CHAPTER ONE: A NARRATIVE APPROACH TO UNDERSTANDING VULNERABILITY TO DEPRESSION

Introduction and Overview

Depression is among the most prevalent health complaints of the western world, with unipolar major depression imposing the fourth greatest burden of illness of all medical conditions worldwide (World Health Organisation, 2002). The importance of understanding the nature of depression and depressive vulnerability has become a major concern. Furthermore, as depression is known to occur across the life span, the investigation of depressive episodes over different life stages and the impact on depressive vulnerability has become a significant focus in psychological research.

Psychological research has often relied on quantitative self-report measures to formulate and confirm theories of depression and vulnerability to depression. That research examines either the underlying personality dimensions (e.g., Blatt 1974, 1990) or the cognitive processes thought responsible for depression or depressive vulnerability such as dysfunctional attitudes, irrational beliefs and negative self-talk (e.g., Beck, 1983; David & Szentagotai, 2006; Ellis, 1994; Scher, Ingram & Segal, 2005). Self-report data on these types of variables shows the complexity of depressive episodes, and raises the question of whether self-reported dysfunctional attitudes are present only during a depressive episode, or emanate from underlying personality dimensions (Blatt & Zuroff, 1992; Hammen, Mark, de Mayo & Mayol, 1985). This issue has generated a line of research concerning whether depression is a trait (i.e., enduring latent depressive schema), state (i.e., confined to a depressive episode) or a state-trait phenomenon (i.e., a current mood, social context and biological processes which determine fluctuating accessibility to enduring cognitive-affecting schemata). Although early work by both

cognitive and psychoanalytic theorists found limited support for the pure state model, equivocal results have led to the formation of a state-trait model (Segal & Ingram, 1994; Teasdale & Barnard, 1993).

Several authors (e.g., Wenzlaff, Meier & Salas, 2002; Wenzlaff & Wegner, 2000) have noted that self-report measures may not adequately access the persistent schemata involved in depressive vulnerability. There would appear to be significant benefits, therefore, of gathering information in diverse ways. The relationship between cognitive processes and depression may provide one means of accessing persistent schemata and assessing their association with depression and depressive vulnerability. A body of research conducted by Ingram and his peers has demonstrated a relationship between depression and cognitive processes, utilising information processing models (e.g., Ingram, 1984; Ingram, Kendall, Smith, Donnel & Ronan, 1987).

Another means of focusing on cognitive processes has emerged from empirical interest in the investigation of the relationship between autobiographical memories and emotional disturbance (e.g., Blagov & Singer, 2004; McAdams, Lensky, Daple & Allen, 1988; Williams & Broadbent, 1986). Examination of autobiographical memory provides a broader base for understanding the nature of depression because it allows coincident access to both the cognitive and affective aspects of information processing. Narrative research, with its focus on the life story, can potentially tap into enduring cognitive schemata, and provides a valuable new means for investigating depression and depressive vulnerability across the life span.

Bruner (1990) proposed that as narratives are the mechanisms through which people understand their lives, more research should be done using these life stories as data. McAdams, Diamond, St Aubin and Mansfield (1997) believe that narratives are an important area of research as they “are themselves the psychosocial constructions of

human identities in modern societies, worthy of study on their own terms" (p. 690). Indeed, Singer and Salovey (1993) declared that "an adequate understanding of personality cannot be achieved without a systematic investigation of how our most meaningful memories influence our emotions and behaviours." (p. 9).

Several studies have sought to determine whether either the content or structure of autobiographical memories can reveal key differences between depressed and non-depressed individuals. As a perspective which incorporates personality and information processing models, narrative research on depression and vulnerability to depression encompasses both of these frameworks. Research by personality oriented theorists has emphasised differences in memory content between depressed and non-depressed individuals, whereas information processing research has focused on differences in the processing of autobiographical memories.

To date, little research has attempted to integrate personality and cognitive perspectives. Although research conducted within cognitive psychology is methodologically sound, it frequently does not account for personological variables. In contrast, narrative research, while taking into consideration individual differences such as motives and goals often does not examine mediating cognitive factors (Conway & Pleydell-Pearce, 2000). Another concern with narrative research is a lack of experimental control which makes it difficult to conclude whether any differences found are a result of the life experiences themselves, writing style or even differences in memory (Woike, Lavezzary & Barsky, 2001).

The purpose of this thesis was to adopt a narrative approach to understanding vulnerability to depression across the life span. Conway and Pleydell-Pearce's (2000) model of autobiographical memory, the Self-Memory System (SMS), was drawn upon to examine the relationship of narratives to depression within the context of an explicit

model of cognitive processing. This model incorporates the rigour of research on cognitive processes into the study of personality. Importantly, the SMS includes the autobiographical memory construct, while describing links to individual motivations that are often aligned to individual personality dimensions. In particular, this thesis drew upon Singer and colleagues' (e.g., Singer, 2004; Singer & Salovey, 1993) construct of the self-defining memory, a sub-type of autobiographical memory considered to be associated with the most significant concerns of the individual. In this study, the self-defining memories of currently depressed participants were compared to those of participants who were not currently depressed but who had a history of depression, and participants with no current or previous depression. Possible group differences were examined in both the structure and content of key elements in self-defining memories which reflect underlying personality dimensions within the life narrative approach. In addition, patterns of autobiographical memory dimensions in self-defining memories were investigated to determine how they related to depression across the entire sample.

The first chapter of this thesis deals with the nature of depression and the stability of depressive schemata over time. It also discusses whether vulnerability to depression emerges as a result of depressive cognitive schemata being triggered by the emergence of a first episode of depression, or as a result of higher levels of one or both of the two underlying personality dimensions of autonomy (related to achievement and power) and sociotropy (concerned with social relationships and intimacy), which are consistently associated with depressive vulnerability across a broad range of theoretical perspectives.

The second chapter is concerned with the nature of autobiographical memory, and how narratives contribute to our understanding of the nature of depression. An

argument is made that study of the relationship between autobiographical memories and depressive vulnerability can clarify and extend understanding of the processes associated with depression. The chapter also outlines major models of autobiographical memory, including the Life Story Model of Identity drawn from the narrative perspective (e.g., McAdams & Pals, 2006), Conway and Pleydell-Pearce's (2000) Cogitive Neuro-Scientific Model of Autobiographical Memory, and Singer and colleagues' (e.g., Blagov & Singer, 2004) conceptual framework for self-defining memories. The information processing models of overgenerality proposed by Williams and his colleagues (Williams, 1992, 1996; Williams et al., 2007) and their relationship to depression are also discussed. Finally, the relationship between overgenerality and the trait versus state models of depression is presented.

The third chapter proposes that while there is substantial research on the relationship between depression and the structure of autobiographical memory, less research concentrates on the content themes that may differentiate between vulnerabilities. Three key narrative dimensions are identified as prospective differentiating factors in the content of autobiographical memory within depression and depressive vulnerability. First, the narrative dimensions related to underlying motivations are considered. The motivations of agency and communion, identified by the narrative perspective, correspond to the depressive vulnerabilities of autonomy and sociotropy. If, as theory suggests, a relationship exists among negatively distorted agency and communion and depression, we would expect to see elevated negative levels of either one or both aspects of the underlying motivations in individuals with depressive vulnerability. Literature is reviewed for both personality and narrative perspectives to evaluate how well different underlying motivations differentiate vulnerability to depression.

A second set of narrative dimensions associated with adaptation, redemption versus contamination is then reviewed. Redemption and contamination occurs when narratives undergo an affective transformation, either containing themes of bad events turning good (redemption), or good events turning bad (contamination; McAdams et al., 1997). Third, the more recently developed empirical notion of integration, is reviewed. Integration has been defined as the ability to derive a higher personal meaning from an event (Blagov & Singer, 2004). Redemption, contamination and integration are conceptualised as adaptive dimensions that go beyond the recalled event to reflect how much a person has been able to adjust to and reconcile the experience. It is proposed that as these two constructs are indicators of adaptation, we would expect to see individuals with a vulnerability to depression demonstrate increased contamination and decreased levels of integration and redemption. Finally, the study aims and hypotheses are presented.

The method chapter (Chapter Four) outlines the self-report inventories and procedures used in the acquisition of written self-defining memories. It also outlines the process for coding the self-defining memories across a range of narrative dimensions: Specificity, agency, communion, redemption, contamination, integration and affect.

The results chapter (Chapter Five) details the analyses of differences among the three groups across the different autobiographical memory dimensions. The three groups contained the currently depressed, those who have had depression before but are not currently depressed, and those who have never experienced depression. Findings regarding the patterns of autobiographical memory dimensions in terms of clusters of respondents across the whole sample are also presented. Cluster analysis was employed to establish whether people coming from different depression groups recall memories that differ in combinations of autobiographical memory dimensions, for example, a

contaminated, negative pattern of recall compared to a positive, agentic pattern of recall. The characteristics of memories as measured by the autobiographical memory dimensions were explored to identify any distinct pattern whereby memories are formed by different combinations of the memory dimensions. Each of the memories were then examined to establish whether any clusters formed, and how the participants varying in depression level had memories of these different combinations. Finally, relationships among the autobiographical memory dimensions are examined, and the variables that were found to be predictors of current depression level are described.

The final general discussion chapter (Chapter Six) reviews findings for the various dimensions of autobiographical memory, and discusses their theoretical implications. Methodological limitations of the study are considered in conjunction with directions for future research. Finally, the implications of findings for this narrative analysis of autobiographical memories for the treatment of depression are elaborated.

Definition and Frequency of Depression

Unipolar depression currently ranks as the fourth greatest burden of illness of all medical conditions worldwide (World Health Organisation, 2002). This liability is predicted to increase so that, by 2020, depression is expected to inflict the second greatest burden of ill health worldwide, exceeded only by ischaemic heart disease (Murray & Lopez, 1998), and to be the primary burden of illness in high-income countries by 2030 (Mathers & Loncar, 2006). Currently, depression is already the greatest burden in the Americas region, the second greatest in the Western Pacific region, the third greatest in Europe, the fourth greatest in South-East Asia, and the fifth greatest in the Eastern Mediterranean region. Notably, it does not feature in the top ten leading causes of disability-adjusted life-years in Africa.

In the United States, the Epidemiological Catchment Area Study and the National Comorbidity Survey Study have found that Major Depressive Disorder's (MDD) cross-sectional prevalence in the general population ranges from 2.3% to 4.9% respectively (Blazer, Kessler, McGonagle & Swartz, 1994; Weissman, Bruce, Leaf, Florio & Holzer, 1991). Beyond Blue, Australia's National Depression Initiative, maintains that depression is "currently Australia's most debilitating illness, with combined mental disorders accounting for 60% of all disability costs in people aged 15-34 years" (Hickie, 2004). They report that approximately one million adults and 100,000 youth experience depression each year. Supporting these findings is data on general practice activity for 2004-2005, which places depression as the fourth most common presenting issue seen by Australian general practitioners (Australian GP Statistics and Classification Centre, 2005).

Within the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders Text Revision, DSM-IV-TR, (American Psychiatric Association, 2000) depression is diagnosed when an individual has experienced both general negative affect and loss of interest in their usual activities as well as three or more of a range of symptoms for longer than a two-week period. These symptoms are broken into four distinct groups of: *Behaviours* (including withdrawal, increased use of alcohol and drug use, inability to concentrate); *Thoughts* (including thoughts of self as a failure, hopeless and worthless); *Feelings* (such as guilt, irritability, frustration, sadness, indecisiveness); and, *Physical symptoms* (including fatigue, sleeplessness, appetite change, headaches, muscle pains).

Reflecting these symptoms, depression is characterised by a significant burden of increased morbidity, decreased physical functioning and impaired social and occupational functioning. Cuijpers and Smit's (2002) meta-analysis examined the

relationship between depression and mortality, and found a significant increased risk of mortality in depression, making it a life threatening disorder. They found that this increased risk of mortality exists both for major depression as well as for sub-clinical forms of depression. Cuijpers and Smit found no significant differences in mortality between men and women, although a non-significant upwards trend was evident for men. Extensive research has also shown a relationship between depression and a number of problematic health risk factors, such as cardiovascular morbidity and mortality (Gump, Matthews, Eberly & Chang, 2005; Nicholson, Kuper & Hemingway, 2008; Van de Kooy et al., 2007), elevated levels of C-reactive protein (Pikhart et al., 2009; Toker, Shirom, Shapira, Berliner & Melamed, 2005), diabetes, (Ciechanowski, Katon & Russo, 2000; De Groot, Anderson, Freedland, Clouse & Lustman, 2001), cancer (Pirl & Roth, 1999), and obesity (Ohayon, 2007).

Depression is also a major public health problem due to the financial burden it creates due to loss of work productivity (da Silva Júnior, de Pinho, de Mello, de Bruin & de Bruin, 2009; Sanderson & Andrews, 2006). In 2008, a group of researchers from the non-profit RAND Corporation reported that in the United States, depression results in more absenteeism than almost any other physical disorder and costs employers more than US$51 billion per year in absenteeism and lost productivity, not including high medical and pharmaceutical bills (RAND Corporation Research Brief, 2008). A number of American Employee Assistance Professionals (EAP) studies have identified depression as among the top three workplace problems for employee assistance professionals, exceeded only by family crisis and stress (Employee Assistance Professionals Association, 1996). Three percent of total short term sick leave days are due to depressive disorders and in 76% of those cases, the employee is a woman (First Chicago EAP Study, 1989-1992, cited in Conti & Burton, 1994). Finally, in a study of

First Chicago Corporations, depressive disorders accounted for more than half of all medical plan dollars paid for mental health problems. The amount for treatment of these claims was close to the amount spent on treatment for heart disease (Conti & Burton, 1994).

Consideration has also been given to how depression and its effects vary across the life course. In, Australia, Beyond Blue reported on the life course of depression by examining three significant stages in the life cycle for men and women: Youth, Adult and Late-Life. It is estimated that up to five percent of Australian youth experience depression that is considerable enough to warrant treatment at any given time, and approximately 20% of Australian youth have experienced significant depressive symptoms before reaching adulthood (National Health and Medical Research Council, 1997). In Australia, suicide accounts for more than one quarter of all male deaths in the 20-24 age group (Australian Bureau of Statistics, 2006). Of significant concern is that adolescents and young adults who experience depression are more likely than adults to have longer first episodes of depression, and to demonstrate higher rates of recurrence and higher levels of comorbid disorders, including substance use disorders (Greden, 2001). Additionally, early onset of depression is associated with poor health and behavioural outcomes, such as higher risk of disruptive behaviours, anxiety and substance abuse (Needham, 2007; Saluja et al., 2004). Educational outcomes also appear to be negatively affected by early onset depression, including lower test scores, lower teacher-rated grades and poorer peer relations (Roeser, Eccles & Strober, 1998). Finally, the association among depression in adolescents and lower achievement and decreased years of completed schooling negatively impacts on future occupational options, income and socioeconomic status (Berndt et al., 2000; Fletcher, 2008; Hamilton, Merrigan & Dufresne, 1997).

With regard to adult women (from puberty onwards), twice as many women than men are likely to experience depression than men (National Health and Medical Research Council, 1997). Depression presents more commonly in younger women than older women, with most vulnerable women experiencing their first depressive episode between 15 to 45 years. Women also experience depression that is specific to their gender, such as post-natal depression, pre-menstrual dysphoric disorder and post-menopausal depression.

It is estimated that around one in six Australian men experience depression, with male depression having a significant association with an increased risk of a range of other health issues, such as cardiovascular disease and diabetes. Of significant concern is that in Australia over the last 30 years, the suicide rate for men aged between 15 and 24 years has tripled, with the Australian Bureau of Statistics (ABS, 2005) estimating that four times more young men commit suicide than young women. In 2005, the ABS observed that the highest suicide rate occurred in adult men in the 30-34 age group.

Less detailed statistics exist for adults aged 65 years and over as they are less likely to report depression, however, it is known that late-life depression is often associated with physical illnesses, such as heart disease and stroke. Research has found an association between depression and excess mortality in elderly populations (Ganguli, Dodge & Mulsant, 2002; Schoevers et al., 2009). The suicide rate for older Australian men (65 years and over) is also very high and remains an ongoing concern.

Trait versus State Theories of Depression

As depression has profound negative effects across the life span, it is important to develop an understanding of the impact of depressive episodes at different life stages, and how these may lead to depressive vulnerability. Two psychological theories of the

processes that give rise to depressive vulnerability dominate the literature. The first theory, derived from the cognitive perspective, focuses on the cognitive processes that emerge after an episode of depression which lead to an ongoing vulnerability (e.g., Hedlund & Rude, 1995; Roberts & Kassel, 1996). The second theory focuses on broader underlying personality dimensions associated with cognitive vulnerabilities to depression, and derives from cognitive, psychodynamic and narrative perspectives (e.g., Beck, 1983; Blatt, 1974; 1990; McAdams, 1985; 1996). Both these accounts are reviewed in turn.

The cognitive theory of depression holds that depressive vulnerability develops when certain types of cognitive processes are triggered after an initial depressive episode located somewhere across the life span of an individual. Based on this assumption, a body of research has investigated whether individuals who have experienced a previous major depressive episode but who are not currently depressed, exhibit cognitive processes more in line with currently depressed individuals as opposed to individuals who have never experienced a major depressive episode.

Early Studies of Cognitive Processing Theories of Depression

Early research on remitted depression relied on cross-sectional data. A key assumption was that if maladaptive cognitions reflect depressive vulnerability then they should persist beyond the current depressive episode/s. This line of research produced inconsistent findings. Some early studies concluded that depressive schemata only develop and exist temporarily while under the influence of a transient mood state of an acute depressive episode, thus supporting the pure state model of depression. For example, Hammen et al. (1985) conducted a study over a four-month period whereby they compared five groups considered to differ on depressive vulnerability. As initial mood was the only significant differentiating variable between recovered depressed and

non-depressed groups, it was concluded that depressive schemata are transient, rather than ongoing cognitive processes. Supporting this account were results from Fromholt, Larsen & Larsen (1995) which found that the recall of recovered depressed individuals six months after their depressive episode was more similar to a non-depressed group rather than a depressed group. However, they only measured memory affect and did not compare other variables such as specificity or latency.

More recent research has found evidence for the "state-trait" vulnerability model (Segal & Ingram, 1994; Teasdale & Barnard, 1993). This model rests on two primary assumptions: The existence of enduring cognitive-affective schemata (e.g., a sense of social rejection) and the fluctuating accessibility of these schemata determined by present mood, social context and biological processes. For example, Hedlund and Rude (1995) found evidence of latent depressive schemata in formerly depressed individuals in their information processing. Although formerly depressed individuals did not differ from never depressed individuals on self-report measures focused on dysfunctional attitudes (e.g., perfectionism and highly critical self-evaluation), formerly depressed individuals demonstrated a more negatively biased information processing style (e.g., a bias towards negative information, and biased negative recall) than never depressed individuals on two of three information processing measures.

Support for the state-trait theory of depressive vulnerability was found by Zuroff, Blatt, Sanislow, Bondi and Pilkonis (1999). They assessed data produced by The American National Institute of Mental Health's sponsorship of the Treatment of Depression Collaborative Research Program (TDCRP; 1985) to examine changes in mean scores and the relative stability of several measures of depression with a special focus on changes in the Dysfunctional Attitudes Scale (DAS; Weissman & Beck, 1978). Patients were administered these measures at pre-treatment, post-treatment (16 weeks),

and at 6, 12 and 18 month follow up points after treatment. Three data-analytic strategies indicated that although mean scores on the DAS decreased after the treatment program, the DAS variables demonstrated substantial relative stability. The structural equation models indicated that both initial levels of dysfunctional attitudes as well as post-treatment depression were significant predictors of dysfunctional attitudes after treatment. Finally, they found that the relative stability of dysfunctional attitudes was markedly higher at 18-month follow up.

The Importance of Cognitive Processes in Assessing Depressive Vulnerabilities

A number of difficulties have been noted with the use of self-report measures to assess persistent schemata (Just, Abramson & Alloy, 2000; Wenzlaff et al., 2002). In particular, it has been argued that self-report measurement of recovered depressive cognitive schemata may not access enduring schemata. Wenzlaff et al. argued that the self-report measures traditionally used in this research were designed to assess dysfunctional attitudes in currently depressed individuals. Whereas, recovered depressives are more likely to have deficits in underlying cognitive processes rather than the acute negative thinking that normally accompanies an active depressive episode. These more subtle processes may be more challenging to detect and identify, and there is evidence to support this view. For example, Rude, Covich, Jarrold, Hedlund and Zentner (2001), building on Hedlund and Rude's study (1995), compared never depressed and formerly depressed individuals on a series of self-report measures and laboratory tasks, and found that laboratory tasks (e.g., incidental recall and the interpretation of ambiguous material) may be a more sensitive measure of depressive vulnerability than questionnaires. Consistent with Hedlund and Rude, they found that formerly depressed individuals were more likely to demonstrate a negative bias in incidental recall and a negative bias in the interpretation of ambiguous material.

Notably, they also found that the differences between never and formerly depressed individuals existed only for the sub-group of formerly depressed individuals who had experienced four or more prior depressions. Thus, depressive schemata may be more frequent in individuals with histories of relatively extensive depression.

Another body of literature (e.g., Wenzlaff & Wegner, 2000; Wenzlaff et al., 2002) proposes that formerly depressed individuals make active attempts to suppress the maladaptive schemata that can put them at risk of depression or dysphoric mood. Several studies (e.g., Rude & McCarthy, 2003; Wenzlaff & Bates, 1998) show that recovered depressives tend to engage in high levels of thought suppression with the aim of reducing negative affect, which reflects an effort to mask depressive cognitions. From these findings, it is argued that depressive processing biases are a trait phenomenon, but are difficult to identify due to the tendency of formerly depressed individuals toward thought suppression. Wenzlaff and Wegner also noted that one of the significant negative by-products of this thought suppression is that it cultivates a vigilance for unwanted thoughts, which in turn promotes uncertainty about ambiguous information and distorts memory.

Theorists have also proposed that when mental control is disrupted by heavy cognitive demands, recovered depressives may revert back to the use of depressive cognitive schemata, without necessarily reverting back to depressive mood. Wenzlaff et al. (2002) conducted a study in which currently, formerly and never dysphoric undergraduate students listened to a series of statements describing positive, negative or ambiguous life events. They subsequently viewed a list of statements containing positive, negative and disambiguated versions of the earlier statements, and indicated whether they recognised any statements presented earlier. The formerly dysphoric group were significantly more likely than the never dysphoric group to endorse negative

disambiguations. This bias was related to higher levels of thought suppression as well as an increased level of uncertainty about the meaning of ambiguous situations. Wenzlaff et al. concluded that this implied an ongoing conflict between positive and negative thoughts in the schemata of formerly dysphoric individuals. They argued that while recovered depressives want to embrace positive beliefs, their dysfunctional depressive schemata actually hinder them in this process resulting in an uncertainty about those positive beliefs.

This assertion was further supported by a study conducted by Wenzlaff, Rude and West (2002) in which participants completed inventories measuring current and previous levels of depression as well as measures of chronic thought suppression and dysfunctional attitudes. While recovered depressive individuals reported relatively adaptive attitudes, they were more uncertain about those beliefs when compared to never depressed participants. A significant relationship was also evident between thought suppression and these increased levels of uncertainty, which, in turn, was associated with the presence of previous depression. Haeffel et al. (2005) obtained similar results using a different approach, in which they assessed participants current and lifetime prevalence of depression, dysfunctional attitudes and negative cognitive styles as measured by hopelessness theory. Although formerly depressed individuals did not differ from never depressed individuals in terms of dysfunctional attitudes, they did demonstrate more negative cognitive styles.

The use of thought suppression strategies by formerly depressed individuals appears to be at odds with research conducted by Pennebaker (1990) on the benefits of emotional expression to mental health and the absence or reduction of psychopathology. A linguistic pattern suggesting inhibition has recently been identified in a study on the relationship between language use and depressive vulnerability. Rude, Gortner and

Pennebaker (2004) conducted a text analysis of essays written by currently, formerly and never depressed college students, and found that while there was no difference between formerly and never depressed individuals in the tendency to use more negatively valenced words, formerly depressed students were significantly more likely than never depressed students to use the word "I" in their essays. The authors concluded that individuals with depressive vulnerability may actively suppress depressive processing as a strategy to ward off depression.

The notion of cognitive vulnerability has now become a fundamental concept in cognitive theories of depression (Scher et al., 2005). While many earlier studies provided conflicting results, more recent, scientifically rigorous studies lend support to the "state-trait" vulnerability model. Specifically, they support the existence of both enduring cognitive-affective schemata as well as the impact of present mood, social context and biological processes on the accessibility of these schemata. Cognitive vulnerability implies that negative cognitive factors are more likely to materialise during stressful situations, and that cognitive reactivity is a determining factor for the onset, relapse and recurrence of depression.

Autonomy and Sociotropy

The previous section discussed the notion of depressive vulnerability due to distorted cognitive processes emerging as a result of a depressive episode. A prominent alternate explanation, however, is that depressive vulnerability emanates from broader underlying personality dimensions associated with cognitive vulnerabilities to depression. Autonomy and sociotropy are two such underlying personality characteristics that have been linked to vulnerability to depression.

One of the most striking aspects of this research is that different theoretical perspectives converge in acknowledging the association between the two relatively stable personality styles of autonomy and sociotropy and depressive vulnerability. Researchers such as Beck and colleagues (e.g., Beck, 1983) from a cognitive framework, and Blatt and his peers from a psychoanalytic ego psychology framework (e.g., Blatt & Zuroff, 1992), highlight autonomy and sociotropy (albeit differently named, but conceptually similar, dimensions) as depressive vulnerabilities.

Autonomy is viewed as a combination of beliefs, behavioural dispositions and attitudes that concern an individual's ability to master their own uniqueness, bodily functioning and environment. It focuses on such issues as self-definition, self-reliance, control and self-criticism. In contrast, sociotropy is characterized as a combination of beliefs, behavioural dispositions and attitudes that comprise an individual's tendency to attend and depend on others for personal satisfaction. The construct focuses on issues such as social dependency, intimacy, need for approval, guidance, social needs and helplessness. Theory suggests that autonomous individuals place great emphasis on personal goals and achievement, whereas sociotropic individuals place high importance on seeking approval and avoiding disapproval from others (Beck, 1983). Research has demonstrated support for this theory (e.g., Bieling & Alden, 1998; Santor & Zuroff, 1997).

Despite considerable overlap, there are clear points of theoretical difference in how autonomy and sociotropy are conceptualised and considered to function. One important difference noted by Coyne and Whiffen (1995) is that psychoanalytic theorists believe that autonomy and sociotropy are fixed characteristics that are established in childhood and rarely occur together in the same person (e.g., Blatt & Maroudas, 1992). In contrast, Beck's (1983) cognitive conceptualisation focused on

how current circumstances largely determine which cognitive distortions individuals exhibit at that time. In Beck's view, people can demonstrate the parallel processes of autonomy and sociotropy to differing levels at different times.

Zuroff (1994) identified other theoretical differences in the interpersonal motivations ascribed to the constructs of autonomy and sociotropy. Zuroff believed that the cognitive construct of sociotropy is broader than the psychoanalytic construct of dependency as it includes a need for recognition and approval that Blatt (1974) associated with Self-Criticism. In addition, whereas the autonomous individual is viewed by cognitive theorists as deliberately avoidant of relationships, the self-critical individual is perceived by Blatt as seeking of others' approval but being fearful of being criticised or judged. It would appear, therefore, that sociotropy is aligned with self-criticism, because both constructs involve a need for approval and admiration. Several studies provide evidence of this overlap between Sociotropy and Self-Criticism (e.g., Robins et al., 1994; Rude & Burnham, 1993; Zuroff, 1994).

In summary, while there is considerable convergence across perspectives regarding autonomy and sociotropy at a descriptive level, notable disparities exist with regard to (a) the stability of the constructs, (b) the origins of the constructs, and (c) the interpersonal motivations attributed to the two constructs. The following sections discuss the characteristics of the cognitive and psychoanalytic constructs of autonomy and sociotropy in more detail.

Cognitive Perspective

Cognitive research has focused predominantly on the (a) etiology of depression by testing the personality event congruence hypothesis, (b) the symptomatology of depression by examining the symptom specificity hypothesis, and/or (c) the effective treatment of depression by testing the treatment hypothesis. Overall, these studies have

yielded inconsistent results. With regard to the relationship among depression and autonomy and sociotropy, although there is support for the relationship between depression and sociotropy (Alford & Gerrity, 1995; Robins, cited in Robins, Block & Peselow, 1989), there is less empirical evidence for the relationship between depression and autonomy.

A number of authors (e.g., Robins et al., 1989; Sato & McCann, 2000) have asserted that these equivocal results may be partially attributed to the measures utilized in many of these studies which are more closely related to sociotropy than autonomy. Yet, other researchers (e.g., Sato, 2003) have questioned whether autonomy and sociotropy are two distinct variables or whether they should be treated on a continuum (Coyne & Whiffen, 1995). While the majority of research has evaluated the presence of autonomy and/or sociotropy as two distinct typologies, Coyne and Whiffen argued that classifying them on a continuum would not only utilise the more advanced diathesis-stress model, but would add a new dimension to existing research despite the methodological challenges. In a rejoinder, Zuroff, Mongrain and Santor (2004) argued that most research has used fundamentally dimensional models and that many researchers already regard autonomy and sociotropy as virtually orthogonal traits or highly distinct constructs. Notwithstanding, Coyne and Whiffen highlighted the need for researchers to be vigorous in their methodological standards.

Personality Event Congruence Hypothesis

A cognitive theory of depression in which individuals vulnerable to depression retain dormant schemata containing negative information regarding their incompetence, unworthiness or the general undesirability of the self was developed by Beck, Rush, Shaw and Emery (1979). In an extension of this theory, Beck (1983) suggested that autonomy and sociotropy were important indicators of depressive vulnerability. He

developed the personality event congruence hypothesis maintaining that autonomy and sociotropy manifest vulnerability only to events that are congruous with each personality style. Beck postulated that highly autonomous individuals would be especially vulnerable to failure to achieve goals and that highly sociotropic individuals would be vulnerable to threatened or actual rejection by others. For example, an autonomous individual who performed badly on an exam may experience increased negative affect or even depression; whereas, a sociotropic individual would be unlikely to have this reaction. However, a sociotropic individual who experienced a relationship loss, such as a marital separation, would be far more likely to be depressed as a result compared to an autonomous individual.

There has been mixed support for the personality-event congruence hypothesis. Several studies show a significant relationship among depression, sociotropy and negative social events (e.g., Allen, de L. Horne & Trinder, 1996; Bartlestone & Trull, 1995; Clark, Beck & Brown, 1992; Robins & Block, 1988), but there is less evidence for the relationship among depression, autonomy and negative autonomy related events (e.g., Hammen et al., 1985; Segal, Shaw, Vella & Katz, 1992). Zuroff and Mongrain (1987) argued that rather than conceptualizing the personality-event congruence hypothesis as a dichotomous phenomenon, it may be better to view the level of activation of self-critical or dependent depression as a continuous function of the congruence between the event and personality type. They used the metaphor of a gradient to describe their theoretical conceptualization.

Symptom Specificity Hypothesis

Beck, Epstein and Harrison (1983) proposed a symptom specificity hypothesis maintaining that when individuals become depressed they tend to exhibit behavioural features consonant with the degree to which they correspond to each personality style.

They postulated that the depressive symptomatology of autonomous individuals is more likely to be about self-criticism, social withdrawal, low reactivity, feelings of guilt and decreased crying. Autonomous individuals also tend to exhibit greater pessimism about being helped and decreased help seeking behaviour. In contrast, the authors believed that when depressed, sociotropic individuals tend to focus on loss of gratification, exhibit increased crying, and have increased concerns about personal attractiveness and other social attributes. Contrary to autonomous individuals, they are optimistic about the benefits of seeking help and exhibit greater help seeking behaviour.

Although there is some support for the relationship of the specific symptoms of depression to both autonomy and sociotropy (Robins, Bagby, Rector, Lynch & Kennedy, 1997; Robins & Luten, 1991; Zuroff, Igreja & Mongrain, 1990), other research supports only the symptom specificity hypothesis and sociotropy (e.g., Jolly, Dyck, Kramer & Wherry, 1996; Robins et al., 1989). Yet other studies provide empirical evidence only for the symptom specificity hypothesis and autonomy (e.g., Persons, Miranda & Perloff, 1991). This inconsistency has been attributed to measurement problems. These inventories might be measuring the constructs of autonomy and sociotropy differently, as well as testing for different aspects on depression. Clearly, more research needs to be done before a causal pathway can be established.

The personality event congruence hypothesis and the symptom specificity hypothesis were tested in the same research sample by Robins, Hayes, Block, Kramer and Villena (1995). Although the study only showed weak support for the personality event congruence hypothesis that was limited to sociotropy, the results supported the symptom specificity hypothesis for both sociotropy and autonomy.

Treatment Congruence Hypothesis

Based on his clinical experience, Beck (1983) proposed that not only do autonomous and sociotropic individuals demonstrate specific symptoms when experiencing depression, they require different types of treatment. Beck believed that therapeutic work with autonomous clients should focus on assorted problem solving tasks to help the client identify their maladaptive cognitions. On the other hand, therapists working with sociotropic clients should first establish a stable and trusting relationship, emphasizing sharing and understanding, and subsequently work on identifying faulty thought processes.

Zettle and his colleagues postulated that in accordance with Beck's treatment congruence theory, sociotropic individuals would show greater improvement in group therapy due to its supportive nature and concern for attachment (e.g., Zettle, Haflich & Reynolds, 1992; Zettle & Herring, 1995). In contrast, they proposed that autonomous individuals would demonstrate significant improvement in individual therapy due to its individualistic, problem-solving nature. Zettle et al. assigned depressed participants to 12 weeks of either individual or group therapy. As hypothesised, while both formats demonstrated significant improvement in participants' well-being, sociotropic participants who received group therapy and the autonomous individuals who received individual therapy demonstrated significantly greater improvement than those individuals whose personality dimensions did not match the hypothesized ideal type of treatment.

Zettle and Herring (1995) conducted a more rigorous study of the hypothesis by using an a priori group comparison treatment utility strategy proposed by Hayes, Nelson and Jarrett (cited in Zettle & Herring). Participants were deliberately matched or mismatched to individual or group therapy according to their personality type. Results

gave mixed support for their hypotheses. Both matched and mismatched participants demonstrated significant reductions in depression over the 12 week treatment course. However, a significantly higher number of matched participants reported greater improvement at a two-month follow up. With regard to pharmacotherapy, Peselow, Robins, Sanfilipo, Block and Fieve (1992) found that antidepressants were significantly more effective for treating depression for people classified as having high autonomous and low sociotropic traits as opposed to those individuals classified as high sociotropy-low autonomy. They also found that the autonomy/sociotropy classification was a more effective predictor of success with pharmacotherapeutic treatment than was endogenicity.

In summary, while many cognitive studies have shown a strong relationship between depression and sociotropy, less support has been found for the hypothesised association between depression and autonomy. However, a number of authors have suggested that measurement issues ineffectively assessing autonomy may be responsible for the inconsistent results.

Psychoanalytic Perspective

Within the psychoanalytic perspective, early writings by Sidney Blatt (1974) formed a theory defining two broad constructs of psychopathology: Anaclitic psychopathology and introjective psychopathology. The theory's primary focus is the nature of interpersonal relationships and object representation. A secondary emphasis is early life experiences and unconscious conflict. Blatt argued that personality development emanated from the interaction between (a) the ability to form stable and mutually satisfying interpersonal relationships, and (b) the establishment of a stable, consolidated and differentiated positive identity. These two formulations have

similarities to Beck's (1983) constructs of sociotropy and autonomy, but they also differ significantly in their orientation.

Blatt and his colleagues have proposed that dependency and self-criticism are interdependent in normal development, and that life development is "the result of a complex dialectic transaction between these two fundamental developmental forces" (Blatt, 1974, p. 113). Furthermore, they theorised that the development of an integrated sense of self is dependent on the development and maintenance of satisfying interpersonal relationships (Blatt, 1974; Blatt & Levy, 2003). Equally, the establishment of sustaining interpersonal relationships is also contingent on the development of a mature and integrated self-identity.

Blatt (1974) further argued that anaclitic psychopathology results from unstable, rejecting or overindulgent parenting. A neglected sense of self emerged from these individuals' exaggerated and distorted strivings to develop and maintain satisfying interpersonal relationships. Anaclitic psychopathology, therefore, revolves around issues of love, intimacy, trust, affection and sexuality and the use of the defense mechanisms denial and repression. Resultant forms of psychopathology, which range in level of disturbance, include non-paranoid-undifferentiated schizophrenia, borderline personality disorder, dependent (or infantile) character disorder, hysterical disorders and anaclitic depression.

In contrast, introjective psychopathology is thought to result from controlling, punitive, intrusive and overly critical parenting. As a result, the individual uses a distorted manner to try and establish an exaggerated sense of self-worth focusing on achievement and independence. This focus on establishing an independent sense of self results in neglect of the establishment of satisfying and functional interpersonal relationships. Introjective psychopathology, therefore, centres on the control of affect,

particularly anger. Primary defense mechanisms are projection, rationalisation, intellectualization and over-compensation. Associated forms of psychopathology, which also range in disturbance levels, include paranoid schizophrenia, overideational borderline, paranoia, obsessive-compulsive personality disorder, phallic narcissism and introjective depression. Although Blatt (1992) held that individuals normally function at one predominant level, there remains a possibility for growth or regression to occur which could alter the form of psychopathology.

In terms of depression, Blatt (1974) proposed that individuals who have been unable to create mature and stable self-representations try to establish a sense of self-worth through interpersonal relationships and thus develop an anaclitic or "dependent" personality. Threatened or actual interpersonal rejection puts these individuals at risk of anaclitic depression, which is characterized by feelings of dependency, helplessness and fear of abandonment. Other proposed symptoms include: Tearfulness, somatic complaints, substance abuse, eating disorders and pursuit of love and protection. In contrast, Blatt proposed that introjective or "self critical" individuals try to establish a sense of self-worth through individuality, ability and achievement. When these "self-critical" individuals do not meet their own standards or the standards of others, "introjective" depression may result, characterized by feelings of inferiority, guilt, self-loathing and worthlessness and symptoms such as social withdrawal and lack of reactivity (Blatt, D'Afflitti & Quinlan, 1976). Blatt argued that the self-critical characterological style is more developmentally advanced and higher functioning than the dependent style. Blatt and Zuroff (1992) in a review of previous research of these two depressive vulnerabilities noted that psychoanalytic research differentiates between the notions of anaclitic (sociotropic) depression and introjective (autonomous) depression. The majority of this research emphasises "the developmental origins, the

predisposing characteristics, clinical manifestations and unconscious conflicts of these two types of depression" (p. 528).

With regard to research on the symptomatology of anaclitic versus introjective depression, Klein, Harding, Taylor & Dickstein (1988) found only limited support for Blatt's theory regarding the hypothesised symptomatology of anaclitic versus introjective depression. Self-critical individuals were more likely to exhibit loss of interest and dependent individuals more likely to demonstrate crying or tearfulness when depressed. Yet, when the severity of depression was controlled for, no relationships were found between introjective depression and lack of reactivity, withdrawal and guilt, or between anaclitic depression and dependency, somatic complaints, substance abuse and reactivity to environmental effects.

Response to Treatment

Research by Blatt and his colleagues has investigated whether anaclitic and introjective individuals demonstrate differential patterns of improvement in alternate psychological treatments, including psychoanalysis, supportive expressive therapy and other brief treatments of depression such as cognitive behavioural therapy and interpersonal therapy. This research comprises three major studies of the therapeutic process to identify differentiation in anaclitic and introjective presentation: The Riggs-Yale Project (e.g., Blatt, Ford, Berman, Cook & Meyer, 1988; Shahar, Blatt & Ford, 2003), the Menninger Psychotherapy Research Project (e.g., Blatt, 1992; Blatt & Shahar, 2004) and the Treatment of Depression Collaborative Research Program (Blatt, Quinlan, Pilkonis & Shea, 1995; Blatt, Zuroff, Bondi, Sanislow & Pilkonis 1998; Blatt, Zuroff, Quinlan & Pilkonis 1996).

Blatt and his colleagues (e.g., Blatt & Auerbach, 2003) argued that the data imply that dependent and self-critical individuals respond differently to diverse

dimensions of the treatment process, and that it may therefore be more worthwhile considering depression and associated psychopathology from a personality, rather than symptomatic perspective. Blatt, Shahar and Zuroff (2001) reviewed research regarding anaclitic and introjective individuals' treatment response patterns. They concluded that there are consistent findings that for long-term intensive therapies, anaclitic individuals have shown better outcomes with long-term supportive expressive therapy than with psychoanalysis. The results were the opposite for introjective individuals, who showed the greatest improvement with psychoanalysis. Introjective individuals have also demonstrated poor results in brief treatments such as cognitive behavioural therapy and interpersonal therapy. The authors concluded that personality styles should be taken into account when selecting a therapeutic approach.

Summary

In summary, this chapter has considered the nature of depression and depressive vulnerability. The aetiology of depression was reported, and the burden of increased morbidity, decreased physical functioning and impaired social functioning as a result of depression discussed. The financial burden of depression as a result of its significant causal association with loss of work productivity was also described.

This chapter also focused on the issue of the stability of depression across the life span, and whether this is a result of enduring depressive cognitive schemata that emerge following the onset of a depressive episode, or due to underlying personality dimensions. The two personality dimensions, autonomy and sociotropy, proposed to relate to depressive vulnerability were described. An argument was made that although depressive vulnerability was initially conceptualised as a state phenomenon, equivocal research findings led researchers to the state-trait model, which recognises both the

presence of stable cognitive-affective schemata as well as the impact of current mood on the accessibility of these schemata. Therefore, although there is evidence for both the impact of cognitive processes and underlying dimensions, such as autonomy and sociotropy, on depressive vulnerability, it is probably best thought of as a combination of both factors.

The next chapter discusses narratives as markers of depressive vulnerability, and describes a number of major models of autobiographical memory. Finally, it focuses on the relationship between autobiographical memory and state versus trait theories of depression.

CHAPTER TWO: NARRATIVES AS MARKERS OF DEPRESSIVE VULNERABILITY

This chapter expounds a narrative perspective on depression and depressive vulnerability. Narratives constitute a person's representation of their identity through a life story, generally represented in recollections that form the basis of autobiographical memory, which is organised in both structure and content. Following a general description of autobiographical memory, six common themes identified by McAdams (2008a) in the narrative study of lives are described, along with McAdams (1985, 1996) framework of the Life Story Model of Identity. In order to examine specific cognitive aspects of narratives, Conway and Pleydell-Pearces's (2000) Cognitive Neuro-Scientific Model of Autobiographical Memory is presented, along with Singer's (e.g., Singer & Salovey, 1993) concept of self-defining memories. Next, Williams and colleagues' information processing models of overgenerality, which provide an insight into the structure of autobiographical memory and its relationship to depression, are examined. The final section of the chapter describes the relationship between overgenerality of memory and the trait versus state theories of depression.

Autobiographical Memory

Personality theorists such as Henry Murray, Erik Erikson and Alfred Adler have all reflected on how human stories are a natural vehicle for organising significant information about the self. Silvan Tomkins (1979, 1987) developed the first narrative model of personality, labelled "script theory" in which he proposed that affect is the primary motivator behind human behaviour, which in turn is organized by scenes and

scripts. Tomkins believed all individuals were the playwrights of their own lives. McAdams (1994) has suggested that "storytelling appears to be a fundamental way of expressing ourselves and our worlds to others" (p. 720), and noted that human narratives are more about meanings than facts.

McAdams, Reynolds, Lewis, Patten & Bowman (2001) defined an individual's life story, as an internalized narrative recount of the person's life, incorporating the recreated past, perceived present and predicted future. McAdams and colleagues (e.g., Bauer & McAdams, 2000; McAdams, 2006a) proposed that human narratives and life identity have a significant commonality in that both are organised in terms of content and structure. Content refers to the thematic essence of the story, while structure refers to how the story is organised and integrated.

In narrative research, narratives have generally been represented as autobiographical memories. Autobiographical memory has been defined by Welch-Ross (1995) "as a collection of memories for personally experienced events that is relevant to one's sense of self, and thus constitutes a person's life history" (p. 338). Autobiographical memories provide a potentially rich source of data about individual differences as well as offering a general model of the interaction between personality and cognition (Woike, Gerschkovich, Piorkowski & Polo, 1999).

Autobiographical memory research has been conducted in varied psychological fields, including cognitive, social, developmental, clinical and neuropsychology. However, as Conway and Pleydell-Pearce (2000) noted, possibly due to the complex nature of autobiographical memory, research across these disparate fields has not been integrated, and there has been little cohesion in autobiographical memory research. Notwithstanding, McAdams (2008a) identified six common themes or principles in research on the narrative study of lives.

The first principle is that human beings use stories to explain their own behaviour and the behaviour of others, and this provides personal meaning and identity. In the late nineteenth century, William James (1892/1963) distinguished aspects of the self, which encompassed an active subject storytelling "I", whose stories about experiences and situations became part of a more object-like storied "me". McAdams (2008a) argued that the "storied me" or life narratives are encoded and retrieved in such a way that they serve a person's goals, and are therefore about both the reconstructed past as well as the imagined future.

The second common narrative principle is that stories integrate lives, reconciling disparate ideas, characters, situations and other aspects of life (e.g., Habermas & Bluck, 2000; Singer 2004). McAdams (1985) proposed that stories can be integrated in two ways: Utilising a synchronic pattern that connects the differentiated individual with the complex and occasionally contradictory one, or by using a diachronic pattern which connects events and situations over time. McAdams (2008a) also noted that explanations of narrative identity have examined the notion of integration in different ways. Whereas McAdams and his colleagues looked at integration at the broad level of one's life as a whole, others have focused on responses to specific events (e.g., significant developmental moments) in everyday life (e.g., Pasupathi, 2001; Thorne, 2000). Despite such differences, one commonality in this research is the notion of autobiographical reasoning, in which individuals attempt to draw meaning from particular experiences in life (Habermas & Bluck, 2000; Pals, 2006b).

Autobiographical reasoning was differentiated from narrative processing by Singer and Bluck (2001). They described narrative processing as the constructed storied accounts of past events, which range from discrete anecdotes to fully developed narratives. In contrast, autobiographical reasoning refers to the process of reasoning

about, interpretation and evaluation of those narratives. Autobiographical reasoning is, therefore, the process that optimally leads to personal integration, insight and self-understanding, whereby individuals place things together in a narrative pattern that provides meaning and purpose.

McAdams' (2008a) third principle is that stories are told in social relationships. He argues that narratives are social phenomena, relayed in the context of societal expectations and norms. He also noted that individuals tend to adopt particular emotional and social positions according to their audience.

His fourth common principle is that stories change over time. McAdams (2008a) pointed out that autobiographical memory is unstable, and that this temporal instability contributes to change in the life story over time. Other contributing factors are accumulated new experiences as well as adjustments in peoples' motivations, goals, personal concerns and view of the world. These factors all work together to alter and evolve the memories of significant events and the meanings attached to them (Conway & Pleydell-Pearce, 2000).

The fifth common principle elucidated by McAdams (2008a) is that stories are cultural texts. McAdams (2006b) proposed that life stories reflect the culture in which the story is created and expressed. Indeed, Habermas and Bluck (2000) believed that individuals' knowledge of their culture's concept of biography must be established before they can create a convincing life story of their own. Evidence supporting this principle comes from recent research by Wang and colleagues, who found significant differences between the autobiographical memories and self-construction of East Asian and North American societies (e.g., Wang, 2001, 2004; Wang & Brockmeier, 2002; Wang & Conway, 2004). Wang and Conway proposed that personal narratives fulfil both self-expressive and self-directive functions. They noted that while European

Americans' narratives were more likely to serve a self-expressive function in which narratives are primarily a vehicle for articulating the breadth, depth and uniqueness of the self, Chinese people's narratives tend to reflect a self-directive function which uses personal narratives as a guide for positive social conduct.

McAdams' (2008a) sixth and final principle is that some stories are "better" than others. McAdams noted that the last decade has seen a surge of interest by researchers in what constitutes a "good life story". This research has studied the interaction among narrative coherence and complexity, and has also looked at the relationship among certain aspects of the life story and psychological maturity, mental health and life satisfaction (e.g., Adler, Kissel & McAdams, 2006; Bauer, McAdams & Sakaeda, 2005). Furthermore, story reformulation and repair is now being used by a number of counselling and cognitive psychologists as a cornerstone of psychotherapy (Singer, 2005), in which the transformation of faulty life narratives into stories that affirm growth, health and adaptation is the desired therapeutic outcome. Indeed, narrative therapy, developed by Michael White and David Epston (e.g., White & Epston, 1990), with its primary goal of developing richer and more cohesive narratives, has become a significant movement in psychotherapy since the 1990s.

A Life Story Model of Identity

McAdams and his colleagues (e.g., McAdams, 1985, 1988, 1996, 2000; McAdams & Pals, 2006) have developed a broad, narrative framework integrating life stories and personality development by formulating a life story model of identity. McAdams (1985, 1996) proposed that narrative identity refers to an individual's internalised, evolving, and integrated story of the self. It takes the form of a story, with all the traditional story components of scenes, character, setting plot and themes. Upon

reaching late adolescence and early adulthood, individuals begin to reconstruct their personal past, recognise their present and anticipate their future using an internalised and growing life-story. This story provides the individual with some sense of psychosocial unity and purpose. Accordingly, McAdams (2001a) postulated that:

> Life stories are psychosocial constructions, co-authored by the person himself or herself and the cultural context within which that person's life is embedded and given some meaning. (p. 101)

Individual life stories are thus a powerful reflection of existing cultural values and norms. One of the most fascinating and powerful aspects of life stories is that while being comprehensible within a specific culture, they also are distinct and variable so that they differ between individuals.

McAdams and Pals (2006) viewed life story models in terms of five broad and interrelated concepts of evolution, traits, adaptations, life narratives and culture. They saw personality as (a) an individual's unique and distinct adaptation to the general evolutionary design for human nature, which is demonstrated as a developing pattern of (b) dispositional traits, (c) characteristic adaptations, in which complex (d) self-defining life narratives are situated in varying (e) cultural and social contexts. Their representation of these concepts, and how they relate to each other, is illustrated in Figure 1.

Evolution is the first concept described in the framework, and is represented in Figure 1 under the title "Human Nature". Evolution provides the general design from which psychological individuality with socially consequential variations has emerged. Among the most significant psychological variations lies the second concept, represented in Figure 1 as "Dispositional Traits", which contains a small set of broad, decontextualised constructs known as personality traits that are related to the

dispositional nature of personality. These have been defined in accordance with the most recent and generally accepted account of personality traits, the NEO PI-R (Costa & McCrae, 1992) so as to include the traits of extraversion, neuroticism, agreeableness, openness to new experience and conscientiousness.

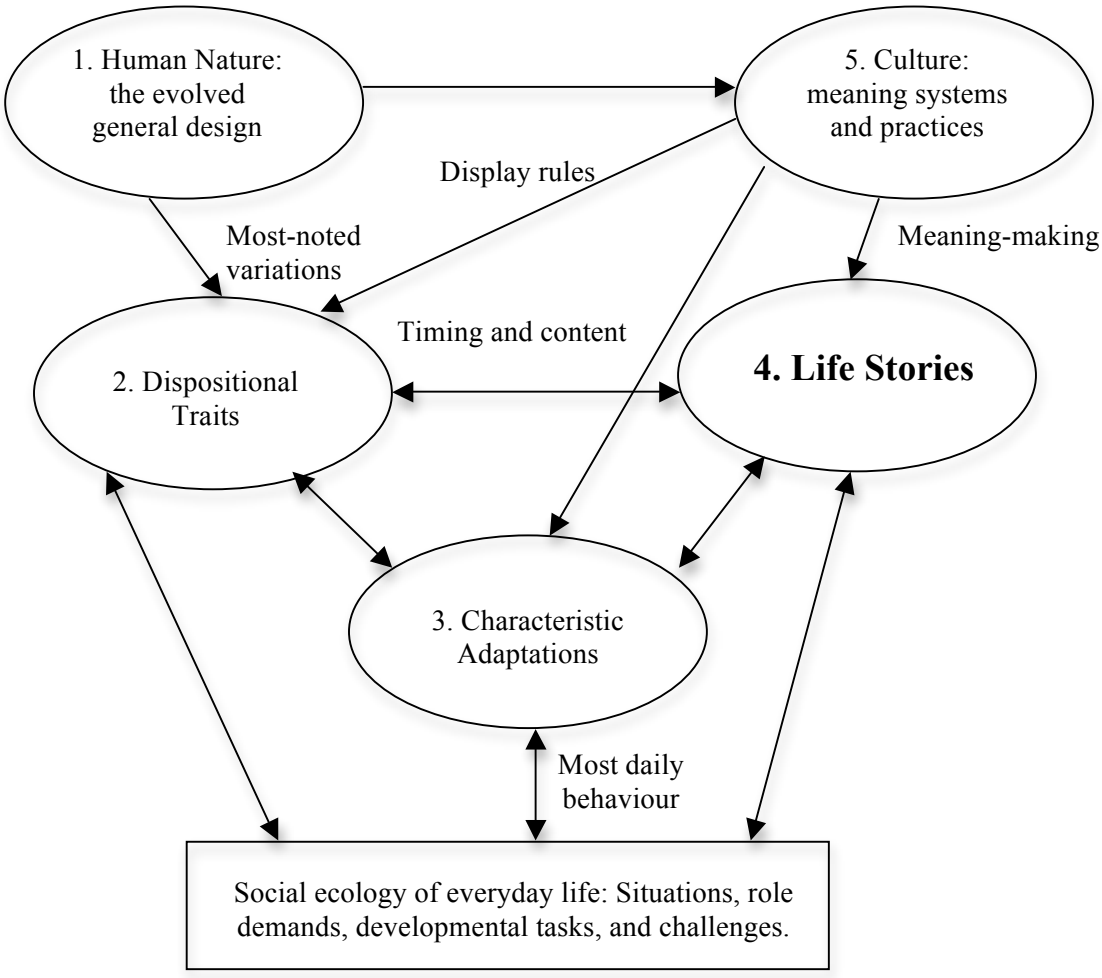

Figure 1. McAdams and Pals (2006) framework for personality.

McAdams and Pals (2006) third concept, represented in Figure 1 as "Characteristic Adaptations", includes personality descriptions referring to personal strivings, defence mechanisms, coping strategies, life tasks, domain-specific skills and values, as well as a varied assortment of motivational, developmental or strategic constructs that are determined by time, place or role. Other narrative researchers place a

similar emphasis on the role of current goals. Woike et al. (1999), for example, proposed that as individuals encode and recall experiences differently, autobiographical memories are likely to be interpretative and driven to a certain degree by a person's current goals and desires.

The relationship between characteristic adaptations and life narratives has been a focus of many studies. One body of research demonstrates that basic motives, such as the need for power (autonomy/agency) and intimacy (sociotropy/communion) are significantly related to autobiographical memory (e.g., McAdams, Hoffman, Mansfield & Day, 1996; Sutin & Robins, 2005; Woike, 1995; Woike et al., 1999; Woike et al., 2001). It is consistently evident that individuals with strong agentic motives are more likely to construct personal narratives that reflect themes associated with power, such as self-mastery, status and victory, achievement and responsibility and empowerment. In contrast, individuals high in communion motivation tend to construct life narratives emphasising intimacy themes, such as love and friendship, dialogue, caring for others and a sense of belonging.

The two motives of agency and communion also reflect a difference in the way life narratives are organised. Woike et al. (1999) found that individuals with strong agentic motivation are more likely to use an analytic and differentiated narrative style when recalling events related to power, reflecting more differences, separations and opposition than those individuals who are lower on agentic motivation. On the other hand, individuals with high intimacy motivation tend to use a synthetic style when recalling communal events, emphasising similarities, connections and congruence. Agency and communion are discussed in more detail in Chapter 3.

The fourth concept of the framework contains the psychosocial constructions that form identity, which are represented in Figure 1 as "Life Stories". These

constructions take the form of internalised and evolving life stories of the self that provide meaning and identity. Singer (2004) observed that narrative identity research focuses primarily on this level, its fundamental aim being to discover how individuals make meaning of their lives, both as discrete individuals and as social beings who are variously defined by life stage, socio-economic status, ethnicity, religion, sexual orientation and other social-cultural factors.

Finally, the framework's fifth concept is represented in Figure 1 as "Culture". McAdams and Pals (2006) proposed that life stories or narratives exist as a psychosocial construction that reflects an individual's understanding of the self as located in culture. This understanding is created by both the individual and the vast range of cultural factors, such as history, religion, ethics, economy and politics, that the individual experiences throughout their life.

With regard to the fourth concept of the framework entitled "Life Stories", McAdams (1996) proposed that an individual's life story displays five unique aspects: (a) structure and content, (b) function, (c) developmental course, (d) differentiating factors, and (e) the degree to which the life story either reflects adaptation or reinforcement towards pathology of the recalling individual. Structure and content relates to the way in which life stories are organised into temporal sequences, incorporating settings, scenes, characters, plots and enduring themes. With regard to function, McAdams proposed that the primary function of the life story is integration in which individuals attempt to form patterns from random and seemingly unrelated aspects of their lives. Life stories also serve other significant functions such as the entertainment of others and the self, instruction and the provision of insights into themselves, others and situations.

The next aspect of McAdams' (1996) life story is the developmental course, which McAdams broke down into three broad eras: Prenarrative, narrative and postnarrative. The prenarrative era occurs from infancy to adolescence. In this era, there is no concept of identity present in life stories, however, this era is one in which material is being gathered to develop a storied self. The narrative era takes place from adolescence to adulthood, and is when individuals starts to create a self-defining life story. McAdams argued that identity is constantly evolving during this era. The postnarrative era encompasses late adulthood and is primarily evaluative in nature, as identity is essentially formed.

McAdams' (1996) fourth aspect of the life story involves individual differences and the alternate kinds of life stories that exist. He proposed that individual differences can be examined in terms of varied narrative tones, imagery, thematic lines, ideological settings, nuclear episodes, imagos and generativity scripts. He believes that while every life story is unique there also exist commonalities that permit comparison (McAdams 1985, 1993).

Finally, McAdams' (1996) fifth aspect of the life stories concerns the varied pathologies (excluding psychiatric disorders whose determinants are greater than, and outside the domain of identity and personal meaning) of which the evaluation of life stories and autobiographical memories may reveal either a presence or absence. He proposed that the good quality of the autobiographical memory or narrative form is strongly associated with the absence of pathologies, and identified six dimensions that reflect this life story quality: Coherence, openness, credibility, differentiation, reconciliation, and generative identification (McAdams, 1993).

Empirical examination of McAdams (1996) model and its application is currently being undertaken by a number of researchers (e.g., Habermas & Bluck, 2000;

Pals, 2006a; Thorne, 2000). McAdams himself has been involved in several studies. McAdams et al. (2004) examined links between dispositional and narrative features of personality by comparing the Big-Five traits to autobiographical memory indices of emotional tone, theme and structure. They hypothesised that neuroticism and extraversion would be related to the emotional tone of the life story, that conscientiousness and agreeableness would be positively related to life story themes of agency and communion respectively, and that finally, openness would be related to narrative complexity. They found mixed support for these hypotheses. Positive relationships were found between (a) neuroticism and emotionally negative tone in life stories, (b) agreeableness and life story themes of communion, as well as (c) openness and structural complexity in the narrative accounts. However, no consistent relationships were found among conscientiousness and life story themes of agency, or extraversion and positive narrative tone. These results suggest that while there is a complex interaction between life stories and dispositional traits, the study of narratives provides information that adds to our comprehensive understanding of personality (Pals & McAdams, 2004).

A Cognitive Neuro-Scientific Model of Autobiographical Memory

McAdams and his colleagues' Life Story Model of Identity provides a broad narrative model, focused primarily on personological variables. The model does not elaborate on underlying cognitive processes or on the structure of autobiographical memory. Conway and Pleydell-Pearce's (2000) landmark review introduced a model of the Self-Memory System (SMS). This model offers a model of autobiographical memory that complements both the content and structure of autobiographical memory, and which attempts to encompass the cognitive, personality and narrative perspectives.

Moreover, Conway, Singer and Tagini's (2004) modified version of Conway and Pleydell-Pearce's SMS model, incorporates the working self, thereby linking in more closely with McAdam's (1985, 1988, 1996, 2000) narrative ideas. Conway et al.'s model is illustrated in Figure 2.

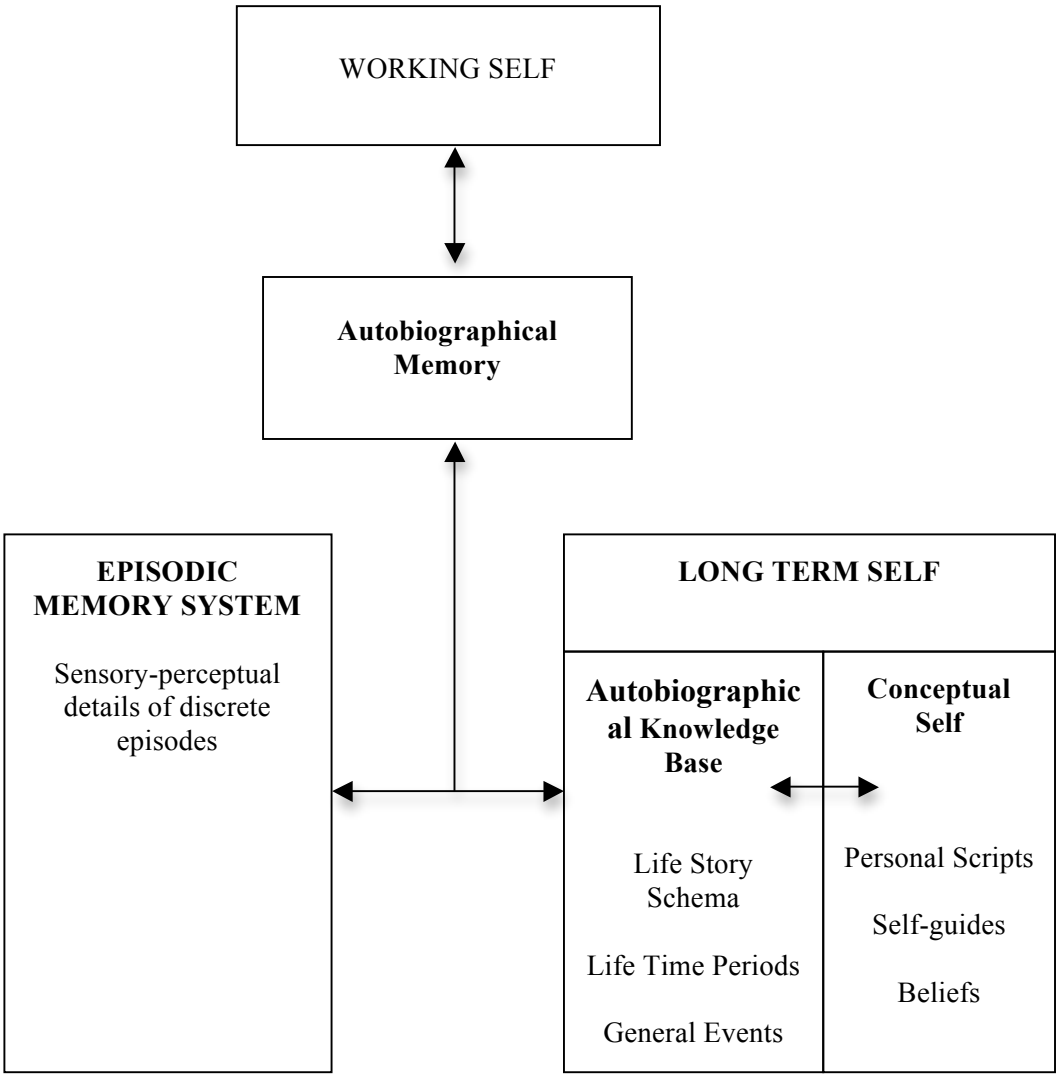

Figure 2. Conway, Singer and Tagini's (2004) Self Memory System

Conway et al.'s (2004) modified SMS model has three major components: The episodic memory system, the working self and the long-term self (see Figure 2). Conway et al. argued that the working self, depending on the status of current goal

activity, mediates between episodic memory and the long-term self to produce autobiographical memories.

Conway and Pleydell-Pearce (2000) postulated that autobiographical memories are temporary mental constructions within a SMS. The SMS contains both the autobiographical knowledge base as well as the individual's current goals as determined by the working self-concept. This relationship between the autobiographical data and current goals is a reciprocal one, in which the goals of the working self-concept are "grounded" by the autobiographical knowledge base. The self, and more specifically the current goals of the self also act as control processes that moderate the construction of autobiographical memory.

Conway and Pleydell-Pearce's (2000) SMS model conceptualised the autobiographical knowledge base as being made up of three broad levels of specificity identified in a body of research (e.g., Conway & Rubin, 1993; Schooler & Herrmann, 1992). These three levels are: (a) lifetime periods, (b) general events, and (c) event-specific knowledge (see Figure 2). Autobiographical memories can encompass one, two or all three levels of specificity in the one memory. The knowledge base is considered a hierarchical one, with knowledge stored at the level of lifetime periods providing cues that can be used to access a catalogue of general events. This in turn indexes knowledge at the event-specific knowledge level.

Lifetime periods (e.g., *when I was at university; when I worked for company x; when I was married*) name well-defined periods of time and incorporate general knowledge of significant others, familiar locations, actions, activities, plans, goals, and characteristics of that period. The memory content of lifetime periods incorporates both thematic and temporal knowledge of that period. Memories of general events represent a recall of a general event that may be a single event (e.g., *the birth of my first child*) or

repeated events (e.g., *summer holidays at the beach house*). They appear to be linked to goal attainment and also act as a means of conveying significant information for the self. Finally, event-specific knowledge represents highly specific detail relevant to the event being recalled. It may include recall of experienced emotions and sensory-perceptual reactions.

Conway et al. (2004) added another level titled the *Life Story Schema* to the autobiographical knowledge base. The life story schema purportedly consists of more global personal history information than lifetime periods, and comprises an individual's understanding of how the normative life story is constructed within their culture. The life story schema, therefore, contributes to the development of an individual's more elaborated life story, which is perceived by McAdams (1985, 2001a) as being a key aspect of identity. Conway et al. argued that the life story schema includes generalisations about life chapters and themes, and also has connections to cultural legends and narrative structures, such as themes of redemption (McAdams, 2006d).

Conway and Pleydell-Pearce (2000) referred to the substantial body of research from a variety of theoretical perspectives that has conceived a significant and strong relationship between the self and autobiographical memory. In their SMS model, current goals of the self modulate the encoding and retrieval of autobiographical memories. Conway and Pleydell-Pearce proposed that two broad subgroups of similar goals related to power and intimacy, or autonomy and sociotropy, have been referred to in an abundance of literature (e.g., Beck, 1983; Blatt & Zuroff, 1992). The dimensions of autonomy and sociotropy as underlying personality characteristics that have been linked to vulnerability to depression have been discussed in Chapter 1. These goals also relate to the concepts of agency and communion which fall under the category of characteristic adaptations in McAdams and Pals (2006) framework of personality

discussed earlier in this chapter and represented in Figure 1. There has been much narrative research on agency and communion (e.g., McAdams et al., 1996; Woike, 1995; Woike et al., 1999; Woike et al., 2001). Conway and Pleydell-Pearce maintained that these goals can include achieving independence, mastery, intimacy that may have perceived by the individual as solutions to discrepancies in the self-concept that resulted from childhood experiences. Attachment literature also assumes that current goals of the self are a result of the secure or insecure representations developed in childhood, which in turn influence the accessibility of autobiographical knowledge.

Based on Baddeley's research on working memory, Conway and Pleydell-Pearce (2000) developed the term *working self* to develop a descriptor for their notion that a core part of working memory is "a set of control processes that co-ordinate and modulate other computationally separate systems" (Conway & Pleydell-Pearce, p. 265). They proposed that the goals of the working self form a subset of working memory control processes that are organised into related goal hierarchies. These goal hierarchies serve to control cognitions so that resultant behaviour is functional and effective.

While Conway et al. (2004) maintained Conway and Pleydell-Pearce's (2000) position that the working self acts as a goal regulator, they extended the duties of the working self to include the organisation of current experiences. This they termed the *psychological present*. Conway et al. introduced a new aspect of the SMS model, the *long-term self*, defined as the interaction of the autobiographical knowledge base and the conceptual self. The conceptual self is assumed to consist of non-temporally specified conceptual self-structures, such as personal scripts (Tomkins, 1979, 1987), conceptual aspects of internal working models (Bowlby, 1973, 1980), attitudes, values and beliefs. The long term self is proposed to contain the knowledge required by the working self to organise and instantiate active goal processes.

In terms of the construction of memories, in Conway and Pleydell-Pearce's (2000) model, specific memories can be activated either by generative retrieval or direct retrieval. They argued that in generative recall search processes are modulated by control processes, whereas in direct recall this modulation is not as extensive. In generative retrieval, the interaction between the working self and the autobiographical knowledge base forms stable patterns that produce a retrieval model. In contrast, direct retrieval occurs when stable patterns are formed in response to the effects of highly specific cues, these cues effectively acting as "retrieval models" themselves. Only after this has occurred does the working self enter the construction process. The goal structure of the working self then determines whether a spontaneously constructed memory enters the current central processing sequences.

Conway et al.'s (2004) modified SMS model introduced the constructions of *adaptive correspondence* (experience-near sensory-perceptual records of goal activity) and *self-coherence* (a more complex and conceptually rich long term storage of both conceptual and remembered knowledge), and proposed that a fundamental tension exists between these two constructions. They believe that the capacity of the SMS to cope with the conflicting demands of adaptive correspondence and self-coherence determines the healthy functioning of memory, and as a result, the self.

Narratives over the Developmental Course

In terms of developmental course, McAdams (1994, 1996) proposed that the life story changes over time into three broad eras: a pre-narrative era which stems from infancy to early adolescence, the narrative era running from adolescence to adulthood, and the post-narrative era which normally occurs when elderly. Following McAdams' model, Habermas and Bluck (2000) proposed that while narrative processing occurs

from early childhood, the cognitive tools required to construct global coherence and integration in the life story, such as the capacity for autobiographical reasoning, as well as the social-motivational demands to construct a life story, develop during adolescence.

More recently, Conway and Holmes (2004), drawing on both Erikson's research on psychosocial stages, and the SMS model of autobiographical memory (Conway & Pleydell-Pearce, 2000), argued that the most accessible events in memory would be the events in any specific period of the developmental life span that are correspondingly related to the developmental goals of that particular psychosocial stage. To test the model, Conway and Holmes asked elderly adults to recall memories from each decade of their life (spanning seven decades from 0-9 to 60+). After coding memories for Erikson's psychosocial themes they found that the memories did indeed reflect the specific psychosocial stages outlined by Erikson in his model. In a second study using another sample of elderly individuals, they used psychosocial cue words to prompt autobiographical memories. Examination of the age patterns also reflected the association between age periods and developmental psychosocial themes. It would appear, therefore, that the developmental stages of our lives do determine and sensitively maintain our narrative identity.

Self-Defining Memories

Conway et al. (2004) incorporated the concept of self defining memories into their revised SMS model, which provides an important link between cognitive processing and personality. Self-defining memories are defined as a class of memories within autobiographical memory that are presumed to contain critical knowledge of progress on long term goal attainment (Singer & Salovey, 1993). Indeed, much of the recent research on autobiographical memory has based itself on Singer and Salovey's

(1993) theoretical framework for conceptualising personality, self and memory, which emphasises content, as well as structure, of narratives. A number of theorists (e.g., Conway, 2005; Singer & Salovey, 1993) have proposed that self-defining memories are both developmentally critical and directly reflective of the major themes in individuals' lives, particularly unresolved conflicts or ongoing issues.

Self-defining memories have been defined by Singer and his colleagues as memories that are at least one year old; are meaningful and affectively intense; have been recalled many times; and, assist in self-understanding and self-discovery (Singer & Salovey, 1993). Self-defining memories have been rated by study participants as being more important to the individual than general autobiographical memories (Singer & Moffitt 1991/1992), and are therefore more likely to elicit significant self-referent material relevant to a person's emotional state. These memories can be positive, negative or a combination of both. Positive memories can act as a motivational experience that can be used when an individual is feeling challenged by a situation. In contrast, negative or ambiguous memories can reflect unresolved issues that can result in a demoralising effect when an individual has to confront similar types of situations (Singer & Salovey, 1993).

Compared to general autobiographical memories, self-defining memories are more likely to reflect themes of self-discovery and self-understanding, focus on unresolved conflicts or enduring concerns, and be more significant to the individual (Sutin & Robins, 2005). As self-defining memories are associated with the most significant concerns of the individual, they are, therefore, repeatedly accessed in consciousness (Singer, 2005). This occurs especially in times of uncertainty as they can act as a coping resource, guiding thoughts and behaviours over difficult situations (Blagov & Singer, 2004). In terms of Conway et al.'s (2004) SMS, self-defining

memories exist as a subset of autobiographical memory. This relationship is presented in a modified version of the SMS illustrated in Figure 3.

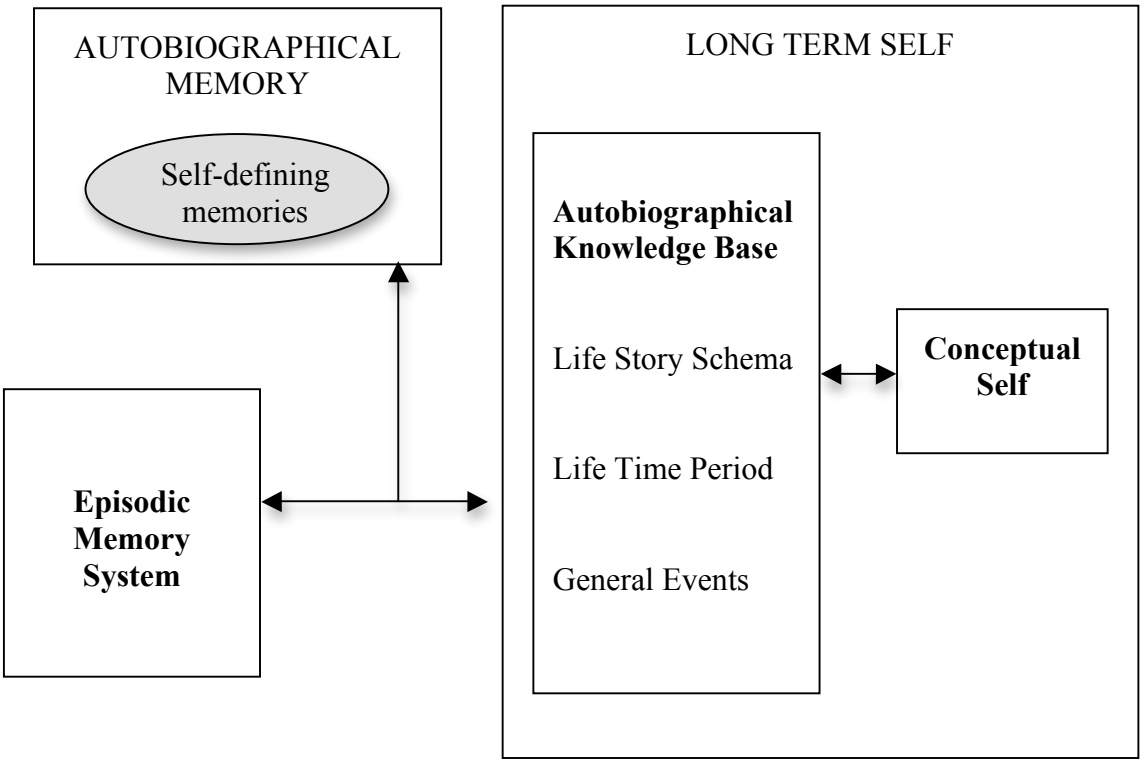

Figure 3. The position of self-defining memories in Conway et al.'s (2004) Self Memory System

Self-defining memories are distinguished from other important and affective personal event memories by (a) their connection to other stored memories that share similar narrative themes, and (b) their relevance to the individual's ongoing concerns or unresolved conflicts (Singer & Blagov, 2004a). Research on individuals' motivations and goal attainment supports this distinction. Thorne, Cutting and Skaw (1998), for example, compared important relationship memories generated in two interviews held over a six-month period. Participants were allowed to recall similar or different relationship memories in the second interview. For both unique and repeated memories

a moderate thematic consistency was evident. Thorne et al. concluded that these personally significant memories, even when divergent in content, had similar motivational themes and narrative structures. Similarly, in an earlier study, Demorest and Alexander (1992) asked participants to recall personally important memories and then a month later to generate a set of fictional scenarios. They found a significant overlap in the thematic content between the recalled memories and imagined scenarios. In combination, these results suggest that individuals connect remembered experiences by personally significant themes. Siegel and Demorest (2010) extended this notion by focussing on a set of maladaptive interpersonal schemas described as affective scripts. Affective scripts have been conceptualised as scrips that concern individuals' motivations in their relationships with others, as well as the emotional outcome for the self as a result of how others respond to them. These affective scripts are thought to develop as a result of specific emotional interactions, but they become generalised, so that over time they act as a guide for how to manage associated, or similar, interpersonal interactions. As such, affective scripts can become maladaptive when applied to interpersonal situations that are incongruent. For example, a child who has acted with anger when rejected by a caregiver, will not find this reaction as helpful as or effective when applying the same reaction to a friend or colleague. Siegel and Demorest argued that the consequences of these maladaptive affective scripts, can lead to psychopathology, including depression.

The temporal stability of both emotions and motives in self-defining memories has been supported by research conducted by Sutin and his colleagues (e.g., Sutin & Robins, 2005; Sutin & Robins, 2010). Sutin and Robins (2005) found that both emotions and motives remained relatively stable across memories and over time. According to Conway et al.'s (2004) SMS model, these personally significant themes

originate from the goals of the working self, but can also act as a continuing influence on ongoing goal processing. Sutin and Robins concluded that their results reflect the enduring nature of concerns and conflicts in self-defining memories, and support the SMS model. Furthermore, Sutin, Costa, Wethington and Eaton (2010) examined how stressful life experiences affect personality development, as measured by the five-factor model of personality (McCrae & Costa, 2003). They found that while the characteristics of stressful life events were primarily unrelated to any change in personality development, how individuals came to understand these stressful events may be related to personality trait changes across middle adulthood. Those participants who perceived the turning point as negative were more likely to demonstrate increased neuroticism, whereas individuals who reported that they had learned a lesson from the event demonstrated increases in extraversion and conscientiousness.

Research has consistently found that the affective quality of self-defining memories is strongly related to thematic content, reflecting attainment or non-attainment of a person's most desired goals (Sutin & Robins, 2008; Wood & Conway, 2006). Self-defining memories are more often relied on by individuals to provide insights and life lessons in memories regarding tension or goal conflict than are other types of personal memories (Thorne, McLean & Lawrence, 2004). Individuals who express positive affect in their self-defining memories are more likely to perceive their goals as more attainable and commit to them. On the other hand, individuals who express negative affect in the memories are more likely to be less optimistic about goal attainment and this may result in active efforts to avoid the negative consequences of undesired outcomes (Moffitt & Singer, 1994).

Moreover, Singer and Salovey (1993) concluded that memories related to specific goal-attainment are more vivid and affectively intense than other

autobiographical memories. Individuals who have a tendency to use avoidance goals rather than approach goals generate memories that have more negative and less positive content. These individuals are also more likely to retrieve memories reflecting failure of goal attainment, which may occur as a reminder of the consequences of the non-attainment of goals (Moffitt & Singer, 1994; Singer, 1990).

To capture influential components of self-defining memories, Blagov and Singer (2004) argued four dimensions of self-defining memories should be considered: specificity, integrative meaning, event content and affect. *Specificity* was defined as the temporal and detailed specificity of the narrative, while *integrative meaning* refers to the individual's capacity to derive some higher personal meaning when reflecting on the narrative from a distance. *Content* refers to a number of different categories that have been prominent in autobiographical memory research, such as relationships and achievement, while *affect* is defined as the subjective emotion upon recall. As an addendum, Blagov and Singer noted that self-defining memories may not always be used to define key aspects of self, but instead can produce a defended view of self. The authors argued that the apparent use of narratives for defensive purposes is consistent with Conway and Pleydell-Pearce's (2000) SMS model of control processes inhibiting the materialisation into consciousness of spontaneously activated autobiographical knowledge.

These functional and dysfunctional self defining memories were explored by Conway et al. (2004) in context of Bowlby's (1973, 1980) internal working model of relationships and its expression in self-defining memories, as they proposed that this working model is the one mental model that can become dominant in the working self. They asserted that complex interactions of the internal working models across the conceptual self, autobiographical knowledge base and episodic memory system bring

into play self-defining memories that have an effect on the working self's attempts at adaptive correspondence to current goal activity and resultant self-coherence.

Conway et al. (2004) cited research conducted by Tagini, Conway and Meins (2004) in which they compared self-defining memories across three individuals with different attachment styles. They found that a securely attached individual was able to produce specific, coherent and integrated narratives that referred to a variety of relationship and achievement themes, and shifted fluently between recollection of detailed memories and evaluation of past attachment experiences in terms of the present. In contrast, an individual with a preoccupied attachment style produced excessively detailed, disrupted and contradictory narratives that referred to negative relationship and achievement themes. Their recall of past attachment experiences significantly affected their capacity for adaptive correspondence and resulted in disengagement from the present context which appeared to disturb current cognitive and contextual processing. Finally, the individual with a dismissive style of attachment recalled overgeneral memories that lacked in any strong positive or negative affect. The overgenerality could not be attributed to depression as the individual scored zero on the Beck Depression Inventory. Conway et al. proposed that overgenerality might serve to keep potentially destabilising details of experiences from the working self and conceptual self, and allow construction of an alternate version of the self and others not limited by remembered reality. The self-defining memories of preoccupied and dismissing individuals are thus deficient in various ways, since both types of insecure individuals are not able to be reflective about their experience and integrate it to form a coherent account.

Structural Aspects of Autobiographical Memory

Although Singer and his colleagues (e.g., Singer & Salovey, 1993) have focused on understanding the content of self-defining memories, their model also incorporates structural aspects derived from research in cognitive psychology by Williams and his colleagues (e.g., Williams & Broadbent, 1986; William et al., 2007). Williams and colleagues' evolving Information Processing Models have explored the structure of autobiographical memory, in particular an autobiographical memory disorder of overgenerality, that appears to occur in depression. In terms of the SMS model, Conway and Pleydell-Pearce (2000) hypothesised that such overgenerality is an attempt at inhibitory control of memory construction. They proposed that the speed in which event-specific knowledge (ESK) enters the retrieval process partly determines whether inhibition occurs. If ESK is encountered quickly or if ESK is directly associated with working memory goals, then extra resources are possibly needed to slow ESK down. Drawing on Williams and his colleagues' findings, they argued that depressed individuals may be incapable of drawing on these extra resources.

Williams and his colleagues (e.g., Williams, 1992; Williams et al., 2007) have developed models of overgenerality which have evolved over time. Originally based on Beck's (1967, 1976) ideas, Williams' conceptualisation of specificity has been increasingly defined. The next section details the sequential development of the information processing models of overgenerality.

Early Overgenerality Research

Williams and his colleagues' research was originally drawn from Beck's (1967, 1976) cognitive theory of depression. Their preliminary hypotheses assumed that the weighting of negative scenes and downplay of positive scenes would be reflected in the autobiographic recall of depressed individuals. Initial research, therefore, set out to

differentiate between positive and negative autobiographic recall for depressed versus non-depressed individuals. However, they found that while affect was not in itself a differentiating factor, there was a significant tendency for depressed individuals to recall overgeneral memories (Williams & Broadbent, 1986).

An initial series of associated studies on the qualitative aspects of autobiographical memory recall, showed that depressed and parasuicidal individuals tend to recall overgeneral memories when compared to non-depressed individuals, even when provided with a specific cue (e.g., Kuyken & Dalgleish, 1995; Moore, Watts & Williams, 1988; Williams & Broadbent, 1986; Williams & Dritschel, 1988; Williams & Scott, 1988). A response was considered specific, as opposed to overgeneral, when the event occurred within one day and was not repeated regularly (e.g.," I made a sandcastle…"), whereas overgeneral memories reflected experiences that did not lie within a day and was possibly repeated (e.g., "Every winter I would go skiing with my family…"). A number of these studies found that the tendency for depressed individuals to recall overgeneral memories was especially pronounced for positive cues (Williams & Broadbent, 1986; Williams & Dritschel, 1988; Williams & Scott, 1988). The overgenerality effect for depressed individuals has also been found in a narrative study using a non-clinical sample, but only in response to positive cues (McAdams et al., 1988).

The association between overgeneral recall and depression was confirmed in a meta-analysis by Van Vreeswijk and de Wilde (2004). Using data from 14 studies carried out between 1986 and 2002, they found confirmation that psychiatric patients demonstrate greater levels of overgenerality than non-clinical controls. However, methodological issues may account for difference between clinical and non-clinical participants in overgenerality. Raes, Hermans, Williams and Eelen (2007) argued that

the traditional procedure used in the majority of autobiographical memory research, the Autobiographical Memory Test (AMT; Williams & Broadbent, 1986) is not sensitive enough to measure overgenerality in non-clinical groups. They found that the Sentence Completion for Events from the Past Test (SCEPT) revealed significantly more overgeneral responses in comparison to the AMT, and may therefore be a more effective instrument to measure overgenerality in the non-clinical population.

A recent meta-analysis of studies using impact methods found similar results to the earlier review by Van Vreeswijk and de Wilde (2004). Wiliams et al. (2007) found a mean effect size (Cohen's *d*) of 1.12 (interquartile range [IQR] = 0.44). They concluded that overgenerality is a consistent phenomenon of clinical patients diagnosed with major depressive disorder. Moreover, Williams et al. found a significant association between affective disorders other than major depressive disorder and overgenerality. They concluded that overgenerality appears to be a phenomenon associated with affective disorders in general, as well as other various psychiatric diagnostic conditions, such as post-traumatic stress disorder.

The overgenerality effect has been found in a range of samples with affective disorders including patients with post-natal depression (Croll & Bryant, 2000); currently euthymic patients with a history of major depression disorder or bipolar depression (Mansell & Lam, 2004; Scott, Stanton, Garland & Ferrier, 2000); and, participants exhibiting sub clinical symptoms of depression, labelled dysphoria (e.g., Goddard, Dritschel & Burton, 1997; Moffitt, Singer, Nelligan & Vyse, 1994). Indeed, when Williams et al. (2007) investigated the overall effect size from their 30 studies and considered overgenerality associated with both major depression disorders or other affective disorders, they found that 28 of the 30 studies showed the clinical groups to significantly differ from the non-clinical controls, with a large overall mean effect size

of Cohen's *d* statistic of 0.94 (IQR = 0.57). They concluded that overgeneral memory is a consistent characteristic of people diagnosed with affective disorders.

With regard to anxiety disorders, while overgenerality does not appear to be evident in generalised anxiety disorder (Burke & Matthews, 1992) or social phobia (Heidenreich, Junghanns-Royack & Stangier, 2007; Rapee, McCallum, Melville, Ravenscroft & Rodney, 1994), Wilhelm, McNally, Baer and Florin (1997), have found that obsessive compulsive disorder (OCD) patients demonstrate this overgenerality effect, but only when experiencing comorbid depression. Furthermore, other studies have replicated the overgenerality effect across a range of various related diagnostic groups, including borderline personality disorder (e.g., Jones et al., 1999; Startup et al., 2001) and those with history of abuse (Burnside, Startup, Byatt, Rollinson & Hill, 2004; Kuyken & Brewin, 1995). Results are equivocal for the relationship between overgenerality and trauma. While some studies show a relationship between overgenerality and trauma-exposed participants (e.g., Dalgleish, Rolfe, Golden, Dunn & Barnard, 2008; McNally, Lasko, Macklin & Pitman, 1995), others provide only limited support for this relationship (e.g., Harvey, Bryant & Dang, 1998). In a recent evaluative review of 24 studies, Moore and Zoellner (2007) did not find a reliable association between trauma exposure and overgenerality. However, they did conclude that depression and PTSD and other psychopathology factors were consistently related to overgeneral recall.

Models of Overgenerality

An Early Theoretical Model of Overgenerality

Williams and his colleagues provided a general model of the autobiographical memory process to account for the overgenerality effect in depression. Williams (1992) proposed that both encoding and retrieval in the memory system should be

conceptualised as hierarchical processing, in which information is processed sequentially starting from more general and moving through to more specific details. In addition, he proposed that memory retrieval of specific information may fail not only because of an inability to encode specific details, but also as a result of a premature termination of the memory retrieval process.

Support for this model was evident in Williams and Dritschel's (1992) findings that overgeneral memories can be distinguished into two functionally independent superordinate memory categories, defined as hierarchical organisers of memories of events. These two hierarchical organizers were labelled; extended hierarchy and categorical hierarchy. Memories of events can be placed in an extended hierarchy, which places memories according to their inclusion in an extended time period (e.g., "when I was at university"). Alternatively a memory can be located in a categorical hierarchy, which places memories in general categories, such as "people", "places" and "activities" (e.g., "my relationship with my mother").

When analysing differences in these two types of overgeneral memories, Williams and Dritschel (1992) found that although depressed people retrieved an abnormally high number of categorical memories compared to non-depressed people, the two groups did not differ in the number of extended memories recalled. They proposed that depressed individuals, rather than processing memories onto a specific level, become "stuck" at the category description stage (e.g, "high school was a difficult time for me"). Williams (1996) termed this process "mnemonic interlock", and postulated that the process develops when children learn that certain specific event information is too negative and, therefore, deliberately avoid recalling the event due to its negative consequences. If this occurs too often, the process becomes a normal way of retrieving information, and inhibits a child's natural retrieval development. In addition,

each time recall of specific negative events is avoided, the repertoire of categoric intermediate descriptions expands. Furthermore, Williams proposed that mnemonic interlock becomes a cognitive style, which is influenced in later life by an individual's current level of depression. If an individual has experienced a recent negative event, Williams postulated that this individual would be more likely to find it particularly difficult to access positive mnemonic cues.

The Hierachical Nature of Autobiographical Memory Retrieval

Integration by Williams et al. (2007) of his earlier models (Williams, 1992; 1996) with that of Conway and Pleydell-Pearce's (2000) SMS model resulted in a model which clearly showed that autobiographical memory retrieval is a staged process. As shown in Figure 4, individuals initially derive an intermediate description of the information that needs to be recalled, and use this intermediate description to access candidate episodes which are consistent with the description.

A number of studies provide support for this hierachical model of recall. Haque and Conway (2001) tested the hierarchical, staged nature of voluntary memory retrieval by interrupting cued autobiographical retrieval after 2, 5 or 30 seconds. Their finding that early interruption resulted in the output of more general memories when individuals were also engaged in a secondary task lent tentative support for the hierachical model of memory retrieval.

Similar results emerged in a study using a different design conducted by Barnhofer, de Jong-Meyer, Kleinpa and Nikesch (2002) which evaluated whether depressed individuals show consecutive retrievals of categoric memories. Clinically depressed and non-depressed participants were compared on the temporal progression of memory retrievals in a think-aloud cued autobiographical memory task. This design allowed the authors to observe all participant thoughts that came to mind in the memory

process. The results replicated previous findings (e.g., Williams & Dritschel, 1992) on overgeneral recall in that depressed patients recalled significantly fewer specific memories and significantly more categoric memories than the control group, with no significant group difference found for extended memories. The authors concluded that these results indicate a general robustness of the overgeneral phenomenon over a range of designs.

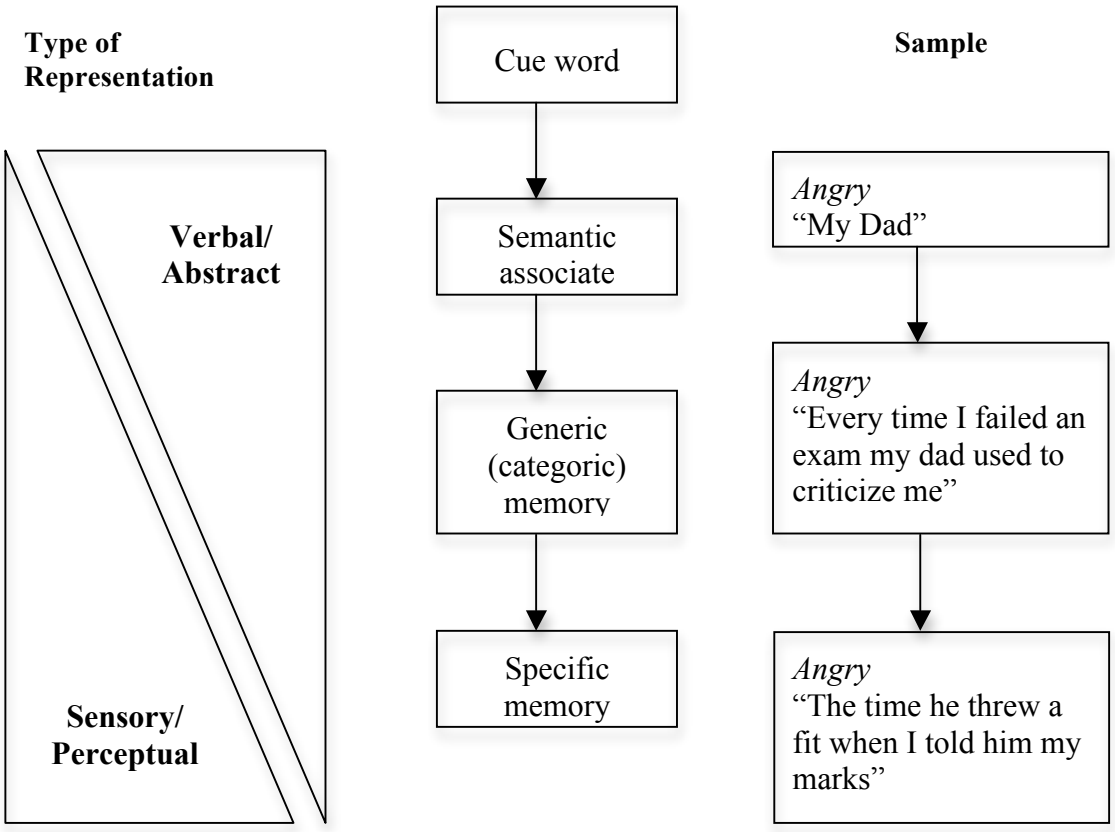

Figure 4. Representation of the memory search processes (Williams et al., 2007)

The hierarchical model of retrieval found further support from Williams et al. (2006) when investigating the pattern of errors made by individuals when they fail to hit the designated target retrieval category. Their results indicated that when individuals are unable to achieve their target that their errors systematically fall into the category that is

on the immediately higher rung of the category. For example, an individual unable to generate a categoric memory will recall a semantic associate, whereas someone who cannot access a specific memory will recall a categoric memory.

The CaRFAX Model of Overgeneral Memory

The most recent model put forward by Williams et al. (2007) is the CaRFAX Model of Overgeneral Memory. Williams et al. extended his previous models to incorporate three processes, which may each work independently or in combination with each other to reduce the specificity in autobiographical recall: Capture and rumination (CaR), functional avoidance (FA) and executive control of dysfunction (X). This integrated model looks not only at reduced executive capacity, but also at the way retrieval processes are impeded by semantic overlap between current concerns and the cues that are used to search memory. They argue that this can trigger rumination and possibly result in the avoidance of specific knowledge, which in turn may lead to consequences such as impaired social problem solving. The proposed relationship between the CaRFAX Model and overgenerality is detailed in Figure 5.

The first process detailed in the CaRFAX model, Capture and Rumination, is based on the strong evidence linking overgenerality and rumination (e.g., Crane, Barnhofer, Visser, Nightingale & Williams, 2007; Raes, Watkins, Williams & Hermans, 2008; Watkins & Teasdale, 2004; Watkins, Teasdale & Williams, 2000). Williams et al. (2006) proposed that overgenerality is a result of the way a cue word is mapped onto the concerns of the individual. Supporting evidence suggests that when the cue words create an overlap with an individual's established attitudes and concerns, overgenerality is likely to result (Spinhoven, Bockting, Kremers, Schene & Williams, 2007).

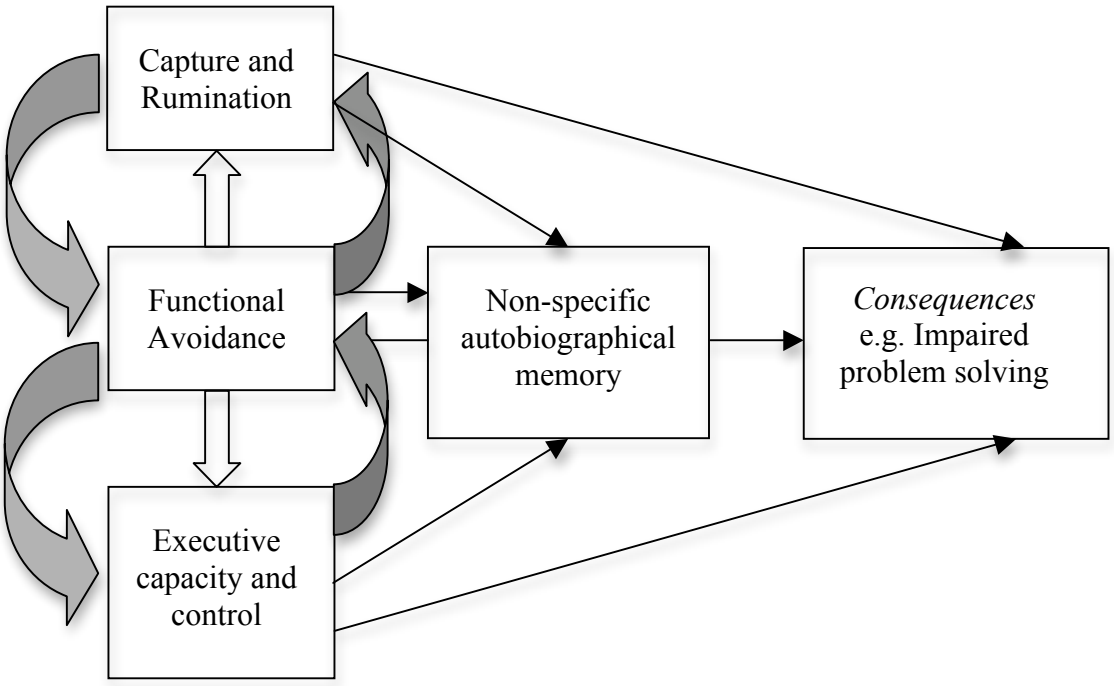

Figure 5. The CaRFAX Model (Williams et al., 2007)

The second process identified by Williams et al. (2007) is functional avoidance. Several recent studies have shown a significant association between avoidance and overgenerality (Hermans, de Decker et al., 2008; Raes, Hermans, de Decker, Eelen & Williams, 2003; Raes, Hermans, Williams & Eelen, 2006). Their findings suggest that overgenerality facilitates an avoidance of emotionally charged memories, whereas specificity exposes the individual directly to a wider range of recalled events and situations, whatever their emotionality.

With regard to the third process of executive capacity and control, Conway and Pleydell-Pearce (2000) proposed in their SMS model that generative retrieval involves supervisory executive processes, and that any interference with these processes could result in unsuccessful retrieval. This reduced executive capacity may also be a

significant contributing factor in the limited specificity retrieval that has consistently been found in the research with depressed individuals.

In summary this section has shown that overgenerality is a phenomenon consistently demonstrated in depressed individuals. Williams and his colleagues (e.g., Williams, 1992, 1996; Williams et al., 2007) have developed evolving models of overgenerality, culminating in the CaRFAX model, which incorporates elements of Conway and Pleydell-Pearce's (2000) SMS model. The next section specifically relates to the subset of autobiographical memory, self-defining memories, and whether the relationship between depression and overgenerality in autobiographical memory extends to self-defining memories.

The Relationship between Self-Defining Memories and Overgenerality

The following section examines the limited research examining the relationship between self-defining memories and overgenerality in depressed individuals. Research with non-clinical samples has found support for the association between depression and overgenerality in self-defining memories (Moffitt et al., 1994; Harkness, 1996). Moffitt et al. used a memory request that involved a written exercise requesting a self-defining memory, and each participant was instructed to recall either a positive or negative memory. They found that dysphoric participants recalled significantly more overgeneral memories than non-dysphoric participants. However, on closer analysis, this tendency to recall overgeneral memories was only in response to positive cues. The groups did not differ in their specificity of recall for negative cues. Harkness (1996) replicated these findings that currently depressed individuals have a tendency to recall overgeneral memories, when compared to non-depressed individuals in a non-clinical sample. The overgenerality effect for depressed individuals was evident not just for positive/negative

cues, but for cues associated with social problem-solving in real life situations (e.g., a memory related to an issue with a family member).

Two major types of self-defining memories have been identified by Singer and Moffitt (1991/1992); the single-event memory, and the summary memory. They defined a single event memory narrative as "identifiable as an unique occurrence and located in a discrete moment of time in an individual's life" (p. 239) (e.g., "the day I gave birth to my first child"), whereas a summary memory narrative was defined as having a deficit in any reference to a discrete moment (e.g., "my father taking me to little athletics"). The summary memory contains more generalised, and hence overgeneral, content. Singer and Moffitt proposed that these summary memories would be more likely to be evident in depressed individuals than non-depressed individuals.

Contrary to the overgenerality effect found by Williams and his colleagues, Blagov and Singer (2004) found that while memory specificity was inversely related to repressive defensiveness, it was not significantly related to subjective distress. Using ten non-affective cues, Blagov and Singer examined four dimensions of self-defining memories: Specificity, integrative meaning, event content and affect. Specificity was defined as the temporal and detailed specificity of the narrative. The authors collected and analysed 10 self-defining memories generated by 103 undergraduates in terms of the four dimensions and compared them to scores of self-restraint, distress and repressive defensiveness. The authors posited that the results were inconclusive regarding the relationship between emotional distress and overgenerality in this non-clinical sample.

In conclusion, there is general support in research for the relationship between overgenerality in autobiographical memory and depression, both in clinical and non-clinical samples. However, less evidence has been found for the relationship between

overgenerality in self-defining memories and depression, especially in non-clinical samples.

The Relationship between Overgenerality and Trait versus State Theories of Depression

Both the revised SMS model (Conway et al., 2004) and Williams and his colleagues (e.g., Williams, 1996) have examined whether overgenerality is an enduring cognitive process or whether it emerges only during a depressive episode. Conway et al.'s revised SMS model drew attention to the role of content in effective retrieval, and proposed that individuals with a history of depression are likely to demonstrate content effects when cognitive control is destabilised, such as when experiencing an episode of depression. Conversely, Williams' (1996) conceptualisation of mnemonic interlock was as an enduring cognitive style. He argued, therefore, that overgenerality is not state dependent and does not cease to exist when depression is remitted. Both these positions appear to be in accordance with the state-trait theory, in which overgenerality is a stable cognitive process that acts both as a depressive vulnerability, and is also most active when currently depressed. Empirical studies, however, have not always found evidence for enduring overgeneralisation in cognitive processes in those prone to depression.

A number of studies provide evidence for overgeneral recall as an enduring cognitive style (e.g., Brittlebank, Scott, Williams & Ferrier, 1993; Mackinger, Loschin, & Leibetseder, 2000; Mackinger, Pachinger, Leibetseder & Fartacek, 2000; Williams & Dritschel, 1988). Moreover, several studies have found that overgenerality is a significant predictor of subsequent depression (e.g., Gibbs & Rude, 2004; Hermans, Vandromme et al. 2008; Kleim & Ehlers, 2008; Van Minnen, Wessel, Verhak & Smeenk, 2005). In contrast, other studies have found no evidence for overgenerality in

autobiographical memory as an enduring cognitive process (e.g., Brewin, Reynolds & Tata, 1999; Crane, Barnhofer, Visser et al., 2007; Kuyken & Dalgleish, 1995; Spinhoven et al., 2006). Furthermore, this lack of support of enduring processes has extended to overgenerality in self-defining memories (e.g., Harkness, 1996).

Williams, Teasdale, Segal and Soulsby (2000) noted that such inconsistent results may still support the enduring nature of overgenerality as a depressive vulnerability due to the cross-sectional nature of the data. Williams et al. argued that a sub-group of depressed individuals with severe retrieval problems, and a lesser chance of recovery, may not be recorded as being formerly depressed, whereas other subgroups of depressed individuals with less impaired retrieval ability are more likely to recover and register as a remitted depressive.

Williams et al. (2000) examined whether overgeneral memory would alter with treatment for depression. They compared two randomly allocated treatment groups, where the treatment group was treated with an eight-week program of mindfulness-based cognitive therapy (MBCT; Teasdale, Segal & Williams, 1995). MBCT's primary goal is to increase patients' consciousness of the current, moment-to-moment experience and was specifically designed to assist patients at risk of depressive relapse. Many of the treatment aspects encourage patients to focus on specific aspects of their environment with a view to reducing the tendency for overgeneric coding. Although no significant change was found for the control group, the group assigned to the MBCT treatment demonstrated a significant reduction in generic memories at the follow-up measure compared to their pre-treatment level of overgenerality. Williams et al. also measured mood changes and found that while overgenerality did reduce for the treatment group, their mood scores did not change over time. They reasoned, therefore, that the memory changes were not mood driven and concluded that while overgenerality

is an enduring cognitive style, it is open to some modification and thus has significant clinical implications.

In conclusion, contrary to the position taken by the theoretical models of autobiographical memory that overgenerality is an enduring cognitive process strongly associated with depressive vulnerability, research has shown inconsistent findings. It is therefore possible that there may be alternate cognitive processes or underlying personality dimensions involved that are associated with overgenerality as an enduring cognitive process. Narrative research may provide a means of identifying these variables.

The Relationship between Overgenerality, Trait versus State Theories of Depression and Autonomy and Sociotropy

A recent body of research has investigated whether individuals with both a history of depression and dysfunctional levels of sociotropy or autonomy demonstrate overgenerality when memories are concerned with events related to power or intimacy themes. Barnhofer, Crane, Spinhoven and Williams (2007) investigated whether overgenerality is a reflection of failures in executive control, or whether it is related to memory content. Using participants with a history of depression compared to a control group, they looked at whether dysfunctional levels of sociotropy or autonomy could work to interfere with memory retrieval if individuals are unable to reconcile memories of events that reflect a discrepancy between the actual event and their self-imposed standards. Their results showed that formerly depressed individuals who had dysfunctional levels of sociotropy (e.g., “My value as a person depends greatly on what other people think of me.”) were significantly more likely to recall overgeneral memories when provided with a dependency cue word. However, no significant

relationship was found for autonomy. The authors concluded that while findings provided only partial support for Conway et al.'s (2004) SMS, the non-significant results regarding autonomy may have been a result of methodological issues in measuring autonomy.

These results regarding the association between sociotropy and overgenerality, were replicated in another study by Spinhoven et al. (2007). Euthymic patients who had experienced at least two prior depressive episodes were asked to recall autobiographical memories in response to cue words regarding helpfulness. This study did not include an examination of autonomy. Results showed that euthymic individuals were more likely to recall overgeneral memories when the cue words matched highly endorsed attitudes or schemata regarding sociotropy. It was concluded that the findings indicated that an inability to retrieve specific memories may be a result of self-referent cues activating generic, higher-order representations.

The Significance of Self Relevant Cues

Independent of sociotropy or autonomy, self relevance in cues would appear to be an important dimension in determining overgenerality. Crane Barnhofer and Williams (2007) argued that the Barnhofer et al. (2007) findings that formerly depressed individuals can demonstrate content effects when cognitive control is destabilised, suggest that overgenerality in individuals with a history of depression may be especially related to cues that are salient and self-relevant, such as when they relate to long term goals or values. In their study comparing formerly depressed and never depressed participants, they found individuals with a history of depression demonstrated a highly significant negative correlation between cue self-relevance and specificity. They concluded that when formerly depressed individuals are exposed to cues that reflect self-guide content, they are more likely to shift to processing information within the

long term self rather than the episodic memory system, and that this primes latent negative self-schemata and leads to overgeneral.

Summary

In summary, this chapter has discussed narratives as markers of depressive vulnerability and provided a general description of autobiographical memory, including an explanation of self-defining memories. It has also described a number of models of autobiographical memory, including Conway and Pleydell-Pearce's (2000) SMS model which encompasses both cognitive and personality variables. The SMS incorporates Williams and colleagues' information processing models and related research, which have determined a strong association between overgenerality in autobiographical memory and depressive vulnerability. Although there have only been a limited number of studies, a relationship has been observed between overgenerality and depressive vulnerability in self-defining memories. In addition, various models of autobiographical memory that emphasise either the structure or content of narratives were discussed. Finally, it reported the research on the relationship between overgenerality and state versus trait theories of depression. While theory contends that overgenerality is an enduring cognitive aspect found in autobiographical memory that is associated with depressive vulnerability, empirical findings are inconsistent.

The next chapter identifies and elucidates the key narrative themes of (a) agency and communion, (b) redemption and contamination, and (c) integration that may differentiate between depression and depressive vulnerability.

CHAPTER THREE: NARRATIVE THEMES

The previous two chapters have established the importance of content and structural aspects of autobiographical memories and their relationship to depressive vulnerability. This chapter reviews three key narrative themes of (a) agency and communion, (b) redemption and contamination, and, (c) integration. These themes can reflect depression and depressive vulnerability in autobiographical memory. Agency and communion are narrative constructs that represent motivational themes, which have similarities to the vulnerabilities of autonomy and sociotropy in the context of dysphoria (Bruch, 2002). The second grouping of dimensions: redemption and contamination and integration, relate to adaptability, as they are concerned with the resolution and adjustment aspects of autobiographical memory. Self-defining memories represent key experiences and unfinished business, and the narrative constructs of redemption, contamination and integration indicate how well a person has adjusted and reconciled such key experiences. These dimensions represent an extension beyond the recalled event to reflect the degree to which a person has come to terms with the experience and the issues raised by this experience.

Motivations of Agency and Communion

Narrative researchers have investigated two implicit motives termed agency and communion by Bakan (1966). Bakan defined agency as the person's individual existence and self-mastery over their environment. Communion was defined as the individual's participation in a larger organization of which they are part, observable in love and intimacy. Significantly, narrative theory has identified agency and communion

as two major thematic dimensions (Hermans, 1988; Hermans, Kempen & Van Loon, 1992; Mansfield & McAdams, 1996).

The content of narratives differentiates people high on one or other of the two motivations. Narratives recorded by communal individuals make frequent reference to reciprocal, harmonious interpersonal relations (Blatt & Levy, 2003). Individuals who score highly on communion often refer to themselves in the roles of caregiver, friend, lover, helper, confidant and counsellor. In contrast, narratives recorded by agentic individuals contain themes of self-protection, self-assertion, and extension of the self (Blatt & Levy, 2003). These individuals have a tendency to divorce themselves from the situational context and instead focus on needs of mastery, achievement, action and control over their environment. Agentic individuals, therefore, usually refer to themselves in roles such as traveller, master, father or authority.

Within McAdams' life story model of identity (McAdams, 1985, 1996, McAdams & Pals, 2006), agency and communion are conceptualised as elements of characteristic adaptations, represented in Figure 1 (page 36). McAdams and his colleagues viewed characteristic adaptations as personality descriptions referring to personal strivings, defence mechanisms, coping strategies, life tasks, domain-specific skills and values, as well as a varied assortment of motivational, developmental or strategic constructs determined by time, place or role. On the basis of Bakan's writings, human motivation literature and interpersonal behaviour literature, McAdams and his colleagues (e.g., Mansfield & McAdams, 1996; McAdams et al., 1996) proposed four themes of agency: self-mastery, status, achievement/responsibility and empowerment, and four themes of communion: love/friendship, dialogue, care/help and community.

Autobiographical Memory Research on Motivational Themes

A focus of narrative research on agency and communion has been the congruence between thematic content in autobiographical memories and agency/communion. A notable feature of this narrative research is the relative consistency in findings. Much research shows that when individuals are asked to recall significant life experiences, agentic individuals tend to recall experiences that centre around themes of agency such as self-mastery and control, whereas individuals classed as communal tend to recall memories centred on communal themes, such as love and friendship or rejection (e.g., McAdams, 1982; Woike, 1994a; Woike & Polo, 2001).

Early investigation within the narrative perspective (e.g., McAdams, 1982, 1989) focused on two dimensions of human motivation, specifically the power motive and the intimacy motive. McAdams (1982) found that individuals who scored highly on intimacy motivation on the Thematic Apperception Test (TAT; Murray, 1943) also tended to recall memories that incorporated intimacy themes. In contrast, participants who had low scores on intimacy motivation did not tend to incorporate intimacy themes in their memories. The study revealed a similar relationship between power motivation and power themes in recalled memories. Notably, the relationship between memory content and motivation was restricted to personally meaningful memories (e.g., peak experiences), and did not exist for memories that emanated from neutral cues (e.g., neutral experiences). These results suggest that motivations relate most clearly to important memories. This is consistent with Sutin and Robins' (2005) findings that both emotions and motives remain relatively stable across self-defining memories and over time.

More extensive studies by McAdams et al. (1996) and others (Woike, 1994a, 1995; Woike et al., 1999, 2001) have confirmed these early findings of enduring links

between personal motives and the context of their memories. McAdams et al. (1996) conducted three studies in which 350 participants (from both a university setting and the community) recalled narratives of significant life events. Positive relationships were evident among the narratives themes of agency and communion and other measures, both projective and objective, of related dimensions, such as the Thematic Apperception Test (Murray, 1943), Personality Research Form (Jackson, 1984) and personal strivings (Emmons, 1986). The authors concluded that there is a thematic consistency in personality across autobiographical memory, social motives and goal attainment.

Woike and her colleagues extended this research to examine the congruence among personal motivations, memory content and memory structure (Woike, 1994a, Woike 1995; Woike et al., 1999, 2001; Woike & Polo, 2001). Consistent with other narrative research, they found that the content of autobiographical memory is congruent with individuals' implicit motives of agency and communion (Woike, 1995; Woike et al., 1999, 2001; Woike & Polo, 2001), which was especially marked for motive related emotional experiences (Woike 1994b, 1995). These results are consistent with McAdams (1982), and suggest that the motivations of agency and communion are strongly related to personally meaningful memories.

Woike and her colleagues also proposed that autobiographical memory is structured to reflect the organization procedures related to these two motives. In a series of studies, (Woike, 1994a; Woike et al., 1999, 2001; Woike & Polo, 2001) they consistently found that agentic individuals tend to recall memories reflecting agentic themes, and are more likely to recall differentiating memories (memories that emphasise a number of differences or opposition in a given set of stimuli). In contrast, communal individuals are more likely to recall memories centred around the themes of communion, and tend to recall integrated memories (memories that link or draw

connections between different aspects in a specific stimulus group). Drawing on Conway and Pleydell-Pearce's (2000) SMS model, Woike and her colleagues proposed that the personality motives of agency and communion, as part of the SMS, are significant in the organization, encoding and retrieval of motive-related personal experiences.

Woike and Polo (2001) extended this research to examine how affect in narratives was related to agency and communion. They conducted two studies using a non-clinical sample, which investigated the relationship between the content and structure of autobiographical memories and affect. Consistent with previous research, in both studies, agentic and communal individuals reported motive congruence in the content of their memories. Their memory structure was also differentiated by their implicit motives, whereby agentic individuals recalled more differentiation and communal individuals recalled more integrated memories. With regard to affect, a significant effect was only found for agentic individuals who demonstrated higher PA and lower NA. In the second study, no differentiation in affect was found. The authors concluded that whereas implicit motives appear to have a strong relationship with both the content and structure of autobiographical memory, the relationship with self-reported affect is not as clear. Results would suggest that while motivations may have some association with affect in autobiographical memory, they appear fundamentally independent to affect.

Correspondence between Agency and Communion with Autonomy and Sociotropy

In contrast to the weak effects of the motivations of agency and communion with affect in Woike's studies, strong links have been identified in a number of studies (e.g., Bruch, 2002; Helgeson & Fritz, 1999; Helgeson & Fritz, 2000) when considering unmitigated agency and communion. These studies noted considerable overlap in the

conceptual make up of the narrative concepts of agency and communion and the cognitive constructs of autonomy and sociotropy. One essential difference, however, was that the broad traits of agency and communion are conceived as constituting positive and adaptive characteristics, whereas the personality vulnerabilities of autonomy and sociotropy are primarily associated with negative cognitive and emotional outcomes. Bruch (2002) found that agency was unrelated to autonomy but was inversely related to sociotropy, while communion was positively related to sociotropy and inversely related to autonomy.

"Unmitigated" agency and communion, refer to more negatively extreme constructs in which individuals focus more strongly on the motivation at the expense of another element. An individual demonstrating high levels of unmitigated agency would most likely involve a focus on self to the exclusion of others, whereas unmitigated communion involves an excessive focus on others to the exclusion of self. Helgeson and her colleagues (e.g., Fritz & Helgeson, 1998) have found that while agency is correlated to unmitigated agency, and communion is associated with unmitigated communion, there are also distinct differences between the concepts in terms of both their characteristics as well as outcomes, such as well-being and psychological distress. Fritz and Helgeson (1998) found that while communion and unmitigated communion are correlated, unmitigated communion is differentiated from communion in terms of elevated findings of negative view of self, turning to others for self-evaluative information and psychological distress. Helgeson and Fritz (1999) found that although agency was associated with decreased level of psychological distress and increased levels of self-esteem, unmitigated agency was related to increased levels of distress, poorer self-esteem, impaired health behaviour and negative social interactions.

Bruch (2002) found that while unmitigated agency, but not agency, was related to autonomy, both communion and unmitigated communion were related to sociotropy. In relationship to dysphoria, agency was inversely related to dysphoria and negative affect, whereas unmitigated agency was positively related to dysphoria and negative affect. In terms of positive affect, only the constructs of agency and communion proved related. Bruch concluded that while communion and sociotropy appear to be strongly related, agency does not appear to be an exclusive developmental correlate of autonomy. Instead, autonomy appears to be associated with both high agency and low communion.

A series of studies have investigated the relationship among agency and communion and general psychological well-being, generating inconsistent results. Some research shows a mild connection among agency and communion and general psychological well-being. Blagov and Singer (2004) analysed 10 self-defining memories generated by 103 undergraduates in terms of the four dimensions of specificity, integrative meaning, event content and affect and compared them to scores of self-restraint, distress and repressive defensiveness. They found that the degree of subjective distress was predicted by (a) affect, (b) memory content, specifically themes of disrupted relationships, and (c) to a reduced extent the absence of achievement/mastery. These results suggest that the absence of the personal motivation of agency is mildly associated with distress.

Further research on well-being has examined life stages in conjunction with the relationship between personal motivations and well-being. Bauer and McAdams (2004b) investigated the relationship among agency and communion with social-emotional well-being and transition satisfaction in adult stories of significant life transitions in careers and religions. Agency themes were found to primarily relate to

transition satisfaction, whereas communion themes were primarily related to global well-being. In contrast, Grossbaum and Bates (2002) examined 49 mid-life adults and found that neither agency nor communion predicted well-being.

In contrast to the inconsistent results regarding the relationship among agency and communion and general psychological well-being, the research regarding the relationship among unmitigated agency and unmitigated communion with psychological well-being and distress is more compelling. Studies by Helgeson and her colleagues (e.g., Helgeson, 2003; Helgeson & Fritz, 2000; Helgeson, Escobar, Siminerio & Becker, 2007) have consistently shown a strong association among unmitigated agency and unmitigated communion with elevated interpersonal problems, decreased levels of well-being and increased levels of psychological distress. Helgeson and Fritz (2000) found that both unmitigated agency and unmitigated communion are characterised by lack of support from others, reluctance to ask for help, relationship difficulties and poorer health behaviour. Individuals reporting high levels of unmitigated communion were more likely to neglect their own needs in deference to the needs of others. They were also more dependent on others to attain self-esteem. In contrast, individuals reporting high unmitigated agency were more likely to avoid relationships and tended to have a negative view of others. Further research has also found a link between unmitigated communion and decreased well-being in populations with physical illness. Helgeson (2003) found that individuals reporting high levels of unmitigated communion were less likely to adapt to a diagnosis of breast cancer, demonstrating poorer mental and physical functioning both at diagnosis and three months later. Unmitigated communion was also strongly associated with negative social interactions with network members and lower levels of support. Helgeson, Escobar, Siminerio and Becker (2007) found that higher levels of unmitigated communion were associated with increased levels of

psychological distress and decreased competence in adolescents with and without diabetes. These studies consistently suggest that unmitigated agency and unmitigated communion is associated with poorer levels of psychological health and increased levels of distress.

Summary of Agency and Communion Research

In summary, research has demonstrated that the basic motives of agency and communion are not only related to autobiographical memory in terms of content, but they also appear to differentiate the way autobiographical memory is organised. Results consistently demonstrate that individuals with strong agentic motives are more likely to construct personal narratives that reflect themes associated with power, such as self-mastery, status and victory, achievement and responsibility and empowerment, and are more likely to use an analytic and differentiated narrative style when recalling events related to power. In contrast, individuals high in communion motivation tend to construct life narratives emphasising intimacy themes, such as love and friendship, dialogue, caring for others and a sense of belonging, and tend to use a synthetic style when recalling communal events, emphasising similarities, connections and congruence. However, there is less evidence for an association between personal motivations and affect in autobiographical memory, with the research suggesting that affect and agency and communion are fundamentally independent of each other.

In terms of the relationship between agency and communion with autonomy and sociotropy, research has tended to demonstrate a stronger link between autonomy and unmitigated agency than autonomy and agency. Similarly, unmitigated communion has been found to be more strongly associated with sociotropy than communion. Finally, while there is mixed evidence in research regarding the relationship among agency, communion and well-being, research has consistently shown that unmitigated agency

and unmitigated communion is associated with decreased levels of psychological well-being and increased levels of psychological distress.

Narrative Themes Related to Adaptation

Two narrative themes appear to be associated with the adaptation and resolution facets of autobiographical memory: (a) contamination and redemption, and b) integration. Contamination and redemption are discussed first as these narrative dimensions have been a feature of narrative research since the 1990s. The more recent empirical notion of integration is discussed second.

Contamination and Redemption

The notion that contamination and redemption are narrative features that reflect dynamic patterns of change was first proposed by McAdams et al. (1997). In a study on generativity, defined by Erikson (1963) as an index of psychosocial adaptation in the midlife years, McAdams et al. based the contamination versus redemption model on Tomkins (1987) description of limitation-remediation scripts that link together life scenes in which negative affect progresses to positive affect or, in the case of contamination scripts, where positive affect becomes negative affect. McAdams et al. defined contaminated memories as when a memory contains themes of good events turning bad or acceptable events becoming worse. A narrative reflecting contamination depicts a scene in which an acceptable or positive emotional event, becomes ruined, damaged, spoiled or undone, resulting in negative affect. This resultant negative effect renders the previous positive affect undone, effectively erasing its impact. In contrast, they defined redemption memories as reflecting an emotionally negative event or circumstance leading to an emotionally positive result. The narrative demonstrates an affective change, which moves from a negative to a positive valence, in which the

original negative state is “redeemed” and has an eventual positive outcome. McAdams and his colleagues have noted that many ancient myths and folklore contain redemption sequences. This is also true of much modern storytelling through written and filmed accounts. The immense popularity in western culture of redemption themed television chat shows is just one such example.

A number of scholars and scientists believe that one of the many functions of narratives is the potential to atone and heal. These stories can aid us in times of stress and can even move us towards recovery. Bruno Bettelheim (1977), a psychoanalyst, postulated that when reading and recalling fairy tales, children can often identify with the protagonist’s feelings of fear and of being overwhelmed, but can also recognise their eventual success. In turn, this identification can help children work through their own internal conflict. McAdams (1994) believes that adults also use this identification with stories, although more varied and personalized than fairy tales, to work through emotional difficulties. Furthermore, one of the major goals of narrative therapy is to produce a healing narrative of the self.

More recently, McAdams (2006b, 2006c, 2008b) has remarked upon “a cultural narrative of redemption” noting that it is highly valued in American storytelling practices. Wang (2001, 2004) argued that Eastern and Western cultures have significant differences that are likely to be reflected in the narratives of individuals. Wang and Conway (2004) found that Chinese individuals are more likely to report more script-like narratives with less detail, fewer references to the self and more emphasis on morality when compared to American individuals. Wang and Brockmeier (2002) proposed that in westernised societies a primary function of narrative recall is to create a history for the purposes of self-continuity, whereas in Eastern cultures narrative recall is about

developing connectedness with others and adhering to moral guidelines accepted by the collective.

In relation to childhood attachment, McAdams (1994) believes that the tendency to contaminate or redeem memories helps to construct the narrative tone of individuals' memories, which in turn reflect the "author's underlying faith in the possibilities of human intention and behaviour" (p. 751). He has argued that this faith is developed in childhood and is neither rational nor logical, but may be related to relationship attachment, and the development of a congruent sense of self. Bauer and McAdams (2004b) proposed that "the personal interpretations of life transitions have implications not only for the course of the transition but also for the individual's personality and life course more broadly" (p. 574), and that individuals who interpret life transitions in terms of growth will not only have greater satisfaction levels with the transition, but also personality development in general. They further postulated that personality development, which is reflected in the development of agency and communion, to a large extent determines the kinds of growth-oriented interpretations a person will generate.

The contamination versus redemption model draws upon several dimensions of other existing theories, namely Bruhn's (1990) cognitive-perceptual theory and Singer and Salovey's (1993) theory of attainment versus non-attainment of current life goals. Bruhn (1990) proposed a cognitive-perceptual theory of personality, based primarily upon the notion of human needs. Focusing on early memories, Bruhn postulated that autobiographical memory is the organisational means by which an individual perceives the self, others and their world. A major proposition of Bruhn's theory is that early memories that have positive affect reflect fulfilment of desires, whereas early memories

coloured by negative affect reflect fear about previous unresolved issues or issues currently taking place.

In an earlier article, Bruhn (1985) postulated that the progressive affective tone of a series of early memories provides valuable diagnostic information about an individual. He identified five main patterns of responses. The first pattern was when the memories began well but progressively got more negative. Bruhn believed that this type of individual would initially present well but would be unable to sustain this impression due to a deficit of inner resources. The second pattern of memories was evident when memories began badly but progressively got more positive. Bruhn believed that this type of individual possessed resources that would enable them to solve difficult problems. The third pattern of memories is when positive and negative outcomes occur in a cyclical manner. According to Bruhn, these patterns probably reflect psychopathological disturbances such as bipolar depression or borderline personality disorder. The fourth pattern identified contains consistently negative memories, and Bruhn hypothesised that individuals displaying this pattern were more likely to reflect either a deficit in coping skills, a negative view of the self and the world, or persistent depression. The final pattern is demonstrated when consistently positive memories are recalled. Bruhn believed that individuals that recalled exclusively positive memories were extremely rare, but it was a reflection of superior coping mechanisms.

Psychobiography has been proposed as critical to the development of basic personality theory (Carlson, 1988). Carlson referred to contamination and redemption when comparing the sequences of a prototypical commitment script and a prototypical nuclear script as defined by Tomkins (1987). Commitment scripts tend to be very goal oriented associated with the approach that negative obstacles can be overcome. Nuclear scripts, in contrast, tend to be more goal ambivalent and are usually formed after an

early significant experience turns bad. Carlson argued that these memories are more likely to reveal a contamination theme, as this early experience has become a hallmark for the organisation of life narratives.

Drawing on Carlson (1988), Singer and Salovey (1993) proposed that the affective intensity of autobiographical memories is related to the balance of attainment versus non-attainment of goals, and that scripts, such as the nuclear and commitment scripts may be "commentaries on our most valued goals" (p. 67). In support of such a goal-based theory of affect in autobiographical memory, Moffitt and Singer (1994) found that the attainment or non-attainment of goals is strongly associated with affective responses to related events. Moffitt (1991) related this theory directly to depression by proposing that depressed individuals are more likely to consistently recall and replay self-defining memories related to the non-attainment of goals.

Redemption, Contamination and Emotional Disturbance

There has been only minimal research investigating the relationship among contamination, redemption and emotional disturbance. Contamination has been found to act as significant independent predictors of self-reported depression as well as low life satisfaction (Adler et al., 2006). Adler et al. compared how the cognitive theory of depressogenic attributional style reflecting stable and global attributions as opposed to narrative concept of contamination would differentiate in an analysis of life stories. While contamination sequences were found to be unrelated to a depressogenic attributional style, the relationship of contamination sequences to self-reported depression and low life satisfaction remained significant even after controlling for neuroticism.

Despite the relative dearth of research examining the direct association of emotional disturbance with redemption and contamination, several studies have

indirectly addressed the notion of redemption in coping with adversity after a traumatic experience and the association with well-being. The following section examines the association between affective transformation and trauma.

Coping with Adversity Research. Literature and narrative accounts from ancient history to modern times contain numerous descriptions of positive change occurring from suffering and adversity. For example, Tedeschi and Calhoun (2004a) refer to the accounts of the transformative effect of the crucifixion of Jesus on others that are found in the Bible and other Christian publications. There is also demonstrated evidence of the power of redemption sequences in a wide range of empirical literature that suggests that people who can find benefits and meaning in adversity tend to demonstrate improved coping skills and even show evidence of improved recovery from that adversity.

In an extensive review of how individuals adapt in the aftermath of a traumatic event, Wortman (2004) surmised that individuals' experiences can be positive, negative, or, as in most cases, a mixture of positive and negative. Wortman noted that while a number of individuals experience a predominantly or exclusively negative struggle with little or no potential for growth, many trauma survivors report at least some positive changes and growth in the aftermath of a traumatic event. However, it is also noteworthy that a number of factors (such as the severity of the trauma or whether it was an individual or collective trauma) may offset any growth gained from the event.

A number of studies reveal that benefit-finding, which is conceptually similar to redemption, is related to less negative affect and improved psychological adjustment by people in the aftermath of a wide range of threatening events (Affleck & Tennen, 1996). These include trauma victims (e.g., Bonnano, Rennicke & Dekel, 2005; Janoff-Bulman, 1992), individuals who have been diagnosed with cancer (e.g., Antoni et al., 2001; Taylor, Lichtman & Wood, 1984; Tomich & Helgeson, 2004), heart attack survivors

(Affleck, Tennen, Croog & Levine, 1987), parents of children with Down Syndrome (e.g., King, Scollon, Ramsey & Williams, 2000), stroke victims (e.g., Thompson, 1991) and infertile couples (e.g., Abbey, Andrews & Halman, 1995; Tennen, Affleck & Mendola, 1991). Furthermore, many survivors of adversity have also reported increased self-understanding and growth as well as a more positive life philosophy as a result of their experience (Tedeschi & Calhoun, 1995, 2004a).

Although many different models of recovery have been proposed, they share the fundamental premise that misfortune can be alleviated by cognitive adaptations centred on finding the benefits and meaning in negative events, which can in turn restore reassuring views of self, others and the environment. (e.g., Janoff-Bulman, 1992, 2004; Neimeyer, 2004; Pals & McAdams, 2004; Taylor, 1983; Tedeschi & Calhoun, 2004a; Thompson, 1991).

Findings from research on coping with adversity can be generalised to the less traumatic and more commonplace personal challenges found in narrative redemption and contamination research (McAdams et al., 2001). McAdams et al. concluded that this generalisation "is a testament to the psychosocial efficacy of this kind of life construal" (p. 483). McAdams et al. also commented that each individual's reality is determined by both subjective and objective means, and that redemption and contamination sequences may be a reflection of either a meaningful psychological transformation or what actually happened. They concluded that the way individuals recall their life story may reflect both paths: the use of particular narrative strategies as well as the long-term influences of actual experiences lived. Furthermore these two paths may well be both the causes and consequences of distinct levels of psychosocial adaptation.

The Relationship of Contamination and Redemption to Well-Being

McAdams et al. (1997) found that adults who scored high in generativity; that is, a marked interest and commitment in promoting the well-being of youth and the next generation, were also significantly more likely to record redemption sequences, and less likely to recall contamination sequences than adults who received low generativity scores. As generativity has been identified by Erikson as an indicator of psychosocial adaptation in adulthood, McAdams et al. concluded that redemption and contamination sequences located in narratives may likewise be a marker of psychosocial adaptation and are, therefore, associated with psychological well-being.

McAdams et al.'s (1997) assertion of the relation among contamination and redemption and psychological well-being is supported by a study conducted by Grossbaum and Bates (2002). They showed that contamination and redemption were significant predictors of life satisfaction as well as four of Ryff's (1989) multidimensional model of eudaimonia. Ryff identified six dimensions of well-being: Self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life and personal growth. Of these six dimensions, the four that demonstrated a significant relationship with contamination and redemption were: Self-acceptance, positive relations with others, environmental mastery and personal growth. Specifically, fewer contamination and greater number of redemption sequences were predictors of environmental mastery and personal growth, while the greater number of redemption themes alone predicted self-acceptance and positive relations with others.

Comparing a sample of both midlife adults (age 35-65 years) and college undergraduates, McAdams et al. (2001) found that for the adult sample, results indicated a positive relationship among generativity and both high levels of redemption and low levels of contamination sequences. Psychological well-being in both the

midlife adults and students demonstrated a positive relationship between redemption sequences and measures of well-being, such as life satisfaction, self-esteem, sense of coherence and the absence of depression. Instead of contamination sequences universally predicting low levels of well-being, this was only true for the mid-life adult group. The power of redemptive sequences to promote well-being was clearly evident in that they were a far stronger predictor of well-being than the affective quality of the autobiographical memories. The authors concluded that redemption and contamination sequences are indeed distinct narrative forms that are significantly associated with psychosocial adaptation.

Certain patterns of narrative identity are strongly associated with the concept of eudaimonic well-being which incorporates both pleasure and psychosocial meaning. Bauer, McAdams and Pals (2008) summarised a body of narrative research (e.g., Bauer & McAdams, 2004a; Blagov & Singer, 2004; King & Raspin, 2004) and concluded that individuals whose life stories reflect themes of personal growth are more likely to reflect high levels of eudaimonic well-being. These individuals are also more likely to demonstrate themes of redemption in their life stories, in which difficult or negative situations are viewed as transformative experiences that have provided new insights about the self. Furthermore, this transformation usually occurs within a culturally formed script of redemption, which in North America is often conceived as upward social mobility, liberation, recovery, atonement or self-actualisation.

Summary of Contamination and Redemption Research

A number of studies have investigated the relationship among contamination and redemption to well-being. However, a notable feature of narrative research is the lack of studies examining the association among depression and contamination and redemption.

Data obtained from direct research on the contamination and redemption constructs and indirect research (such as the research focused on coping with adversity) strongly imply that redemption and contamination sequences are two distinct narrative referents significantly associated with psychosocial adaptation and psychological well-being. The one study examining the association between contamination and depression found that they were significantly related. It is therefore a reasonable extension that the contamination versus redemption model has the potential to differentiate between depressed and non-depressed individuals, with depressed individuals being more likely to recall contaminated memories than redemption memories, and non-depressed individuals being more likely to recall redemption memories than contaminated memories.

Integration

Blagov and Singer (2004) included integrative meaning, along with specificity, event content and affect, as one of their four dimensions of self-defining memories, discussed in Chapter 2. This reflects integration's importance as a core feature of adaptation. Integration has been defined by Blagov and Singer, as an individual's ability to integrate, or draw some higher meaning from an event. From the personality perspective, McAdams (1996) has argued that the primary function of the life story is integration, with which individuals attempt to form patterns from random and seemingly unrelated aspects of their lives. Indeed, McAdams' (2008a) second common principle of narrative literature and research is that stories integrate lives (e.g., Habermas & Bluck, 2000; Singer 2004), reconciling disparate ideas, characters, situations and other aspects of life. McAdams (1985) proposed that stories can be integrated in two ways: Utilising a synchronic pattern that connects the differentiated

individual with the united, complex and occasionally contradictory single issue, or by using a diachronic pattern which connects events and situations over time.

What is meant by integration, and what its function is, has been annotated by Blagov and Singer (2004). They proposed that the integrative quality of a self-defining memory determines its meaning. Integrative quality reflects the extent to which the memory provides evidence of abstract knowledge as well as the provision of lessons about the self, significant relationships or general life that extended beyond recalled events. People utilise autobiographical reasoning to develop a depth of self-understanding of an experience that ties into an individual's sense of identity (e.g., "I have come to understand that…", "I have learnt that…", "This experience taught me that…").

Although the concepts of integration and redemption have some commonalities, redemption does not contain the dimension of meaning that the concept of integration entails. Although both constructs of redemption and integration converge on the notion of drawing something consequential from a memory, redemption involves an affective transition, whereas integration focuses on the meaning drawn from a significant experience that may refer to insights about general life, or concern an individual's own sense of identity (Singer & Blagov, 2000-2001).

The Process of Integration

When individuals review their life they engage not only in the process of reminiscence, but also tend to actively analyse meanings drawn from experiences (Staudinger, 2001). Staudinger further argued that the ability to reason and find meaning in autobiographical experiences provides a reasonable definition of "wisdom", and that individuals who can be classified as "wise", tend to use their narratives for both knowledge gathering as well as vehicles for change.

Singer and Blagov (2004b) extrapolated Staudinger's position to note that individuals can engage in a paradigmatic process when generating narratives, in which they reflect on the meaning of the memory and how it may contribute to the meaning of their life story. By attaching meaning to a narrative it activates a positive feedback loop in which bonus cognitive, emotional and motivational value is added to the memory, potentially reinforcing relevant goals in the SMS and thereby cementing the potential for the narrative to be repeatedly revived into consciousness. The integrative process of transforming negative life situations to enhanced self-defining memories appears to occur across age groups from adolescence to older adulthood (Bluck & Gluck, 2004).

In terms of the modified SMS model (Conway et al., 2004) and based on Tomkins' (1979, 1987) script theory, Conway et al. envisioned self-defining memories as especially strong integrations of personal scripts within the conceptual self and knowledge within the autobiographical knowledge base, that is in turn thematically linked to these personal scripts. They proposed that in the SMS model, "scripts are abstract structures that contain templates for sequences of actions, affects and outcomes" (p. 507).

How the capacity to integrate relates to the dynamic of specificity in autobiographical memory has been described by Blagov and Singer (2004). They have proposed an amended model of the role of the life story schema and self-defining memories in the adult SMS in which episodic memories become self-defining memories after they experience autobiographical processing. The amended model is presented in Figure 6. Their finding of a negative relationship between specificity and integration led them to conclude that the cognitive abstraction of autobiographical memories may result from the effort of two important, yet independent functions of finding integrative meaning and achieving specificity. In addition, they proposed that individuals who are

able to recall both a specific and integrated memory achieve the greatest emotional and cognitive value.

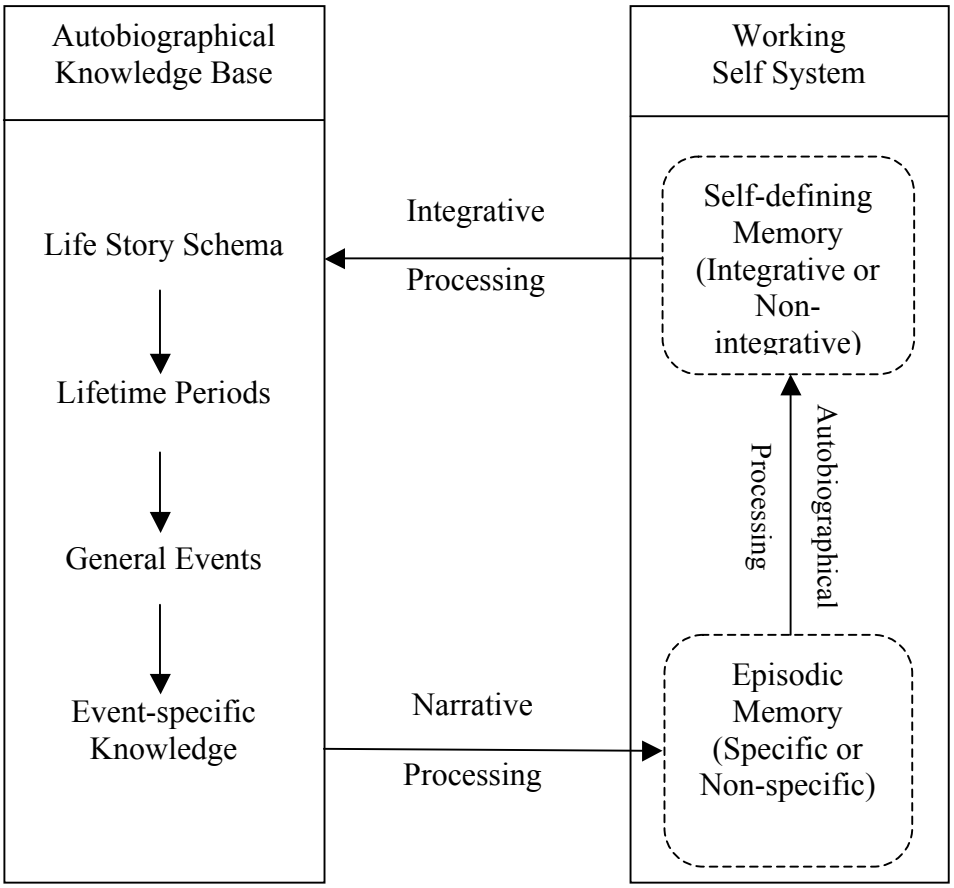

Figure 6. Blagov and Singer's (2004) model of the role of life story schema and self-defining memories in the adult self-memory system

In Blagov and Singer's (2004) model, an episodic memory is created using the autobiographical knowledge base. The level of specificity in episodic memories is determined by search processes organised across hierarchical levels of autobiographical knowledge resulting in corresponding levels of temporal organization, imagery, and degree of detail. Episodic memories that are repetitive, vivid, or emotionally intense and that are therefore tied to the enduring concerns of the working self may activate narrative processing and form self-defining memories. These self-defining memories

can then produce abstract information through integrative processing that is, in turn, incorporated into the life story schema.

The way in which individuals construct and maintain their life story by making connections between experience and their selves has been the focus of a series of studies by Pasupathi and colleagues (e.g., McLean, Pasupathi & Pals, 2007; Pasupathi & Mansour, 2006). McLean & Fournier (2008) labelled these connections "self-event connections" and have identified them as when people make explicit connections between the past and the self (e.g., "Because of this event I know I am a strong person"). Four types of content in self-event connections have been identified: dispositions (traits, stable behavioural characteristics), values (morality), outlook (attitudes, perspectives about the world) and personal growth (maturing, developing confidence, strength). The notion of self-event connections has some theoretical similarities to Singer's concept of integrative memories.

Using self-defining memories, McLean and Fournier (2008) assessed the association among these four types of self-event connections and evaluation and found that both personal growth and values types of self-event connections were evaluated as more positive and growth promoting. They concluded that gaining an understanding of how one has changed or grown over time as well as the identification of an individual's most important values are the types of autobiographical reasoning that may be most effective in moving a story forward. The frequency of self-event connections are generally consistent over time, however, older individuals are more likely to reflect more thematic coherence and memories that represent stability, while younger individuals are more likely to recall memories reflecting change (McLean, 2008).

The Relationship between Integration and Well-Being

Integrative memories employ the use of autobiographical reasoning to enhance a sense of identity and deeper level of understanding (Singer & Blagov, 2004a). This assertion is supported by Blagov and Singer's (2004) finding that students with optimal life adjustment are significantly more likely to produce integrated narratives in their self-defining memories. Integrated memories may also provide a bank of memories for people to draw on in times of stress, as they provide past referents for times when they have resolved negative experiences. In contrast, Bates (2007) noted that if integrative memories can provide a resolved quality that can be drawn upon in stressful or distressing situations, it could be assumed that memories of unresolved experiences may lack this integrative quality and might possibly cause or reinforce distress.

A body of recent research has revealed that a number of personality constructs, including integrative memories and goals, tend to relate significantly to either maturity or well-being (e.g., King & Raspin, 2004; McGregor & Little, 1998). In a narrative investigation of memories about parents discovering that their children had Down syndrome, King et al. (2000) found that individuals whose memories emphasised the consolidation of new information through integration tended to report greater ego development, and that individuals' memories focusing on accommodative change, happy endings and closure were related to positive well-being. The results indicated that maturity and well-being are two elements that, while strongly associated with happiness, operate relatively independently of each other. Moreover, in a follow up two years later the interaction between accommodative change and closure was uniquely predictive of enduring growth in response to the participants' challenging experiences. Notably, those participants whose narratives reflected closure without accommodative change reported the lowest level of growth.

Accommodative change has also been found to interact with coherent positive resolution to facilitate the development of enduring eudaimonic well-being by constructing a lasting sense of positive self-transformation with the narrative identity (Pals, 2006a, 2006b). Pals (2006a) argued that this takes place over two phases: first, by individuals openly acknowledging and exploring the meaning of the negative emotional impact of the situation; and second, by the construction of a resolved, positive ending in which the person views themself as positively transformed by the challenging experience. Consequently, individuals may learn to work through difficult experiences by viewing them as identity challenges with potential for growth, as opposed to viewing them as an emotional threat that must be disconnected from identity to protect the current life story. Pals (2006b) concluded that the ability for positive self-transformation in narrative identity may create new potential for ways of being and viewing the self and world that contribute to well-being.

Integrative memories have been found to relate to high levels of maturity and ego development. A series of studies by Bauer and colleagues (Bauer & McAdams, 2004a; Bauer et al., 2005) have found that individuals who emphasise conceptual integration and learning in their narratives appear to demonstrate greater maturity, especially with regard to their ability for social-cognitive meaning making. In contrast, those individuals with a tendency to recall intrinsic memories, that focus humanistic concerns, are more likely to report higher well-being. It would appear therefore, that the ways in which individuals interpret significant life events has a significant impact on two fundamental facets of "the good life", maturity and well-being (Bauer & McAdams, 2004a). Bauer et al. identified a group of individuals who scored highly on both maturity and happiness and who recalled both integrative and intrinsic memories. The

memories of this group were more likely to emphasise the development of a greater conceptual understanding of themselves, others, and of their relationships.

Mature people, therefore, have a tendency to frame their narrative identity in terms of social-cognitive growth (Bauer et al., 2005). These individuals are more likely to connect experiences with learning and thus draw some meaning from the event or situation. Bauer et al. also found that older study participants were more likely to recall memories with one or both growth orientations, and were consequently found to demonstrate greater maturity and well being as compared to younger participants.

This increased tendency to recall more integrative memories with age has been replicated in additional studies. Older people appear to have discovered ways to emphasise the redemptive qualities and find some resolution to their memories, in contrast to younger individuals who are currently dealing with unresolved issues and still forming their psychosocial identity. Both Blagov and Singer (2004) and Thorne et al. (2004) showed that in college students, and hence generally younger samples, the presence of integrative memories was relatively low (28% and 23% respectively). Singer, Rexhaj and Baddeley (2007) also found that 43% of older participants as compared to 21% of younger individuals were able to recall memories containing integrative meaning. They were unsure whether this difference stems from temporal distance from the event, current mood states, or other underlying causes.

As integration has been found to be related to measures of well-being and optimal life adjustment, an individual's ability to integrate experiences through the process of narrative recall has significant implications for the process of psychotherapy. Singer and Rexhaj (2006) have noted that an individual's inability to construct coherent and integrative narratives often isolates them from family, friends, peers, colleagues and even therapists. The goal of narrative therapy (e.g., White & Epston, 1990) is thus to

work with the individual's narratives and promote an agility in storytelling enabling the client to develop new ways of seeing and understanding their experiences, so that they can avert further avoidance of reductive and repetitive misconceptions of interpersonal situations and experiences.

The successful therapeutic outcome from the use of narrative techniques in conjunction with cognitive-behavioural therapy in a case study of social anxiety disorder, has been described by Bates (2007). His client was asked to recount self-defining memories that were associated with his presenting issues of social anxiety in counselling sessions. The memories while specific, were predominantly non-integrative, had negative affective valence and reflected negative content themes. Bates argued that the non-integrative nature of these memories resulted in them remaining a significant source of distress, simultaneously causing additional discomfort when being confronted by similar situations and lowering the client's probability of dealing with the current situation in an effective manner. Bates, therefore, focused his therapy on the client developing an understanding of the thematic content in the memories so that he could integrate the memories into his view of self. Once this was achieved workable goals were established which contained an integrative message. The outcome of this case study approach was a positive one, with a significant reduction in the clinical symptoms of anxiety so that the client no longer met the criteria for social anxiety disorder.

Summary of Integration Research

Integration is a construct that has only recently been a focus of cognitive and narrative research. Early results have shown integration to work as an independent function in autobiographical memory, which is distinct from the capacity to be specific or to be overgeneral. There is also an increased tendency to integrate memories with age. Current research has consistently demonstrated a strong relationship between well-

being and integration. Furthermore, there is a positive relationship between integration and goal attainment in autobiographical memory. These results have led some researchers to apply the notion of integration in therapy.

Summary

In summary, this chapter has discussed three key narrative themes that have consistently generated research that has differentiated between both the SMS as reflected by autobiographical memory and various measures of psychosocial adaptation and well-being: (a) agency and communion, (b) contamination and redemption, and (c) integration.

Agency/autonomy and communion/sociotropy, defined as personality styles that manifest as primary forms of motivation, can be found in cognitive, narrative and psychoanalytic research as markers of depressive vulnerability. However, despite conceptual overlap of agency and communion to autonomy and sociotropy, Bruch (2002) found that while there is a strong association of both "mitigated" and "unmitigated" communion to sociotropy, only "unmitigated" agency is significantly associated with autonomy. In addition, he found that while "unmitigated" agency had a positive relationship to dysphoria and negative affect, agency had an inverse relationship to dysphoria and negative affect. Although research has found a significant relationship with agency and communion to autobiographical memory in terms of content and organisation, there is mixed evidence regarding the relationship among agency, communion and well-being.

The dimensions of redemption and contamination, which have been drawn from various theoretical propositions, but which primarily emanate from the narrative framework, have consistently been found to be associated with psychosocial adaptation

and psychological well-being in research. Furthermore, contamination and redemption also have the potential to differentiate between depressed and non-depressed individuals. Contamination and redemption literature implies that depressed individuals are more likely to recall contaminated memories, while non-depressed individuals would have a tendency to recall memories with redemption sequences.

Finally, the concept of integrative meaning, which has been drawn from the cognitive framework, is a more recent theoretical notion related to adaptation that research has consistently found to be strongly associated with well-being. Individuals who are able to derive meaning and demonstrate integrated autobiographical memories have consistently demonstrated higher levels of global well-being. Accordingly, an assumption could be made that an inability to integrate events may be related to depression and depressive vulnerability.

Aims of the Present Research

The major purpose of this thesis was to identify a set of narrative themes that differentiate the life stories of currently depressed, formerly depressed and never depressed individuals. Differences among these groups were explored because of the contrasting views that depressive schemata result from either underlying personality traits associated with depressive vulnerability, or emerges as a result of a depressive episode. It was anticipated that the use of a narrative model, which incorporates both personality dimensions and cognitive processes, could access information relevant to these rationales for depressive vulnerability. Three aims guided the empirical research.

The first aim was to identify group differences in the content and structure of autobiographical memory in four broad aspects of autobiographical memory: Specificity, adaptation, motivation, and affect. With regard to specificity, the aim was to

replicate previous findings in relation to the structure of autobiographical memory that currently depressed individuals would tend to recall overgeneral memories relative to never depressed individuals. Although the data are less consistent with regard to individuals with a history of depression but no current depression, an aim was to explore the possibility that formerly depressed people would be more overgeneral than never depressed people, but more specific than individuals with current depression. To evaluate adaptation effects, group comparisons were made on the three autobiographical memory dimensions of redemption, contamination and integration, which reflect both content and structural aspects of autobiographical memory. Finally, for personal motivations and affect in autobiographical memory, the content of self-defining memories was explored to identify differences among the depression groups. Further exploration of motivations investigated the correspondence among the narrative dimensions of agency and communion and self-reported autonomy and sociotropy.

The second aim was more exploratory. Here the aim was to examine if key personal experiences across the different stages of the life span were similar across the three groups. In order to do this, three memories related to the lifetime periods of childhood, adolescence and adulthood, and three further memories related to subjectively important experiences elicited by the use of peak, nadir and turning point memory cues were investigated. Targeting these types of self-defining memories afforded an opportunity to look at group differences relevant to particular types of self-defining memories, as well as overall group differences. In addition it permitted investigation of group differences in structure and content of autobiographical memories for different personal experiences.

The final aim of the study was to investigate whether these different dimensions of autobiographical memory work independently or in cooperation to regulate mood and

give meaning to the self. To this end, how patterns of autobiographical memory dimensions in self-defining memories related to depression or previous depression was considered. In these analyses, two methods were used to examine the pathways of the relationships. First, differential patterns in the relationship between autobiographical dimensions and depression were explored through memory clusters. Each of the six memories was examined to establish whether there were any clusters, and then how the participants who varied in depression level recalled memories reflecting any different combinations of the autobiographical memory dimensions. Second, dimensional analysis was used to identify which autobiographical memory dimensions were predictors of current levels of depression.

Hypotheses

Group Comparisons on the Dimensions of Autobiographical Memory

Hypothesis 1 – Specificity

(a) **Specificity/Non-specificity.** It was anticipated that currently depressed individuals would produce fewer specific memories than formerly depressed individuals, who would in turn produce fewer specific memories than never depressed individuals.

(b) **Specific/Episodic/Generic**. It was anticipated that currently depressed individuals would recall significantly more episodic and generic memories than formerly depressed individuals, who would in turn produce more episodic and generic memories than never depressed individuals.

Hypothesis 2 – Motivations

(a) **Agency and Communion.** With regard to agency and communion in autobiographical memories, it was anticipated that because agency and

communion reflect goal-directed motivations associated with healthy psychological functioning, currently depressed individuals would produce significantly more references to failed agentic and communal when compared to formerly depressed and never depressed individuals.

(b) **Autonomy and Sociotropy.** It was assumed that as autonomy and sociotropy reflect disordered information processing in depression, currently depressed individuals would score higher on autonomy and sociotropy than the formerly depressed group, who would score higher on autonomy and sociotropy than the never depressed group.

Hypothesis 3 – Adaptation

As there has been little investigation of adaptation themes in narratives in the context of depression, hypotheses related to expected differences among the currently depressed and the two non-currently depressed groups.

(a) **Contamination.** It was anticipated that currently depressed individuals would produce significantly more contaminated references when compared to non-depressed individuals.

(b) **Redemption.** It was anticipated that currently depressed individuals would produce significantly fewer redemptive sequences than non-depressed individuals.

(c) **Integration.** It was anticipated that currently depressed individuals would produce fewer integrated memories than non-depressed individuals.

Hypothesis 4 – Affect

It was anticipated that currently depressed individuals would produce significantly fewer memories demonstrating positive affect, and significantly more

memories containing negative affect when compared to formerly depressed and never depressed individuals.

Patterns of Autobiographical Memory Dimensions and their Relationship to Participants

Hypothesis 5 – Differential Patterns Among Memory Clusters

It was anticipated that the dimensions of specificity, agency, communion, redemption, contamination, integration and affect would form differential patterns, whereby narratives are formed using different combinations of these autobiographical memory dimensions. It was hypothesised that the autobiographical memory dimensions, associated with higher functioning of specificity, agency, communion, redemption, integration and positive affect, would form a differential pattern of recall, and that the autobiographical memory dimensions, associated with poorer levels of functioning, of contamination and negative affect, would form an alternate differential pattern of recall.

Furthermore, it was anticipated that each of the six memories would form clusters and that the participants who varied in depression level would recall narratives reflecting these different dimensional representations. It was anticipated that participants demonstrating current or previous depression would be placed in the clusters reflecting a less functional grouping of autobiographical memory dimensions, such as contamination and negative affect. It was also expected that participants with no current or previous depression would be found in clusters reflecting a more functional combination of autobiographical memory dimensions, such as specificity, agency, communion, redemption, integration and positive affect.

Relationships among Autobiographical Memory Dimensions and Depression

Hypothesis 6 – Relationships among the Dimensions of Autobiographical Memory

It was anticipated that the dimensions of specificity, integration, agency, communion, redemption and contamination would be significantly associated with each other in autobiographical memory.

Hypothesis 7 – Predictors of Depression

It was hypothesised that specificity, integration, agency and communion, and redemption and contamination would be significant predictors of current level of depression.

CHAPTER FOUR: METHOD

Participants

The sample comprised 105 participants. Forty-nine (47%) participants were undergraduate Psychology students from Swinburne University of Technology. Fifty-six (53%) participants were recruited from a variety of small organizations and associations, including information technology organisations, a chartered accounting firm, an independent school, a number of non-profit organisations, a car dealership and a number of Returned Serviceman Leagues sub-branches. There were 61 (58%) women and 44 (42%) men, with a mean age of 40.43 years (*SD* 17.00 years; range 18-75 years). The men had a mean age of 49.11 years (*SD* 15.96 years; range 18-75 years), while the women had a mean age of 34.16 years (*SD* 14.95 years; range 18-70 years).

Measures

Self-Defining Memory Task

Self-Defining Memory Request (Singer & Moffitt, 1991/1992)

This memory task generates memories considered more important and concerned with the themes of self-discovery and understanding than general autobiographical memory requests. Participants were provided with Singer and Moffitt's (1991/1992) definition of a self-defining memory as memories that are at least one year old; are meaningful and affectively intense; have been recalled many times; and, assist in self-understanding and self-discovery. The protocol for self-defining memory assessment is included in the Study Questionnaire in Appendix A.1.

Following this general definition were requests for six specified self-defining memories. The first memory required the respondent to write about their peak experience. The second memory task required them to recall and write down a "turning point" experience. The next three memory tasks requested written accounts of significant and memorable events from childhood, adolescence and adulthood respectively. The sixth and final memory task requested that participants recall and write down a nadir experience. Definitions of each memory cue are found in Table 1.

Table 1

Definitions of Self-Defining Memory Cues

Memory Cue	Definition
Peak	An event or experience that is a high point in their life.
Turning Point	An event in which an individual believes they have undergone a significant life transition or personality change.
Nadir	A significant low point in an individual's life.
Childhood	An event or experience that occurs between birth to approximately 13 years of age.
Adolescence	An event or experience that occurs between approximately 13 and 18 years of age.
Adulthood	An event or experience that occurs after approximately 18 years of age.

These six memory cues were adapted from McAdams (1993) life-story interview because they captured three key point experiences as well as three significant periods across the life span. The use of the explicit life-story cues differs from the

majority of research with self-defining memories (e.g., Sutin & Robins, 2005; Thorne et al., 2004) in which the cues are left open and general to permit idiographic memory themes to emerge. The temporal life-story cues were utilised in this study to avoid only the recall of recent memories and ensure that memories were spread across different life stages. The different affective cues were selected to identify any experiences that were more likely to be relevant to the development of depression.

Self-Defining Memory Information

Respondents noted the year in which each memory took place, and rated each memory on 6-point Likert scales for clarity, intensity, importance, and degree of resolution (i.e., how satisfactorily the issue was resolved). The majority of studies collecting self-defining memories ask participants to rate their affective response to the memory, however, in this study participants' affective responses were expanded to the abovementioned four categories of response, and the affect was instead coded by raters. A copy of the self-defining memory information is included in the Study Questionnaire in Appendix A.1.

Self-Report Inventories

Copies of all self-report inventories are included in the Study Questionnaire in Appendix A.1.

Revised Personal Style Inventory (PSI-II) (Robins et al., 1994)

This 48-item self-report inventory measures the domains of autonomy and sociotropy. Twenty-four items relate to autonomy and a further 24 items to sociotropy. The test was developed using a construct-oriented as opposed to factor analytic strategy. Each item is rated on a 6-point scale from "strongly disagree" (score of 1), "disagree" (score of 2), "slightly disagree" (score of 3), "slightly agree" (score of 4), "agree" (score of 5) to "strongly agree" (score of 6). The autonomy and sociotropy scales are

considered independent of each other and are scored separately. The sociotropy scale comprises seven items assessing “Concern About What Others Think”, seven items assessing “Dependency” and 10 items assessing “Pleasing Others”. The autonomy scale comprises four items assessing “Perfectionism/Self-Criticism”, eight items assessing “Need for Control” and 12 items assessing “Defensive Separation”.

Robins et al. (1994) tested the PSI-II on a non-clinical derivation population and on a non-clinical validation sample. They found that the PSI-II demonstrated good factor structure, internal consistency reliability for autonomy (Cronbach’s alpha = .86 for both the derivation and validation samples) and sociotropy (Cronbach’s alpha = .88 for the derivation sample and .90 for the validation sample). The test-retest stability was also acceptable for the autonomy (Spearman-Brown coefficient = .70) and sociotropy scales (Spearman-Brown coefficient = .80). The authors found a low correlation between the two scales and weak or no gender differences. Convergent and discriminant validity were generally acceptable when measured with depressive symptom levels and the Dependency and Self-Criticism scales of the Revised Depressive Experiences Questionnaire and a social desirability scale. Sato (2003) found Cronbach alphas for the sociotropy and autonomy scales of .89 and .77 respectively. Bagby, Parker, Joffe, Schuller and Gilchrist (1998) conducted a confirmatory factor analysis on the PSI-II using a sample of non-clinical and clinical participants. Overall, they found that the items and subscales broke down into factor structures that were a fair to good representation of the model. The revised PSI also demonstrated very good internal consistency results ranging from .71 for female psychiatric outpatients on the autonomy dimension to .91 for male psychiatric outpatients on the sociotropy dimension. Finally, using a clinical sample, Babgy et al. (2001) tested the psychometric properties of a modified version of the PSI-II which omitted the four self-critical items. They found an

internal consistency coefficient for the modified version of the PSI-II of .85 for the autonomy scale and .88 for the sociotropy scale. The test-retest reliability demonstrated an acceptable range (Spearman-Brown coefficient = .73 to .80). Convergent and discriminant validity were acceptable when measured with the five-factor model of personality.

Inventory to Diagnose Depression, Lifetime Version (IDDL) (Zimmerman & Coryell, 1987)

This 22-item scale was designed to diagnose a lifetime history of major depressive disorder (MDD) as defined by the third edition revision of the Diagnostic and Statistical Manual for Mental Disorders (DSM-III-R; American Psychiatric Association, 1987). The DSM-III-R criteria for a major depressive episode are consistent with the DSM-IV criteria (American Psychiatric Association, 1994). The IDDL has been used in a number of studies to identify people in remission from depression (e.g., Bates & Lavery, 2003). Respondents rate the degree of depressive symptomatology they experienced in the week of their life when they felt the most depressed on a 5-point scale, from 1 = an absence of depressive symptomatology, to 5 = an extreme presence of depressive symptomatology. They also indicate whether the symptom was present for more or less than two weeks. An individual is considered to have experienced a MDD if they meet one or more symptoms in Part A, and at least four symptoms in Part B of the DSM-III-R criteria.

Zimmerman and Coryell (1987) found that the IDDL demonstrated good internal consistency (Cronbach's alpha = 0.92) and split-half reliability (Spearman-Brown coefficient = 0.90) in a non-clinical population. Sato, Uehara, Sakado & Sato (1996) found that the inventory showed good test-retest reliability (kappa = .77).

Finally, Sakado, Sato, Uehara & Sato (1996) found high discriminant validity for the IDDL with a sample of psychiatric outpatients and controls.

Beck Depression Inventory II (BDI-II) (Beck, Steer & Brown, 1996)

This widely used 21-item self-report scale was designed to assess the severity of current affective, cognitive, motivational and somatic depressive symptomatology in adolescents and adults. For each item, respondents select from four statements the one which best describes the way they have been feeling over the past two weeks, including the day they respond to the questionnaire. The inventory uses a 4-point scale where 0 = an absence of depressive symptomatology, and 3 = an extreme presence of depressive symptomatology. Total depression scores are calculated by summing each individual item response, with a possible score range of 0-63. Beck et. al. classified scores of 0-13 as indicating minimal depression; scores of 14-19 as indicating mild depression; scores of 20-28 as indicating moderate depression; and, scores of 29-63 as indicating severe depression. Participants that scored 29 or higher, were considered currently depressed.

The BDI-II has demonstrated excellent psychometric properties in both clinical and non-clinical samples and across cultures (Nuevo et al., 2009). Steer, Ball, Ranieri and Beck (1999) found support for the two-factor structure measuring somatic-affective and cognitive depressive dimensions using a sample of clinically depressed outpatients and a coefficient alpha of .90. In another clinical sample of psychiatric outpatients, Beck, Steer, Ball and Ranieri (1996) found an internal consistency co-efficient of .91. For non-clinical samples, in a meta-analysis of the BDI's internal consistency, Beck, Steer and Garbin (1988) found a mean internal consistency coefficient of .81 for non-psychiatric patients. They also found that the BDI correlated moderately with the Hamilton Rating Scale for Depression (r = .74) and clinical ratings (r = .60).

Storch, Roberti and Roth (2004) examined the factor structure, concurrent validity and internal consistency of the BDI-II using a sample of 414 American undergraduate students. They found support for the two-factor structure measuring cognitive-affective and somatic depressive symptomology. They also found that the BDI correlated moderately with self-report measures of depression and anxiety using the State-Trait Anxiety Inventory – Trait Version (STAI-T, Spielberger, 1983) (*rs* = .76 and .69. $p < .001$ for depression and anxiety respectively). Finally, they found an internal consistency coefficient of .90 for the total scale, with the Cognitive-affective factor having a reliability score of .87 and the Somatic factor receiving a score of .74.

Procedure

The university participants were informed about the study in lectures, and collected a questionnaire if they wished to participate. The remaining participants volunteered to participate in the study after observing posters placed in prominent places in a variety of businesses and organisations, including two information technology organisations, a chartered accounting firm, an independent school, a number of non-profit organisations, a car dealership and approximately 20 Returned Serviceman Leagues sub-branches. The poster provided information about the study and its requirements. All participants were requested to complete the questionnaire in their own time, the only stipulation being that they were to complete the questionnaire within one day. A one-day time frame was requested due to findings by Zimmerman (1986) that more than 50% of university students that fell into the depressed range on the first BDI application, were classified as non-depressed one week later.

The questionnaire was constructed in the following order: Self-defining memory requests, RQ, PSI, IDDL, BDI-II, and, self-defining memory information. All

participants wrote their self-defining memories before completing the scales, due to the potential inducement of negative affect by the completion of scales involving depression (Vredenberg, Flett & Krames, 1993). University participants placed the completed questionnaire in a posting box at the university, and non-university participants posted the questionnaire in a reply paid envelope. Anonymity was assured.

Coding of Self-Defining Memories

Participants' self-defining memories were coded for specificity using the criteria from Singer and Blagov's (2000-2001) *Classification System and Scoring Manual for Self-Defining Memories*. A copy of this manual is in Appendix A.2. Memories were then coded for three measures of adaptation: integration, redemption and contamination. First, the self-defining memories were coded for integration using the Singer and Blagov (2000-2001) manual. Memories were coded for redemption using a coding manual developed by the Foley Centre for the Study of Lives in 1999, and contamination using a revised version (Foley Centre for the Study of Lives, 1998) of McAdams et al.'s (1997) coding manual. Copies of the coding manuals for redemption and contamination are in Appendix A.3 and A.4 respectively. Self-defining memories were also coded for the motivations of agency and communion using a system developed by McAdams et al. (1996) and revised by McAdams (2001b). A copy of the coding instructions for agency and communion is in Appendix A.5. Finally, self-defining memories were coded for positive, negative or mixed affect.

A second, independent rater coded 25 (24% of the sample) study questionnaires for specificity, integration, redemption, contamination, agency, communion and affect. The inter-rater reliability coefficients were very high across the autobiographical memory dimensions. Table 2 shows the inter-rater reliability co-efficients (Cohen's kappa statistic; Cohen, 1960) across the autobiographical memory dimensions.

Table 2

Inter-Rater Reliability Co-efficients across the Autobiographical Memory Dimensions

Autobiographical Memory Dimension	Coding Criteria	Cohen's kappa κ
Specificity	Specific or Non-specific	.96
Specific Narratives	Type 1 (The pure specific memory), Type 2 (The specific memory with generalisation) or Type 3 (The specific memory with multiple single events)	.93
Non-specific Narratives	Episodic or Generic	.92
Integration	Integrated or Non-integrated	.89
Integrated Narratives	Type 1 (Meaning not tied to self) or Type 2 (Meaning tied to self)	.92
Non-integrated Narratives	Type 1 (Pure event; Time stamp) or Type 2 (Categorisation by emotion, impact, context or attribute)	.90
Redemption	Presence of redemptive imagery	.95
	Enhanced agency	.89
	Enhanced communion	.92
	Ultimate concerns	.99
Contamination	Presence of contamination	.95
Agency	Self-Mastery	.91
	Status/Victory	.92
	Achievement/Responsibility	.91
	Empowerment	.94
Communion	Love/Friendship	.94
	Dialogue	.93
	Caring/Help	. 91
	Unity/Togetherness	.92
Agency	Presence of agency regardless of affect	. 91
Communion	Presence of communion regardless of affect	.94
Affect	Positive, negative or mixed	.98

Specificity

Participants' self-defining memories were coded for specificity, according to Singer and Blagov's (2000-2001) classification system and scoring manual. Singer and Blagov have defined a specific memory as containing at least one single-event statement (i.e., either reflecting a unique occurrence or having a duration of less than one day). In addition to the differentiation between specific and non-specific memories, the manual also categorically differentiates among three sub-types of specific memories: (1) the pure specific memory (defined as a memory which contains related single-event statements only); (2) the specific memory with generalization (defined as a memory which contains related single-event statements plus general narrative within the context of the memory); and (3) the specific memory with multiple single events (defined as multiple single event statements that are part of a sequential story and do not occur in the same 24 hour period. These statements may also incorporate a non-specific memory).

Non-specific memories do not contain any single-event statements, and are classified either as episodic or generic. Episodic memories are defined by Singer and Blagov (2000-2001) as a generalized narrative of related events that fit sequentially within an extended time frame (e.g., a summer holiday). Generic memories are defined as containing analogous events that occur during unrelated time intervals. Examples of specific and non-specific memories are contained in Table 3.

Table 3
Synopsis of specific (vs. non-specific) narratives from the Classification System and Scoring Manual for Self-Defining Memories (Singer & Blagov, 2000-2001)

Specificity	Examples
Specific memory narratives	*Specific memory*
The narrative contains at least one single-event statement in which attention is clearly focused on a happening that is a unique occurrence (i.e., something that happened on a specific day, possibly date and time identifiable) and had a brief, uninterrupted duration of less than one day or 24 hour period.	"I vividly recall the day I returned from Vietnam in 1969. I was standing in the kitchen leaning against the stove recalling some of my experiences. Homecoming was a disappointment. The woman I was going out with was not there to meet me and my mother was proffering excuses for her. A long term school mate was also in the kitchen and I found I had no longer anything in common with him and very little more to say to my family. I felt they didn't understand me and I had moved on from them. Strange as it may seem if it had been possible I would have gone back to Vietnam to be with my mates."
Non-specific memory narratives	*Non-specific memory*
Episodic: The narrative takes a generalised form that lacks any single-event statements. The narrative refers to a general event with a duration that is either unclear or is over 24 hours long. The narrative may pertain to one event or may be composed of several events that are related to a particular story line. Perceptions and actions are indiscriminate and merge with the context of the narrative.	*Episodic*: "A period of depression that occurred in the mid to late seventies. I was morose, without energy, a hypochondriac and didn't understand what was wrong with me. It was not until I read an article on depression that knew what was wrong with me and I was able to turn it around."
Generic: The memory contains corresponding events that continually occur over time intervals that are not themselves part of the narrative. There is a blending or fusing of events which contain consistent characters, settings, happenings and emotions.	*Generic*: "My low points have centred around my times of being most lonely. Living in California definitely had periods of extreme loneliness and isolation. I remember being amazed talking to people who had never eaten in a restaurant alone. In other places I have lived I went months without spending my weekends with anyone. I developed my own coping mechanisms: Friday night at the book store, Saturday night at the movies, Sunday shopping and cooking. Long weekends were the worst."

Integration of Meaning

Singer and Blagov's (2000-2001) classification system and scoring manual also attempts to differentiate between memories that contain explicit lessons about the self, others, or the world and memories that do not reflect these lessons. Singer and Blagov's dimension of meaning corresponds to the degree to which individuals derive lessons from their narratives and then integrate them into the self-system. Examples of integrated and non-integrated narratives are in Table 4.

Table 4

Synopsis of integrated (vs. non-integrated) narratives from the Classification System and Scoring Manual for Self-Defining Memories (Singer & Blagov, 2000-2001)

Integration	Examples
Integrated memory narratives	*Integrated memory*
The narrative makes supplementary reference regarding the significance or meaning of the memory to the individual. The narrative not only refers to the significance of the memory, but also why the memory is so important and emotional. It may be expressed in references to what the experience has taught the individual, which can be expressed about meaning to the self or life in general.	"When my parents divorced and I moved interstate was a turning point experience. This was a time when I went from a relatively stable, familiar setting into a place where I knew no one. I remember going to a new school and walking around pretending to be busy so that people didn't realise I was so sad and by myself. It was a time when I developed an ability to survive without social interaction, and I learned that I could survive without social interaction. I also realised that I was a really strong person who could endure whatever life threw at me. I also started to focus academically which opened new opportunities for me."
Non-integrated memory narratives	*Non-integrated memory*
While these memories may contain powerful emotions and generalisations about the impact of the experience, they do not explain why the experience was so important to the individual or how it has given meaning to the individual's life.	"Walking home from my Year 12 English exam knowing I had stuffed up a question. I was completely crushed and deflated. Just thinking about how I was going to cope if I failed and all the hard work I had wasted. I ended up passing, but not doing as well as I could have."

Integration of meaning differentiates between non-integrative memories and integrative memories with each category containing two sub-types. Non-integrative narratives are classified either as Type 1 (pure event; time stamp), or Type 2 (categorization by emotion, impact, context or attribute), while integrative narratives are classified as Type 1 (general lesson, meaning not tied to self) or Type 2 (self-relevant, meaning tied to self).

The inter-rater reliability coefficients (Cohen's kappa statistic; Cohen, 1960) have been found by Singer and Blagov (2000-2001) to range from Cohen's κ 0.54 to 0.98, with the highest levels of reliability being found when scoring for two levels of structure (specific events vs. episodic and generic, $\kappa = 0.80 – 0.98$) and two levels of meaning (integrative vs. non-integrative, $\kappa = 0.70$).

Redemption and Contamination

Participants' self-defining memories were coded for content themes of redemption and contamination. To code for redemption sequences, a coding manual developed by the Foley Centre for the Study of Lives in 1999 was used. The coding scheme has its origins in the theoretical writings on redemption scenes and commitment scripts (e.g., McAdams et al., 1997; Tomkins 1987; Carlson, 1998) as well as Tedeschi and Calhoun's (1996) research on posttraumatic growth. The literature regarding redemption scenes and commitment scripts incorporates an understanding of the movement from bad scenes to good scenes, which is encoded in the category of "redemption imagery". The posttraumatic growth literature refers to a positive product or growth that may emerge for an individual after a negative event leads to a positive outcome. The manual authors have encoded this concept of growth in three subcategories for redemption sequences: "Enhanced agency", "enhanced communion" and "ultimate concerns". Each memory was thus coded for four theoretically derived

thematic categories: (1) Redemption imagery, and within redemption sequences: (2) Enhanced agency, (3) enhanced communion and (4) ultimate concerns.

Redemption imagery was reflected in narratives where a bad experience became good and were coded 0 for "absence" or 1 for "presence" of this redemption theme when there was movement from negative to positive and themes of sacrifice, recovery, growth, learning and improvement were demonstrated. If a memory was determined to contain redemption imagery then it was further coded for the presence of absence of each of three subcategories (enhanced agency, enhanced communion, ultimate concerns). For enhanced agency a score of 1 was given if the redemptive imagery reflected a transformation that led to an explicitly stated enhancement of the protagonist's personal agency or power, if it increased self-confidence, efficacy or personal resolve, or if it gave the individual some insight into their personal identity. For enhanced communion, a score of 1 was given if the redemptive imagery reflected a transformation that led to an explicitly stated enhancement of the protagonist's personal relationships of love, friendship, family connectedness, other personal ties. As the two subcategories of enhanced agency and enhanced communion function as "bonus points" for redemption sequences, they were only awarded if additional benefits that went beyond the original redemptive shift were found. For ultimate concerns, a score of 1 was given if the redemptive imagery reflected a transformation that confronted or significantly involved fundamental existential issues or ultimate concerns, such as death, God and or religious/spiritual concerns. Total scores were calculated by adding the scores from redemption imagery, enhanced agency, enhanced communion and ultimate concerns providing a range of scores for each memory from 0 to 4.

To code for contamination sequences, a revised version (Foley Centre for the Study of Lives, 1998) of McAdams et al.'s (1997) coding manual was used. The

contamination theme was reflected in narratives in which an acceptable or positive experience turns bad or deteriorates, and may contain themes of victimization, betrayal, loss, failure physical or psychological illness or injury, disappointment, disillusionment or sex. These contamination narratives were coded 0 “absence” or 1 “presence”, even when there are multiple contaminations in the narrative. Examples of narrative containing themes of redemption and contamination are found in Table 5.

Table 5

Synopsis of narratives containing themes of redemption and contamination from the coding manual developed by the Foley Centre for the Study of Lives in 1999

Redemption	Examples
Presence of redemption theme	*Memory containing redemptive imagery*
The narrative reflects movement from negative to positive and themes of sacrifice, recovery, growth, learning and improvement are demonstrated.	“After failing H.S.C. I went back to repeat but my mother nagged incessantly about doing more work (homework), study, etc. As I hated studying, I was an outdoors person. I left school and started working hard and have become a success to prove that I could make something of myself even without a tertiary education.”
Presence of redemption theme with enhanced agency	*Memory containing redemption with enhanced agency*
The redemptive imagery reflects a transformation that leads to an explicitly stated enhancement of the protagonist’s personal agency or power, if it increases self-confidence, efficacy or personal resolve, or if it gives the individual some insight into their personal identity. This transformation has provided additional benefits that are beyond the original redemptive shift.	“While out on exercise with the RAAF, we had to complete some abseiling tasks. Going down backwards was fairly scary in itself but the next task was to go down facing forwards. The thought itself was terrifying and I was in tears as I was coaxed/bullied over the edge. Once I reached the bottom… I was so proud of my effort that I went back up the cliff and did it again forward even though I didn’t have to. I was on a high for the rest of the day, as I realised I could achieve anything once I made the decision to go for it.”

Presence of redemption theme with enhanced communion	*Memory containing redemption with enhanced communion*
The redemptive imagery reflects a transformation that leads to an explicitly stated enhancement of the protagonist's personal relationships of love, friendship, family connectedness, and other personal ties. This transformation has provided additional benefits that are beyond the original redemptive shift.	"In March 1975 I had been drinker for 30 years and a very heavy drinker for the past 10 years. I was all too aware of my weaknesses which caused unhappiness and hurt to a loving wife and family who were forgiving. This added to my self-shame. But I could not stop. … One Sunday I was drinking as usual all day and was alone in my house. My wife was in another room sewing. In the gloom and shadows of late afternoon I stood and faced myself. I had a saint for a wife… I had two honest, gentle children and four loving grandchildren. I was approaching retirement age when every day would be Sunday and I saw with dread the threat this presented to their happiness. It was as though I was seeing a stranger for the first time and one who already was almost drunk. At that moment I resolved to stop drinking and did so with the support of my loved ones and help from our doctor."
Presence of redemption theme with ultimate concerns	*Memory containing redemption with ultimate concerns*
The redemptive imagery reflects a transformation that confronts or significantly involves fundamental existential issues or ultimate concerns, such as death, God and or religious/spiritual concerns.	There were no examples from the current study.
Contamination	*Memory containing contaminated imagery*
The narrative refers to an acceptable or positive experience that turns bad or deteriorates, and may contain themes of victimization, betrayal, loss, failure physical or psychological illness or injury, disappointment, disillusionment or sex.	"When I started high school in Year 7 I was on top of the world. I had friends and I was one of the best in the class. Then I had a fall out with my group of friends, which lead to years of bullying and conflict. School was never the same for me after that point. I went from someone who had always loved classes and learning to someone who dreaded Sundays because it was the day before school resumed for the week. My grades went from being As

	to barely passing, and never really improved. Looking back I feel such regret that I did not do more about the situation, or even change schools. I remain sensitive to others' criticism to this day, even as a grown adult. Now that my children are at school, I am haunted that the same thing might happen to them.

Agency and Communion

The six memories were then coded for content themes of agency and communion using a system developed by McAdams et al. (1996) and revised by McAdams (2001b) to code for themes of agency and communion in autobiographical memories. McAdams et al. developed this system by integrating selected themes from the content analysis systems used with the Thematic Apperception Test (TAT; Bakan, 1966) The coding system delineates four themes of agency: self-mastery, status/victory, achievement/responsibility and empowerment. It also outlines four themes of communion: love/friendship, dialogue, caring/help and unity/togetherness. Each memory was scored for the presence (score of 1) or absence (score of 0) of these themes, therefore yielding a score range of 0 to 4 for agency and 0 to 4 for communion across each memory. As there were six memories included in the questionnaire, each participant could therefore score between 0 and 24 for agency and 0 and 24 for communion. McAdams et al. defined four themes of agency and communion that they believed went beyond the customary nature of autobiographic recall.

Agency Themes

Self Mastery. The authors have defined self-mastery as the striving to successfully master, control, enlarge or perfect the self.

Status/Victory. Status/victory has been defined as the attainment of a heightened status of prestige amongst peers through receiving special recognition or by winning a contest or competition.

Achievement/Responsibility. Achievement/responsibility has been defined as the self-reported success in achieving tasks, jobs or instrumental goals, or in assuming important responsibilities.

Empowerment. The empowerment theme reflects the subject's experience of feeling enlarged, empowered, ennobled, built up or made better through their association with something perceived as larger as or more powerful than the self.

Examples of agentically themed narratives are contained in Table 6.

Communion Themes

McAdams et al. (1996) developed their four themes of communion based on the TAT's ten intimacy-motivation categories and Murray's (1938, cited in McAdams et al.) communal concepts of need for affiliation and nurturance.

Love/Friendship. Love/friendship has been defined by the authors as the experience of an enhancement of love or friendship toward another person; primarily amongst peers, either romantic or platonic. It does not include feelings of nurturance or love as experienced in parent/child or other nurturing relationships.

Table 6

Synopsis of narratives containing themes of agency from the coding system developed by McAdams, Hoffman, Mansfield and Day (1996) and revised by McAdams (2001)

Agency	Examples
Memory narratives containing theme of self-mastery	*Memory containing theme of self-mastery*
Narrative containing references to the striving to successfully master, control, enlarge or perfect the self.	"I remember learning to ride a bike. My uncle took the training wheels off even though I wasn't ready. He'd push me down off the ramp at the back of the house and I'd fall off and cry. He kept calling me "a girl"! We kept going for what seemed like all day until I learned to ride. It was the first time I remember feeling angry and determined to prove someone wrong. It was also quite empowering when I realised I could actually do something I didn't think I could."
Memory narratives containing theme of status/victory	*Memory containing theme of status/victory*
Narratives contain references to the attainment of a heightened status of prestige amongst peers through receiving special recognition or honour or by winning a contest or competition.	"Winning the Under 15 solo brass state champion competitions. My family was so proud of me and I was proud of myself too. All the hard work had paid off. Most importantly I remember a teacher of mine coming to hear me play, and congratulating me afterward back at school in front of the whole class."
Memory narratives containing theme of achievement/responsibility	*Memory containing theme of achievement/responsibility*
Reference are made in the narrative to self-reported success in achieving tasks, jobs or instrumental goals, or in assuming important responsibilities.	"Graduating from university with my peers. I won a significant academic award and was commended for this on stage in front of my family and peers. The sense of achievement was amazing and it was wonderful having most of my immediate family there to celebrate with me."
Memory narratives containing theme of empowerment	*Memory containing theme of empowerment*
The narrative reflects the subject's experience of feeling enlarged, empowered, ennobled, built up or made better through their association with something perceived as larger as or more powerful than the self.	"Sitting and writing poetry for the love of all that I could see in nature around me. Especially the Blackhall Ranges in Queensland. Looking across Brisbane from the nature reserve and knowing that my place in nature provided me with the ability to conceive poetic notions that I could give as a demonstration of love to my wife."

Dialogue. Dialogue has been characterized as when the subject experiences a reciprocal and non-instrumental form of communication or dialogue with another individual or group of people.

Care/Help. Care/help has been defined as the participant's offer or receiving of care, assistance, nurturance, help, aid, support or therapy.

Unity/Togetherness. The theme of unity/togetherness encompasses the communal idea of being part of a much larger community. In community, the participant experiences feelings of oneness, unity, harmony, synchrony, togetherness, belonging, allegiance or solidarity with a group of people, a community or even mankind.

Examples of narratives containing different communal themes are in Table 7.

Research by McAdams et al. (1996) has demonstrated the coding system has significant correlations among the four themes of agency and the TAT's constructs of power and achievement motivation. Significant correlations with the four themes of agency in the coding system have also been found with both power and achievement imagery in personal strivings and self-reported needs for dominance and achievement. McAdams et al. also found significant associations among the coding system's themes of communion and the TAT's construct of intimacy motivation, as well as both intimacy imagery in personal strivings and self-reported needs for affiliation and nurturance.

In addition to McAdams' (2001b) coding for agency and communion, memories were coded for the presence of agency and communion regardless of affect. McAdams' coding allows for agency and communion referents only if they have positive affect, and the author wanted to broaden this frame of reference to any reference to themes of agency and communion across various types of affect.

Affect

Singer and Blagov (2000-2001) defined affect as the subjective emotion upon recall. In this study, self-defining memories were coded for affect as positive, negative or ambiguous/mixed.

Table 7

Synopsis of narratives containing themes of communion from the coding system developed by McAdams, Hoffman, Mansfield and Day (1996) and revised by McAdams (2001)

Communion	Examples
Memory narratives containing theme of love/friendship	*Memory containing theme of love/friendship*
The narratives reflect the experience of an enhancement of love or friendship toward another person; primarily amongst peers, either romantic or platonic. It does not include feelings of nurturance or love as experienced in parent/child or other nurturing relationships.	"The moment I spoke about a future together with my wife when I first asked her to marry me and she accepted. A special love from a fellow human being different to all other loves and cares we have for others."
Memory narratives containing theme of dialogue	*Memory containing theme of dialogue*
Narratives refer to the individual experiencing a reciprocal and non-instrumental form of communication or dialogue with another individual or group of people.	"My memory of a peak experience is Christmas Eve, 1996. I was out at the pub in Hamilton and after all my friends had left to go on to the next place, I decided to stay. About 10 minutes later a girl came through the crowd and started talking to me. We talked for hours and she made me feel so special that night. I am still with the girl now."

Memory narratives containing theme of caring/help	*Memory containing theme of caring/help*
Narratives reflect the participant's offer or receiving of care, assistance, nurturance, help, aid, support or therapy.	"Being telephoned by my son-in-law to tell me my daughter had given birth to a stillborn daughter. I made the journey to the hospital in record time to comfort the distraught parents. My attendance did help although I was also very distressed. I remembered to baptise the baby, which was a great source of comfort to them later on."
Memory narratives containing theme of unity/togetherness	*Memory containing theme of unity/togetherness*
The narratives make reference to the collective idea of being part of a much larger community. In community, the participant experiences feelings of oneness, unity, harmony, synchrony, togetherness, belonging, allegiance or solidarity with a group of people, a community or even mankind.	"I was in a family of six children. We were all fairly independent, except for Sundays when we were all together. I have strong memories of good times as a family, especially on Sunday nights. We always had a bath (usually two of us at a time with the bath water re-used). After bath, we would have our finger nails and toenails cut. Sunday night dinner was soup and sandwiches, because we would have had a roast for lunch. After dinner we watched TV and shared a tin of Kool Mints. We took turns to sort them into eight piles so we all had a fair share. They were happy days all bunched up on the couch in our flannelette pyjamas."

CHAPTER FIVE: RESULTS

This chapter presents the analyses in relation to the aims and the hypothesised relationships presented in Chapter 3. The results are presented in three sections. The first section considers the results of the between-group comparisons according to depression levels. Analyses regarding the different dimensions of autobiographical memory, relevant to the first two study aims, are described. The first aim of the study was to identify group differences in the content and structure of autobiographical memory as measured by the autobiographical memory dimensions of: (1) specificity; (2) the motivations of agency and communion (including how the depression groups scored on autonomy and sociotropy); (3) the adaptation dimensions of redemption, contamination and integration; and (4) memory affect. The second aim of the study was to explore whether key personal experiences across the different stages of the life span were similar across the three groups. This was examined by using three cues related to lifetime periods, and three memory cues related to important experiences.

In the second section, the patterns of autobiographical memory dimensions, in terms of clusters of respondents, are presented. These analyses are relevant to the third aim of the study, which was to examine whether the different dimensions of autobiographical memory work independently or in cooperation to regulate mood and give meaning to the self. The findings regarding memory clusters related to depression groups, and differences among these clusters are described.

The final section examines the relationships across the dimensions of autobiographical memory and the predictors of current depression level. These analyses

are also relevant to the third aim of the study. SPSS output for all analyses are in Appendix B.9.

Reliability of Self-Report Measures

All three self-report measures demonstrated very good reliability with the present sample. The BDI-II was found to have very high internal consistency with the present sample (Cronbach's alpha = .98), as was the IDDL (Cronbach's alpha = .92) and the PSI-II (Cronbach's alpha = .93).

Formation of Participant Groups

The BDI-II Manual (Beck et al., 1996) reports that scores of 29 and above on the BDI-II indicate severe depression. To ensure the study had a clear differentiation between groups, only the 30 participants with BDI-II scores of 29 or more were included in a "currently depressed" group. As expected, all 30 currently depressed participants also indicated a prior history of depression. Twenty-five participants scored 13 or lower on the BDI-II indicating "minimal depression" (Beck et al.), and did not report any previous history of depression. These individuals were classified as "never depressed". The 42 participants, who scored 13 or lower on the BDI-II, but reported a lifetime history of depression were classified as "formerly depressed". Eight participants, therefore, remained ungrouped due to their BDI-II score lying in the score range of 14 to 28.

Of the "currently depressed" group, 16 participants (53%) were men, and 14 (47%) were women. In the "formerly depressed" group 13 participants (31%) were men and 29 (69%) were women. Finally, in the "never depressed" group 13 participants (52%) were men and 12 participants (48%) were women.

Participant Ratings of Self-Defining Memories

Preliminary analyses were conducted to establish whether the groups differed from each other in how they rated their self-defining memories according to importance, intensity, clarity and degree of resolution. It was expected that if the memories provided by the respondents could be classified as self-defining memories, according to the definition provided in the study questionnaire, then the ratings given to them of importance and intensity would be generally high, and that the groups would not differ in their ratings of importance and intensity.

One-way Analyses of Variance (ANOVAs) was used to ascertain whether the depression groups differed significantly across the six memory cues on the self-reported memory importance, intensity, clarity and degree of resolution. Table 7 contains the means and standard deviations for the participant ratings of their self-defining memories across the six cues.

The means for memory importance were generally high across the six memory cues (Range 4.44 – 5.78). No group trends were observed, and furthermore, the groups did not differ in the self-reported importance of their self-defining memories on any of the six memory cues (Peak cue, $F(2, 89) = 1.47$, $p = .24$; Turning Point cue, $F(2, 87) = .28$, $p = .75$; Childhood cue, $F(2, 87) = 1.73$, $p = .18$; Adolescence cue, $F(2, 85) = 2.87$, $p = .06$; Adulthood cue, $F(2, 83) = .29$, $p = .75$; Nadir cue, $F(2, 86) = 2.24$, $p = .11$). Thus, all three depression groups recalled self-defining memories according to the definition in the study questionnaire.

There were also no group differences on the self-reported memory intensity of the memories across the six cues (Peak cue, $F(2, 89) = 1.86$, $p = .16$; Turning Point cue, $F(2, 86) = .72$, $p = .49$; Childhood cue, $F(2, 87) = .97$, $p = .38$; Adolescence cue, $F(2, 86) = 2.80$, $p = .07$; Adulthood cue, $F(2, 83) = 1.71$, $p = .19$; Nadir cue, $F(2, 86) = 1.73$,

$p = .18$). However, there was a general trend for the currently depressed group to provide the highest mean for intensity on all cues.

There was a general trend for the currently depressed group to recall the highest mean on self-reported clarity across the six cues. The never depressed group recalled the lowest mean for clarity on all but one cue. A significant group difference was evident in memory clarity on the Childhood ($F(2,87) = 5.10$, $p < .01$), Adulthood ($F(2,83) = 9.23$, $p < .01$) and Nadir cues ($F(2,86) = 4.17$, $p < .02$). Scheffé post-hoc comparisons were used to explore group differences, and are noted in Table 7.

On the Childhood cue, Scheffé comparisons showed that the currently depressed group reported significantly greater memory clarity than both the formerly depressed and never depressed groups. On the Adulthood cue, the never depressed group reported significantly less memory clarity than both the formerly and currently depressed groups. On the Nadir cue, the currently depressed group reported significantly greater memory clarity than the never depressed group. These results suggest that for different types of memories, current or previous depression was associated with greater memory clarity than for those with no current or history of depression.

Table 8

Means and Standard Deviations for the Participant Ratings of their Self-Defining Memories across the Six Cues

		Never Depressed		Formerly Depressed		Currently Depressed		
		M	*SD*	*M*	*SD*	*M*	*SD*	*F*
Peak	Importance	5.78	.67	5.49	.59	5.57	.74	1.47
	Intensity	5.52	.66	5.20	1.01	5.57	.84	1.85
	Clarity	5.52	.59	5.63	.66	5.71	.71	0.54
	Resolution	5.61_{a}	.89	5.23_{a}	1.36	3.79_{b}	2.15	10.33**
Turning	Importance	5.52	.95	5.66	.53	5.58	.76	0.28
Point	Intensity	5.18	1.01	5.29	.78	5.46	.71	0.72
	Clarity	5.27	1.03	5.34	.73	5.69	.55	0.11
	Resolution	5.26_{a}	1.42	5.10_{a}	.97	4.23_{b}	1.90	4.09*
Childhood	Importance	5.22	.80	4.63	1.21	4.85	1.49	1.73
	Intensity	4.48	.95	4.43	1.11	4.78	1.05	0.97
	Clarity	4.57_{a}	1.24	4.55_{a}	1.15	5.33_{b}	.68	5.10**
	Resolution	4.83_{a}	1.40	4.69_{a}	1.38	3.78_{b}	1.81	3.81*
Adolescence	Importance	5.09	1.23	4.44	1.34	5.04	.98	2.87
	Intensity	4.50	1.41	4.90	1.07	5.27	.92	2.80
	Clarity	4.82	1.30	5.10	.94	5.46	.76	2.54
	Resolution	4.95	1.25	4.45	1.38	3.96	1.61	2.91
Adulthood	Importance	5.50	.69	5.65	.66	5.58	.86	0.29
	Intensity	5.40	.82	5.55	.71	5.77	.51	1.70
	Clarity	5.15_{a}	.99	5.75_{b}	.49	5.88_{b}	.33	9.23**
	Resolution	5.37_{a}	1.30	5.38_{ab}	1.14	4.36_{b}	2.06	4.00*
Nadir	Importance	4.96	1.30	5.20	1.29	5.64	.64	2.24
	Intensity	5.13	1.10	5.37	1.02	5.64	.64	1.73
	Clarity	5.22_{a}	.90	5.37_{ab}	.80	5.80_{b}	.41	4.17*
	Resolution	4.09_{a}	1.70	4.15_{a}	1.63	2.40_{b}	1.73	9.51**

Note. * $p < .05$, ** $p < .01$

df may change in occasional cues due to occasional missing values

Finally, with regard to self-reported memory resolution, there was a general trend across all six memory cues for the currently depressed group to report the lowest mean for memory resolution. Furthermore, significant group differences were found for memory resolution on five of the six cues: Peak ($F(2,88) = 10.33$, $p < .01$), Turning Point ($F(2,87) = 4.09$, $p < .05$), Childhood ($F(2,86) = 3.81$, $p < .05$), Adulthood ($F(2,80) = 4.00$, $p < .05$) and Nadir ($F(2,85) = 9.51$, $p < .01$). On four of these cues (Peak, Turning Point, Childhood & Nadir) the currently depressed group reported significantly less memory resolution than both the formerly depressed and never depressed groups. On the Adulthood cue, the currently depressed group reported significantly less memory resolution than the formerly depressed group. These results suggest that for most types of memories, current depression is associated with significantly less memory resolution than for those who are not experiencing current depression.

Group Comparisons on the Dimensions of Autobiographical Memory

The general approach followed in presenting results for the group comparisons, is to present the overall group comparisons of the proportional data, then report on the proportional data and chi-square analyses for the individual memory cues.

Specificity

Scores were coded for specificity coded according to Singer and Blagov's (2000-2001) *Classification System and Scoring Manual for Self-defining Autobiographical Memories* in which they were categorised as specific, or as one of two types of non-specific memories, episodic or generic. Specificity was coded in two ways. First, scores were given for specificity or non-specificity in which the episodic and generic categories were incorporated into one non-specific category. Overall specificity scores

were derived by totalling the specific versus non-specific scores across the six memory cues, with a possible total score of six. Memories were then classified as specific, episodic or generic.

Specific/Non-Specific Analyses

Group Comparison of Overall Proportional Data. A one-way Analysis of Variance (ANOVA) showed significant a group difference in overall specificity of memory recall across the six self-defining memory cues ($F(2,94) = 3.71$, $p = .03$), indicating that participants' levels of specificity differed significantly across the six memory cues. Total proportions are in Table 8. A Scheffé test for the group main effect showed that the formerly depressed group recalled significantly more specific memories than the currently depressed group. No significant differences were evident between the never depressed group and the formerly depressed group or the never depressed group and currently depressed group. This finding supports hypothesis (1a), that currently depressed individuals would produce fewer specific memories than formerly depressed individuals, who would in turn produce fewer specific memories than never depressed individuals.

Analysis of Individual Memory Cues for Specificity. Proportions for participant groups were calculated for binary responses on specificity/non-specificity for all six cues. Chi-square analyses were used to determine group differences on the six cues. The proportions and chi-squares for specificity (specific/non-specific) across the six memory cues are shown in Table 8.

Table 9

Proportions of Specific Memories and Pearson χ^2 for Specificity (Specific/Non-Specific) Across the Six Memory Cues

	Group			Pearson
	Never Depressed	Formerly Depressed	Currently Depressed	χ^2
Cue	Proportion	Proportion	Proportion	(*df*) = 2
Peak	.48	.81	.73	8.34*
Turning Point	.52	.52	.63	1.03
Childhood	.64	.69	.53	1.87
Adolescence	.52	.76	.37	11.66**
Adulthood	.60	.74	.43	6.83*
Nadir	.56	.62	.33	5.99*
Total	.55	.69	.51	

Note. * $p < .05$, ** $p < .01$

$N = 97$

Although the proportional means varied across the cues, overall, the currently depressed group was the least specific in response of the three groups, with the exception of the Peak cue. Contrary to expectations, the formerly depressed group was more specific than the never depressed group. The Turning Point Cue was the only cue for which this pattern of recall differed. On this cue, the currently depressed group demonstrated *greater* specificity than both the formerly and never depressed groups.

Chi-square analyses were used to determine group differences on the six individual memory cues. The counts, chi-squares and adjusted residuals for specificity across the six memories are detailed in Appendix B.1. When using the classification of

the memories as specific or non-specific, chi-square analyses showed significant group differences on four of the six individual memory cues partially supporting hypothesis (1a) that currently depressed individuals would produce fewer specific memories than formerly depressed individuals, who would in turn produce fewer specific memories than never depressed individuals. Three of the memory cues generated significant scores consistent with hypothesis (1a) namely: The Adolescence cue (Pearson χ^2 (2, N = 97) = 11.66, $p < .01$), the Adulthood cue (χ^2 (2, N = 97) = 6.38, $p = .03$) and the Nadir cue (χ^2 (2, N = 97) = 5.99, $p = .05$). However, the Peak cue (χ^2 (2, N = 97) = 8.34, p = .02) demonstrated significant scores in contrast to hypothesis (1a).

Each cue was examined using adjusted residuals for interpretation. On the Peak cue memory, the formerly depressed group recalled significantly more specific memories than expected ($Z = 2.0$, $p < .05$), whereas the never depressed group recalled significantly fewer specific memories than expected ($Z = -2.8$, $p < .05$). The currently depressed group recalled specific memories within the expected count range. These results were effectively opposite to predictions.

In contrast, on the Adolescence, Adulthood and Nadir cues the formerly depressed group recalled significantly more specific memories than expected (Adolescence cue, $Z = 3.2$, $p < .05$; Adulthood cue, $Z = 2.3$, $p < .05$; Nadir Cue, $Z = 1.8$, $p < .05$), while the currently depressed recalled significantly fewer specific memories (Adolescence cue, $Z = -2.8$, $p < .05$; Adulthood cue, $Z = -2.4$, $p < .05$; Nadir Cue, $Z = -2.4$, $p < .05$) than expected. The never depressed group reported specificity scores within the expected range.

Specific/Episodic/Generic Analyses

Proportions were calculated for responses on episodic and generic memories for each group on all cues. Chi-square analyses were used to determine group differences in

specificity (specific/episodic/generic) on the six cues. The proportions for specificity (episodic/generic) and chi-squares across the six memory cues are shown in Table 9.

Chi-square analyses were conducted using Singer and Blagov's (2000-2001) classification of memories as specific, episodic or generic. The counts, chi-squares and adjusted residuals for specificity (specific/episodic/generic) across the six memories are detailed in Appendix B.2. Each cue was examined using adjusted residuals for interpretation. Only the memory with the Adolescence cue generated a significant score (χ^2 (4, N = 97) = 11.73, p = .02), lending partial support to hypothesis (1b), that currently depressed individuals would recall significantly more episodic and generic memories than formerly depressed individuals, who would in turn produce more episodic and generic memories than never depressed individuals. On this memory, the formerly depressed group recalled significantly more specific memories than expected (Z = 3.2, p < .05), and significantly fewer episodic memories (Z = -2.9, p < .05). In contrast, the currently depressed group recalled significantly fewer specific memories than expected (Z = -2.8, p < .05) and significantly more episodic memories (Z = 2.5, p < .05). The never depressed group's specificity scores were in the expected range.

These results for the specific/episodic/generic coding of specificity on the Adolescence cue were similar to the results for specific/non-specific analyses (in which the formerly depressed group recalled greater levels of specificity while the currently depressed group recalled more non-specific memories). This suggests, therefore, that the differences in overgenerality found in this study occurred only for memories coded as episodic.

Table 10

Proportions of Episodic and Generic Memories and Pearson χ^2 for Specificity (Specific/Episodic/Generic) Across the Six Memory Cues

		Group			
Cue		Never Depressed Proportion	Formerly Depressed Proportion	Currently Depressed Proportion	Pearson χ^2 (*df*) = 4
Peak	Episodic	0.32	0.16	0.20	8.62
	Generic	0.20	0.16	0.12	
Turning	Episodic	0.36	0.76	0.36	3.93
Point	Generic	0.12	0.04	0.08	
Childhood	Episodic	0.16	0.36	0.20	5.02
	Generic	0.20	0.16	0.36	
Adolescence	Episodic	0.40	0.32	0.64	11.73**
	Generic	0.08	0.08	0.12	
Adulthood	Episodic	0.24	0.32	0.40	7.36
	Generic	0.16	0.12	0.28	
Nadir	Episodic	0.28	0.52	0.64	7.25
	Generic	0.16	0.12	0.16	
Total	Episodic	0.28	0.41	0.41	
	Generic	0.15	0.11	0.19	

Note. ** $p < .01$

$N = 97$

Motivations

Themes of Agency in Memory Recall

Agency was coded in two ways. First, memories were coded for the presence of agency in memories with either positive, negative or mixed affect. Overall presence of agency scores (regardless of affect) were derived by totalling the presence of agency versus absence of agency scores across the six memory cues, with a possible total score of six. Second, memories were coded for the presence of four positive themes of agency according to the McAdams (2001) coding manual. Each memory was scored for the presence (score of 1) or absence (score of 0) of these four agency themes, therefore yielding a score range of 0 to 4 for each individual memory.

Group Comparison of Overall Proportional Data. In partial support of hypothesis (2a), that currently depressed individuals would produce significantly fewer agentic memories than formerly and never depressed individuals, a one-way Analysis of Variance (ANOVA) revealed a borderline significant group difference for the presence of agency (regardless of affect) in memory recall across the six self-defining memory cues ($F(2,94) = 3.02$, $p = .054$). Total proportions are in Table 10. However, a Scheffé test for the group main effect found no significant differences among the three participant groups.

Furthermore, there was no support for the hypothesis (2a) with regard to the presence of positive agency across the memory cues. A one-way Analysis of Variance (ANOVA) did not reveal any significant group difference in the presence of positive agency in memory recall, indicating that the participants did not significantly differ in their levels of positive agency across the six memory cues ($F(2,94) = 0.08$, $p = .92$).

Analysis of Individual Memory Cues for Agency. A descriptive representation of the proportional means for positive agency (representing the four positive themes of

agency according to the McAdams (2001) coding manual) was not possible as they were not binary responses, but were scored from 0-4.

Proportions for participant groups were calculated for binary responses on the presence of agency (regardless of affect) for all six cues. Chi-square analyses were used to determine group differences on the six cues. The proportions and chi-squares for agency (regardless of affect) across the six memory cues are shown in Table 10.

Table 11

Proportions of Agentic (Regardless of Affect) Memories and Pearson χ^2 for Agency (Regardless of Affect) Across the Six Memory Cues

	Group			Pearson
	Never Depressed	Formerly Depressed	Currently Depressed	χ^2
Cue	Proportion	Proportion	Proportion	(*df*) = 2
Peak	.28	.33	.20	1.55
Turning Point	.56	.62	.40	3.45
Childhood	.24	.21	.17	0.48
Adolescence	.36	.31	.30	0.26
Adulthood	.44	.40	.33	0.70
Nadir	.36	.21	.07	7.20*
Total	.37	.35	.25	

Note. * $p < .05$

$N = 97$

Although non-significant, results were in the expected direction with the currently depressed group scoring lowest on agency across all six cues. The never depressed group scored highest on presence of agency on the Childhood, Adolescence, Adulthood

and Nadir cues, while the formerly depressed group received the highest agency scores on the Peak and Turning Point cues.

Chi-square analyses identified significant group differences in agency (regardless of affect) on only one of the six individual memory cues. The counts, chi-squares and adjusted residuals for agency (regardless of affect) across the six memories are detailed in Appendix B.3. Each cue was examined using adjusted residuals for interpretation. The Nadir cue memory generated a significant score (χ^2 (2, N = 97) = 7.20, p = .03). On the Nadir cue memory, the never depressed group recalled significantly more memories with an agentic theme than expected (Z = 2.2, p < .05). In contrast, the currently depressed group recalled significantly fewer memories reflecting an agentic theme than expected (Z = -2.3, p < .05). The agency scores for the formerly depressed group fell within the expected range.

Analysis of Individual Memory Cues for Agency Themes. In addition to the analyses for the memories coded for agency according to McAdams' (2001) coding manual, in which a total score was derived by adding scores for the presence of four positive themes of agency, analyses were also conducted to ascertain whether there were any significant group differences for the four individual agency themes across the six memory cues. Chi-square analyses found no group differences for any of the four individual agency themes across the six cues.

Themes of Communion in Memory Recall

Communion was also coded in two ways. First, memories were coded for the presence of communion in memories with either positive, negative or mixed affect. Overall presence of communion scores (regardless of affect) were derived from totalling the presence of communion versus absence of communion scores across the six memory cues, with a possible total score of six. Second, memories were coded for the presence

of four positive themes of communion according to the McAdams (2001) coding manual. Each memory was scored for the presence (score of 1) or absence (score of 0) of these communion themes, therefore yielding a score range of 0 to 4 for each individual memory.

Group Comparison of Overall Proportional Data. Contrary to hypothesis (2a), that currently depressed individuals would produce significantly fewer communal memories than formerly and never depressed individuals, a one-way Analysis of Variance (ANOVA) did not reveal a significant group difference for communion (regardless of affect) in memory recall ($F(2,94) = 0.54$, $p = .58$). Thus, participants did not significantly differ in their levels of overall communion across the six memory cues. Total proportions are in Table 11.

There was also no support for hypothesis (2a) with regard to the presence of positive communion across the six memory cues. A one-way Analysis of Variance (ANOVA) did not reveal any significant group difference in the presence of positive communion in memory recall ($F(2,94) = 2.16$, $p = .12$). This indicates that the participants did not significantly differ in their presence of positive communion across the six memory cues.

Analysis of Individual Memory Cues for Communion. A descriptive representation of the proportional means for positive communion (representing the four positive themes of communion according to the McAdams [2001] coding manual) was not possible as they were not binary responses, but were scored from 0-4.

Means as proportions for participant groups were calculated for binary responses on the presence of communion (regardless of affect) for all six cues. Chi-square analyses were used to determine group differences on the six cues. The proportions and chi-squares for communion across the six memory cues are shown in Table 11.

Table 12

Proportions of Communal Memories and Pearson χ^2 for Communion Across the Six Memory Cues

	Group			Pearson
	Never Depressed	Formerly Depressed	Currently Depressed	χ^2
Cue	Proportion	Proportion	Proportion	(*df*) = 2
Peak	.80	.69	.70	1.04
Turning Point	.56	.48	.50	0.45
Childhood	.56	.64	.50	1.51
Adolescence	.64	.67	.53	1.38
Adulthood	.64	.71	.63	0.66
Nadir	.56	.79	.73	3.99
Total	.63	.66	.60	

Note. * $p < .05$, ** $p < .01$

$N = 97$

Overall, the non-significant pattern of means for communion was high for all groups across the six cues. The most notable aspect of the results from communion scores was the lack of variance between groups on all cues, except the Nadir cue. As expected, the currently depressed group did not record the highest communion scores for any of the cues.

Chi-square analyses did not reveal any significant group differences on the six individual memory cues in terms of presence of communion. The counts, chi-squares and adjusted residuals for communion across the six memories are detailed in Appendix B.4.

Analysis of Individual Memory Cues for Communion Themes. In addition to the analysis of total scores on communion, analyses were also conducted to ascertain whether there were any significant group differences on the four individual communion themes across the six memory cues. Chi-square analyses found significant group differences only the Love/Friendship theme on the Nadir cue (χ^2 (2, N = 97) = 6.43, p = .04), in which the never depressed group recalled more memories than expected with themes of love/friendship (Z = 2.0, p < .05), while the currently depressed group recalled fewer memories than expected with themes of love/friendship (Z = -2.2, p < .05), No other significant group differences were found on any of the four individual agency themes across the six cues.

Depression Group Comparisons on Autonomy and Sociotropy

Analysis of self-reported autonomy and sociotropy permitted comparison of the depression groups on the negative constructs of autonomy and sociotropy, which have been conceptualised as depressive vulnerabilities. Two Multivariate Analyses of Variance (MANOVA) were conducted. The first MANOVA was on the sociotropy and autonomy subscale totals, and the second on the six subscales of sociotropy and autonomy.

Group Comparisons on Sociotropy and Autonomy Subscale Totals. A MANOVA was performed with participant group as independent variable, and the sociotropy total sub-scale (representing the sum of the three PSI-II sociotropy sub-scales) as well as the autonomy total sub-scale (representing the sum of the three PSI-II autonomy sub-scales) as the dependent variables. The means and standard deviations for the autonomy and sociotropy total sub-scales are in Table 12.

The group differences and means for the autonomy and sociotropy total sub-scales supported hypothesis (2b) that increased levels of autonomy and sociotropy are

associated with depression. Using Pillai's criterion, there was a significant overall group difference on MANOVA for the autonomy total and sociotropy total sub-scales ($F(4,188) = 4.49$, $p < .01$).

Table 13

Mean PSI-II Autonomy and Sociotropy Summed Scores by Group

Scale	Never Depressed		Formerly Depressed		Currently Depressed		F
	Mean	SD	Mean	SD	Mean	SD	(2,94)
Sociotropy Total	86.24_a	16.63	88.95_a	16.99	100.77_b	15.25	6.57**
Autonomy Total	76.64_a	16.35	80.90_a	14.85	91.93_b	16.15	7.32**

Note. ** $p < .01$

$N = 97$

The sociotropy total sub-scale demonstrated a significant univariate group difference. ($F(2,94) = 6.57$, $p < .01$). A post-hoc Scheffé test showed that the currently depressed group's mean sociotropy score was higher than both the mean for the formerly depressed group and the never depressed group. However, the formerly depressed group and never depressed group did not differ significantly from each other. The autonomy total sub-scale also demonstrated a significant univariate group difference ($F(2,94) = 7.32$, $p < .01$). A post-hoc Scheffé test showed that the currently depressed group's mean autonomy score was higher than the mean for both the formerly depressed group and the never depressed group. Once more, the formerly depressed group and never depressed group did not differ significantly from each other.

Group Comparisons on Sociotropy and Autonomy Subscales. A MANOVA was performed with participant group as the independent variable, and the three sociotropy

sub-scales and the three autonomy total sub-scales as dependent variables. The means and standard deviations for the autonomy and sociotropy sub-scales are in Table 13.

Table 14

Mean PSI-II Sub-Scale Scores by Group

Scale	Never Depressed		Formerly Depressed		Currently Depressed		F
	Mean	SD	Mean	SD	Mean	SD	(2,94)
Sociotropy Sub-Scales							
Concern About What Others Think	25.28_{ab}	5.86	25.17_{a}	6.39	29.17_{b}	5.74	4.42*
Dependency	23.56_{a}	5.97	25.93_{ab}	6.18	27.87_{a}	4.54	3.94*
Pleasing Others	37.40_{a}	7.94	37.86_{a}	6.86	43.73_{b}	7.87	6.89**
Autonomy Sub-Scales							
Perfectionism/Self-Criticism	14.40_{a}	4.27	15.00_{ab}	3.70	17.43_{b}	3.83	5.01**
Need for Control	25.28_{a}	6.67	26.83_{ab}	6.59	30.03_{b}	5.45	4.23**
Defensive Separation	36.96_{a}	8.14	39.07_{a}	7.41	44.47_{b}	9.47	6.29**

Note. * $p < .05$, ** $p < .01$

$N = 97$

The group differences and means for the autonomy and sociotropy sub-scales also supported hypothesis (2b) that increased levels of autonomy and sociotropy are associated with depression. Using Pillai's criterion, the combined autonomy and sociotropy sub-scales revealed a significant overall group difference ($F(12,180) = 1.97$, $p < .05$). Furthermore, univariate F-tests on the six PSI-II sub-scales revealed significant group differences on all six sub-scales.

Sociotropy Sub-Scales. Across the three sub-scales, the currently depressed group differed significantly from either or both of the formerly and never depressed groups. First, significant group differences were found on the *Concern About What Others Think* sub-scale ($F(2,94) = 4.42$, $p < .05$). A post-hoc Scheffé test found that the currently depressed group's mean *Concern About What Others Think* score was significantly higher than the mean for the formerly depressed group. The never depressed group did not differ significantly from either group.

A significant group difference was also found for the *Dependency* sub-scale ($F(2,94) = 3.94$, $p < .05$). A post-hoc Scheffé test showed that the currently depressed group's mean *Dependency* score was significantly higher than the mean for the never depressed group. However, the formerly depressed group did not differ from the currently or never depressed groups.

Finally, there was a significant group differences for the *Pleasing Others* sub-scale. ($F(2,94) = 6.89$, $p < .01$). A Scheffé test showed that the currently depressed group's mean *Pleasing Others* was higher than the mean for both the formerly depressed and the never depressed groups. No significant group difference existed between the formerly and never depressed groups.

Autonomy Sub-Scales. On the autonomy sub-scales, significant group differences were evident between the currently depressed group and the never depressed group on two of the sub-scales, and between the currently depressed group and the two non-depressed groups on the remaining sub-scale. First, significant group differences were found for the *Perfectionism/Self-Criticism* sub-scale ($F(2,94) = 5.01$, $p < .01$). A Scheffé test showed that the currently depressed group's mean *Perfectionism/Self-Criticism* score was significantly higher than the mean for the never depressed group. However, the formerly depressed group was not found to differ from either group.

Similar results were found on the *Need for Control* sub-scale which showed significant group differences ($F(2,94) = 4.23$, $p < .01$), with the Scheffé test indicating that the currently depressed group's mean *Need for Control* score was significantly higher than the mean for the never depressed group. The formerly depressed group did not differ from the currently or never depressed groups.

Finally, the groups also differed significantly on the *Defensive Separation* sub-scale ($F(2,94) = 6.29$, $p < .01$). A Scheffé test showed that the currently depressed group's mean *Defensive Separation* score was higher than the mean for both the formerly depressed and the never depressed groups. No significant group difference existed between the formerly and never depressed groups.

Adaptation

Themes of Redemption in Memory Recall

Scores were coded for redemption in two ways. First, they were coded for the four theoretically derived thematic categories of redemption (Foley Centre for the Study of Lives, 1999): (a) Redemption imagery, and if redemption imagery was present then received additional "bonus points" if the redemption sequences reflected: (b) Enhanced agency, (c) enhanced communion, and/or (d) ultimate concerns. Each memory was scored for the presence (score of 1) or absence (score of 0) of these themes. Thus, each memory potentially scored four points for redemption. An overall redemption score was derived by adding the six memories with a possible total score of 24.

In the second coding, scores were generated for the presence of redemptive imagery without the bonus points, with only zero or one being a possible score. The overall presence of redemption scores was derived from totalling these scores across the six memory cues, with a possible total score of six.

Group Comparison of Overall Proportional Data. Contrary to hypothesis (3a), that currently depressed individuals would produce significantly fewer redemptive sequences than formerly and never depressed individuals, a one-way Analysis of Variance (ANOVA) did not reveal a significant group difference in redemption (plus enhanced redemption) of memory recall across the six self-defining memory cues ($F(2,94) = 1.34$, $p = .27$). Thus, participants did not significantly differ in their levels of redemption across the six memory cues.

In addition, there was no support for hypothesis (3a) with regard to the overall presence of redemption across the six memory cues. One-way Analysis of Variance (ANOVA) showed no significant group difference in the overall presence of redemption of memory recall ($F(2,94) = 1.08$, $p = .34$). This indicates that the participants did not significantly differ in their presence of redemptive imagery across the six memory cues. Total proportions are in Table 14.

***Analysis of Individual Memory Cues for Redemption*.** A descriptive representation of the proportional means for redemption (plus enhanced redemption) was not possible as they were not binary responses, but were scored from 0-4 according to the Foley Centre for the Study of Lives (1999) manual which awarded points for (a) redemption imagery, (b) enhanced agency, (c) enhanced communion, and/or (d) ultimate concerns.

Proportions for participant groups were calculated for binary responses on redemption/non-redemption for all six cues. Chi-square analyses were used to determine group differences on the six cues. The proportions and chi-squares for specificity (specific/non-specific) across the six memory cues are shown in Table 14.

Overall, the proportions for redemption were generally low for all cues except the Turning Point cue. There was variation in group responses across the six individual

memory cues. On three of the six cues: Peak, Adolescence and Nadir, the never depressed group received the highest scores on redemption, followed by the formerly depressed group with the currently depressed group receiving the lowest redemption scores. On the Turning Point and Childhood cues, the formerly depressed group scored highest on redemption, followed by the never depressed group then the currently depressed group. However, on the Adulthood cue, the results were contrary to expectation, with the formerly depressed group receiving the highest scores for redemption, followed by the currently depressed group, with the never depressed group receiving the lowest redemption scores.

Table 15

Proportions of Redemptive Memories and Pearson χ^2 for Redemption (Redemption/Non-Redemption) Across the Six Memory Cues

	Group			Pearson
	Never Depressed	Formerly Depressed	Currently Depressed	χ^2
Cue	Proportion	Proportion	Proportion	(*df*) = 2
Peak	.24	.14	.13	1.39
Turning Point	.36	.55	.30	4.94
Childhood	.16	.17	.10	0.70
Adolescence	.24	.12	.03	5.39
Adulthood	.08	.24	.23	2.87
Nadir	.40	.19	.17	4.99
Total	.30	.32	.20	

Note. * $p < .05$, ** $p < .01$

$N = 97$

Chi-square analyses did not find any significant group differences for the six individual memory cues in terms of overall presence of redemptive imagery. The counts, chi-squares and adjusted residuals for redemption across the six memories are detailed in Appendix B.5.

Themes of Contamination in Memory Recall

Group Comparison of Overall Proportional Data. There was support for hypothesis (3b), that currently depressed individuals would produce significantly more contaminated memories than formerly and never depressed individuals. A one-way Analysis of Variance (ANOVA) revealed a significant group difference in the overall contamination of memory recall across the six self-defining memory cues ($F(2,94) = 7.93$, $p < .01$). Thus, participants significantly differed in their levels of contamination across the six memory cues. Total proportions are in Table 15. A Scheffé test for the group main effect showed that the currently depressed group recalled significantly more contaminated memories than both the never depressed and formerly depressed groups. There was no difference between the never depressed and formerly depressed groups.

Analysis of Individual Memory Cues for Contamination. Proportions for participant groups were calculated for binary responses on contamination for all six cues. Chi-square analyses were used to determine group differences on the six cues. The proportions and chi-squares for specificity (specific/non-specific) across the six memory cues are shown in Table 15.

Overall, the proportions for contamination were low across all six cues. Notably, the currently depressed group received the highest contamination scores across all six cues. Also supporting hypothesis (3b), the never depressed group received the lowest scores for contamination on five of the six cues: Peak, Turning Point, Childhood,

Adolescence and Nadir. The formerly depressed group received the lowest contamination score on the Adulthood cue.

Table 16

Proportions of Contaminated Memories and Pearson χ^2 for Contamination Across the Six Memory Cues

	Group			Pearson
	Never Depressed	Formerly Depressed	Currently Depressed	χ^2
Cue	Proportion	Proportion	Proportion	(*df*) = 2
Peak	.00	.07	.27	10.94**
Turning Point	.00	.17	.20	5.38
Childhood	.00	.07	.30	13.19**
Adolescence	.08	.10	.20	2.37
Adulthood	.08	.02	.17	4.72
Nadir	.12	.14	.17	0.24
Total	.05	.10	.22	

Note. ** $p < .01$

$N = 97$

Chi-square analyses were used to determine group differences on the six individual memory cues. The counts, chi-squares and adjusted residuals for contamination across the six memories are detailed in Appendix B.6. Chi-square analyses showed significant group differences on two of the six individual memory cues: the Peak cue (χ^2 (2, $N = 97$) = 10.94, $p < .01$) and Childhood cue (χ^2 (2, $N = 97$) = 13.19, $p < .01$). Each cue was examined using adjusted residuals for interpretation. On both the Peak and Childhood cues, the currently depressed group recalled significantly

more contaminated memories than expected (Peak Cue, $Z = 3.2$, $p < .05$; Childhood Cue, $Z = 3.5$, $p < .05$). In contrast, the never depressed group recalled significantly fewer contaminated memories than expected (Peak Cue, $Z = -2.1$, $p < .05$; Childhood Cue, $Z = -2.2$, $p < .05$).

Integration of Memory Recall

Group Classification of Overall Proportonal Data. A one-way Analysis of Variance (ANOVA) revealed significant group differences in overall integration of memory recall across the six self-defining memory cues lending support to hypothesis (3c), $F(2,94) = 5.44$, $p < .01$, that currently depressed individuals would produce fewer integrated memories than formerly depressed and never depressed individuals. Thus, participants significantly differed in their levels of integration across the six memory cues. Total proportions are in Table 16. A Scheffé test for the group main effect showed that both the never depressed and formerly depressed groups recalled significantly more integrated memories than the currently depressed group. There was no significant difference between the never depressed group and the formerly depressed group.

Analysis of Individual Memory Cues for Integration. Group proportions were calculated for binary responses on integration/non-integration for all six cues. Chi-square analyses were used to determine group differences on the six cues. The proportions and chi-squares for integration across the six memory cues are shown in Table 16.

Although the proportions for integration were generally low for all cues except the Turning Point cue, the most notable result for these proportions was the general trend for the currently depressed group to be less integrative across all six cues. The never depressed group scored highest for integration on the Peak and Adolescence cues,

whereas the formerly depressed group had the highest proportional mean for integration on the Turning Point, Childhood, Adulthood and Nadir cues.

Table 17

Proportions of Integrative Memories and Pearson χ^2 for Integration Across the Six Memory Cues

	Group			Pearson
	Never Depressed	Formerly Depressed	Currently Depressed	χ^2
Cue	Proportion	Proportion	Proportion	(*df*) = 2
Peak	.32	.24	.10	4.10
Turning Point	.56	.69	.33	9.03**
Childhood	.08	.19	.03	4.67
Adolescence	.28	.14	.00	9.26**
Adulthood	.20	.28	.17	1.55
Nadir	.16	.17	.06	1.70
Total	.27	.29	.12	

Note. ** $p < .01$

$N = 97$

Chi-square analyses found significant group differences on two of the six individual memory cues. The counts, chi-squares and adjusted residuals for integration across the six memories are detailed in Appendix B.7. Chi-square analysis was significant for the Turning Point cue (χ^2 (2, $N = 97$) = 9.03, $p = .01$) and the Adolescence cue (χ^2 (2, $N = 97$) = 9.26, $p = .01$). Each cue was examined using adjusted residuals for interpretation. On the Turning Point cue memory, the formerly depressed group recalled significantly more integrative memories than expected ($Z = 2.5$, $p < .05$).

In contrast, the currently depressed group recalled significantly fewer integrative memories than expected ($Z = -2.8$, $p < .05$). The never depressed group recalled integrated memories within the expected count range.

On the Adolescence cue memory, the never depressed group recalled significantly more integrative memories than expected ($Z = 2.5$, $p < .05$). In contrast, the currently depressed group recalled significantly fewer integrative memories than expected ($Z = -2.6$, $p < .05$). The formerly depressed group's integrative recall fell within the expected range.

Affect

As affect was scored as a categorical variable it was not possible to derive a total affect score from the six memory cues, and thus did not permit a comparison of proportions across the three depression groups for the combined cues. Instead, comparisons were analysed by chi-squares across the six individual memory cues.

Analysis of Individual Memory Cues for Affect

A descriptive representation of the proportions for affect (positive/negative/mixed) was also not possible as affect was not scored as binary responses, but was scored from 0-2, representing the three categories of response.

Supporting hypothesis (4) chi-square analyses identified significant group differences on three of the six individual memory cues: the Turning Point cue (χ^2 (4, $N = 97$) = 11.27, $p = .02$), Childhood cue (χ^2 (4, $N = 97$) = 14.29, $p < .01$) and Adolescence cue (χ^2 (4, $N = 97$) = 9.89, $p = .04$). The Peak cue, Adulthood cue and Nadir cue did not find any significant group differences. The counts, chi-squares and adjusted residuals for affect across the six memories are detailed in Appendix B.8.

Each cue was examined using adjusted residuals for interpretation. On all three significant cues there was a consistent pattern of the currently depressed group recalling

more negative memories than expected and the never depressed group recalling significantly fewer negatively toned memories than expected. Another consistent response across the three significant cues was that the formerly depressed group's affective recall fell within the expected range.

On the Turning Point cue memory, the never depressed group recalled significantly fewer negative memories than expected ($Z = -2.1$, $p < .05$). In contrast, the currently depressed group recalled significantly fewer mixed affect memories than expected ($Z = -2.6$, $p < .05$) and significantly more negative memories ($Z = 2.5$, $p < .05$).

On the Childhood cue, the currently depressed group recalled significantly more negative affect memories than expected ($Z = 3.1$, $p < .05$), whereas the never depressed group recalled significantly fewer negative memories ($Z = -2.7$, $p < .05$) and significantly more mixed affect memories ($Z = 2.5$, $p < .05$).

Finally, on the Adolescence cue, the never depressed group recalled significantly fewer negative memories than expected ($Z = -2.6$, $p < .05$). In contrast, the currently depressed group recalled significantly more negative memories than expected ($Z = 2.4$, $p < .05$) and significantly fewer positive memories ($Z = -2.0$, $p < .05$).

Positive Affect

Scores for positive affect were derived by scoring affect responses (positive/negative/ mixed) a "1" for presence of positive affect or "0" for presence of negative or mixed affect.

Analysis of Individual Memory Cues for Positive Affect. Proportions for participant groups were calculated for binary responses on positive affect for all six cues. The proportions and chi-squares for positive affect across the six memory cues are shown in Table 17.

Table 18

Proportions and Pearson χ^2 for Positive Affect Memories Across the Six Memory Cues

	Group			Pearson
	Never Depressed	Formerly Depressed	Currently Depressed	χ^2
Cue	Proportion	Proportion	Proportion	(*df*) = 2
Peak	.68	.71	.40	7.98*
Turning Point	.36	.19	.30	2.52
Childhood	.36	.43	.27	1.99
Adolescence	.44	.38	.20	4.05
Adulthood	.56	.64	.47	2.22
Nadir	.00	.00	.00	0.00
Total	.40	.39	.27	

Note. * $p < .05$

$N = 97$

There was a considerable range on positive affect scores for the three groups across the six cues, with the Nadir cue receiving nil positive affect scores. On the Peak, Childhood and Adulthood cues, the formerly depressed group demonstrated the highest levels of positive affect followed by the never depressed group then the currently depressed group. On the Turning Point cue the never depressed group recalled the greatest amount of memories with positive affect, followed by the currently depressed group, then the formerly depressed group. However, the results may be extraneous, as almost half (49.5%) of the sample responded with mixed affect on this particular cue. The expected direction of scores was found only on the Adolescence cue, in which the never depressed group received the highest score for positive affect, followed by the formerly depressed group, then the never depressed group.

Chi-square analyses showed significant group differences in positive affect on only the Peak cue (χ^2 (2, N = 97) = 7.98, p = .02). Each cue was examined using adjusted residuals for interpretation. On the Peak cue memory, the formerly depressed group recalled significantly more positive memories than expected (Z = 1.9, p < .05), while the currently depressed group recalled significantly fewer positive memories (Z = -2.8, p < .05).

Negative Affect

Scores for negative affect were derived by scoring affect responses (positive/negative/mixed) a "1" for presence of negative affect or "0" for presence of positive or mixed affect.

Analysis of Individual Memory Cues for Negative Affect. Proportions for participant groups were calculated for binary responses on negative affect for all six cues. The proportions and chi-squares for negative affect across the six memory cues are shown in Table 18.

There was significant range on negative affect scores for the three groups across the six cues, with the Nadir cue receiving the highest negative affect scores. The expected direction of proportional mean scores for negative affect was found on four of the six cues. On the Peak, Turning Point, Childhood and Adolescence cues, the currently depressed group recalled the greatest amount of negative affect memories, followed by the formerly depressed group, with the never depressed group having the lowest scores. In contrast, on the Adulthood cue, the currently depressed group again received the highest negative affect scores, but the formerly depressed group received the lowest scores for negative affect. On the Nadir cue, the formerly depressed group received the highest negative affect score, followed by the currently depressed group,

with the never depressed group recalling the lowest number of negative affect memories.

Table 19

Proportions and Pearson χ^2 for Negative Affect Memories Across the Six Memory Cues

	Group			Pearson
	Never Depressed	Formerly Depressed	Currently Depressed	χ^2
Cue	Proportion	Proportion	Proportion	(*df*) = 2
Peak	.16	.17	.27	1.39
Turning Point	.08	.21	.40	7.93*
Childhood	.08	.26	.50	11.97**
Adolescence	.12	.33	.50	8.91**
Adulthood	.16	.09	.30	5.13
Nadir	.64	.76	.73	1.19
Total	.19	.30	.45	

Note. * $p < .05$, ** $p < .01$

$N = 97$

Chi-square analyses found significant group differences on three of the six individual memory cues: the Turning Point cue (χ^2 (2, $N = 97$) = 7.93, $p = .02$), Childhood cue (χ^2 (2, $N = 97$) = 11.97, $p < .01$) and Adolescence cue (χ^2 (2, $N = 97$) = 8.91, $p = .01$). Each cue was examined using adjusted residuals for interpretation. On all three significant cues there was a consistent pattern of the currently depressed group recalling more negative memories than expected and the never depressed group recalling significantly fewer negatively toned memories than expected. Another

consistent response across the three significant cues was that the formerly depressed group's affective recall fell within the expected range.

On the Turning Point cue memory, the never depressed group recalled significantly fewer negative memories than expected ($Z = -2.1$, $p < .05$). In contrast, the currently depressed group recalled significantly more negative memories ($Z = 2.5$, $p < .05$). On the Childhood cue, the currently depressed group recalled significantly more negative affect memories than expected ($Z = 3.1$, $p < .05$), whereas the never depressed group recalled significantly fewer negative memories ($Z = -2.7$, $p < .05$). On the Adolescence cue, the never depressed group recalled significantly fewer negative memories than expected ($Z = -2.6$, $p < .05$), while the currently depressed group recalled significantly more negative memories ($Z = 2.4$, $p < .05$).

Patterns of Autobiographical Memory Dimensions

Memory Clusters Related to Depression Groups

The first section of the results reported investigations of between-group comparisons, according to depression levels, across the autobiographical memory dimensions of specificity, agency, communion, redemption, contamination, integration and affect. This section of the chapter focuses on the patterns of these same autobiographical memory dimensions in terms of clusters of respondents. The analyses examined whether the autobiographical memory dimensions of specificity, agency, communion, redemption, contamination, integration and affect form divergent patterns, in which different combinations of these dimensions form distinct narratives.

The aim of the cluster analyses was to establish whether people coming from different depression groups recall memories that differ in combinations of autobiographical memory dimensions, for example, a contaminated, negative pattern of

recall compared to a specific, integrated pattern of recall. The characteristics of memories as measured by the autobiographical memory dimensions were explored to identify any distinct patterns whereby memories are formed by different combinations of these memory dimensions. Each of the memories was then examined to establish whether any clusters formed, and how the participants varying in depression level had memories of these different combinations.

Cluster analyses were conducted on each of the six individual memory cues, with memory clusters using proportions of responses equal to one. A two-stage clustering algorithm was used based on binary responses for specificity, agency, communion, redemption, contamination, integration, positive affect and negative affect. The analyses focused on positive and negative affect for ease of interpretation, as it would have been difficult to interpret any meaning to mixed affect.

The two-step cluster method is a scalable cluster analysis algorithm, which is able to analyse both continuous and categorical variables. It involves two stages of analysis. First, it pre-clusters the cases into multiple small sub-clusters using a sequential clustering method. Second, using an agglomerative hierarchical clustering method, the sub-clusters are clustered into multiple cluster solutions, and the optimal number of clusters is automatically determined (Chiu, Fang, Chen, Wang & Jeris, 2001; Zhang, Ramakrishnon & Livny, 1996).

Results showed significant clusters on the memories with a Peak cue and Adolescence cue. As 49.5% of participants responded to the Turning Point cue with mixed affect and therefore would have received a null result on binary responses for positive and negative affect, an additional cluster analysis was conducted on the Turning Point cue without including the affect dimensions as variables, yielding significant clusters. These results lend support to hypothesis (5), suggesting that a

differential pattern between depression and autobiographical memory dimensions exists, but only for certain cues.

Peak Cue

On the Peak cue, two distinct clusters were generated (χ^2 (2, N = 97) = 6.37, p = .04). The clusters did not differ greatly on the dimensions of specificity and communion, but there were divergences between the clusters on integration, agency, redemption, contamination, positive affect and negative affect. Cluster 1 (Contaminated, Negative Affect Cluster) recalled more contaminated memories, as well as memories with negative affect. In contrast, Cluster 2 (Integrated, Redemptive, Agentic, Positive Affect Cluster) generated more integrated memories and memories with positive affect, as well as more memories reflecting themes of agency and redemption when compared to Cluster 1 (Contaminated, Negative Affect Cluster). The proportions for the Peak memory cluster are found in Table 19.

Table 20

Proportions of Autobiographical Memory Dimensions Across Clusters for Memory 1 (Peak)

	Specific-ity	Integrat-ion	Agen-cy	Commu-nion	Redem-ption	Contam-ination	Pos Affect	Neg Affect
Contaminated Neg Affect Cluster	.65	.13	.13	.70	.09	.48	.00	.83
Integrated Redemptive Agentic Pos Affect Cluster	.72	.24	.32	.73	.19	.00	.80	.00

N = 97

The Contaminated, Negative Affect Cluster had a higher percentage of currently depressed participants, compared to formerly depressed and never depressed participants. The Integrated, Redemptive, Agentic, Positive Affect Cluster contained a higher percentage of never depressed and formerly depressed participants compared to currently depressed individuals. The percentage breakdown of depression groups within the two clusters is in Table 20.

Table 21

Percentages of Depression Groups in Clusters for Memory 1 (Peak)

	Group		
	Never Depressed $N = 25$	Formerly Depressed $N = 42$	Currently Depressed $N = 30$
Contaminated, Negative Affect Cluster	16.0%	16.7%	40.0%
Integrated, Redemptive, Agentic, Positive Affect Cluster	84.0%	83.3%	60.0%

$N = 97$

Turning Point (Without Affect) Cue

A two-stage clustering algorithm was used based on binary responses for specificity, integration, agency, communion, redemption and contamination. On the Turning Point (Without Affect) cue, three distinct clusters were generated (χ^2 (4, N = 97) = 15.12, $p < .01$). Cluster 1 (Contamination Cluster) generated more contaminated memories than the other two clusters. Cluster 2 (Integrated, Redemption, Agency Cluster) produced more integrated memories, more agentic memories and more memories with a redemptive theme than the other clusters. In contrast, Cluster 3 (Specific, Communion Cluster) recalled more specific memories and memories with communal themes than the other clusters. The proportions for the three Turning Point memory clusters are shown in Table 21.

Table 22

Proportions of Autobiographical Memory Dimensions Across Clusters for Memory 2 (Turning Point) with Affect Variables Eliminated from the Cluster Analysis

	Specificity	Integration	Agency	Communion	Redemption	Contaminat-ion
Contamination Cluster	.54	.31	.31	.31	.08	1.00
Integrated Redemption Agency Cluster	.44	.91	.94	.44	1.00	.00
Specific Communion Cluster	.64	.36	.32	.60	.12	.00

N = 97

The Contamination Cluster comprised currently depressed and formerly depressed individuals only. The Integrated, Redemption, Agency Cluster had a higher percentage of never depressed and formerly depressed participants compared to currently depressed participants, whereas the Specific, Communion Cluster contained a majority of never depressed and currently depressed participants. The percentage breakdown of depression groups among the three clusters for the Turning Point cue (without affect variables) is in Table 22.

Table 23

Percentages of Depression Groups in Clusters for Memory 2 (Turning Point) with Affect Variables Eliminated from the Cluster Analysis

	Group		
	Never Depressed $N = 25$	Formerly Depressed $N = 42$	Currently Depressed $N = 30$
Contaminated Cluster	0.0%	16.7%	20.0%
Integrated, Redemptive, Agentic Cluster	32.0%	50.0%	16.7%
Specific, Communal Cluster	68.0%	33.3%	63.3%

$N = 97$

Adolescence Cue

On the Adolescence cue, three distinct clusters were generated (χ^2 (4, $N = 97$) = 11.688, $p = .02$). Although the clusters differed little on the dimension of communion, Cluster 1 (Contaminated, Negative Affect Cluster) recalled more negatively toned and contaminated memories. Conversely, Cluster 2 (Integrated, Redemption, Agency Cluster) generated more integrated memories containing themes of redemption and agency. Cluster 3 (Specific, Positive Affect Cluster) generated more positively toned memories and more specific memories when compared to the other clusters. Table 23 shows the proportions for the three Adolescence memory clusters.

Table 24

Proportions of Autobiographical Memory Dimensions Across Clusters for Memory 4 (Adolescence)

	Specificity	Integration	Agency	Communion	Redemption	Contamination	Pos Affect	Neg Affect
Contaminated Neg Affect Cluster	.52	.06	.21	.54	.00	.21	.00	.62
Integrated, Redemption Agency Cluster	.53	.67	.60	.60	.80	.07	.20	.00
Specific Pos Affect Cluster	.70	.00	.37	.77	.00	.00	1.00	.00

$N = 97$

The Contaminated, Negative Affect Cluster had a high percentage of currently depressed participants when compared to the other two participant groups. The Integrated, Redemptive, Agentic Cluster was made up of predominantly never depressed and formerly depressed participants compared to currently depressed participants. The Specific, Positive Affect Cluster also contained a greater percentage of never depressed and formerly depressed participants than currently depressed participants. The percentage breakdown of depression groups among the three clusters for the Adolescence cue is in Table 24.

Table 25

Percentages of Depression Groups in Clusters for Memory 4 (Adolescence)

	Group		
	Never Depressed	Formerly Depressed	Currently Depressed
	N = 25	*N* = 42	*N* = 30
Contaminated, Negative Affect Cluster	40.0%	45.2%	76.7%
Redemptive, Agentic Cluster	28.0%	16.7%	3.3%
Specific, Positive Affect Cluster	32.0%	38.1%	20.0%

N = 97

Relationships between Clusters

Chi-square analyses were conducted to determine if the clusters on the Peak, Turning Point (without affect variables) and Adolescence cues were significantly related to each other. For example, if someone were in a low functioning cluster on the Peak cluster, would they also be in the low functioning cluster on the Turning Point (Without Affect) or Adolescence cues? No significant relationships between clusters were found on any of the three cues. These results suggest that while a differential pattern existed between depression and autobiographical memory dimensions on certain cues, participants' responses to one cue were not necessarily consistent with their responses on other cues.

Differences between Clusters

Peak Cue. One-way Analysis of Variance (ANOVA) was used to test whether the two clusters on the Peak cue significantly differed on BDI-II scores, PSI-II scores and

self-defining memory information. The means and standard deviations for the differences between clusters on the Peak cue are found in Table 25.

Table 26

Descriptive Data and F scores for Memory 1 (Peak) Clusters on PSI-II Scores, BDI-II Scores and Self-Defining Memory Information

Measure	Memory Cluster				*F*
	Contaminated, Negative Affect Cluster		Integrated, Redemptive, Positive Affect Cluster		
	N = 23		*N* = 74		
	M	*SD*	*M*	*SD*	
PSI Sociotropy	94.48	19.20	91.11	16.73	0.66
PSI Autonomy	87.96	17.73	81.74	16.14	2.48
BDI Total	23.00	19.61	13.65	16.18	5.29*
Clarity	5.82	.40	5.57	.71	2.39
Intensity	5.41	.80	5.39	.92	0.01
Importance	5.68	.72	5.43	.88	2.29
Resolution	2.91	1.93	5.51	1.05	65.48**

Note. * $p < .05$, ** $p < .01$

There was no significant difference between clusters for PSI-II scores on the Peak Memory cue. In contrast, the BDI-II scores significantly differentiated between clusters ($F(1,95) = 5.29$, $p < .05$), with the cluster whose memories showed greater contamination and negative affect demonstrating higher BDI-II scores than the cluster whose memories showed greater integration, redemption and positive affect.

With regard to self-defining memory information, the two clusters did not differ in the self-reported importance for their self-defining memories, suggesting that the

clusters recalled self-defining memories according to the definition provided in the study questionnaire. The clusters also did not differ in self-reported memory clarity or intensity. However, significant cluster differences were found for memory resolution ($F(1,89) = 65.48$, $p < .01$). The Integrated, Redemptive, Positive Affect Cluster reported significantly greater resolution to their Peak experience than the Contaminated, Negative Affect Cluster.

Turning Point (Without Affect) Cue. One-way Analysis of Variance (ANOVA) was used to test whether the three clusters on the Turning Point (without affect) cue differed significantly on BDI-II scores, PSI-II scores and self-defining memory information. The means and standard deviations for the differences between clusters on the turning point (without affect) cue are found in Table 26.

The only significant difference between clusters on PSI-II scores for the Turning Point (Without Affect) memory cue was found for PSI Autonomy ($F(2,94) = 4.24$, $p = .02$), in which the cluster whose memories showed greater contamination demonstrated significantly higher PSI Autonomy scores than the cluster whose memories showed greater integration, redemption and agency. The BDI-II scores also significantly differentiated between clusters ($F(2,94) = 4.03$, $p = .02$), with the cluster whose memories showed greater contamination demonstrating higher BDI-II scores than the cluster whose memories showed greater integration, redemption and agency.

Table 27

Descriptive Data and F scores for Memory 2 (Turning Point Without Affect) Clusters on PSI-II Scores, BDI-II Scores and Self-Defining Memory Information

Measure	Memory Cluster: Contaminated Cluster $N = 13$		Integrated, Redemptive, Agentic Cluster $N = 34$		Specific, Communion Cluster $N = 50$		F
	M	SD	M	SD	M	SD	
PSI Sociotropy	94.77	20.26	79.56	14.16	82.70	16.20	2.48
PSI Autonomy	98.31_{a}	14.40	87.12_{b}	18.67	93.50_{ab}	16.48	4.24*
BDI Total	24.08_{a}	22.19	9.85_{b}	12.82	17.82_{ab}	17.77	4.03*
Clarity	5.80	0.63	5.44	0.67	5.34	0.87	1.44
Intensity	5.80_{ab}	0.42	5.41_{ab}	0.67	5.15_{ab}	0.93	3.05*
Importance	5.40	0.70	5.78	0.49	5.52	0.83	1.74
Resolution	4.40	1.08	5.22	0.98	4.77	1.74	1.56

Note. * $p < .05$

With regard to the self-defining memory information, only the self-defining memory information category of Intensity showed significant cluster differences for the Turning Point (without affect) cue ($F(2,86) = 3.05$, $p = .05$). However, a post-hoc Scheffé test revealed no group differences. The three clusters did not differ in the self-reported importance for their self-defining memories across any of the six memory cues, suggesting that the clusters' recalled memories were self-defining.

Adolescence Cue. One-way Analysis of Variance (ANOVA) was used to test whether the clusters on the Adolescence cue differed significantly on BDI-II scores,

PSI-II scores and self-defining memory information. The means and standard deviations for the differences between clusters on the adolescence cue are found in Table 27.

Table 28

Descriptive Data and F scores for Memory 4 (Adolescence) Clusters on PSI-II Scores, BDI-II Scores and Self-Defining Memory Information

	Memory Cluster						
Measure	Contaminated, Negative Affect Cluster		Integrated, Redemptive, Agentic Cluster		Specific, Positive Affect Cluster		*F*
	N = 52		*N* = 15		*N* = 30		
	M	*SD*	*M*	*SD*	*M*	*SD*	
PSI Sociotropy	86.94	17.77	81.93	13.42	77.40	14.65	1.36
PSI Autonomy	94.40_{a}	16.98	86.80_{ab}	17.23	90.13_{b}	17.68	3.33*
BDI Total	19.92_{a}	18.80	7.73_{b}	8.79	12.90_{ab}	16.51	3.68*
Clarity	5.21_{ab}	1.03	4.42_{a}	1.17	5.31_{b}	0.81	3.80*
Intensity	5.19_{a}	1.02	4.25_{b}	1.22	4.72_{ab}	1.19	4.05*
Importance	4.83	1.27	4.33	1.37	4.86	1.16	0.87
Resolution	3.98_{a}	1.56	4.67_{ab}	1.16	5.11_{b}	1.07	6.17**

Note. * $p < .05$, ** $p < .01$

The only significant difference between clusters on PSI-II scores for the Adolescence memory cue was found for PSI Autonomy ($F(2,94) = 3.33$, $p = .04$), in which the Contaminated, Negative Affect Cluster demonstrated significantly higher PSI Autonomy scores than the Specific, Positive Affect Cluster. BDI-II scores also significantly differentiated between clusters ($F(2,94) = 3.68$, $p = .03$), with the

Contaminated, Negative Affect Cluster demonstrating higher BDI-II scores than the Integrative, Redemptive, Agentic Cluster.

With regard to self-defining memory information, significant cluster differences were found for memory clarity ($F(2,86) = 3.80$, $p = .03$), intensity ($F(2,86) = 4.05$, $p = .02$), and resolution ($F(2,85) = 6.17$, $p < .01$). The Specific, Positive Affect Cluster rated their memories as having greater clarity than the Integrative, Redemptive, Agentic Cluster. The Contaminated, Negative Affect Cluster reported significantly greater memory intensity than the Integrative, Redemptive, Agentic Cluster. Finally, the Specific, Positive Affect Cluster reported significantly higher memory resolution than the Contaminated, Negative Affect Cluster. The three clusters did not differ in memory importance across any of the six memory cues.

Autobiographical Memory Dimensions as Predictors of Current Depression Level

The first two sections of the results have focused on group comparisons on the autobiographical memory dimension across the six memory cues, and differences between clusters of respondents that reflect how individuals who have different levels of depression recall memories that vary in their patterns of autobiographical memory dimensions. The final section of the results examines relationships among the dimensions and seeks to identify predictors of depression levels.

Correlations were calculated for depression (measured by the total score on the BDI-II) and each of the dimensions of autobiographical memory: Specificity, agency, communion, redemption, contamination and integration. These overall recall autobiographical memory variables were derived by totalling the presence/absence of each variable across the six memory cues, with a possible total score of six for each

individual autobiographical memory dimension. Table 28 shows the correlations for current depression levels and the autobiographical memory dimensions.

Table 29

Pearson Correlations for Depression and Autobiographical Memory Dimensions

	BDI Total	Specificity	Integration	Redemp-tion	Contami-nation	Agency
Specificity	-.182					
Integration	-.326**	.115				
Redemption	-.158	.174	.599**			
Contamination	.392**	.004	-.179	-.094		
Agency	-.202*	.097	.350**	.457**	-.175	
Communion	-.131	.045	.252*	.283**	-.039	-.011

Note. * $p < .05$ (2-tailed), ** $p < .01$ (2-tailed)

Contrary to hypothesis (6), that the dimensions of specificity, agency, communion, redemption, contamination, and integration would be significantly associated with each other, relatively few of the autobiographical memory dimensions were significantly related at the two-tailed level of significance. Indeed, specificity and contamination showed no significant associations with any of the other memory dimensions. As expected, integration was significantly associated with the memory dimensions of redemption ($r = .599$, $p < .01$), agency ($r = .350$, $p < .01$) and communion ($r = .252$, $p = .01$). Redemption was also significantly related to three autobiographical

memory dimensions: integration, agency (r = .457, p < .01) and communion (r = .283, p < .01).

In line with predictions, depression was negatively associated with integration (r = -.326, p < .01), positively associated with contamination (r = .392, p < .01) and negatively associated with agency (r = -.202, p < .05). No significant relationships emerged for depression and specificity, redemption or communion.

As integration, contamination and agency were found to be significantly associated with depression, multiple regression was used to test whether current depression level scores could be predicted by these three autobiographical memory dimensions. Total BDI score was used as the dependent variable in the regression, with overall integration, contamination and agency used as predictors. Together, the predictors accounted for 22% of the variance in current depression scores. (R^2 = .224, Adjusted R^2 = .199, $F(3,93) = 8.962$, p < .01). As shown in Table 29, the significant independent predictors, in order of beta weights, were contamination and integration, partially supporting hypothesis (7), that specificity, agency, communion, redemption, contamination and integration would be significant predictors of current level of depression. Agency was non-significant.

Table 30

Summary of Multiple Regression: Level of Current Depression as Dependent Variable

Variable	Correlation	Beta	Regression Coefficient	*t*	*p*
Contamination	.392	.338	5.261	3.617	<.01
Integration	-.326	-.246	-3.372	-2.500	.01
Agency	-.202	-.057	-1.225	-0.577	.56

One tailed significance * p < .01

A hierarchical multiple regression was then performed using the two significant predictors. The analysis sought to ascertain what integration adds to variance in BDI scores when controlling for contamination. On the first step, contamination accounted for 15% of the variance in current depression scores (R^2 = .154, Adjusted R^2 = .145, $F(1,95) = 17.265$, $p < .01$). Adding integration to the regression equation on the second step explained an additional 7% of variance in current depression scores, which was a significant change ($F(2,94) = 13.370$, $p < .01$). Thus, integration made a significant independent contribution to the prediction of depression beyond the contribution of contamination. Possible interaction effects of agency with both contamination and integration were tested and all were non-significant. Therefore, there was no moderation of contamination and integration by levels of agency.

CHAPTER SIX: GENERAL DISCUSSION

The discussion chapter reports the study findings in relation to the aims and hypotheses of the research, and considers the theoretical implications that emerge from these results. The findings are considered first in relation to comparisons of the depression groups for self-defining memory information as well as the autobiographical memory dimensions of specificity, integration, redemption, contamination, agency, communion and affect. This relates to the first two aims of the research. In the subsequent sections, findings are described in terms of patterns of autobiographical memory dimensions as they relate to depression across the entire sample, according to the third aim of the study. This is followed by a discussion of the methodological strengths and limitations. The concluding section considers the implications of the findings for treatment of depression and future directions for research.

Summary of Results

Generally, the present results were in keeping with predictions. While there were some inconsistencies in the data, overall the results provide new insights into the understanding of the complex nature of depression and depressive vulnerability across the life span. The study results suggest that the narrative structure and content of individuals' self-defining autobiographical memories are meaningfully related to both psychological adjustment and vulnerability to depression. These autobiographical memory dimensions also operate as interrelated patterns in autobiographical memory recall. Furthermore, particular types of self-defining memories appear to be more

important in differentiating between depressive vulnerability and psychological adjustment.

In terms of between-group comparisons, the depression groups recalled memories that fit the classification of self-defining memories as importance levels of the memories were generally high and there were no group differences in the importance or intensity of the memories provided. The self-defining memories of currently depressed people showed greater overgenerality, and were more likely to be contaminated and demonstrate negative affect, relative to never depressed and formerly depressed individuals. In contrast, formerly depressed and never depressed people were found to be more likely to have an integrative style, and demonstrated greater specificity in autobiographical recall when compared to currently depressed individuals.

With respect to the patterns of autobiographical memory dimensions as they relate to depression across the entire sample, participants clustered across a range of autobiographical memory dimensions on three of the six cues: Peak, Turning Point and Adolescence. In addition, relatively few of the autobiographical memory dimensions related to each other, while only integration, contamination and agency correlated with current depression level. Furthermore, only contamination and integration were significant predictors of depression.

The findings from both the between-group comparisons and the cluster analyses lend support to the state-trait theory of depression. The between-group comparisons provide partial support for the state-trait theory of depression, based on the apparent adaptive mechanism of formerly depressed individuals to use integration to protect themselves from remitting depression. The variability amongst the participants, irrespective of their depression level, in their distribution among clusters of respondents also demonstrates support for the state-trait theory of depression. Had depression been

solely a trait phenomenon, we would have expected the currently depressed participants to be consistently located in the low functioning clusters, and the never depressed individuals to be located in the high functioning clusters, across the different memories. The cluster analyses also demonstrated that while some formerly depressed individuals show evidence of integration in their narrative recall, this is not the case universally. Furthermore, the use of integration for formerly depressed individuals would seem to be cue dependent. This is based on the finding that formerly depressed individuals who integrated narratives for one cue, did not necessarily use integrative recall on other cues.

A possible explanation of the present results is that the adaptive and sophisticated cognitive process of narrative integration differentiates depressive vulnerability. It is proposed that individuals are divided into two groups when it comes to depressive vulnerability. The first group, who are unable to integrate their negative life experiences written in their self-defining memories, thereby remain more vulnerable to depression. The second group, who are able to integrate such experiences within their narratives, become more resilient to depression. This explanation will be elaborated in the following sections.

Finally, the Adolescence cue was notable for its prominence in the between-group differences, and in the memory clusters across the entire sample. The memories provided for this cue showed significant between group differences on specificity (both specific/non-specific and specific/episodic/generic), integration, and affect. The Adolescence cue was also one of the three cues that differentiated the autobiographical memory dimensions in terms of memory clusters. On the Adolescence cue, three distinct clusters were generated: A Contaminated/Negative Affect cluster, an Integrated/Redemptive/Agentic cluster and a Specific/Positive Affect cluster. The adolescence period has been found to be a particularly significant lifetime stage in

generating autobiographical memories across a range of studies (e.g., Conway & Haque, 1999). These findings are discussed in more detail in the following sections.

Group Comparisons on the Dimensions of Autobiographical Memory

This section first considers the findings for the between-groups comparisons on the various autobiographical memory dimensions of specificity, integration, redemption, contamination, agency, communion and affect. This section also includes specific references to the findings regarding the formerly depressed group, and how these results relate to the state versus trait theories of depression, as well as considering the relative importance of findings for different cues, in particular the Adolescence cue.

Specificity

The hypotheses regarding specificity were that currently depressed individuals would produce significantly fewer specific memories (hypothesis 1a), and significantly more episodic and generic memories than the non-depressed groups (hypothesis 1b). It was further hypothesised that the formerly depressed individuals would produce fewer specific memories (hypothesis 1a), and significantly more episodic and generic memories (hypothesis 1b) than the never depressed group. While overall, the hypotheses regarding the currently depressed group were supported, there was no evidence that the formerly depressed group had overgeneral memories, or were more likely to have episodic or generic memories than the never depressed group.

Overall, the present results replicate previous findings that currently depressed individuals tend to recall overgeneral memories, when compared to non-depressed individuals (e.g., Kuyken & Dalgleish, 1995; Moffitt et al., 1994; Williams & Dritschel, 1988). Unexpectedly, however, the formerly depressed group rather than the never depressed group was the group that was consistently differentiated from the currently depressed group. This occurred for the overall comparison of specificity (as measured

by specific versus non-specificity) across the six memories, as well as the between group comparisons on the specific memory cues. Four of the six individual cues revealed significant group differences. Group differences in overall specificity were found for the Peak, Adolescence, Adulthood and Nadir cues. On the Adolescence, Adulthood and Nadir cues, the currently depressed group generated significantly fewer specific memories than the formerly depressed group. In contrast, on the Peak cue, the formerly depressed group recalled significantly more specific memories than the never depressed group.

These findings that currently depressed individuals have a tendency to recall overgeneral memories contrasts with Blagov and Singer's (2004) finding that specificity was not significantly related to subjective distress. In the limited research on overgenerality in self-defining memories of depressed individuals, there has been mixed evidence of overgenerality (e.g., Blagov & Singer; Moffitt et al., 1994). This is in contrast to the significant findings for overgenerality in general autobiographical memories. Further research is therefore warranted to ascertain how robust is the finding that overgenerality is a phenomenon found in self-defining memories as well as general autobiographical memories.

Analysis of a more in-depth measure of specificity, in which specific, episodic and generic memories were compared, yielded group differences only on the Adolescence cue. The results mirrored the findings when comparing specificity/non-specificity on the adolescence, adulthood and nadir cues in which the currently depressed group recalled fewer specific and more episodic memories, while the formerly depressed group recalled more specific and fewer episodic memories.

Conway and Pleydell-Pearce's (2000) self-memory system model proposed a hierarchical retrieval process that builds autobiographical memories across three

increasingly specific levels of organisation: Lifetime periods, general events and event-specific knowledge. They argued that individuals guided by a supervisory executive capacity, start the retrieval process of autobiographical memories at the general abstract level and move through the three levels until they have united them and created a fully realised narrative. The present group comparisons in recall specificity on the six cues suggest a complex relationship between content and style of memory.

In this study, only certain cues elicited group differences in specificity. One possible explanation for these results is that currently depressed individuals may have difficulties using a supervisory executive capacity to access event-specific knowledge across certain types of cues, namely events associated with adolescence, adulthood and nadir experiences. Furthermore, the depressed individuals' tendency to recall more episodic memories than non-depressed individuals suggests that they may get stuck at the general events level of retrieval, and not proceed to the most specific level of autobiographical knowledge: event-specific knowledge. In contrast, individuals who have had a history of depression but were not currently depressed appeared to be particularly proficient at accessing event-specific knowledge. These results suggest therefore, that overgenerality is not an underlying trait phenomenon, but is associated with depressive state, emerging only in a currently depressed mood.

However, it should be noted that the differences in ways individuals accessed their self-defining memories may also have been a result of the memory cues themselves being located at various levels of memory organisation. While a childhood memory generally requires an entry point at the "lifetime period" point in memory organisation, the turning point cue asks for a "general events" entry point. Therefore the various memory cues may generate different retrieval strategies in the SMS, and thus result in different specificity outcomes.

In contrast, individuals who have had a history of depression but were not currently depressed appeared to be particularly proficient at accessing event-specific knowledge. These results suggest therefore, that overgenerality is not an underlying trait phenomenon, but is associated with depressive state, emerging only in a currently depressed mood.

In terms of Conway, Singer and Tagini's (2004) extended self-memory model, the specificity results suggest that currently depressed individuals have more difficulty accessing memories that relate to current working goals and/or self-coherence than non-depressed individuals. Currently depressed individuals are also more likely to have difficulty co-ordinating their retrieval of sensory-perceptual information from the episodic memory system, and be more likely to recall either general events and life story schema information located at the autobiographical memory base or information related to the conceptual self.

Contrary to expectations (hypothesis 1b), there was no group difference in the recall of generic memories. One explanation for this is that differentiation among groups on depressive vulnerability occurs at the general events level of the adult self-memory system. Thus, while individuals, regardless of their vulnerability to depression, can access memories regarding lifetime periods, those individuals who are currently depressed cannot access autobiographical knowledge past the general events level, and thus recall an increased amount of these types of episodic memories.

An alternate explanation of the present findings relates to the focus on self-defining memories. There are some parallels between Singer and Blagov's (2004a) definition of episodic and generic overgeneral narratives with Williams and Dritschel's (1992) definition of the two functionally independent superordinate memory categories, extended and categorical memories. Extended memories (e.g., "when I was at

university") have some commonalities in definition with episodic memories (e.g., "my trip to Fiji"), while categoric memories (e.g., "my relationship with my mother") have some similarities with the conceptualisation of generic narratives (e.g., "every winter holiday we went to the snow"). Barsalou's (cited in Singer & Moffitt, 1991/1992) scoring system for self-defining memories contains three categories: specific events (similar to Singer and Moffitt's definition of a single event memory narrative); summarised events (blending two or more events with no stated significance to the person) and extended events (memories of two or more blended events that are of significance to the person). It is feasible that extended memories are more important to the person than generic memories. It is therefore possible that the self-referent nature of self-defining memories bolstered the recall of episodic memories as opposed to generic memories in this study, masking any possible group differences.

The inconsistent results in terms of the overgenerality effect suggest that autobiographical memories and self-defining memories are related, but not identical, dimensions. It may, therefore, be counterproductive to compare studies using these different measures of memory, especially as the two paradigms have often utilised different approaches in measurement. For example, in much of Williams and his colleagues research (e.g., Williams & Broadbent, 1986; Williams & Dritschel, 1988), a critical dependent variable has been latency in accessing specific memories, whereas in the majority of self-defining memory research, the specificity of the memory is coded after an open-ended request. Instead, it may be more beneficial to ask how the personally significant and self-referent aspects of self-defining memories tie in with Williams' (1992, 1996) model of autobiographical memory. The results of the present study indicate that while self-defining memories still elicit overgeneral memory recall for depressed individuals, they do not evoke the increased use of generic memories. A

comparison of general autobiographical memories and self-defining memories may be an issue of interest in future studies.

Differences in study design may also account for the inconsistent results in studies of specificity. Research has varied in the use of either verbal or written techniques; number and types of cues used; and, use of general autobiographical or self-defining memories. For example, while Williams and Broadbent (1986), Williams and Dritschel (1988), Williams and Scott (1988) and Barnhofer et al. (2002) used verbal cues and requested that participants verbally recall general autobiographical memories, participants from the studies conducted by Kuyken and Dalgleish (1995) and Moore et al. (1988) were provided with written cues, and were instructed to write down their general autobiographical memories. Written cues and responses were also requested in the present study. It is possible that individuals respond differently to verbal and written techniques. Consequently, direct comparison of different methods of eliciting memories warrants further research.

Group Ratings of Self-Defining Memories

The groups demonstrated equivalent ratings on self-reported memory importance and intensity of their memories suggesting that all groups were recalling narratives that fit the criteria of self-defining memories. However, there were significant group differences in memory clarity and resolution, with the currently depressed group having an overall tendency to report greater memory clarity and less memory resolution than the formerly and never depressed groups. These results suggest that the nature of depressive status may have a marked impact on the ability to recall clear and resolved memories.

Interestingly, while the currently depressed group demonstrated greater self-reported memory clarity than the formerly and never depressed groups, they were not

able to generate as specific memories as the two non-currently depressed groups. This suggests that the clarity of the self-defining memories of currently depressed individuals is the product of an intense affective and emotional response to the recalled experience rather than specific detail, as currently depressed individuals have an apparent inability to recall this specific information.

Narrative Themes Related to Adaptation

For the narratives themes of adaptation: integration, redemption and contamination, it was expected that currently depressed individuals would recall fewer integrated (hypothesis 3c), fewer redemptive (hypothesis 3b) and more contaminated (hypothesis 3a) self-defining memories than the two non-depressed groups. While the hypotheses were supported for integration and contamination, there was no support for the hypothesis on redemption.

Integration

In terms of the relationship between depression and integrative meaning in autobiographical memory, currently depressed individuals were found to be less likely to recall integrated memories than were never depressed individuals, or individuals who had recovered from depression. Furthermore, a lack of integration was a significant predictor of current depression in the full sample. In addition to the overall significant group differences across the six self-defining memory cues, the Turning Point and Adolescence cues also revealed significant differences among the three groups. On both the Turning Point and Adolescence cues the currently depressed group recalled fewer integrated memories compared to the non-depressed groups. On the Turning Point cue, the formerly depressed group recalled significantly more integrated memories, while on the Adolescence cue, it was the never depressed group that recalled more integrated memories. The variation in results between cues may reflect differences in the type of

information being recalled in response to these cues. The Turning Point cue is more likely to reflect an adjustment to an intensely negative experience such as a depressive episode, and would, therefore, possibly be more relevant to people with a history of depression, whereas the Adolescence cue may generate recall regarding a developmental challenge.

These results have some parity with Blagov and Singer (2004)'s finding that integration is related to moderate and high levels of self-restraint, as self-restraint is positively associated with enhanced psychological adjustment (Weinberger, 1998). In this study, integration also seemed to be positively related to psychological adjustment as both the formerly and never depressed groups were more likely to integrate their self-defining memories than the currently depressed group.

These results also support Blagov and Singer's (2004) model of the role of life story schema and self-defining memories in the adult self-memory system. The ability to integrate meaning into self-defining memories has a constructive impact on the various dimensions of the life story schema, causing a positive reorganisation of its temporal, thematic and causal lines, and reinforcing relevant goals. In this study, integration was found to play a particular role in providing resilience from depression. The results also support the theory that finding integrative meaning in autobiographical experiences results in positive affect regulation (King et al., 2000; Pals, 2006a, 2006b).

The two cues found to significantly differentiate groups on integration showed slightly different patterns of response. On the Turning Point cue, it was the formerly depressed group who demonstrated the greatest levels of integration. As the Turning Point cue is relevant to a transformation and change in experience, these results suggest that at least some of the formerly depressed participants were able to find meaning in a significantly negative experience, enhancing resilience and promoting recovery from

depression and maintenance of a non-depressed state. Recovery from depression is, therefore, likely to reflect the ability to process negative experiences in a cognitively sophisticated way, which provides a protective factor from future depression as well as reducing vulnerability.

On the Adolescence cue it was the never depressed group that scored highest in integration. As the Adolescence cue concerns individuals' handling of developmental issues, the data suggest that never depressed individuals are able to integrate earlier than currently depressed or formerly depressed individuals, which in turn enhances never depressed individuals' resilience to depression. McAdams (1996a) life story model proposed that the narrative era, which occurs from adolescence and adulthood, is when individuals start to create a self-defining life story. Bluck and Gluck (2004) observed that integration is evident from adolescence onwards. In addition, Singer, Rexhaj and Baddeley (2007) and Thorne et al. (2004) found that the ability to recall more integrative memories increases with age. Possible reasons for the late onset of the ability to integrate provided by these authors include temporal distance from the event, current mood states, or other underlying causes. They concluded that people integrate memories more as they age, whereas younger individuals are less likely to integrate experiences as their focus is more on dealing with current unresolved issues and forming their psychosocial identity.

An alternate explanation to Blagov and Singer (2004) and Thorne et al. (2004) that emerges from the present results is that one of the critical elements in creating a functional self-defining life story is to achieve the developmental milestone of integration of challenging life events. This is shown in the turning point stories of the formerly depressed. Furthermore, some individuals, as shown in the never depressed group, appear to develop the ability to integrate earlier than others during adolescence.

This reflects a more sophisticated cognitive processing style, which in turn provides a protective factor from current and future depression, thereby decreasing depressive vulnerability.

In summary, the present results suggest that integration is a cognitive process in narrative processing that facilitates development of a more highly developed life story schema, thus providing resilience from depression. Certain individuals appear to achieve the ability to integrate in adolescence that is associated with reduced vulnerability to depression. For previously depressed individuals, the absence of the ability to integrate creates a potentially larger threat to future depression. Therefore, in terms of vulnerabilities to depression, it may not be simply a history of depression, but rather the inability to integrate negative life experiences that provides the greatest threat of future depression. Certainly, this is consistent with Blagov and Singer's (2004) theory that the ability to engage in autobiographical reasoning and find integrative meaning in self-defining memories informs an individual's sense of identity and level of self-understanding which positively impacts on their ability to find insight and growth.

In terms of the relationship between specificity and integration, no meaningful relationship emerged between the two variables. This lends support to Blagov and Singer's (2004) theory that the construction of autobiographical memories emanates from the independent functions of both specificity and integration. Blagov and Singer proposed that the cognitive abstraction of autobiographical memories results from one or both of the independent functions of finding integrative meaning and achieving specificity. Furthermore, they argued that individuals with the ability to recall both a specific and integrated memory achieve the greatest emotional and cognitive value. The present results support this proposal as, in the main, there were significant group differences for both specificity and integration. Therefore, Blagov and Singer's model

of the role of the life story schema and self-defining memories in the adult self-memory system would appear to be supported. Also supported is the premise that episodic memories become self-defining memories after autobiographical processing, and that these self-defining memories in turn produce abstract information through integrative processing, which is then incorporated into the life story schema.

Redemption and Contamination

Redemption. With regard to redemption, the results of this study contradicted the majority of previous findings that redemption was a significant predictor of well-being (e.g., Adler et al., 2006; McAdams et al., 1997; McAdams et al., 2001). Contrary to hypothesis (3b), redemption did not differentiate the groups, and thus did not appear to have any relationship with depressive vulnerability in this sample. Although contrary to the results of many studies, the non-significant results for redemption have some correspondence to Grossbaum and Bates (2002), who found that redemption made no significant contribution to prediction of well-being in a community sample of midlife adults other than via its shared variance with generativity.

One possible explanation for these results is that McAdams' operationalisation of redemption, which includes religious (predominantly Christian concerns related to the concept of God) and spiritual concerns may be more associated with North American culture (McAdams, 2006b, 2006c, 2008b), and may not be so applicable to other cultures, including other westernised nations. Interestingly, no participant in this study recalled any memories with the redemptive content of "Enhanced Ultimate Concerns", which involves significant fundamental existential issues or ultimate concerns, such as death, God and or religious/spiritual concerns. One could feasibly argue that the North American culture places more emphasis on religion and spiritual concerns than Australia. Indeed the emphasis on religiosity in the conceptualisation of a

generative American adult would appear to be problematic for Australia's relatively poor church attending population (ABS 2002 General Social Survey).

Contamination. In contrast to the non-significant results for redemption, contamination proved to be significant in determining group differences, and was the most significant predictor of depressive vulnerability for the full sample, accounting for 14% of the variance in current depression scores. Supporting hypothesis 3a, this study replicated previous findings that currently depressed individuals have a tendency to recall contaminated memories, when compared to non-depressed individuals (e.g., McAdams et al., 1997; Grossbaum & Bates, 2002; Adler et al., 2006). Contamination also differentiated among groups on the Peak and Childhood cues. On both cues the currently depressed group recalled more contaminated memories, while the never depressed group recalled fewer contaminated memories.

These results suggest that currently depressed individuals have a tendency to recall self-defining memories that contain a contaminated theme, from which they are less likely to draw any redemption or integrated meaning. These findings also align with those of previous studies in which contamination was found to have a negative association with indicators of well-being (Grossbaum & Bates, 2002), and a positive relationship with depression (Adler et al., 2006).

McAdams and his colleagues have placed great emphasis on the redemptive nature of ancient and modern storytelling and media narratives. However, it is also true that many of these storied accounts often start with a positive story, then contain a contaminated sequence, in which a positive beginning takes a problematic turn, but are then redeemed with a positive outcome. It is possible that the ability to make the transition from positive to negative, and then positive again is an indicator of psychosocial adaptation, and that individuals who are vulnerable to depression get

"stuck" at this contaminated point. Therefore, instead of using redemption or integration to provide a positive and meaningful feedback loop into the life story schema, the schema is reinforced by recurring and powerful negative information, rendering them unable to draw on positive autobiographical experiences to improve their situation.

In this study it was on the Peak and Childhood cues that the currently depressed group produced significantly more contaminated memories, while the never depressed group recalled significantly fewer contaminated memories. The Peak cue generated a number of responses across the sample that were more consistent with a powerful experience than a peak experience. This methodological issue is discussed later in this chapter. Unsurprisingly, the never depressed group was less likely to contaminate these peak or powerful experiences, while the currently depressed group was more likely to turn a peak or powerful experience into a negative occurrence. The Childhood cue provided opportunities for early memories, and these results would suggest that when depressed, individuals have a tendency to contaminate narratives that relate to earliest memories. An interesting question is whether this reflects either an early onset of contamination that emerges in childhood, that acts as a dysfunctional style of cognitive processing and thereby, a developmental impediment, or a tendency to contaminate that emerges in a depressive episode affecting memories related to childhood.

In conclusion, it would appear that while contamination as a narrative form is significantly associated with psychosocial adaptation, redemption may not be as powerful in predicting depressive vulnerability in a non-clinical, non-American sample.

Motivations of Agency and Communion versus Autonomy and Sociotropy

The results showed only limited support for the hypothesis regarding the motivations of agency and communion. Currently depressed individuals were expected to produce significantly more references to failed agency and communion in their self-

defining memories than the non-depressed groups (hypothesis 2a). However, the present results found strong support for the hypothesis (2b) that currently depressed individuals would demonstrate significantly higher levels of the disordered cognitions of autonomy and sociotropy than the two non-depressed groups.

While quantitatively all of the PSI-II subscales differentiated among the participant groups in the expected direction, the qualitative agentic and communal themed narratives revealed only a borderline distinction between groups for the presence of agency (regardless of affect), with only one memory cue yielding a significant group difference in agentic themed narratives. On the Nadir cue, the never depressed group recalled more agentically-themed memories in comparison to the currently depressed group. These results suggest that the currently depressed group felt less able to manage their own environment and self-sufficiency during this lowest point experience and thus reported low levels of agency. By contrast, the never depressed group felt more in control of themselves and their surroundings despite the nadir situation, thus reporting more constructive levels of agency. There was no evidence of group differences on communion for any of the six memory cues, although there was a significant group difference for the Communion Love/Friendship theme on the Nadir cue. On that cue, the never depressed group recalled more memories with a love/friendship theme, and the currently depressed group recalled fewer memories with a love/friendship theme than expected.

The findings from this study are at odds with past research. Contrary to the present study, Barnhofer et al. (2007) found that highly sociotropic, formerly depressed individuals recalled significantly more overgeneral memories. In addition, Spinhoven et al. (2007) found that formerly depressed individuals were more likely to be overgeneral on sociotropic cue words. However, the present study differed from those two studies in

two significant ways. First, participants in the Barnhofer et al. and Spinhoven et al. studies were given cue words specifically related to the motivations of autonomy and sociotropy. In contrast, the current study gave more generalised cues, and measured themes of agency and communion, as opposed to autonomy and sociotropy.

This raises the question of whether agency and communion are as conceptually similar to autonomy and sociotropy as earlier believed. Bruch (2002) noted differences between the concepts. He proposed that while agency and communion have been defined as constituting positive and adaptive characteristics, autonomy and sociotropy are primarily associated with negative cognitive and emotional outcomes. His focus on unmitigated agency (i.e., a focus on self to the exclusion of others) and communion (i.e., an excessive focus on others to the exclusion of self) yielded some interesting results, with unmitigated agency, but not agency, being related to autonomy, but both communion and unmitigated communion being related to sociotropy. He also found an inverse relationship between dysphoria and agency, whereas unmitigated agency was positively related to dysphoria. This study did not merely code for McAdams' positive conceptualisation of agency and communion, but also for the presence of either positive or negative agency and communion, and while the results did not significantly differentiate the groups for either measurement, there was an increased variation across group means when the presence of agency and communion (regardless of affect) was compared. Further research regarding the conceptual overlap of agency and communion with autonomy and sociotropy is warranted.

In terms of the PSI-II, the results were strikingly consistent. On all sub-scales except the *Concern About What Others Think* sub-scale, the currently depressed group had the highest mean, with the formerly depressed group next highest, followed by the never depressed group. While the Autonomy Total sub-scale and *Defensive Separation*

sub-scale showed significant differences between the currently depressed group and both never and formerly depressed groups, the *Perfectionism/Self-Criticism* and *Need for Control* sub-scales significantly differentiated the currently and never depressed groups. With regard to the communion scale and sub-scales, on both the Communion Total sub-scale and the *Pleasing Others* sub-scale, the currently depressed group differed significantly from both the never and formerly depressed groups. The *Concern About What Others Think* sub-scale differentiated the currently depressed and formerly depressed group, while the *Dependency* sub-scale revealed significant differences between the currently and never depressed groups. While overall, the formerly depressed group demonstrated scores in between the currently and never depressed groups, their scores were more aligned to the never depressed group. These results suggest that self-reported autonomy and sociotropy are associated with current state levels of depression, and emerge only in a currently depressed mood, rather than being an underlying trait phenomenon. In summary, the results support the theory of autonomy and sociotropy as motivations that are vulnerabilities to current depression.

The inconsistency between the significant PSI-II results and lack of differentiation in thematic content raise several interesting issues. The most obvious question concerns construct validity, and whether these two assessment techniques have measured the same dimension. Indeed, as Bruch (2002) has maintained, it is unclear how conceptually related agency and communion are to autonomy and sociotropy. The research regarding the correlation between implicit and explicit motives may provide further insight on these inconsistent findings. McLelland, Koestner and Weinberger (1989) found that research based on narratives or pictures are more likely to elicit implicit motives, which are associated with activity incentives. In contrast, self-report measures are more likely to access self-attributed (or explicit) motives, which are

associated with social incentives. They concluded that implicit motives, as accessed by narrative research, reflect more primitive motivations derived from affective experiences, whereas explicit motives, as derived by self-report measures, represent more elaborate cognitive constructs. A number of subsequent studies have supported McLelland et al.'s findings. King (1995) compared measures of explicit and implicit motives across a wide range of measures, including autobiographical memories and self-report measures. Her overall results found no correlation between explicit measures and thematic measures of the same motives. Woike (1995) found that implicit motives are strongly associated with affective memorable experiences, whereas explicit motives are more likely to be associated with routine memorable experiences. These findings, in combination with the results from this study suggest that self-report and narrative techniques measure different types of motives, and that these distinct motives are associated with qualitatively different types of experiences.

These findings therefore raise an interesting research question, and a potential area for future research, of how qualitative and quantitative measurement techniques can be used to make direct comparisons of constructs thereby consolidating construct validity. Finally, an additional interest is how quantitative and qualitative research compares. Do they measure the same dimensions of constructs, or do they assess divergent aspects? These two techniques appear to access both independent and inter-related phenomenon, lending support to the use of both quantitative and qualitative techniques in future research. However, how to best use these two markedly different techniques most efficiently remains an enduring issue for research.

Affect

The present results supported the hypothesis that affect would significantly differentiate depression (hypothesis 4). Negative affect significantly differentiated the

depression groups on the overall affect analyses and on the analyses specifically relating to negative affect. Significant group differences were also found for positive affect on the Peak cue for the analyses specifically relating to positive affect.

With respect to specific cues, negative affect significantly differentiated the depression groups on three of the six memory cues: Turning point, Childhood and Adolescence. On these three cues the currently depressed group showed higher levels of negative affect in their memories than expected. These results are inconsistent with early overgenerality research (e.g., Williams & Broadbent, 1986), which found no relationship between depression and negative bias in autobiographic recall. Positive affect significantly differentiated depression groups on the Peak cue, in which the formerly depressed group recalled significantly more positive memories than expected, while the currently depressed group recalled significantly fewer positive memories. Furthermore, the proportions for positive affect across the six memory cues indicated that the currently depressed group recalled the lowest proportions for positive affect across all six memory cues. The currently depressed group also produced the highest proportions for negative affect on all six cues, with the exception of the Nadir cue, in which the formerly depressed group was slightly higher. These results suggest that affect in self-defining memories, particularly negative affect, differentiates depressed and non-depressed individuals.

Formerly Depressed Participants

One of the main research aims was to determine whether any group differences for the formerly depressed participants resulted from either underlying personality traits associated with depressive vulnerability, or emerged as a result of a depressive episode. It was expected that the formerly depressed group would reflect scores more aligned to

currently depressed participants than never depressed participants, reflecting underlying depressive vulnerabilities.

However, contrary to these expectations, the formerly depressed group was more similar to the never depressed group than the currently depressed group across the various dimensions of autobiographical memory assessed. In fact, for most analyses, the formerly depressed group placed between the currently depressed group and never depressed group, with most significant group differences being between the currently depressed group and the formerly depressed group. In addition, on some dimensions of autobiographical memory, such as integration and specificity, the formerly depressed group scored higher than both the never depressed and currently depressed groups. The formerly depressed group tended, therefore, to reflect responses more analogous to the never depressed group than the currently depressed group, although there were some variations of different cues and different dimensions.

The results for the formerly depressed group provide partial support for the "state-trait" vulnerability model proposed by previous researchers (e.g., Segal & Ingram, 1994; Teasdale & Barnard, 1993). This model assumes that individuals with a history of depression will maintain special cognitive-affective schemata, but that present mood, social context and biological processes will contribute to the fluctuating accessibility of these schemata. Overall, the formerly depressed group were much higher functioning than expected, suggesting that, at least in this sample, individuals with a history of depression, but not experiencing current depression, have adapted their narrative processing to reflect more sophisticated and functional cognitive processing.

While the state-trait model argues for vulnerability in terms of underlying dysfunctional cognitive-affective schemata, these results suggest that this is not necessarily the case. One of the most notable results of this study was the tendency for

both the formerly depressed and never depressed groups to recall more integrated memories than the currently depressed group. Therefore, some of these supposed trait factors would appear to be somewhat malleable via the process of integration, suggesting that at least some underlying schemas can change. Furthermore, it is feasible that individuals who are unable to integrate may maintain their vulnerability to depression. Potentially, there may be at least two groups of people when it comes to vulnerability to depression. The first group, who are unable to integrate their memories, remain more vulnerable to continuing and future depression. The second group, while at some risk of ongoing vulnerability have demonstrated increased adaptation through the sophisticated cognitive process of narrative integration, thereby making them more resilient to future depression. In this second group, their ability to modify at least some of their schemas reflects that trait factors are not completely fixed.

With regard to specificity, the formerly depressed group recalled significantly more specific memories than the currently depressed group suggesting that overgeneral memory recall, often associated with current depression, is predominantly a state phenomenon, rather than a trait as previously suggested (e.g., Brittlebank et al., 1993; Hermans, Vandromme, et al., 2008; Williams & Dritschel, 1988). This study demonstrated results concomitant with studies conducted by Kuyken and Dalgleish (1995), Brewin et al. (1999), and Spinhoven et al. (2006).

Furthermore, the present results for the formerly depressed group contradict Crane et al.'s (2007) argument that the combination of the increased rehearsal of abstract autobiographical processing that occurs during earlier episodes of depression, in addition to the likelihood of self-referent cues priming latent negative self-schemata, work together to modify information processing in the long term self when exposed to self-referent material. Therefore, when individuals with a history of depression are

exposed to cues that reflect self-guide content, they are more likely to shift to processing information within the long term self rather than the episodic memory system. In this study, group differences in specificity were found on the peak, adolescence, adulthood and nadir cues, and it was the formerly depressed group that recalled more specific memories and fewer non-specific memories than expected, suggesting that formerly depressed individuals do not have significant difficulties in accessing event-specific knowledge in the autobiographical knowledge base. However, the participants in this study were from a community sample, so these results may not extend to a clinical sample.

There are a number of feasible explanations for the inconsistency in results in the relationship between overgenerality and autobiographical memory in individuals with a history of depression. One possible reason is that the degree of depression experienced may influence whether or not recovered depressed individuals maintain latent dysfunctional schemata in terms of overgeneral memory recall. Rude et al.'s (2001) findings that depressive schemata are more likely to be present in individuals with an extensive history of depression support this premise. In their study only formerly depressed individuals who had experienced four or more prior depressive episodes differed from the never depressed group in depressive schemata. It is therefore feasible that individuals who have a more extensive history of depressive episodes may also have a tendency towards the priming of self-relevant concepts on autobiographical memory that is seen in currently depressed individuals (Crane et al., 2007). An alternate explanation for the inconsistency in overgenerality findings is that only formerly depressed individuals who have a trait tendency towards rumination are more vulnerable to overgenerality, as rumination is likely to reinstate the analytical self-focus that results in specificity deficits (Crane et al.). Finally, another potentially viable reason

for divergence in state versus trait results, is the variation in type of cues used. Crane et al. argued that only cues that pertain to self-guide content are likely to elicit differences between formerly depressed individuals and never depressed individuals. The cues used in this and other studies may have been too generalised to evoke self-guide content, and it would be interesting to compare different types of cues to establish whether they do result in distinct group differences.

In terms of contamination, overall, both the formerly and never depressed groups recalled fewer contaminated memories than the currently depressed group. However, analysis of individual cues showed that the formerly depressed group did not recall significantly more or fewer contaminated memories than expected. An investigation of the contamination proportions showed that the formerly depressed group recalled more contaminated memories than the never depressed group, and fewer contaminated memories than the currently depressed group on all cues, except the Adulthood cue. These results add weight to the importance of integration in the protection against depression, as despite a slightly increased level of contamination when compared to the currently depressed group, the formerly depressed group were not experiencing current onset of depression.

Significance of the Adolescence Cue

One of the most striking results from this study was the prominence of the Adolescence cue as a locus of significant group differences. On this cue there were important between-group differences on the dimensions of specificity (both specific/non-specific and specific/episodic/generic), integration, and affect. In addition, the Adolescence cue was one of the three cues that significantly distinguished the clusters of respondents. Conway and Haque (1999) have noted that one of the most consistent findings in memory research has been the identification of a lifetime retrieval

curve (e.g., Bernsten & Rubin, 2002; Rubin, Wetzler & Nebes, 1986; Rubin & Schulkind, 1997) in which individuals older than 35 years of age have a marked tendency to recall a disproportionate amount of memories from adolescence and early adulthood. There are three components to the lifetime retrieval curve: First, the period from birth to about five years of age of childhood amnesia; secondly, a stage of amplified recall from about 10 to 30 years of age which has been labelled as the *reminiscence bump*; and, finally the period of recency which extends from the present receding back to the end of the reminiscence bump. The reminiscence bump appears to be a universal phenomenon as it has been demonstrated across various cultures (Conway, Wang, Hanyu & Haque, 2005; Rubin, Bernsten & Hutson, 2009).

Numerous researchers emphasise the developmental basis for the reminiscence bump from both the cognitive and personality frameworks. From the cognitive perspective, Singer and Salovey (1993) maintained that the events that occur during adolescence and adulthood are pre-eminently vivid, affectively charged and related to enduring life concerns, thereby contributing significantly to the development of self-defining memories. Accordingly, these self-defining memories are likely to provide abstract knowledge that becomes integrated with other semantic memories creating life story schemata, which in turn provide an enduring index of important themes and concerns (Blagov & Singer, 2004). Furthermore, Singer and Blagov (2004b) postulated that the powerful relationship between memories formed during the reminiscence bump to the beginnings of the formation of an comprehensive life story provide these memories with a heightened meaningfulness and continuing affective significance in the SMS.

Conway and his colleagues (e.g., Conway, 1997; Conway & Rubin, 1993; Conway & Pleydell-Pearce, 2000) postulated that events that occur during the

reminiscence bump have an important relation to the self in terms of goal formation and attainment. The SMS maintains that the accessibility of memories is reliant on its relevance to meaningful and enduring goals of individuals. Thus, the memories of significant formative experiences that occur during adolescence and early adulthood should play a foundational role in the development of enduring, lifelong goals and are more accessible as a result. Conway and his colleagues have also suggested that the adolescent struggle between identity formation and identity confusion requires greater amounts of cognitive effort, and that this increased effort may cause the knowledge from this developmental period to be encoded in a more privileged way than at other developmental stages. This theory of differential encoding has found empirical support in a number of studies (e.g., Conway and Haque, 1999; Janssen, Chessa & Murre, 2007; Rathbone, Moulin & Conway, 2008), supporting the hypothesis that identity formation in adolescence and early adulthood organises the retrieval of autobiographical memory.

Bernsten and Rubin (Bernsten & Rubin, 2002; 2004; Rubin & Bernsten, 2003) proposed an alternate explanation of the reminiscence bump. In their life script account, they put forward that there is a culturally shared expectation that important transitional life events, or life scripts, such as getting married, purchasing a house or having a baby, will occur at various points across the life span. Events that deviate from the life script result in significant negative affect, and even trauma. Bernsten and Rubin argued that life scripts provide a way to structure memory within culture, and that the recall of these positive and important life events form the reminiscence bump. In contrast, the recall of sad or negative events does not exhibit a bump in recall, but is stable across the life span.

From the personality framework, McAdams' (2001a) life story model of identity proposed that adolescence and early adulthood encompasses what he has termed the

"narrative era" of development, in which individuals have the psychosocial goal of identity formulation, and that autobiographical events consistent with this goal are more likely to be encoded. It is also the life stage when individuals start to create a self-defining life story. Habermas and Bluck (2000) have proposed that the cognitive tools needed to create global coherence and integration in the life story, such as the capacity for autobiographical reasoning, develop during adolescence.

Although this study did not investigate differences in the number of memories recalled at varying developmental stages, the adolescent cue yielded the most notable group differences in terms of depressive vulnerability across the autobiographical memory dimensions of specificity, integration and affect. On the Adolescence cue the currently depressed individuals recalled fewer specific, fewer integrative and more negative self-defining memories. In contrast, the formerly depressed group recalled more specific memories, and the never depressed group recalled more integrative memories and fewer negative memories. A possible explanation is that currently depressed individuals may have difficulty accessing those identity processes formed in adolescence that maintain self-consistency and develop meaning, and that provide a schematic and integrative knowledge of the self in later adulthood (Conway & Holmes, 2004). Instead they access more negative and fewer integrative self-defining memories. That currently depressed individuals have difficulties with both specificity and integration is consistent with Blagov and Singer's (2004) proposal that while these are independent functions, both can be affected in depression.

Patterns of Autobiographical Memory Dimensions

This section presents the findings in relation to the patterns of autobiographical memory dimensions as they relate to current depression across the entire sample, in particular the findings in relation to the memory clusters.

Memory Clusters Related to Depression Groups

Overall, support was found for the hypothesis (5) that the dimensions of specificity, integration, agency, communion, redemption and contamination would form differential patterns that distinguished between clusters of respondents. Cluster analysis identified significant differences among clusters on two of the six cues: Peak and Adolescence. In addition, significant cluster differences were also evident for the turning point cue after a cluster analysis was conducted without the inclusion of the two affect variables. This secondary analysis of the Turning Point cue was justified by the fact that 50% of the sample of was excluded from the original analysis as they had responded with mixed affect, which was not included in the cluster analyses due to its difficulty for interpretation of findings.

The Peak cue generated two clusters. The first cluster appeared to be a more vulnerable cluster, recalling more contaminated memories as well as memories with negative affect, and contained a high percentage of currently depressed participants. The second cluster, which reflected a higher functioning profile with a tendency towards adaptive integration, redemption and positive affect, contained the majority of never depressed and formerly depressed participants. Specificity and communion did not differentiate between the clusters for the Peak cue. While it was unsurprising that the majority of never depressed and formerly depressed participants were in the higher functioning cluster, the results were less expected for the currently depressed participants. The distribution of the currently depressed group was relatively evenly

spread over the two clusters. Even when asked to describe a Peak experience, half of the currently depressed described a contaminated, negative memory. This supports the model that they maintain inappropriate cognitive schemata. However, the other half of the currently depressed group did provide a memory that is counter to their current depressed state. A feasible explanation for these findings is that within currently depressed individuals there exists a sub-group who have developed, or are developing, more functional cognitive processing in their narrative recall, which may protect them from future episodes of depression.

Three clusters were found on the Turning Point cue in which the affect variables were eliminated from the cluster analysis. As with the Peak cue clusters, the formerly and never depressed group participants were the predominant members of the more integrative cluster, which also demonstrated higher scores in redemption and agency. The second cluster, which also appeared relatively high functioning in terms of specificity and communion, contained mostly currently depressed and never depressed participants. The third, more vulnerable, cluster with its tendency towards contamination contained a predominance of currently depressed and formerly depressed individuals. While the presence of never depressed participants was unsurprising in the specificity/communion cluster, the large number of currently depressed individuals found in this cluster supports the state-trait theory of depression as we would have expected no representation of currently depressed individuals in this more positively oriented cluster should depression be a purely state phenomenon. The distribution of the currently depressed group across the three clusters adds support to the state-trait theory of depression for individuals vulnerable to depression. However, the alternate rationalization that there exists a more adaptive group as well as a more vulnerable group within currently and formerly depressed groups in terms of narrative processing,

also presents a feasible explanation. It would appear that within the currently depressed and formerly depressed groups there is a subset of individuals who are moving towards a more integrated style of narrative processing, which is demonstrated by adaptive differences in narrative structure, therefore increasing the likelihood of recovery.

The interpretation of these findings is made difficult by a methodological issue that arises from the Turning Point cue. On this cue, there is inadequate definition of the type of turning point experience. It is not specified whether it is a turning point for the better or a turning point for the worse. These findings may therefore be a result of contrasting turning point definitions, rather than the explanations provided. Differences between type of turning points warrant further research.

The Adolescence cue generated three significantly differentiated clusters. On the seemingly high functioning cluster that reflected a tendency to recall memories that were specific and contained positive affect, the formerly and never depressed individuals showed the greatest representation. The second, more vulnerable, cluster with a greater tendency to contaminate memories contained mainly currently depressed individuals. The third cluster, which also appeared to be a highly adaptive cluster in terms of integration, redemption and agency, contained mostly formerly depressed and never depressed participants. Communion did not differentiate among the clusters for the Adolescence cue. The spread of the participants across the clusters again supports the state-trait theory of depression, or alternatively supports the notion of two narrative pathways for vulnerability to depression, in which integration is the determining factor.

In summary, the results from the clustering of profiles of memory dimensions for particular self-defining memory cues provide overall support for most of the hypotheses made regarding the differentiation between depressed and non-depressed individuals on the dimensions of autobiographical memory. Clusters with

predominantly formerly depressed and never depressed individuals were more likely to recall integrated, specific, redemptive, agentic and positive memories, while clusters that were mainly made up of currently depressed individuals tended to recall contaminated and negative memories. Fewer significant findings were found for the motivational dimension of communion. The results also provide some support for the state-trait theory of depression with the currently depressed individuals not responding in a manner that placed them exclusively in the vulnerable clusters, but demonstrating some variation among the clusters. However, an alternate explanation proposed here is that there are two pathways for individuals with current or previous depression. This proposal also presents a feasible explanation for these results. One pathway contains individuals who are unable to integrate narrative experiences and therefore remain vulnerable to depression. On the other pathway, individuals with an ability to integrate negative experiences may potentially be able to move out of a depressive episode and demonstrate resilience to future onset of depression

Relationships of Clusters Across Memory Cues

Due to the similar patterns found across dimensions for the clusters on the Peak, Turning Point (without affect) and Adolescence cues, the clusters were compared to establish whether they contained consistent group membership and were thus related. No significant relationships were found among clusters across the three cues, indicating that while there appears to be differential patterns of recall, different cues elicit different patterns. These results lend support to the state-trait theory of depression. The currently depressed participants who were in the higher functioning cluster on one cue were not more likely to be in the same high functioning cluster on the other cues. This suggests that depressed individuals can maintain adverse cognitive schemata that are activated by specific experiences, dysphoric mood or time periods.

Comparison of Clusters on Self-Report Measures

Further analyses of the clusters across the three cues and how they differentiated among depression scores, autonomy and sociotropy yielded consistent results. A relationship was supported among a contaminated style and vulnerability to depression as well as the depressive vulnerability of autonomy. On all three cues the cluster with the contaminated profile scored significantly higher on the BDI-II than the higher functioning clusters with more adaptive narrative processing. The relationship between the clusters and autonomy was also strong, with the clusters with contaminated profiles demonstrating significantly higher autonomy for two cues: Turning Point and Adolescence, and demonstrating a trend towards higher autonomy on the Peak cue. However, no significant relationships were evident between the clusters and sociotropy. These results suggest that individuals with a contaminated profile rely on self, and not others. They may not trust others and therefore become counter dependent, which in turn may lead to current or future depression.

Analyses of the self-reported elements of self-defining memory information: Clarity, intensity, importance, and degree of resolution, yielded equivocal results. While there were some similarities across clusters, differences emerged possibly due to the nature of the memory being accessed. The results regarding the high levels of intensity for the contaminated/negative affect cluster on the adolescent cue suggest that for this temporal situation at least, the intensity has not decreased over time, resulting in the use of a pattern of recall that is contaminated.

There are a number of possible explanations for the difference between situational (peak, turning point and nadir) and temporal (child, adolescence and adult) recall patterns. One argument is that individuals learn this functional recall pattern with age and maturity, another explanation may be that these temporal cues relate to the non-

attainment of goals in a particular lifetime period, while a third potential elucidation is that individuals' self-defining memories related to adolescence are part of an evolving story, in which the more intense situations experienced during adolescence are accepted as unique to that lifetime period. The differences found between the situational and temporal cues certainly warrant further research.

Summary of Memory Clusters

In conclusion, these results indicate that there are adaptive and vulnerable patterns of narrative processing that encompass various dimensions of autobiographical memory. This study has revealed two seemingly consistent patterns of narrative processing, an integrative, redemptive and agentic style as well as a negative and contaminated style. Furthermore, both current mood and type of experience are significant determinants of the style of narrative processing used. With regard to current mood, never depressed and formerly depressed individuals are more likely to use the integrative style, while currently depressed individuals are more vulnerable to the contaminated style. However, the type of experience is a determinant, indicated by the currently depressed groups' high representation in the integrative style when the experience involved a turning point situation.

Autobiographical Memory Dimensions as Predictors of Current Depression Level

This section presents the findings in relation to how the autobiographical memory dimensions relate to each other. It also discusses the findings on which of the autobiographical memory dimensions were able to predict current depression.

One continuing avenue of inquiry within autobiographical memory research is whether the different dimensions of autobiographical memory work independently or interactively to regulate mood and give meaning to the self. Accordingly, it was

hypothesised that the autobiographical memory dimensions of specificity, integration, agency, communion, redemption and contamination would be significantly associated with each other (hypothesis 6), and furthermore, would be significant predictors of depression (hypothesis 7). The results provide partial support for these hypotheses.

Results indicated that depression was significantly associated with lower integration, greater contamination and diminished agency. However, no significant relationships were found among depression and specificity, redemption or communion. These results add weight to the proposition that the ability to integrate negative experiences in narratives demonstrates a highly developed cognitive style that acts as a protective factor in relation to depression. The significant relationship between depression and contamination suggests that the tendency to contaminate experiences in narrative processing demonstrates a significant vulnerability to depression. The significant relationship between depression and agency was more surprising as agency had demonstrated only a borderline significant overall between-group comparison across the six cues, and was significant for only one of the cues. A possible explanation for the enhanced relationship between depression and agency is that relatively strong relationships were found between integration and agency, as well as redemption and agency. The ability to integrate autobiographical events in memory may contribute to an individual's sense that they have the ability to master their own uniqueness, bodily functioning and environment.

In contrast to Blagov and Singer's (2004) finding of a significant negative relationship between specificity and integration, no relationship between specificity and integration was found for the present sample. This suggests that the dimensions of memory structure and meaning work relatively independently to maintain life story schema and autobiographical knowledge.

Significant positive relationships were evident between integration and the dimensions of redemption, agency and communion. The positive relationship between integration and redemption is unsurprising as they measure similar concepts, with integration possessing the additional aspect of drawing meaning from an event. Furthermore, redemption also had significantly positive associations with agency and communion. While the relationships between integration and redemption with communion were relatively mild, the relationship with agency was stronger. If, as discussed in the significant relationship between agency and depression, the ability to integrate experiences contributes to an individual's sense that of agentic mastery, then likewise, the facility to find meaning and redeem experiences may give individuals a sense of intimacy and approval often associated with communion. Future research needs to determine how the different dimensions of autobiographical memory are related, and to determine whether autobiographical memory, specifically overgenerality of recall, is indeed an underlying mechanism of psychosocial adaptation and well-being.

In terms of the prediction of current depression, both contamination and reduced integration were significant independent predictors, and were not moderated by any other factors. The tendency to contaminate autobiographical events would appear to indicate a vulnerability to depression, whereas the ability to integrate or find meaning in narratives would appear to be an important protective factor against depression. In this study, the meaning given to autobiographical memories was a more critical factor than the structure of the memories in the prediction of depression.

Methodological Considerations

A strength of this study was the use of both self-report quantitative measures as well as the qualitative autobiographical memories to access the persistent schemata

involved in depressive vulnerability. The use of written memories provided data that revealed distinctive information about how the way narratives are processed is associated with depression, depressive vulnerability, and resilience from depression. The findings suggest that the autobiographical memory dimensions of integration, specificity, positive affect, agency, communion and redemption work independently and interdependently to afford some resilience to depression. Furthermore, the autobiographical memory dimensions of contamination and negative affect are significantly related to current depression and depressive vulnerability. While no qualitative analysis or presentation of actual memories has been offered in this study, an extension of the current research would be to perform a qualitative analysis and report on any thematic content variation, independent of the memory coding.

An additional strength of this study was the inclusion of individuals who were not currently depressed but had a history of depression. This allowed assessment of the stability of depressive schemata over time and provided valuable information regarding the importance of the process of integration in providing resilience from depression. Investigation of this group of formerly depressed participants also revealed the possible presence of two sub-groups of individuals: One group who have developed, or are in the process of developing, a more sophisticated and functional integrative style of cognitive processing, which, in turn, may act as a buffer from future episodes of depression, while the other group, who are unable to integrate their narratives, and remain vulnerable to current and future depressive episodes.

Furthermore, most previous studies on autobiographical memory have centred around one or a limited number of the many dimensions of autobiographical memory. Inclusion of an increased number of these dimensions permitted analyses of the patterns of autobiographical memory dimensions as revealed by the cluster analysis. This

analysis revealed that the various autobiographical memory dimensions can work interdependently to demonstrate either an increased vulnerability to, or resilience from, depression. Overall, the cluster analyses showed that individuals more vulnerable to depression tend to demonstrate a dysfunctional narrative style reflected by their tendency to recall memories that are contaminated and show negative affect, while those who are more resilient to depression demonstrate a more highly developed cognitive processing style in their integrated, specific, agentic and redemptive narratives.

Finally, the use of the six explicit memory cues from McAdams (1993) life-story interview provided both methodological strengths and limitations. While the use of the temporal life-story cues permitted meaningful differences between the currently depressed, formerly depressed and never depressed groups to emerge, particularly on the adolescence and childhood cues, the use of the three cues representing different affective experiences was more methodologically complex. An unforeseen problem in the study procedure was that participants had difficulty with the first memory cue, which asked them to recall their peak experience. A number of participants did not interpret this cue correctly, and instead wrote a very powerful and personally significant memory, that did not necessarily reflect a peak experience. This was demonstrated in the unexpected number of negative and mixed affect memories generated for this cue. This resulted in more difficult interpretation of the results that emerged from the three cues representing various affective experiences. In future research, it may be advisable to provide more introductory information about the nature of the cues, or alternatively deliver a briefing by an experimenter in person, so that study participants can understand the instructions regarding cues more correctly.

Study Limitations

Despite its methodological strengths, acknowledgement is given to some limitations, particularly in relation to the sampling method, sample characteristics and study procedure. First, this study used a sample of convenience that was neither random, nor representative, and resulted in a bias in terms of study participants. The study's sample was drawn from a relatively limited socio-economic status, with an overrepresentation of high socio-economic and highly educated participants. It also resulted in some gaps in the representative sample, especially in younger men aged between 18 and 40 years of age. The study also had a relatively small sample size, due to the complexities in getting people to record written memories.

An additional anomaly with the study sample was the large number of participants who reported as formerly depressed. This may be a result the self-selected nature of the sample, where participants had an opportunity to inspect and assess the questionnaire before completing it. The nature of the questionnaire could have attracted more highly functioning formerly depressed individuals, who desired to share their explanation of recovery. Future research may wish to use a sample where participants complete the exercise without prior viewing. This would not only increase the external validity of results, but would facilitate comparison between data from experimenter-selected samples and data from self-selected samples.

Another potential study limitation was the lack of information regarding the number of prior episodes of depression for the formerly depressed group, as well as the absence of information for currently depressed individuals as to whether it was their first episode of depression, or if they had had any prior episodes. This seems particularly vital information when considering Rude et al.'s (2001) finding that the differences between never and formerly depressed individuals occurred only for the

sub-group of formerly depressed individuals who had experienced four or more prior depressions, and that depressive schemata may thus be more frequent in individuals with histories of relatively extensive depression. Therefore, the number of prior episodes for the formerly depressed groups could have proved to be a differentiating factor within this group, especially in view of their tendency to integrate autobiographical events. Likewise, previous history of depression for the currently depressed group may also have provided some additional differentiating information. Ideally, future studies would be conducted longitudinally enabling access to precise data across a period of time.

While this study used the Self-Defining Memory Request (Singer & Moffitt, 1991/1992), Blagov and Singer (2004) have since developed a modified version of the earlier memory request. This modified version has improved on the Singer and Moffitt version by more closely matching all criteria of the self-defining memory in the request.

Finally, inconsistencies in study design have made it difficult to make direct comparisons across studies. The use of either verbal or written techniques, variation in the number and type of cues used, and use of either general autobiographical memories or self-defining memories may account for some of the inconsistent results across studies (Kuyken & Brewin, 1995; Moffitt & Singer, 1994). Future research is needed to address this issue by either using multiple design techniques or directly comparing these design issues to ascertain if they account for significant variance in results.

Therapeutic Implications and Conclusions

A tangible advantage of investigating the relationship between depression and autobiographical memory is its potential use in the applications of psychological assessment and counselling. If indeed, the variables in this relationship are significantly

interrelated, as this and other studies suggest, then specific cognitive strategies dealing with integration as well as maladaptive encoding and retrieval processes could be developed and implemented with depressed clients so that access to both integrated and specific events becomes more accessible and easier to process.

With regard to psychological assessment, the identification of patterns in the structure and content of narratives could be a powerful and alternate assessment tool in counselling and psychotherapy (Singer & Blagov, 2004a). Individuals with overgeneral narratives with contaminated or non-integrated themes are more likely to be vulnerable to depression and other forms of psychopathology, whereas those individuals with specific, non-contaminated and integrated narratives may have a tendency towards emotional maturity and well being, and be less likely to be at risk of enduring psychological distress. Other dimensions of narratives that may be relevant to assessment include the affect intensity of the memories, motivational themes, and themes of enduring concerns or unresolved conflicts. Furthermore, a request for some self-defining memories in the therapeutic environment may also be a less threatening form of assessment than inventories, especially in the early stages of therapy when there is an emphasis on creating a constructive therapeutic relationship.

Narrative therapy would seem an obvious conduit for increasing integration due its established emphasis on developing and promoting flexibility in storytelling so that individuals can acquire new ways of comprehending their experiences, with the aim of preventing further negative and recurring misconception of interpersonal experiences. Bates' (2007) recent success with a combination of narrative therapy and cognitive behaviour therapy (CBT) in working with a client with social anxiety disorder also bodes well for working with clients with depression. Future therapy may well benefit from assisting clients in an understanding of the thematic content of their

autobiographical memories so that they can integrate the narratives into their view of self, so that workable goals which contain an integrative message can be achieved.

Schema Therapy (Young, Klosko & Weishaar, 2003) with its emphasis on the replacement of maladaptive schemas with healthy schemas, may also be a therapeutic technique that could potentially utilise the findings of this research. The imposition of overgeneral contamination scrips on remembered experiences may be parallel to the notion of maladaptive schemas that distort or inhibit individuals. Therefore the therapeutic goal of locating and identifying specific positive memories from an individual's past may permit healthier schemas.

With regard to enhancing specificity, both Cognitive Behaviour Therapy (McBride, Segal, Kennedy & Gemar, 2007) and Mindfulness-Based Cognitive Therapy (Williams et al., 2000) have been found to increase specificity in autobiographical memory. More recently, Raes, Williams and Hermans (2009) have found good preliminary support for the use of their MEmory Specificity Training (MEST) in depressed inpatients. The MEST is a stand-alone program designed especially by Raes et al. to increase specificity in memory recall. The MEST was found to alter participants' retrieval style over a four-week period so that they became significantly more specific in their recall. Furthermore, increased specificity was associated with improvements in variables assumed to mediate the relationship between depression and autobiographical memory: Social problem solving, rumination and experiential avoidance.

In conclusion, this study has shown that both the narrative structure and content of self-defining autobiographical memories have significant relationships with vulnerability to depression as well as psychological adjustment. Furthermore, the autobiographical memory dimensions of integration, contamination, specificity, affect,

agency, communion and redemption operate as interrelated patterns in autobiographical memory recall. Of these dimensions, integration and contamination appear to be the two that most significantly differentiate depressive vulnerability, with integration providing resilience from depression, and contamination being associated with increased vulnerability. In addition, particular types of self-defining memories are more powerful at differentiating between depressive vulnerability and psychological adjustment, with memories of adolescent experiences being especially significant. Finally, these results carry implications for therapy, suggesting that narrative and cognitive strategies emphasising integration may act as a productive therapeutic intervention. Furthermore, the use of narratives may be a potentially useful tool in terms of psychological assessment, with the presence of contamination suggesting depressive vulnerability and the presence of integration implying some resilience from depression.

REFERENCES

Abbey, A., Andrews, F., & Halman, L. (1995). Provision and receipt of social support and disregard: What is their impact on the marital life quality of fertile and infertile couples? *Journal of Personality and Social Psychology, 68*, 455-469.

Adler, J.M., Kissel, E.C, & McAdams, D.P. (2006). Emerging from the CAVE: Attributional style and the narrative study of identity in midlife adults. *Cognitive Therapy and Research, 30*, 39-51.

Affleck, G., & Tennen, H. (1996). Construing benefits from adversity: Adaptational significance and dispositional underpinnings. *Journal of Personality, 64*, 899-923.

Affleck, G., Tennen, H., Croog, S., & Levine, S. (1987). Causal attribution, perceived benefits, and morbidity following a heart attack: An eight-year study. *Journal of Consulting and Clinical Psychology, 55*, 29-35.

Alford, B.A., & Gerrity, D.M. (1995). The specificity of sociotropy-autonomy personality dimensions to depression vs anxiety. *Journal of Clinical Psychology, 51*, 190-195.

Allen, N.B., de L. Horne, D.J., & Trinder, J. (1996). Sociotropy, autonomy, and dysphoric emotional responses to specific classes of stress: A psychophysiological evaluation. Journal *of Abnormal Psychology, 105*, 25-33.

American Psychiatric Association. (1987). *Diagnostic and statistical manual of mental disorders* (3rd ed., rev). Washington, DC: Author.

American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington (DC): Author.

American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed. Text revision). Washington (DC): Author.

Antoni, M.H., Lehman, J.M., Kilbourn, K.M., Boyers, A.E., Culver, J.L., Alferi. S.M., Yount, S.E., McGregor, B.A., Arena, P.L., Harris, S.D., Price, A.A., Carver, C.S. (2001). Cognitive-behavioural stress management intervention decreases the prevalence of depression and enhances benefit finding in women under treatment for early-stage breast cancer. Health Psychology, 20, 20-32.

Australian Bureau of Statistics. (2002). *General Social Survey* (Publication No. 4159.0). Retrieved January 19, 2010, from ABS Web Site: http://www.abs.gov.au/AUSSTATS/abs@.nsf/ProductsbyReleaseDate/700C5AC87E329CECCA2572E20013B980?OpenDocument.

Australian Bureau of Statistics. (2005). *Suicides Australia* (Publication No. 3309.0). Retrieved January 23, 2009, from ABS Web Site: http://www.abs.gov.au/AUSSTATS/abs@nsf/DetailsPage/3309.02005?OpenDocument.

Australian Bureau of Statistics. (2006). *Suicides: Recent Trends, Australia, 1993 to 2003* (Publication No. 3309.0.55.001). Retrieved January 23, 2009, from ABS Web Site: http://www.abs.gov.au/AUSSTATS/abs@nsf/productsbytopic/A61B65AE88EBF976CA256DEF00724CDE?OpenDocument.

Australian GP Statistics and Classification Centre. (2005). *General Practice Activity in Australia 2004-05*. Retrieved May 27, 2007, from Australian Institute of Health and Welfare web site: http://www.aihw.gov.au/publications/index.cfm/title/10189

Bagby, R.M., Gilchrist, E.J., Rector, N.A., Dickens, S.E., Joffe, R.T., Levitt, A., Levitam , R.D., & Kennedy, S.H. (2001). The stability and validity of sociotropy and autonomy personality dimensions as measured by the revised Personal Style Inventory. *Cognitive Therapy and Research, 25*, 765-559.

Bagby, R.M., Parker, J.D.A., Joffe, R.T., Schuller, D., & Gilchrist, E. (1998). Confirmatory factor analysis of the revised Personal Style Inventory (PSI). *Assessment, 5*, 31-43.

Bakan, D. (1966). *The duality of human existence: Isolation and communion in Western man*. Boston: Beacon.

Barnhofer, T., Crane, C., Spinhoven, P., & Williams, J.M.G. (2007). Failures to retrieve specific memories in previously depressed individuals: Random errors or content related? *Behaviour Research and Therapy, 45*, 1859-1869.

Barnhofer, T., de Jong-Meyer, R., Kleinpa ß, A., & Nikesch, S. (2002). Specificity of autobiographical memories in depression: An analysis of retrieval processes in a think-aloud task. *British Journal of Clinical Psychology, 41*, 411-416.

Bartlestone, J.H., & Trull, T.J. (1995). Personality, life events, and depression. *Journal of Personality Assessment, 64*, 279-294.

Bates, G.W. (2007). Beyond cognitive behaviour therapy in the treatment of anxiety disorders: a case study of social anxiety disorder. In D. Castle, S. Hood., & M. Kyrios. *Anxiety Disorders: Current Controversies, Future Directions*. Melbourne: Australian Postgraduate Medicine. (pp. 171-180).

Bates, G.W., & Lavery, B.J. (2003). Social problem-solving and vulnerability to depression in a clinical sample. *Psychological Reports, 92*, 1277-1283.

Bauer, J.J., & McAdams, D.P. (2000). Competence, relatedness and autonomy in life stories. *Psychological Inquiry, 11*, 276-279.

Bauer, J.J., & McAdams, D.P. (2004a). Growth goals, maturity and well-being. *Developmental Psychology, 40*, 114-127.

Bauer, J.J., & McAdams, D.P. (2004b). Personal growth in adults' stories of life transitions. *Journal of Personality, 72*, 573-602.

Bauer, J.J., McAdams, D.P., & Pals, J.L. (2008). Narrative identity and eudaimonic well-being. *Journal of Happiness Studies, 9*, 81-104.

Bauer, J.J., McAdams, D.P., & Sakaeda, A.R. (2005). Interpreting the good life: Growth memories in the lives of mature, happy people. *Journal of Personality and Social Psychology, 88,* 203-217.

Beck, A.T. (1967). *Depression: Causes and Treatment*. Philadelphia: University of Pennsylvania Press.

Beck, A.T. (1976). *Cognitive therapy and emotional disorders*. New York: International Universities Press.

Beck, A.T. (1983). Cognitive therapy of depression: New perspectives. In P. Clayton & J. E. Barrett (Eds.), *Treatment of depression: Old controversies and new approaches* (pp. 265-290). New York: Raven Press.

Beck, A.T., Epstein, N., & Harrison, R. (1983). Cognitions, attitudes and personality dimensions in depression. *British Journal of Cognitive Psychotherapy, 1*, 1-16.

Beck, A.T., Rush, B.F., Shaw, A.J., & Emery, G. (1979). *Cognitive therapy of depression*. New York & Chichester: Wiley.

Beck, A.T., Steer, R.A., Ball, R., & Ranieri, W.F. (1996). Comparison of Beck Depression Inventories –IA and –II is psychiatric outpatients. *Journal of Personality Assessment, 67*, 588-597.

Beck, A.T., Steer, R.A., & Brown, G.K. (1996). *Beck Depression Inventory Manual: Version II*. San Antonia TX: Psychological Corp., Harcourt Brace.

Beck, A.T., Steer, R.A., & Garbin, M. (1988). Psychometric properties of the Beck Depression Inventory: Twenty-five years of evaluation. *Clinical Psychology Review, 8*, 77-100.

Berndt, E., Koran, L., Finkelstein, S., Gelenberg, A., Kornstein, S., & Miller, I. (2000). Lost human capital from early onset chronic depression. *American Journal of Psychiatry, 157*, 940-947.

Bernsten, D., & Rubin, D.C. (2004). Cultural life scripts structure recall from autobiographical memory. *Memory and Cognition, 32*, 427-442.

Bernsten, D., & Rubin, D.C. (2002). Emotionally charged autobiographical memories across the life span: The recall of happy, sad, traumatic, and involuntary memories. *Psychology and Aging, 17*, 636-652.

Bettelheim, B. (1977). The *uses of enchantment: The meaning and importance of fairytales*. NewYork: Knopf.

Bieling, P.J., & Alden, L.E. (1998). Cognitive-interpersonal patterns in dysphoria: The impact of sociotropy and autonomy. *Cognitive Therapy and Research, 22*, 161-178.

Blagov, P.S., & Singer, J.A. (2004). Four dimensions of self-defining memories (specificity, meaning, content and affect) and their relationship to self-restraint, distress, and repressive defensiveness. *Journal of Personality, 72*, 481-511.

Blatt, S.J. (1974). Levels of object representation in anaclitic and introjective depression. *Psychoanalytic Study of the Child, 29*, 107-157.

Blatt, S.J. (1990). The Rorschach: A test of perception or an evaluation of representation. *Journal of Personality Assessment, 54*, 236-251.

Blatt, S.J. (1992). The differential effect of psychotherapy and psychoanalysis on anaclitic and Introjective patients: The Menninger Psychotherapy Research

Project revisited. *Journal of the American Psychoanalytic Association, 40*, 691-724.

Blatt, S.J., & Auerbach, J.S. (2003). Psychodynamic measures of therapeutic change. *Psychoanalytic Inquiry, 23*, 268-307.

Blatt, S.J., D'Affliti, J.P., & Quinlan, D.M. (1976). Experiences of depression in normal young adults. *Journal of Abnormal Psychology, 85*, 383-389.

Blatt, S.J., Ford, R.Q., Berman, W., Cook, B., & Meyer, R. (1988). The assessment of therapeutic change in schizophrenic and borderline young adults. *Psychoanalytic Psychology, 5*, 127-158.

Blatt, S.J., & Levy, K.N. (2003). Attachment theory, psychoanalysis, personality development and psychopathology. *Psychoanalytic Inquiry, 23*, 102-150.

Blatt, S.J., & Maroudas, C. (1992). Convergences among psychoanalytic and cognitive –behavioral theories of depression. *Psychoanalytic Psychology, 9*, 157-190.

Blatt, S.J., Quinlan, D.M., Pilkonis, P.A., & Shea, M.T. (1995). Impact of perfectionism and need for approval on the brief treatment of depression: The National Institute of Mental Health Treatment of Depression Collaborative Research Program revisited. *Journal of Consulting and Clinical Psychology, 63*, 125-132.

Blatt, S.J ., & Shahar, G. (2004). Stability of the patient-by-treatment interaction in the Menninger Psychotherapy Research Project. *Bulletin of the Menninger Clinic, 68*, 23-38.

Blatt, S.J., Shahar, G., & Zuroff, D.C. (2001). Anaclitic (sociotropic) and introjective (autonomous) dimensions. *Psychotherapy: Theory, Research, Practice, Training, 38*, 449-454.

Blatt, S. J ., & Zuroff, D. C. (1992). Interpersonal relatedness and self definition: Two prototypes for depression. *Clinical Psychology Review, 12*, 527-562.

Blatt, S.J., Zuroff, D.C., Bondi, C.M., Sanislow, C.A., & Pilkonis, P.A. (1998). When and how perfectionism impedes the brief treatment of depression: Further analyses of the National Institute of Mental Health Treatment of Depression Collaborative Research Program. *Journal of Consulting and Clinical Psychology, 66*, 423-428.

Blatt, S.J., Zuroff, D.C., Quinlan, D.M., & Pilkonis, P.A. (1996). Interpersonal factors in brief treatment of depression: Further analyses of the National Institute of Mental Health Treatment of Depression Collaborative Research Program. *Journal of Consulting and Clinical Psychology, 64*, 162-171.

Blazer, D.G., Kessler, R.C., McGonagle, K.A., & Swartz, M.S. (1994). The prevalence and distribution of major depression in a national community sample: the National Comorbidity Survey. *American Journal of Psychiatry, 151*, 979-986.

Bluck, S., & Gluck, J. (2004). Making things better and learning a lesson: experiencing wisdom across the life span. *Journal of Personality, 72*, 543-572.

Bonnano, G.A., Rennicke, C., & Dekel, S. (2005). Self-enhancement among high-exposure survivors of the September 11th terrorist attack: Resilience or social maladjustment? *Journal of Personality and Social Psychology, 88*, 984-998.

Bowlby, J. (1973). *Attachment and loss: Vol.2. Separation, Anxiety and Anger*. New York: Basic Books.

Bowlby, J. (1980). *Attachment and loss: Vol.3. Loss, sadness and depression*. New York: Basic Books.

Brewin, C.R., Reynolds, M., & Tata, P. (1999). Autobiographical memory processes and the course of depression. *Journal of Abnormal Psychology, 108*, 511-517.

Brittlebank, A.D., Scott, J., Williams, J.M.G., & Ferrier, I.N. (1993). Autobiographical memory in depression: State or trait marker? *British Journal of Psychiatry, 162*, 118-121.

Bruch, M.A. (2002). The relevance of mitigated and unmitigated agency and communion for depression vulnerabilities and dysphoria. *Journal of Counseling Psychology, 49*, 449-459.

Bruhn, A.R. (1985). Using early memories as a projective technique - the cognitive perceptual method. *Journal of Personality Assessment, 49*, 587-597.

Bruhn, A.R. (1990). Cognitive-perceptual theory and the projective use of autobiographical memory. *Journal of Personality Assessment, 55*, 95-114.

Bruner, J. (1990). *Acts of Meaning*. Cambridge, MA: Harvard University Press.

Burke, M., & Mathews, A. (1992). Autobiographical memory and clinical anxiety. *Cognition and Emotion, 15*, 106-118.

Burnside, E., Startup, M., Byatt, M., Rollinson, L., & Hill, J. (2004). The role of overgeneral autobiographical memory in the development of adult depression following childhood trauma. *British Journal of Clinical Psychology, 43*, 365-376.

Carlson, R. (1988). Exemplary lives: The uses of psychobiography for theory development. *Journal of Personality, 56*, 105-138.

Chiu, T., Fang, D., Chen, D., Wang, Y., & Jeris, C. (2001). A robust and scalable clustering algorithm for mixed type attributes in large database environments. In: *Proceedings of the Seventh ACM SIGKSS International Conference on Knowledge Discovery and Data Mining*. San Francisco, CA: ACM.

Ciechanowski, P.S., Katon, W.J., & Russo, J.E. (2000). Depression and diabetes: impact of depressive symptoms on adherence, function and costs. *Archives of Internal Medicine, 160*, 3278-3285.

Clark, D.A., Beck, A.T., & Brown, G.K. (1992). Sociotropy, autonomy, and life event perceptions in dysphoric and nondysphoric individuals. *Cognitive, Therapy and Research, 16*, 635-652.

Cohen, J. (1960). A coefficient of agreement for nominal scales. *Educational and Psychological Measurement, 20*, 37-46.

Conti, D.J ., & Burton, W.N. (1994). The Economic Impact of Depression in a Workplace. *Journal of Occupational and Environmental Medicine, 36*, 983-988.

Conway, M.A. (1997). The inventory of experience: memory and identity. In D. Jodelet, J. Pennebaker, & D. Paez (Eds.), *Political events and collective memories* (pp. 21-46). London: Routledge.

Conway, M.A. (2005). Memory and the self. *Journal of Memory and Language, 53*, 594-628.

Conway, M.A., & Haque, S. (1999). Overshadowing the reminiscence bump: memories of a struggle for independence. *Journal of Adult Development, 6, 35*-44.

Conway, M.A., & Holmes, A. (2004). Psychosocial stages and the accessibility of autobiographical memories across the life cycle. *Journal of Personality, 73*, 461-480.

Conway, M.A ., & Pleydell-Pearce, C.W. (2000). The construction of autobiographical memories in the self-memory system. *Psychological Review, 107*, 261-288.

Conway, M.A ., & Rubin, D.C. (1993). The structure of autobiographical memory. In A.E. Collins, S.E. Gathercole, M.A Conway, & P.E.M. Morris (Eds.), *Theories of memory* (pp. 103-137). Hove: Erlbaum.

Conway, M.A., Singer, J.A., & Tagini, A. (2004). The self and autobiographical memory: Correspondence and coherence. *Social Cognition, 22*, 491-529.

Conway, M.A., Wang, Q., Hanyu, K., & Haque, S. (2005). A cross-cultural investigation of autobiographical memory on the universality and cultural variation in the reminiscence bump. *Journal of Cross-Cultural Psychology, 36*, 739-749.

Conti, D.J., & Burton, W.N. (1994). The economic impact of depression in a workplace. *Journal of Occupational Medicine, 36*, 983-988.

Coyne, J.C., & Gotlib, I. (1983). The role of cognition in depression. *Psychological Bulletin, 94*, 472-505.

Coyne, J.C., & Whiffen, V.E. (1995). Issues in personality as diathesis for depression: The case of sociotropy-dependency and autonomy-self-criticism. *Psychological Bulletin, 118*, 358-378.

Crane, C., Barnhofer, T., Visser, C., Nightingale, H., & Williams, J.M.G. (2007). The effects of analytical and experimental rumination of autobiographical memory specificity in individuals with a history of major depression. *Behaviour Research and Therapy, 45*, 3077-3087.

Crane, C., Barnhofer, T., & Williams, J.M.G. (2007). Cue self-relevance affects autobiographical memory specificity in individuals with a history of major depression. *Memory, 15,* 312-323.

Croll, S., & Bryant, R.A. (2000). Autobiographical memory in post-natal depression. *Cognitive Therapy and Research, 24*, 419-426.

Cuijpers, P., & Smit, F. (2002). Excess mortality in depression: a meta-analysis of community studies. *Journal of Affective Disorders, 72*, 227-236.

da Silva Júnior, F.P., de Pinho, R.S.N., de Mello, M.T., de Bruin, V.M.S., & de Bruin, P.F.C. (2009). Risk factors for depression in truck drivers. *Social Psychiatry & Psychiatric Epidemiology, 44*, 125-129.

Dalgleish, T., Rolfe, J., Golden, A.-M., Dunn, B.D., & Barnard, P.J. (2008). Reduced autobiographical memory specificity and posttraumatic stress: Exploring the contributions of impaired executive control and affect regulation. *Journal of Abnormal Psychology, 117*, 236-241,

David, D., & Szentagotai, A. (2006). Cognitions in cognitive-behaioral psychotherapies; toward an integrative mode. *Clinical Psychology Review, 26, 284-298*.

De Groot, M., Anderson, R., Freedland, K.E., Clouse, R.E., & Lustman, P.J. (2001). Association of depression and diabetes complications: a meta-analysis. *Psychosocial Medicine, 63*, 619-630.

Demorest, A.P., & Alexander, I.E. (1992). Affective scripts as organizers of personal experience. *Journal of Personality, 60*, 645-663.

Ellis, A. (1994). *Reason and Emotion in Psychotherapy*, NY: Birch Lane Press.

Emmons, R.A. (1986). Personal strivings: An approach to personality and subjective well-being. *Journal of Personality and Social Psychology, 51*, 1058-1068.

Employee Assistance Professionals Association (EAPA). (1996). Employee Assistance Professionals Association 1996 Survey. *Employee assistance backgrounder*. Arlington, VA: EAPA.

Erikson, E.E. (1963). *Childhood and Society* (2nd ed.). New York: Norton.

Fletcher, J. (2008). Adolescent depression: diagnosis, treatment and educational attainment. *Health Economics, 17*, 1215-1235.

Foley Centre for the Study of Lives. (1998). Coding System for Contamination Sequences. Evanston, Illinois: Northwestern University.

Foley Centre for the Study of Lives. (1999). Coding Narrative Accounts of Autobiographical Scenes for Redemption Sequences. Evanston, Illinois: Northwestern University.

Fritz, H.L., & Helgeson, V.S. (1998). Distinctions of unmitigated communion from communion: Self-neglect and overinvolvement with others. Journal of Personality and Social Psychology, 75, 121-140.

Fromholt, P., Larsen, P., & Larsen, S.F. (1995). Effects of late-onset depression and recovery on autobiographical memory. *Journal of Gerontology, 50B*, 74-81.

Ganguli, M., Dodge, H.H., & Mulsant, B.H. (2002). Rates and predictors of mortality in an aging, rural community-based cohort: The role of depression. *Archives of General Psychiatry, 59*, 1046-1052.

Gibbs, B.R, & Rude, S.S. (2004). Overgeneral autobiographical memory as depression vulnerability. *Cognitive Therapy and Research, 28*, 511-526.

Goddard, L., Dritschel, B., & Burton, A. (1997). Social problem solving and autobiographical memory in non-clinical depression. *British Journal of Clinical Psychology, 36*, 449-451.

Greden, J. (2001). The burden of recurrent depression: causes, consequences, and future prospects. *Journal of Clinical Psychiatry, 62*, 5-9.

Grossbaum, M.F., & Bates, G.W. (2002). Correlates of psychological well-being at midlife: The role of generativity, agency and communion, and narrative themes. International *Journal of Behavioral Development, 26*, 120-127.

Gump, B.B., Matthews, K.A., Eberly, L.E., & Chang, Y.F. (2005). Depressive symptoms and mortality in men. Results from the multiple risk factors intervention trial. *Stroke, 36*, 98-102.

Habermas, T., & Bluck, S. (2000). Getting a life: The emergence of the life story in adolescence. *Psychological Bulletin, 126*, 748-769.

Haeffel, G.J., Abramson, L.Y., Voelz, Z.R., Metalsky, G.I., Halberstadt, L., Dykman, B.M., Donovan, P., Hogan, M.E., Hankin, B.L., & Alloy, L.B. (2005). Negative cognitive styles, dysfunctional attitudes, and the remitted depression paradigm: A search for the elusive cognitive vulnerability to depression factor among remitted depressives. *Emotion, 5*, 343-348.

Hamilton, V., Merrigan, P., & Dufresne, E. (1997). Down and out: estimating the relationship between mental health and unemployment. *Health Economics, 6*, 397-406.

Hammen, C., Marks, T., de Mayo, R ., & Mayol, A. (1985). Self-schemas and risk for depression: A prospective study. *Journal of Personality and Social Psychology, 49*, 1147-1159.

Haque, S., & Conway, M.A. (2001). Sampling the process of autobiographical memory construction. *European Journal of Cognitive Psychology, 13*, 529-547.

Harkness, T.K. (1996). The relationship between depression, social problem-solving ability and autobiographical memory. Unpublished graduate diploma dissertation, Swinburne University of Technology, Melbourne.

Harvey, A.G., Bryant, R.A., & Dang, S.T. (1998). Autobiographical memory in acute stress disorder. *Journal of Consulting and Clinical Psychology, 66*, 500-506.

Hedlund, S., & Rude, S.S. (1995). Evidence of latent depressive schemas in formerly depressed individuals. *Journal of Abnormal Psychology, 104*, 517-525.

Heidenreich, T., Junghanns-Royack, K., & Stangier, U. (2007). Specificity of autobiographical memory in social phobia and major depression. *British Journal of Clinical Psychology, 46*, 19-33.

Helgeson, V.S. (2003). Unmitigated communion and adjustment to breast cancer: Associations and explanations. *Journal of Applied Social Psychology, 33*, 1643-1661.

Helgeson, V.S., & Fritz, H.L. (1999). Unmitigated agency and unmitigated communion: Distinctions from agency and communion. *Journal of Research in Personality, 33*, 131-158.

Helgeson, V.S., & Fritz, H.L. (2000). The implications of unmitigated agency and unmitigated communion for domains of problem behavior. *Journal of Personality, 68*, 1031-1057.

Helgeson, V.S., Escobar, O., Siminerio, L., & Becker, D. (2007). Unmitigated communion and health among adolescents with and without diabetes: The mediating role of eating disturbance. *Personality and Social Psychology Bulletin, 33*, 519-536.

Hermans, D., de Decker, A., de Peuter, S., Raes, F., Eelen, P., & Williams, J.M.G. (2008). Autobiographical memory specificity and affect regulation: Coping with a negative life event. *Depression and Anxiety, 25*, 787-792.

Hermans, D., Vandromme, H., Debeer, E., Raes, F., Demytternaere, K., Brunfaut, E., & Williams, J.M.G. (2008). Overgeneral autobiographical memory predicts diagnostic status of depression. *Behaviour, Research and Therapy, 46*, 668-677.

Hermans, H.J.M. (1988). On the integration of nomothetic and idiographic research methods in the study of personal meaning. *Journal of Personality, 56*, 785-812.

Hermans, H.J.M., Kempen, H.J.G., & Van Loon, R.J.P. (1992). The dialogical self: Beyond individualism and rationalism. *American Psychologist, 47*, 23-33.

Hickie, I.B. (2004). Reducing the burden of depression: are we making progress in Australia? Medical Journal of Australia, 181 (7 Suppl): S4-S5. Retrieved August 8, 2005, from http://www.beyondblue.org.au/index.aspx?link_id=6.365

Ingram, R.E. (1984). Toward an information processing analysis of depression. *Cognitive Therapy and Research, 8*, 443-478.

Ingram, R.E., Kendall, P.C., Smith, T.W., Donnell, C., & Ronan, K. (1987). Cognitive specificity in emotional distress. *Journal of Personality and Social Psychology, 53*, 734-742.

Jackson, D.N. (1984). *The Personality Research Form*. Palo Alto, CA: Research Psychologists Press.

Janoff-Bulman, R. (1992). *Shattered Assumptions: Towards a New Psychology of Trauma*. New York: The Free Press.

Janoff-Bulman, R. (2004). Posttraumatic growth: Three explanatory models. *Psychological Inquiry, 15*, 30-34.

Janssen, S.M.J., Chessa, A.G., & Murre, J.M.J. (2007). Temporal distribution of favourite books, movies and records: differential encoding and re-sampling. *Memory, 15*, 755-767.

Jolly, J.B., Dyck, M.J., Kramer, T.A., & Wherry, J.N. (1996). The relations between sociotropy and autonomy, positive and negative affect and two proposed depression subtypes. *British Journal of Clinical Psychology, 35*, 91-101.

Jones, B., Heard, H., Startup, S., Swales, M., Williams , J.M.G., & Jones, R.S.P. (1999). Autobiographical memory, disassociation and parasuicide in Borderline Personality Disorder. *Psychological Medicine, 29*, 1397-1404.

Just, N., Abramson, L.Y., & Alloy, L.B. (2000). Remitted depression studies as tests of the cognitive vulnerability hypotheses of depression onset: A critique and conceptual analysis. *Clinical Psychology Review, 21*, 63-83.

Kernberg, O.F. (1976). Object relations theory and clinical psychoanalysis. New York: Jason Aronson Inc.

King, L.A. (1995). Wishes, motives, goals, and personal memories: Relations of measures of human motivation. *Journal of Personality, 64*, 985-1007.

King, L.A., & Raspin, C. (2004). Lost and found possible selves, subjective well-being, and ego development in divorced women. *Journal of Personality, 72*, 603-632.

King, L.A., Scollon, C.K., Ramsey, C., & Williams, T. (2000). Stories of life transition: Subjective well-being and ego development in parents of children with Down syndrome. *Journal of Research in Personality, 34*, 509-536.

Kleim, B., & Ehlers, A. (2008). Reduced autobiographical memory specificity predicts depression and posttraumatic stress disorder after recent trauma. *Journal of Consulting and Clinical Psychology, 76*, 231-242.

Klein, D.N., Harding, K., Taylor, E.B., & Dickstein, S. (1988). Dependency and self-criticism in depression: Evaluation in a clinical population. *Journal of Abnormal Psychology, 97*, 399-404.

Kuyken, W., & Brewin, C. (1995). Autobiographical memory functioning in depression and reports of early abuse. *Journal of Abnormal Psychology, 104*, 585-591.

Kuyken, W., & Dalgleish, T. (1995). Autobiographical memory and depression. *British Journal of Clinical Psychology, 34*, 89-92.

Kuyken, W., & Dalgleish, T. (1995). Autobiographical memory and depression. Unpublished manuscript. (Longer version of above article).

Mackinger, H.F., Loschin, G.G., & Leibetseder, M.M. (2000). Prediction of postnatal affective changes by autobiographical memories. *European Psychologist, 5*, 52-61.

Mackinger, H.F., Pachinger, M.M., Leibetseder & Fartacek, R.R. (2000). Autobiographical memories in women remitted from major depression. *Journal of Abnormal Psychology, 109*, 331-334.

Mansell, W., & Lam, D. (2004). A preliminary study of autobiographical memory in remitted bipolar and unipolar depression and the role of imagery in the specificity of memory. *Memory, 12*, 437-446.

Mansfield, E.D., & McAdams, D.P. (1996). Generativity and themes of agency and communion in adult autobiography. *Personality and Social Psychology Bulletin, 22*, 721-731.

Mathers, C.D., & Loncar, D., (2006). Projections of global mortality and burden of disease from 2002 – 2030. *PLoS Medicine, 3*, 2011-2030.

McAdams, D.P. (1982). Experiences of intimacy and power: Relationships between social motives and autobiographical memory. *Journal of Personality and Social Psychology, 42*, 292-302.

McAdams, D.P. (1985). *Power, Intimacy, and the Life Story: Personological inquiries into identity*. New York: Guilford Press.

McAdams, D.P. (1988). Biography, narrative and lives: An introduction. *Journal of Personality, 56*, 1-18.

McAdams, D.P. (1989). The development of a narrative identity. In Buss, D.M., & Canton, N. (eds.). *Personality Psychology* (pp.160-174). Chicago: University of Chicago Press.

McAdams, D.P. (1993). *The stories we live by: Personal myths and the making of the self*. New York: The Guilford Press.

McAdams, D.P. (1994). Life scripts, life stories. In *The Person: An Integrated Introduction of Personality Psychology (2nd ed)*. New York: Harcourt.

McAdams, D.P. (1996). Personality, modernity, and the storied self: A contemporary framework for studying persons. *Psychological Inquiry, 7*, 295-321.

McAdams, D.P. (2000). Life scripts, life stories. In *The Person: An Integrated Introduction of Personality Psychology (3rd ed)*. New York: Harcourt.

McAdams, D.P. (2001a). The psychology of life stories. *Review of General Psychology, 5*, 100-122.

McAdams, D.P. (2001b). *Coding Autobiographical Episodes for Themes of Agency and Communion*. Evanston, Illinois: Northwestern University.

McAdams, D.P. (2006a). *The Person: An Integrated Introduction of Personality Psychology (4th ed)*. New York: Harcourt.

McAdams, D.P. (2006b). *The redemptive self: Stories Americans live by*. New York: Cambridge University Press.

McAdams, D.P. (2006c). The role of narrative in personality psychology today. *Narrative Inquiry, 16*, 11-18.

McAdams, D.P. (2006d). The redemptive self: Generativity and the Stories Americans live by. *Research in Human Development, 3*, 81-100.

McAdams, D.P. (2008a). Personal narratives and the life story. In John, O.P., Robins, R.W., & Pervin, L.A. (eds.). *Handbook of Personality: Theory and Research* (pp.242-262). New York: Guilford Press.

McAdams, D.P. (2008b). American identity: The redemptive self. *The General Psychologist, 43,* 20-27.

McAdams, D.P., Anyidoho, N.A., Brown, C., Huang, Y.T., Kaplan, B., & Machado, M.A. (2004). Traits and stories: Links between dispositional and narrative features of personality. *Journal of Personality, 72*, 761-784.

McAdams, D.P., Diamond, A., de St Aubin, E., & Mansfield, E.D. (1997). Stories of commitment: The psychosocial construction of generative lives. *Journal of Personality and Social Psychology, 72*, 678-694.

McAdams, D.P., Hoffman , B. J., Mansfield, E. D., & Day, R. (1996). Themes of agency and communion in significant autobiographical scenes. *Journal of Personality, 64*, 339-377.

McAdams, D.P., Lensky, D.B., Daple, S.A ., & Allen, J. (1988). Depression and the organisation of autobiographical memory. *Journal of Social and Clinical Psychology, 7*, 332-349.

McAdams, D.P., & Pals, J.L. (2006). A new Big Five: Fundamental principles for an integrative science of personality. American Psychologist, 61, 204-217.

McAdams, D.P., Reynolds, J., Lewis, M., Patten, A.H., & Bowman, P.J. (2001). When bad things turn good and good things turn bad: Sequences of redemption and contamination in life narrative and their relation to psychosocial adaptation in midlife adults and in students. *Personality and Social Psychology Bulletin, 4*, 474-485.

McBride, C., Segal, Z., Kennedy, S., & Gemar, M. (2007). Changes in autobiographical memory specificity following cognitive behavior therapy and pharmacotherapy for major depression. *Psychopathology, 40*, 147-152.

McCrae, R.R., & Costa, P.T., Jr. (2003). *Personality in adulthood: A five-factor theory perspective* (2nd ed.). New York, NY: Guilford Press.

McGregor, I., & Little, B.R. (1998). Personal projects, happiness and meaning: On doing well and being yourself. *Journal of Personality and Social Psychology, 74,* 494-512.

McLean, K.C. (2008). Stories of the young and the old: Personal continuity and narrative identity. *Developmental Psychology, 44*, 254-264.

McLean, K.C., & Fournier, M.A. (2008). The content and processes of autobiographical reasoning in narrative identity. *Journal of Research in Personality, 42*, 527-545.

McLean, K.C., Pasupathi, M., & Pals, J.L. (2007). Selves creating stories creating selves: A process model of self-development. *Personality and Social Psychology Review, 11*, 262-278.

McLelland, D.C., Koestner, R., & Weinberger, J. (1989). How do self-attributed and implicit motives differ? *Psychological Review, 96*, 690-702.

McNally, R.J., Lasko, N.B., Macklin, M.K., & Pitman, R.K. (1995). Autobiographical memory disturbance in combat-related posttraumatic stress disorder. *Behaviour Research and Therapy, 33*, 619-630.

Moffitt, K.H. (1991). Linking personal past, present and future: Self-defining memories, affect and strivings. Master's thesis, Department of Psychology, Connecticut, New London, CT.

Moffitt, K.H., & Singer, J.A. (1994). Continuity in the life story: Self defining memories, affect and approach/avoidance personal strivings. *Journal of Personality, 62*, 21-42.

Moffitt, K.H., Singer, J.A., Nelligan, D.W., Carlson M.A., & Vyse S.A. (1994). Depression and memory narrative type. *Journal of Abnormal Psychology, 103*, 581-583.

Moore, R.G., Watts, F.N., & Williams, J.M.G. (1988). The specificity of personal memories in depression. *British Journal of Clinical Psychology, 27*, 275-276.

Moore, S.A., & Zoellner, L.A. (2007). Overgeneral autobiographical memory and traumatic events: An evaluative review. *Psychological Bulletin, 133*, 419-437.

Murray, C.L., & Lopez, A.D. (1998). *The global burden of disease: A comprehensive assessment of mortality and disability from disease, injuries and risk factors in 1990 and projected to 2020*. Boston: Harvard University Press.

National Health and Medical Research Council. (1997). *Depression in young people: clinical practice guidelines*. Canberra: Australian Government Publishing Service.

Needham, B. (2007). Gender differences in trajectories of depressive symptomatology and substance abuse during the transition from adolescence to young adulthood. *Social Science and Medicine, 65*, 1166-1179.

Neimeyer, R.A. (2004). Fostering posttraumatic growth: A narrative elaboration. *Psychological Inquiry, 15*, 53-58.

Nicholson, A., Kuper, H., & Hemingway, H., (2008). Depression as an aetiologic and prognostic factor in coronary heart disease: a meta-analysis of 6362 event among 146,538 participants in 54 observational studies. *European Heart Journal, 27*, 2763-2774.

Nuevo, R., Dunn, G., Dowrick, C., Vázquez-Barquero, J.L., Casey, P., Dalgard, O.S., Lehtinen, V., & Ayuso-Mateos, J.L. (2009). Cross-cultural equivalence of the Beck Depression Inventory: A five-country analysis from the ODIN study. *Journal of Affective Disorders, 114*, 156-162.

Ohayon, M.M. (2007). Epidemiology of depression and its treatment in the general population, *Journal of Psychiatric Research, 4*, 207-2123.

Pals, J.L. (2006a). Authoring a second chance in life: Emotion and transformational processing within narrative identity. *Research in Human Development, 3,* 101-120.

Pals, J. L. (2006b). Narrative identity processing of difficult life experiences: Pathways of personality development and positive self-transformation in adulthood. *Journal of Personality, 74*, 1079–1109.

Pals, J.L., & McAdams, D.P. (2004). The transformed self: A narrative understanding of posttraumatic growth. *Psychological Inquiry, 15*, 65-69.

Pasupathi, M. (2001). The social construction of the personal path and its implications for adult development. *Psychological Bulletin, 127*, 651-672.

Pasupathi, M., & Mansour, E. (2006). Adult age difference in autobiographical reasoning in narratives. *Developmental Psychology, 42*, 798-808.

Pennebaker, J.W. (1990). *Opening Up: The Healing Power of Confiding in Others*. New York: William Morrow.

Persons, J.B., Miranda, J., & Perloff, J.M (1991). Relationship between depressive symptoms and cognitive vulnerabilities of achievement and dependency. *Cognitive Therapy and Research, 15*, 221-235.

Peselow, E.D., Robins, C.J., Sanfilipo, M.P., Block, P., & Fieve, R.R. (1992). Sociotropy and autonomy: Relationship to Antidepressant drug treatment response and endogenous-nonendogenous dichotomy. *Journal of Abnormal Psychology, 101*, 479-486.

Pikhart, H., Hubacek, J.A., Kubinova, R., Nicholson, A., Peasey, A., Capkova, N., Poledne, R., & Bobak, M. (2009). Depressive symptoms and levels of C-reactive protein. *Social Psychiatry & Psychiatric Epidemiology, 44*, 217-222.

Pillemer, D.B. (1998). *Momentous events, vivid memories*. Cambridge, MA: Harvard University Press.

Pirl, W.F., & Roth, A.J. (1999). Diagnosis and treatment of depression in cancer patients. *Oncology, 13*, 1293-1301.

Raes, F., Hermans, D., de Decker, A., Eelen, P., & Williams, J.M.G. (2003). Autobiographical memory specificity and affect regulation: An experimental approach. *Emotion, 3*, 201-206.

Raes, F., Hermans, D., Williams, J. M. G., & Eelen, P. (2006). Reduced autobiographical memory specificity and affect regulation. *Cognition and Emotion, 20*, 402-429.

Raes, F., Hermans, D., Williams, J. M. G., & Eelen, P. (2007). A sentence completion procedure as an alternative to the Autobiographical Memory Test for assessing overgeneral memory in non-clinical populations. *Memory, 15*, 495-507.

Raes, F., Watkins, T., Williams, J.M.G., & Hermans, D. (2008). Non-ruminative processing reduces overgeneral autobiographical memory retrieval in students. *Behaviour Research and Therapy, 46*, 748-756.

Raes, F., Williams, J.M.G., & Hermans, D. (2009). Reducing cognitive vulnerability to depression: A preliminary investigation of MEmory Specificity Training (MEST) in inpatients with depressive symptomatology. *Journal of Behavior Therapy, 40*, 24-38.

RAND Corporation Research Brief (2008). *The Societal Promise of Improving Care for Depression*. Retrieved May 27, 2007, from the Rand Corporation web site: *www.rand.org/pubs/research_briefs/2008/RAND_RB9055-1.pdf*

Rapee, R.M., McCallum, S.L., Melville, L.F., Ravenscroft, H., & Rodney, J.M. (1994). Memory bias in social phobia. *Behaviour Research and Therapy, 32*, 89-99.

Rathbone, C.J., Moulin, C.J.A., & Conway, M.A. (2008). Self-centred memories: the reminisicence bump and the self. *Memory and Cognition, 36*, 1403-1414.

Roberts, J.E., & Kassel, J.D. (1996). Mood-state dependence in cognitive vulnerability to depression: The roles of positive and negative affect. *Cognitive Therapy and Research, 20*, 1-12.

Robins, C.J., Bagby, R.M., Rector, N.A., Lynch, T.R., & Kennedy, S.H. (1997). Sociotropy, autonomy, and patterns of symptoms in patients with major depression: A comparison of dimensional and categorical approaches. *Cognitive Therapy and Research, 21*, 285-300.

Robins, C.J., & Block, P. (1988). Personal vulnerability, life events, and depressive symptoms: A test of a specific interactional model. *Journal of Personality and Social Psychology, 54*, 847-852.

Robins, C.J., Block, P., & Peselow, E.D. (1989). Relations of sociotropic and autonomous personality characteristics to specific symptoms in depressed patients. *Journal of Abnormal Psychology, 98*, 86-88.

Robins, C.J., Hayes, A.M., Block, P., Kramer, R.J., & Villena, M. (1995). Interpersonal and achievement concerns and the depressive vulnerability and symptom specificity hypotheses: A prospective study. *Cognitive Therapy and Research, 19*, 1-20.

Robins, C.J., Ladd, J.S., Welkowitz, J., Blaney, P.H., Diaz, R., & Kutcher, G. (1994). The Personal Style Inventory: Preliminary validation studies of new measures of sociotropy and autonomy. *Journal of Psychopathology and Behavioral Assessment, 16*, 277-300.

Robins, C.J., & Luten, A.G. (1991). Sociotropy and autonomy: Differential patterns of clinical presentation in unipolar depression. *Journal of Abnormal Psychology, 100*, 74-77.

Roeser, R., Eccles., J., & Strobel, K. (1998). Linking the study of schooling and mental health: selected issues and empirical illustrations at the level of the individual. *Educational Psychologist, 33*, 153-176.

Rubin, D.C., & Bernsten, D. (2003). Life scripts help to maintain autobiographical memories of highly positive, but not highly negative, events. *Memory and Cognition, 31*, 1-14.

Rubin, D.C., & Schulkind, M.D. (1997). The distribution of autobiographical memories across the lifespan. *Memory and Cognition, 25*, 859-866.

Rubin, D.C., & Bernsten, D., & Hutson, M. (2009). The normative and the personal life: Individual differences in life scripts and life story events among USA and Danish undergraduates. *Memory, 17*, 54-68.

Rubin, D.C., Wetzler, S.E., & Nebes, R.D. (1986). Autobiographical memory across the adult life span. In D.C. Rubin (Ed.), *Autobiographical memory* (pp. 202-221). Cambridge: Cambridge University Press.

Rude, S.S., & Burnham, B.L. (1993). Do interpersonal and achievement vulnerabilities interact with congruent events to predict depression? Comparison of DEQ, SAS, DAS and combined scales. *Cognitive Therapy and Research, 17*, 531-548.

Rude, S.S., Covich, J., Jarrold, W., Hedlund, S., & Zentner, M. (2001). Detecting depressive schemata in vulnerable individuals: Questionnaires versus laboratory tasks. *Cognitive Therapy and Research, 25*, 103-116.

Rude, S.S., Gortner, E., & Pennebaker, J.W. (2004). Language use of depressed and depression-vulnerable college students. *Cognition and Emotion, 18*, 1121-1133.

Rude, S.S., & McCarthy, C.T. (2003). Emotional functioning in depressed and depression-vulnerable college students. *Cognition and Emotion, 17*, 799-806.

Sakado, K., Sato, T., Uehara, T., & Sato, S. (1996). Discriminant validity of the Inventory to Diagnose Depression, Lifetime Version. *Acta Psychoatrica Scandinavica, 93,* 257-260.

Saluja, G., Iachan, R., Scheidt, P., Overpeck, M., Sun, W., & Giedd, J. (2004). Prevalence of and risk factors for depressive symptoms among young adolescents. *Archives of Paediatrics and Adolescent Medicine, 158*, 760-765.

Sanderson, K., & Andrews, G. (2006). Common mental disorders in the workforce: recent findings from a descriptive and social epidemiology. *Canadian Journal of Psychiatry, 51*, 3-75.

Santor, D.A., & Zuroff, D.C. (1997). Interpersonal responses to threats to status and interpersonal relatedness: Effects of dependency and self-criticism. *British Journal of Clinical Psychology, 36*, 521-541.

Sato, T. (2003). Sociotropy and autonomy: The nature of vulnerability. *Journal of Psychology, 137*, 447-466.

Sato, T., & McCann, D. (2000). Sociotropy-autonomy and the Beck Depression Inventory. *European Journal of Psychological Assessment, 16*, 66-76.

Sato, T., Uehara, T., Sakado, K., & Sato, S. (1996). The test-retest reliability of the Inventory to Diagnose Depression, Lifetime Version. *Psychopathology, 29*, 154-158.

Scher, C.D., Ingram, R.E., & Segal, Z.V. (2005). Cognitive reactivity and vulnerability: Empirical evaluation of construct activation and cognitive diatheses in unipolar depression. *Clinical Psychology Review, 25*, 487-510.

Schoevers, R.A., Geerlings, M.I., Deeg, D.J.H., Holwerda, T.J., Jonker, C., & Beekman, A.T.F. (2009). Depression and excess mortality: Evidence for a dose response relation in community living elderly. *International Journal of Geriatric Psychiatry, 24,* 169-176.

Schooler, J.W., & Herrman, D.J. (1992). There is more to episodic memory than just episodes. In M.A. Conway, D. Rubin, H. Spinnler and W. Wagenaar (eds.), *Theoretical perspectives on autobiographical memory* (pp. 241-262). Boston: Kluwer.

Scott, J., Stanton, B., Garland, A., & Ferrier, I.N. (2000). Cognitive vulnerability in patients with bipolar disorder. *Psychological Medicine, 30*, 467-472.

Segal, Z.V., & Ingram R.E. (1994). Mood priming and construct activation in tests of cognitive vulnerability to unipolar depression. *Clinical Psychology Review, 14*, 663-695.

Segal, Z.V., Shaw, B.F., Vella, D.D., & Katz, R. (1992). Cognitive and life stress predictors of relapse in remitted unipolar depressed patients: Test of congruency hypothesis. *Journal of Abnormal Psychology, 101*, 26-36.

Shahar, G., Blatt, S.J., & Ford, R.Q. (2003). The identification of mixed anaclitic-introjective psychopathology in young adult inpatients. *Psychoanalytic Psychology*, 20, 84-102.

Siegel, P., & Demorest, A. (2010). Affective scripts: A systematic case study of change in psychotherapy. *Psychotherapy Research, 20*, 369-387.

Singer, J.A. (1990). Affective responses to autobiographical memories and their relationship to long-term goals. *Journal of Personality, 58*, 535-563.

Singer, J.A. (2004). Narrative identity and meaning making across the adult life span: An introduction. *Journal of Personality, 73*, 437-459.

Singer, J.A. (2005). *Personality and Psychotherapy: Treating the Whole Person*. New York: Guilford.

Singer, J.A., & Blagov, P.S. (2001-2002). *Classification System and Scoring Manual for Self-defining Autobiographical Memories.* New London, Connecticut: Connecticut College.

Singer, J.A., & Blagov, P.S. (2004a). Self-defining memories, narrative identity and psychotherapy: A conceptual model, empirical investigation and case report. In L.E. Angus & J. McLeod (eds.). *The Handbook of Narrative and Psychotherapy*. London: Sage. (pp. 229-246).

Singer, J.A., & Blagov, P.S. (2004b). The integrative function of narrative processing: Autobiographical memory, self-defining memories and the life story of identity. In D.R. Beike, J.M. Lampinen & D.A. Behrend (eds.). *The Self and Memory*. New York: Psychology Press. (pp. 117-138).

Singer, J.A., & Bluck, S. (2001). New perspectives on autobiographical memory: The integration of narrative processing and autobiographical reasoning. *Review of General Psychology, 5*, 91-99.

Singer, J.A., & Moffitt, K.H. (1991-92). An experimental investigation of specificity and generality in memory narratives. *Imagination, Cognition and Personality, 11*, 233-257.

Singer, J.A., & Rexhaj, B. (2006). Narrative coherence and psychotherapy: A commentary. *Journal of Constructivist Psychology, 19*, 209-217.

Singer, J.A., & Rexhaj, B., & Baddeley, J. (2007). Older, wiser, and happier? Comparing older adults' and college students' self-defining memories. *Memory, 15*, 886-898.

Singer, J.A., & Salovey, P. (1993). *The remembered self: Emotion and memory in personality*. New York: The Free Press.

Spinhoven, P., Bockting, C. L. H., Kremers, I.P., Schene, A. H., & Williams, J.M.G. (2007). The endorsement of dysfunctional attitudes is associated with an impaired retrieval of specific autobiographical memories in response to matching cues. *Memory, 15*, 324-338.

Spinhoven, P., Bockting, C.L.H., Schene, A.H., Koeter, M.W., Wekking, E.M., & Williams, J.M.G. (2006). Autobiographical memory in the euthymic phase of recurrent depression. *Journal of Abnormal Psychology, 115*, 590-500.

Startup, S., Heard, H., Swales, M., Jones, B., Williams , J.M.G., & Jones, R.S.P. (2001). Autobiographical memory and parasuicide in borderline personality disorder. *British Journal of Clinical Psychology, 40*, 113-120.

Staudinger, U.M. (2001). Life reflection: A social-cognitive analysis of life review. *Review of General Psychology, 5*, 148-160.

Steer, R.A., Ball, R., Ranieri, W.F., & Beck, A.T. (1999). Dimensions of the Beck Depression Inventory-II in clinically depressed outpatients. *Journal of Clinical Psychology, 55*, 117-128.

Storch, E.A., Roberti, J.W., & Roth, D.A. (2004). Factor structure, concurrent validity, and internal consistency of the Beck Depression Inventory – Second Edition in a sample of college students. *Depression and Anxiety, 19*, 187-189.

Sutin, A.R., & Robins, R.W. (2005). Continuity and correlates of emotions and motives in self-defining memories. *Journal of Personality*, 73, 793-824.

Sutin, A.R., & Robins, R.W. (2008). Going forward by drawing from the past: personal strivings, personally meaningful memories, and personality traits. *Journal of Personality*, 76, 631-663.

Sutin, A.R., Costa, T.J. Jnr., Wethington, E., & Eaton, W. (2010). Turning points and lessons learned: Stressful life events and personality trait development across middle adulthood. *Psychology and Aging, 25*, 524-533.

Tagini, A., Conway, M.A., & Meins, M. (2004). Adult attachment and the phenomenological characteristics of early memories. In preparation, cited in Conway, M.A., Singer, J.A., & Tagini, A. (2004). The self and autobiographical memory: Correspondence and coherence. *Social Cognition, 22*, 491-529.

Taylor, S.E. (1983). Adjustment to threatening events. *American Psychologist, 38*, 1161-1173.

Taylor, S.E., Lichtman, R.R., & Wood, J.V. (1984). Attributions, beliefs about control, and adjustment to breast cancer. *Journal of Personality and Social Psychology, 46*, 489-502.

Teasdale, J.D., & Barnard, P.J. (1993). *Affect, cognition and change*. London: Lawrence Erlbaum.

Teasdale, J.D., Segal, Z.V., & Williams, J.M.G. (1995). How does cognitive therapy prevent depressive relapse and why should attentional control (mindfulness) training help? *Behaviour Research and Therapy, 33*, 25-39.

Tedeschi, R.G., & Calhoun, L.G. (1995). *Trauma and transformation: Growing in the aftermath of suffering*. Thousand Oaks, California: Sage.

Tedeschi, R.G., & Calhoun, L.G. (1996). The Posttraumatic Growth Inventory: Measuring the positive legacy of trauma. *Journal of Traumatic Stress, 9*, 455-471.

Tedeschi, R.G., & Calhoun, L.G. (2004a). Posttraumatic growth: Conceptual foundations and empirical evidence. *Psychological Inquiry, 15*, 1-18.

Tennen, H., Affleck, G., & Mendola, R. (1991). Causal explanations for infertility: Their relations to control appraisals and psychological adjustment. In A. Stanton & C. Dunkel-Schetter (eds.), *Infertility: Perspectives from stress and coping research* (pp. 109-132). New York: Plenum.

Thompson, S.C. (1991). The search for meaning following a stroke. *Basic and Applied Social Psychology, 12*, 81-96.

Thorne, A. (2000). Personal memory telling and personality development. *Personality and Social Psychology Review, 4*, 45-56.

Thorne, A., Cutting, L., & Skaw, D. (1998). Young adults' relationship memories and the life story: Examples or essential landmarks. *Narrative Inquiry, 8*, 237-268.

Thorne, A., McLean, K.C., & Lawrence, A.M. (2004). When remembering is not enough: Reflecting on self-defining memories in late adolescence. *Journal of Personality, 72*, 513-541.

Toker, S., Shirom, A., Shapira, I., Berliner, S., & Melamed, S. (2005). The association between burnout, depression, anxiety, and inflammation biomarkers: C-reactive protein and fibrinogen in men and women. *Journal of Occupational Health Psychology, 10*, 344-362.

Tomkins, S. S. (1979). Script theory: Differential magnification of affects. *Nebraska Symposium on Motivation, 26*, 201-236.

Tomkins, S.S. (1987). Script theory. In J. Aronoff, A.I. Rabin, & R.A. Zucker (eds.), *The emergence of personality* (pp. 147-216). New York: Springer.

Van der Kooy, K., van Hout, H., Marwijk, H., Marten, H., Stehouwer, C., & Beekman, A. (2007). Depression and the risk for cardiovascular diseases: systematic review and meta analysis. *International Journal of Geriatric Psychiatry, 22*, 613-626.

Van Minnen, A., Wessel, I., Verhaak, C., & Smeenk, J. (2005). The relationship between autobiographical memory specificity and depressed mood following a stressful life event: A prospective study. *British Journal of Clinical Psychology, 44*, 405-415.

Van Vreeswijk, M.F., & de Wilde, E.J. (2004). Autobiographical memory specificity, psychopathology, depressed mood and the use of the autobiographical memory test: A meta-analysis. *Behaviour, Research and Therapy, 42*, 731-743.

Vredenberg, K., Flett, G.L., & Krames, L. (1993). Analogue versus clinical depression: A clinical reappraisal. *Psychological Bulletin, 113*, 327-344.

Wang, Q. (2001). Culture effects on adults' earliest childhood recollection and self-description: Implications for the relation between memory and the self. *Journal of Personality and Social Psychology, 81*, 220-233.

Wang, Q. (2004). The emergence of cultural self-constructs: Autobiographical memory and self-description in European American and Chinese children. *Development Psychology, 40*, 3-15.

Wang, Q., & Brockmeier, J. (2002). Autobiographical remembering as cultural practice: Understanding the interplay between memory, self and culture. *Culture and Psychology, 8*, 45-64.

Wang, Q., & Conway, M.A. (2004). The stories we keep: Autobiographical memory in American and Chinese middle-aged adults. *Journal of Personality, 72*, 911-938.

Watkins, E., & Teasdale, J.D. (2004). Adaptive and maladaptive self-focus in depression. *Journal of Affective Disorders, 82*, 1-8.

Watkins, E., Teasdale, J.D., & Williams, R.M. (2000). Decentring and distraction reduce overgeneral autobiographical memory in depression. *Psychological Medicine, 30*, 911-920.

Weinberger, D.A. (1998). Defenses, personality structure, and development: Integrating psychodynamic theory into a typological approach to personality. *Journal of Personality, 66*, 1061-1080.

Weissman, M.M., Bruce, M.L., Leaf, P.J., Florio, L.P., & Holzer, A. (1991). Affective disorders. In L.N. Robins & D.A. Reiger (eds.). *Psychiatric disorders in America: the Epidemiologic Catchment Area Study*. New York: Free Press.

Welch-Ross, M. (1995). An integrative model of the development of autobiographical memory. *Developmental Review, 15*, 338-365.

Wenzlaff, R.M., & Bates, D.E. (1998). Unmasking a cognitive vulnerability to depression: How lapses in mental control reveal depressive thinking. *Journal of Personality and Social Psychology, 75,* 1559-71.

Wenzlaff, R.M., Meier, J., & Salas, D.M. (2002). Thought suppression and memory biases during and after depressive moods. *Cognition and Emotion, 16*, 403-422.

Wenzlaff, R.M., Rude, S.S., & West, L.M. (2002). Cognitive vulnerability to depression: The role of thought suppression and attitude certainty. *Cognition and Emotion, 16*, 533-548.

Wenzlaff, R.M., & Wegner, D.M. (2000). Thought suppression. *Annual Review of Psychology, 51*, 59-91.

White, M. & Epston, D. (1990). *Narrative means to therapeutic ends*. New York: WW Norton.

Wilhelm, S., McNally, R.J., Baer, L., & Florin, I. (1997). Autobiographical memory in obsessive-compulsive disorder. *British Journal of Clinical Psychology, 36*, 21-31.

Williams, J.M.G. (1992). Autobiographical memory and emotional disorders. In S. Christianson (Ed.), *The handbook of emotion and memory: Research and theory* (pp. 451-477). Hillsdale, New Jersey: Lawrence Erlbaum Associates Inc.

Williams, J.M.G. (1996). Depression and the specificity of autobiographical memory. In D. Rubin (Ed.), *Remembering our Past* (pp. 244-267). Cambridge: Cambridge University Press.

Williams, J.M.G., Barnhofer, T., Crane, C., Hermans, D., Raes, F., Watkins, E., & Dalgleish, T. (2007). Autobiographical memory specificity and emotional disorder. *Psychological Bulletin, 133*, 122-148.

Williams, J.M.G., & Broadbent, K. (1986). Autobiographical memory in suicide attempters. *Journal of Abnormal Psychology, 95*, 144-149.

Williams, J.M.G., Chan, S., Crane, C., Barnhofer, T., Eade, J., & Healy, H. (2006). Retrieval of autobiographical memories: The mechanisms and consequences of truncated search. *Cognition and Emotion, 20*, 351-382.

Williams, J.M.G., & Dritschel, B.H. (1988). Emotional disturbance and the specificity of autobiographical memory. *Cognition and Emotion, 2*, 221-234.

Williams, J.M.G., & Dritschel, B.H. (1992). Categoric and extended autobiographical memories. In M.A. Conway, D.C. Rubin, H. Spinnler, and W.A. Wagenaar (Eds.), *Theoretical Perspectives on Autobiographical Memory*, (pp. 391-410). Netherlands: Kluwer Academic Publishers.

Williams, J.M.G., & Scott, J. (1988). Autobiographical memory in depression. *Psychological Medicine, 18*, 689-695.

Williams, J.M.G., Teasdale, J.D., Segal, Z.V., & Soulsby, J. (2000). Mindfulness-based cognitive therapy reduces overgeneral autobiographical memory in formerly depressed patients. *Journal of Abnormal Psychology, 109*, 150-155.

Woike, B.A. (1994a). The use of differentiation and integration processes: Empirical studies of "separate" and "connected" ways of thinking. *Journal of Personality and Social Psychology, 67*, 142-150.

Woike, B.A. (1994b). Vivid recollection as a technique to arouse implicit motive-related affect. *Motivation and Emotion, 18*, 335-349.

Woike, B.A. (1995). Most-memorable experiences: Evidence of a link between implicit and explicit motives and social cognitive processes in everyday life. *Journal of Personality and Social Psychology, 68*, 1081-1091.

Woike, B., Gerschkovich, I., Piorkowski, R., & Polo, M. (1999). The role of motives in the content and structure of autobiographical memory. *Journal of Personality and Social Psychology, 76*, 600-612.

Woike, B., Lavezzary, E., & Barsky, J. (2001). The influence of implicit motives on memory processes. *Journal of Personality and Social Psychology, 81*, 935-945.

Woike, B., & Polo, M. (2001). Motive-related memories: Content, structure and affect. *Journal of Personality, 69*, 391-415.

Wood, W.J., & Conway, M. (2006). Subjective impact, meaning making, and current and recalled emotions for self-defining memories. *Journal of Personality, 74*, 811-845.

World Health Organisation, (2002). *The World Health Report 2002: Reducing Risks, Promoting Healthy Life.* World Health Organisation, Geneva, Switzerland.

Wortman, C.B. (2004). Posttraumatic growth: Progress and problems. *Psychological Inquiry, 15*, 81-90.

Young, J.E., Klosko, J.S., & Weishaar, M.E. (2003). Schema Therapy: A Practitioners Guide. New York: The Guilford Press.

Zettle, R.D., Haflich, J.L., & Reynolds, R.A. (1992). Responsivity to cognitive therapy as a function of treatment format and client personality dimensions. *Journal of Clinical Psychology, 48*, 787-797.

Zettle, R.D., & Herring, E.L. (1995). Treatment utility of the sociotropy/autonomy distinction: Implications for cognitive therapy. *Journal of Clinical Psychology, 51*, 280-289.

Zhang, T., Ramakrishnon, R., & Livny, M. (1996). BIRCH: An efficient clustering method for very large databases. In: *Proceeding of the ACM SIGMOD Conference on Management of Data*. Canada: ACM.

Zimmerman, M. (1986). The stability of the revised Beck Depression Inventory in college students: Relationship with life events. *Cognitive Therapy and Research, 10*, 37-43.

Zimmerman, M., & Coryell, W. (1987). The inventory to diagnose depression, lifetime version. *Acta Psychiatrica Scand, 75*, 495-499.

Zuroff, D.C. (1994). Depressive personality styles and the five-factor model of personality. *Journal of Personality Assessment, 63*, 453-472.

Zuroff, D.C., Blatt, S.J., Sanislow III, C.A., Bondi, C.M., & Pilkonis, P.A. (1999). Vulnerability to depression: Reexamining the state dependence and relative stability. *Journal of Abnormal Psychology, 108*, 76-89.

Zuroff, D.C., Igreja, I., & Mongrain, M. (1990). Dysfunctional attitudes, dependency and self-criticism as predictors of depressive mood states: A twelve month longitudinal study. *Cognitive Therapy and Research, 14*, 315-326.

Zuroff, D.C., & Mongrain, M. (1987). Dependency and self-criticism: Vulnerabilities for depressive affective states. *Journal of Abnormal Psychology, 96*, 14-22.

Zuroff, D.C., Mongrain, M., & Santor, D.A. (2004). Conceptualizing and measuring personality variables to depression: Comment on Coyne and Whiffen (1995). *Psychological Bulletin, 130*, 489-511.

CONFIDENTIAL

SWINBURNE UNIVERSITY OF TECHNOLOGY
SCHOOL OF SOCIAL AND BEHAVIOURAL SCIENCES

Thank you for your interest in this project. My name is Tanya Harkness and I am studying the Professional Doctorate (Counselling Psychology). The aim of this project is to look at how emotions affect our lives. The major research question to be addressed will be: How do emotions affect our personal memories?

This questionnaire should take approximately 45-60 minutes. Please set aside this amount of time so that you will not be rushed or interrupted. It is important to answer this questionnaire in one complete sitting.

While the questionnaire may appear bulky, it has been specially laid out so as to highlight the different sections and should not take too long to complete. The first section of the questionnaire involves recalling significant memories. You will be asked to recall and write down six memories that are important to you. These memories may range from a few sentences to a couple of paragraphs, however, the more you write the better. The second section of the questionnaire consists of various statements that require you to either (a) circle the appropriate number, or (b) indicate to what degree the statement is true of you. Please answer all the questions yourself. Your initial reactions will probably be the best. Remember that there are no right or wrong answers.

Upon completion of the questionnaire please place it in the envelope provided. Non-Swinburne participants should then post the questionnaire in the reply paid envelope provided. Swinburne students should deposit the questionnaire in the pigeon hole on the 7th floor of the BA Building marked "how emotions affect our lives". This questionnaire will be opened with about 100 other questionnaires. All information given will be confidential. It is intended that the data from this study will be reported in scientific journals. However, all numeric data will be presented in group form, and no identifying information will be presented. You are free to withdraw from this project at any stage.

I would greatly appreciate your participation in this project. Please feel free to contact me if you need any further information or guidance on (03) 9836 8117, or my supervisor Dr Glen Bates on (03) 9214 8100.

THANK YOU FOR YOUR TIME AND ASSISTANCE. PLEASE COMPLETE THE DETAILS BELOW AND THEN TURN TO THE NEXT PAGE AND BEGIN. PLEASE ENSURE THAT YOU RESPOND TO EACH ITEM ON EACH PAGE.

Sex: ……..

Age: …… years

SECTION ONE

Detailed below is the definition of the type of memory we would like you to recall. Please read this carefully before writing down the six memories as requested. If you do not understand these instructions, please contact me on the phone number listed on the previous page and I will be more than happy to clarify the details for you.

Your recalled memory should have the following attributes:

1. It is at least one year old.
2. It is a memory from your life that you remember very clearly and still feels important to you even as you think about it.
3. It is a memory that helps you understand who you are as an individual and might be the memory that you would tell someone else if you wanted that person to understand you in a more profound way.
4. It is a memory that leads to strong feelings.
5. It is a memory that you have thought about many times. It should be familiar to you like a picture you have studied or a song you have learned by heart.

Recall and write down your peak experience.

Your recalled memory should have the following attributes:

1. It is at least one year old.
2. It is a memory from your life that you remember very clearly and still feels important to you even as you think about it.
3. It is a memory that helps you understand who you are as an individual and might be the memory that you would tell someone else if you wanted that person to understand you in a more profound way.
4. It is a memory that leads to strong feelings.
5. It is a memory that you have thought about many times. It should be familiar to you like a picture you have studied or a song you have learned by heart.

Recall and write down your "turning point" experience (an event in which you believe you underwent a significant life transition or personality change).

Your recalled memory should have the following attributes:

1. It is at least one year old.
2. It is a memory from your life that you remember very clearly and still feels important to you even as you think about it.
3. It is a memory that helps you understand who you are as an individual and might be the memory that you would tell someone else if you wanted that person to understand you in a more profound way.
4. It is a memory that leads to strong feelings.
5. It is a memory that you have thought about many times. It should be familiar to you like a picture you have studied or a song you have learned by heart.

Recall and write down a significant and memorable event from childhood.

Your recalled memory should have the following attributes:

1. It is at least one year old.
2. It is a memory from your life that you remember very clearly and still feels important to you even as you think about it.
3. It is a memory that helps you understand who you are as an individual and might be the memory that you would tell someone else if you wanted that person to understand you in a more profound way.
4. It is a memory that leads to strong feelings.
5. It is a memory that you have thought about many times. It should be familiar to you like a picture you have studied or a song you have learned by heart.

Recall and write down a significant and memorable event from adolescence.

Your recalled memory should have the following attributes:

1. It is at least one year old.
2. It is a memory from your life that you remember very clearly and still feels important to you even as you think about it.
3. It is a memory that helps you understand who you are as an individual and might be the memory that you would tell someone else if you wanted that person to understand you in a more profound way.
4. It is a memory that leads to strong feelings.
5. It is a memory that you have thought about many times. It should be familiar to you like a picture you have studied or a song you have learned by heart.

Recall and write down a significant and memorable event from adulthood.

Your recalled memory should have the following attributes:

1. It is at least one year old.
2. It is a memory from your life that you remember very clearly and still feels important to you even as you think about it.
3. It is a memory that helps you understand who you are as an individual and might be the memory that you would tell someone else if you wanted that person to understand you in a more profound way.
4. It is a memory that leads to strong feelings.
5. It is a memory that you have thought about many times. It should be familiar to you like a picture you have studied or a song you have learned by heart.

Recall and write down a nadir experience or low point in your life story.

SECTION TWO

ATT SCALE

1) Following are descriptions of four general relationship styles that people often report. Please read each description and CIRCLE the letter corresponding to the style that *best* describes you or is *closest* to the way that you generally are in your close relationships.

A. It is easy for me to become emotionally close to others. I am comfortable depending on them and having them depend on me. I don't worry about being alone or having others not accept me.

B. I am uncomfortable getting close to others. I want emotionally close relationships, but I find it difficult to trust others completely, or to depend on them. I worry that I will be hurt if I allow myself to become too close to others.

C. I want to be completely emotionally intimate with others, but I often find that others are reluctant to get as close as I would like. I am uncomfortable being without close relationships, but I sometimes worry that others don't value me as much as I value them.

D. I am uncomfortable with close emotional relationships. It is very important for me to feel independent and self-sufficient, and I prefer not to depend on others or have other depend on me.

2) Please rate each of the following relationship styles according to the *extent* to which you think each description corresponds to your general relationship style.

A. It is easy for me to become emotionally close to others. I am comfortable depending on them and having them depend on me. I don't worry about being alone or having others not accept me.

B. I am uncomfortable getting close to others. I want emotionally close relationships, but I find it difficult to trust others completely, or to depend on them. I worry that I will be hurt if I allow myself to become too close to others.

C. I want to be completely emotionally intimate with others, but I often find that others are reluctant to get as close as I would like. I am uncomfortable being without close relationships, but I sometimes worry that others don't value me as much as I value them.

D. I am uncomfortable with close emotional relationships. It is very important for me to feel independent and self-sufficient, and I prefer not to depend on others or have other depend on me.

	Not at all like me			Somewhat like me			Very much like me
Style A	1	2	3	4	5	6	7
Style B	1	2	3	4	5	6	7
Style C	1	2	3	4	5	6	7
Style D	1	2	3	4	5	6	7

PSI SCALE

Here area number of statements about personality characteristics. Please read each one carefully, and indicate whether you agree or disagree, and to what extent, by circling a number.

		Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
1.	I often put other people's needs before my own.	1	2	3	4	5	6
2.	I tend to keep other people at a distance.	1	2	3	4	5	6
3.	I find it difficult to be separated from people I love.	1	2	3	4	5	6
4.	I am easily bothered by other people making demands of me.	1	2	3	4	5	6
5.	I am very sensitive to the effects I have on the feelings of other people.	1	2	3	4	5	6
6.	I don't like relying on others for help.	1	2	3	4	5	6
7.	I am very sensitive to criticism by others.	1	2	3	4	5	6
8.	It bothers me when I feel that I am only average and ordinary.	1	2	3	4	5	6
9.	I worry a lot about hurting or offending other people.	1	2	3	4	5	6
10.	When I'm feeling blue, I don't like to be offered sympathy.	1	2	3	4	5	6
11.	It is hard for me to break off a relationship even if it is making me unhappy.	1	2	3	4	5	6
12.	In relationships, people are often too demanding of one another.	1	2	3	4	5	6

		Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
13.	I am easily persuaded by others.	1	2	3	4	5	6
14.	I usually view my performance as either a complete success or a complete failure.	1	2	3	4	5	6
15.	I try to please other people too much.	1	2	3	4	5	6
16.	I don't like people to invade my privacy.	1	2	3	4	5	6
17.	I find it difficult if I have to be alone all day.	1	2	3	4	5	6
18.	It is hard for me to take instructions from people who have authority over me.	1	2	3	4	5	6
19.	I often feel responsible for solving other people's problems.	1	2	3	4	5	6
20.	I often handle big decisions without telling anyone else about them.	1	2	3	4	5	6
21.	It is very hard for me to get over the feeling of loss when a relationship has ended.	1	2	3	4	5	6
22.	It is hard for me to have someone dependent on me.	1	2	3	4	5	6
23.	It is very important to me to be liked or admired by others.	1	2	3	4	5	6
24.	I feel badly about myself when I'm not actively accomplishing things.	1	2	3	4	5	6
25.	I feel I have to be nice to other people.	1	2	3	4	5	6
26.	It is hard for me to express admiration or affection.	1	2	3	4	5	6

		Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
27.	I like to be certain that there is somebody close I can contact in case something unpleasant happens to me.	1	2	3	4	5	6
28.	It is difficult got me to make a long-term commitment to a relationship.	1	2	3	4	5	6
29.	I am too apologetic to other people.	1	2	3	4	5	6
30.	It is hard for me to open up and talk about my feelings and other personal things.	1	2	3	4	5	6
31.	I am very concerned with how people react to me.	1	2	3	4	5	6
32.	I have a hard time forgiving myself when I feel I haven't worked up to my potential.	1	2	3	4	5	6
33.	I get very uncomfortable when I'm not sure whether or not someone likes me.	1	2	3	4	5	6
34.	When making a big decision, I usually feel that advice from others is intrusive.	1	2	3	4	5	6
35.	It is hard for me to say "no" to other people's requests.	1	2	3	4	5	6
36.	I resent it when people try to direct my behaviour or activities.	1	2	3	4	5	6
37.	I become upset when something happens to me and there's nobody around to talk to.	1	2	3	4	5	6
38.	Personal questions from others usually feel like an invasion of my privacy.	1	2	3	4	5	6

		Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
39.	I am most comfortable when I know my behaviour is what others expect of me.	1	2	3	4	5	6
40.	I am very upset when other people or circumstances interfere with my plans.	1	2	3	4	5	6
41.	I often let people take advantage of me.	1	2	3	4	5	6
42.	I rarely trust the advice of others when making a big decision.	1	2	3	4	5	6
43.	I become very upset when a friend breaks a date or forgets to call me as planned.	1	2	3	4	5	6
44.	I become upset more than most people I know when limits are placed on my personal independence and freedom. 5 6	1	2	3	4	5	6
45.	I judge myself based on how I think others feel about me.	1	2	3	4	5	6
46.	I become upset when others try to influence my thinking on a problem.	1	2	3	4	5	6
47.	It is hard for me to let people know when I am angry with them.	1	2	3	4	5	6
48.	I feel controlled when others have a say in my plans.	1	2	3	4	5	6

IDDL SCALE

1. On this questionnaire are groups of five statements.
2. Read each group of statements carefully. Then **pick out the one statement in each group that best describes the way you felt during the week in your life that you felt the most depressed**. Circle the number next to the statement you picked.
3. For every group in which you circled #1, 2, 3 or 4 answer the follow-up question as to whether you felt that way for more or less than two weeks.

1	0	I did not feel sad or depressed.
	1	I occasionally felt sad or depressed.
	2	I felt sad most the time, but I could snap out of it.
	3	I felt sad all the time, and I couldn't snap out of it.
	4	I was so sad or unhappy that I couldn't stand it.

If you circled #1, 2, 3 or 4:
Did you feel sad or depressed for more or less than two weeks?
more *less*

2	0	My energy level was normal.
	1	My energy level was occasionally a little lower than normal.
	2	I got tired more easily or had less energy than usual.
	3	I got tired from doing almost anything.
	4	I felt tired or exhausted almost all of the time.

If you circled #1, 2, 3 or 4:
Was your energy level lower than usual for more or less than two weeks? *more* *less*

3	0	I did not feel more restless and fidgety than usual.
	1	I felt a little more restless or fidgety than usual.
	2	I was very fidgety, and I had some difficulty sitting still in a chair.
	3	I was extremely fidgety, and I was pacing a little bit almost every day.
	4	I was pacing more than an hour per day, and I couldn't sit still.

If you circled #1, 2, 3 or 4:
Did you feel restless and fidgety for more or less than two weeks?
more *less*

4	0	I was not talking or moving more slowly than usual.
	1	I was talking a little slower than usual.
	2	I was speaking slower than usual, and it took me longer to respond to questions, but I could still carry on a normal conversation.
	3	Normal conversations were difficult because it was hard to start talking.
	4	I felt extremely slowed down physically, like I was stuck in mud.

If you circled #1, 2, 3 or 4:
Did you feel slowed down for more or less than two weeks?
more *less*

5	0	I did not lose interest in my usual activities.
	1	I was a little less interested in 1 or 2 of my usual activities.
	2	I was less interested in several of my usual activities.
	3	I had lost most of my interest in almost all of my usual activities.
	4	I had lost all interest in all of my usual activities.

If you circled #1, 2, 3 or 4:
Was your interest in your usual activities low for more or less than two weeks? *more* *less*

6	0	I got as much pleasure out my usual activities as usual.
	1	I got a little pleasure from 1 or 2 of my usual activities.
	2	I got less pleasure from several of my usual activities.
	3	I got almost no pleasure from most of the activities which I usually enjoyed.
	4	I got no pleasure from any of the activities which I usually enjoyed.

If you circled #1, 2, 3 or 4:
Was your enjoyment in your activities low for more or less than two weeks? *more* *less*

7	0	I did not notice any change in my interest in sex.
	1	I was only slightly less interested in sex than usual.
	2	There was a noticeable decrease in my interest in sex.
	3	I was much less interested in sex.
	4	I had lost all interest in sex.

If you circled #1, 2, 3 or 4:
Was your interest in sex low for more or less than two weeks?
more *less*

8	0	I did not feel guilty.
	1	I occasionally felt a little guilty.
	2	I often felt guilty.
	3	I felt quite guilty most of the time.
	4	I felt extremely guilty most of the time.

If you circled #1, 2, 3 or 4:
Did you have guilt feelings for more or less than two weeks?
more *less*

9	0	I did not feel like a failure.
	1	My opinion of myself was occasionally a little low.
	2	I felt I was inferior to most people.
	3	I felt like a failure.
	4	I felt like I was a totally worthless person.

If you circled #1, 2, 3 or 4:
Were you down on yourself for more or less than two weeks?
more *less*

10	0	I didn't have any thoughts of death or suicide.
	1	I occasionally thought life was not worth living.
	2	I frequently thought of dying in passive ways (such as going to sleep and not waking up), or that I'd be better off dead.
	3	I had frequent thought of killing myself, but I would not have carried them out.
	4	I would have killed myself if I had had the chance.

If you circled #1, 2, 3 or 4:
Were you thinking about dying or killing yourself for more or less than two weeks? *more* *less*

11	0	I was able to concentrate as well as usual.
	1	My ability to concentrate was slightly worse than usual.
	2	My attention span was not as good as usual and I was having difficulty collecting my thoughts, but this did not cause any problems.
	3	My ability to read and to hold a conversation was not as good as it usually is.
	4	I could not read, watch TV or have a conversation without great difficulty.

If you circled #1, 2, 3 or 4:
Did you have problems concentrating for more or less than two weeks? *more* *less*

12	0	I made decisions as well as I normally do.
	1	Decision making was slightly more difficult than usual.
	2	It was harder and took longer to make decision, but I did make them.
	3	I was unable to make some decisions.
	4	I couldn't make any decisions at all.

If you circled #1, 2, 3 or 4:
Did you have problems making decisions for more or less than two weeks? *more* *less*

13	0	My appetite was not less than normal.
	1	My appetite was slightly worse than usual.
	2	My appetite was clearly not as good as usual, but I still ate.
	3	My appetite was much worse.
	4	I had no appetite at all, and I had to force myself to eat even a little.

If you circled #1, 2, 3 or 4:
Did your appetite decrease for more or less than two weeks?
more *less*

14	0	I didn't lose any weight.
	1	I lost less than 2 kilograms (5 pounds).
	2	I lost between 2-5 kilograms (5-10 pounds).
	3	I lost between 5-11 kilograms (11-25 pounds).
	4	I lost more than 11 kilograms (25 pounds).

If you circled #1, 2, 3 or 4:
Were you dieting and deliberately trying to lose weight? *yes* *no*

If you circled #1, 2, 3 or 4:
Did you lose weight for more or less than two weeks?
more *less*

15	0	My appetite was not greater than normal.
	1	My appetite was slightly greater than usual.
	2	My appetite was clearly greater than usual.
	3	My appetite was much greater than usual.
	4	I felt hungry all the time.

If you circled #1, 2, 3 or 4:
Did your appetite increase for more or less than two weeks?
more *less*

16 0 I didn't gain any weight.
1 I gained less than 2 kilograms (5 pounds).
2 I gained between 2-5 kilograms (5-10 pounds).
3 I gained between 5-11 kilograms (11-25 pounds).
4 I gained more than 11 kilograms (25 pounds).

If you circled #1, 2, 3 or 4:
Did you gain weight for more or less than two weeks?
more *less*

17 0 I was not sleeping less than normal.
1 I occasionally had slight difficulty sleeping.
2 I clearly didn't sleep as well as usual.
3 I slept about half my normal amount of time.
4 I slept less than two hours per night.

If you circled #1, 2, 3 or 4: Which of these sleep problems did you experience? (circle all which applied)
1. I had difficulty falling asleep.
2. My sleep was fitful and restless in the middle of the night.
3. I woke up earlier than usual and could not fall back to sleep.

If you circled #1, 2, 3 or 4:
Did you have sleep problems for more or less than two weeks?
more *less*

18 0 I was not sleeping more than normal.
1 I occasionally slept more than usual.
2 I frequently slept at least one hour more than usual.
3 I frequently slept at least two hours more than usual.
4 I frequently slept at least three hours more than usual.

If you circled #1, 2, 3 or 4:
Did you sleep extra for more or less than two weeks?
more *less*

19 0 I did not feel anxious, nervous or tense.
1 I occasionally felt a little anxious.
2 I often felt anxious.
3 I felt very anxious most of the time.
4 I felt very terrified and was near panic.

If you circled #1, 2, 3 or 4:
Did you feel anxious, nervous or tense for more or less than two weeks? *more* *less*

20	0	I did not feel discouraged about the future.
	1	I occasionally felt a little discouraged about the future.
	2	I often felt discouraged about the future.
	3	I felt very discouraged about the future most of the time.
	4	I felt that the future was hopeless and that things would never improve.

If you circled #1, 2, 3 or 4:
Did you feel discouraged for more or less than two weeks?
more *less*

21	0	I did not feel irritated or annoyed.
	1	I occasionally got a little more irritated than usual.
	2	I felt irritated or annoyed by things that usually don't bother me.
	3	I felt irritated or annoyed almost all of the time.
	4	I felt so depressed that I did not get irritated at all by the things that used to bother me.

If you circled #1, 2, 3 or 4:
Did you feel more irritable than usual for more or less than two weeks?
more *less*

22	0	I was not worried about my physical health.
	1	I was not occasionally concerned about bodily aches and pains.
	2	I was worried about my physical health.
	3	I was very worried about my physical health.
	4	I was so worried about my physical health that I could not think of anything else.

If you circled #1, 2, 3 or 4:
Were you worried about your physical health for more or less than two weeks? *more* *less*

BDI-II SCALE

This questionnaire consists of 21 groups of statements. Please read each group of statements carefully and then pick out the **one statement** in each group that best describes the way you have been feeling during the **past two weeks, including today**. Circle the number beside the statement you have picked. If several statements in the group seem to apply equally well, circle the highest number for that group. Be sure that you do not choose more than one statement for any group, including Item 16 (Changes in Sleeping Pattern) or Item 18 (Changes in Appetite).

1. Sadness

0 I do not feel sad.
1 I feel sad much of the time.
2 I am sad all the time.
3 I am so sad or unhappy that I can't stand it.

2. Pessimism

0 I am not discouraged about my future.
1 I feel more discouraged about my future than I used to be.
2 I do not expect things to work out for me.
3 I feel my future is hopeless and will only get worse.

3. Past Failure

0 I do not feel like a failure.
1 I have failed more than I should have.
2 As I look back, I see a lot of failures.
3 I feel I am a total failure as a person.

4. Loss of Pleasure

0 I get as much pleasure as I ever did from the things I enjoy.
1 I don't enjoy things as much as I used to.
2 I get very little pleasure from the things I used to enjoy.
3 I can't get any pleasure from the things I used to enjoy.

5. Guilty Feelings

0 I don't feel particularly guilty.
1 I feel guilty over many things I have done or should have done.
2 I feel quite guilty most of the time.
3 I feel guilty all of the time.

6. Punishment Feelings

0 I don't feel I am being punished.
1 I feel I may be punished.
2 I expect to be punished.
3 I feel I am being punished.

7. Self-Dislike

0 I feel the same about myself as ever.
1 I have lost confidence in myself.
2 I am disappointed in myself.
3 I dislike myself.

8. Self-Criticalness

0 I don't criticise or blame myself more than usual.
1 I am more critical of myself than I used to be.
2 I criticise myself for all of my faults.
3 I blame myself for everything bad that happens.

9. Suicidal Thoughts or Wishes

0 I don't have any thoughts of killing myself.
1 I have thoughts of killing myself, but I would not carry them out.
2 I would like to kill myself.
3 I would kill myself if I had the chance.

10. Crying

0 I don't cry any more than I used to.
1 I cry more than I used to.
2 I cry over every little thing.
3 I feel like crying, but I can't.

11. Agitation

0 I am no more restless or wound up than usual.
1 I feel more restless or wound up than usual.
2 I am so restless or agitated that it's hard to stay still.
3 I am so restless or agitated that I have to keep moving or doing something.

12. Loss of Interest

0 I have not lost interest in other people or activities.
1 I am less interested in other people or things than before.
2 I have lost most of my interest in other people or things.
3 It's hard to get interested in anything.

13. Indecisiveness

0 I make decisions about as well as ever.
1 I find it more difficult to make decisions than usual.
2 I have much greater difficulty in making decisions than I used to.
3 I have trouble making any decisions.

14. Worthlessness

0 I do not feel I am worthless.
1 I don't consider myself as worthwhile and useful as I used to.
2 I feel more worthless as compared to other people.
3 I feel utterly worthless.

15. Loss of Energy

0	I have as much energy as ever.
1	I have less energy than I used to have.
2	I don't have enough energy to do very much.
3	I don't have enough energy to do anything.

16. Changes in Sleeping Pattern

0	I have not experienced any change in my sleeping pattern.
1a	I sleep somewhat more than usual.
1b	I sleep somewhat less than usual.
2a	I sleep a lot more than usual.
2b	I sleep a lot less than usual.
3a	I sleep most of the day.
3b	I wake up 1-2 hours early and can't get back to sleep.

17. Irritability

0	I am no more irritable than usual.
1	I am more irritable than usual.
2	I am much more irritable than usual.
3	I am irritable all the time.

18. Changes in Appetite

0	I have not experienced any change in my appetite.
1a	My appetite is somewhat less than usual.
1b	My appetite is somewhat greater than usual.
2a	My appetite is much less than before.
2b	My appetite is much greater than usual.
3a	I have no appetite at all.
3b	I crave food all the time

19. Concentration Difficulty

0	I can concentrate as well as ever.
1	I can't concentrate as well as usual.
2	It's very hard to keep my mind on anything for very long.
3	I find I can't concentrate on anything.

20. Tiredness of Fatigue

0	I no more tired or fatigued than usual.
1	I get more tired or fatigued more easily than usual.
2	I am too tired or fatigued to do a lot of the things I used to do.
3	I am too tired or fatigued to do most of the things I used to do.

21. Loss of Interest in Sex

0	I have not noticed any recent change in my interest in sex.
1	I am less interested in sex than I used to be.
2	I am much less interested in sex now.
3	I have lost interest in sex completely.

RATINGS OF MEMORIES

Below are some questions concerning the memories you recalled in Section 1. For each memory recalled, please note down the approximate date of the memory and then carefully select one of the numbers below which indicates the extent to which the statement is true of you.

Memory 1

"Recall and write down a peak experience"

a) When approximately did this memory occur? …….

b) How clearly do you recall the memory? (circle one number)

not at all clear					extremely clear
1	2	3	4	5	6

c) How intensely do you recall the memory? (circle one number)

not at all intense					extremely intense
1	2	3	4	5	6

d) How important was this memory in your life? (circle one number)

not at all important					extremely important
1	2	3	4	5	6

e) How satisfactorily was this issue resolved? (circle one number)

not at all satisfactorily					extremely satisfactorily
1	2	3	4	5	6

Memory 2

"Recall and write down a "turning point" experience.

a) When approximately did this memory occur? …….

b) How clearly do you recall the memory? (circle one number)

not at all clear					extremely clear
1	2	3	4	5	6

c) How intensely do you recall the memory? (circle one number)

not at all intense					extremely intense
1	2	3	4	5	6

d) How important was this memory in your life? (circle one number)

not at all important					extremely important
1	2	3	4	5	6

e) How satisfactorily was this issue resolved? (circle one number)

not at all satisfactorily					extremely satisfactorily
1	2	3	4	5	6

Memory 3

"Recall and write down a significant and memorable event from childhood."

a) When approximately did this memory occur? …….

b) How clearly do you recall the memory? (circle one number)

not at all clear					extremely clear
1	2	3	4	5	6

c) How intensely do you recall the memory? (circle one number)

not at all intense					extremely intense
1	2	3	4	5	6

d) How important was this memory in your life? (circle one number)

not at all important					extremely important
1	2	3	4	5	6

e) How satisfactorily was this issue resolved? (circle one number)

not at all satisfactorily					extremely satisfactorily
1	2	3	4	5	6

Memory 4

"Recall and write down a significant and memorable event from adolescence."

a) When approximately did this memory occur? …….

b) How clearly do you recall the memory? (circle one number)

not at all clear — extremely clear

1 2 3 4 5 6

c) How intensely do you recall the memory? (circle one number)

not at all intense — extremely intense

1 2 3 4 5 6

d) How important was this memory in your life? (circle one number)

not at all important — extremely important

1 2 3 4 5 6

e) How satisfactorily was this issue resolved? (circle one number)

not at all satisfactorily — extremely satisfactorily

1 2 3 4 5 6

Memory 5

"Recall and write down a significant and memorable event from adulthood."

a) When approximately did this memory occur? …….

b) How clearly do you recall the memory? (circle one number)

not at all clear — extremely clear

1 2 3 4 5 6

c) How intensely do you recall the memory? (circle one number)

not at all intense — extremely intense

1 2 3 4 5 6

d) How important was this memory in your life? (circle one number)

not at all important — extremely important

1 2 3 4 5 6

e) How satisfactorily was this issue resolved? (circle one number)

not at all satisfactorily — extremely satisfactorily

1 2 3 4 5 6

Memory 6

"Recall and write down a nadir experience or low point in your life story."

a) When approximately did this memory occur? …….

b) How clearly do you recall the memory? (circle one number)

not at all clear					extremely clear
1	2	3	4	5	6

c) How intensely do you recall the memory? (circle one number)

not at all intense					extremely intense
1	2	3	4	5	6

d) How important was this memory in your life? (circle one number)

not at all important					extremely important
1	2	3	4	5	6

e) How satisfactorily was this issue resolved? (circle one number)

not at all satisfactorily					extremely satisfactorily
1	2	3	4	5	6

IMPORTANT - PLEASE READ

Please keep in mind that while you have participated in this exercise you have raised a number of personal issues. Writing down these issues has hopefully added to your level of self-understanding. However it is sometimes the case that recalling personal memories will raise some "unfinished business" for you. If this is the case please make sure that you do not ignore this reaction. It may be helpful to discuss any reaction you had with a friend or a professional person as a form of debriefing. Certainly if you have any ongoing concerns about the questionnaire or you have any other thoughts or questions, please do not hesitate to call Tanya Harkness, the thesis author, on 0419 002 661, or Dr Glen Bates, my supervisor, on 9214 8100 to discuss them.

✂ ……

Please complete the details below if you would like to receive a brief summary of the results once all data has been analysed. You may send this with the questionnaire, or may mail it separately if you wish to maintain confidentiality to: Tanya Harkness Doctoral Thesis, c/- Dr Glen Bates, Swinburne University of Technology, PO Box 218, Hawthorn 3122.

Name: …….

Address: ……

Appendix A.2 Coding Instructions for Memory Specificity and Integration

Classification System and Scoring Manual

for Self-defining Autobiographical Memories

Jefferson A. Singer and Pavel S. Blagov

Connecticut College

2000 - 2001

Please address any inquiries to Jefferson A. Singer, Ph.D., Professor of Psychology, Department of Psychology, Connecticut College, New London, CT 06320

Email: jasin@conncoll.edu

Developing the System

Pilot study

The development of the current Self-Defining Memory Scoring System began as an attempt to locate Pillemer's (1998) types of personal event memories within the existing scoring system for the specificity of self-defining memory narratives by Singer and Moffitt (1991-1992). In the summer of 1999, four raters (one psychologist and three undergraduate students) tried to sort over 200 archival self-defining memories into categories based on the specificity (i.e., single-events, episodes, and generic memories; Singer & Moffitt, 1991-1992) an implied function (e.g., originating event, turning point, memorable message, and symbolic message; Pillemer, 1998). It turned out to be difficult for the raters to agree upon the defining characteristics of the different functional types, and the following conclusions were reached:

(1) The specificity categories are largely independent from the implied function of the memories or the lessons contained in them. For example, both specific and generalized narratives could contain messages about learned lessons about the self.

(2) More often than not, it was not possible to differentiate between originating events and turning points, even though a number of criteria based on the use of language by participants had been created.

(3) Instead of trying to distinguish between messages communicated by others (memorable messages) or implied lessons (symbolic messages) it would be more practical to distinguish between memories that contain explicit lessons about the self, others, or the world and memories that do not contain such lessons.

Participants

The sample (N = 104) consisted of 80 women and 24 men (ages 17 - 22) from a small U.S. liberal arts college who volunteered for credit toward an undergraduate psychology course. All participants wrote down 10 self-defining memories using the Self-defining Memory Task (page 30) and completed a personality inventory as part of a larger study.

Refinement

Based on the failed attempt to validate Pillemer's (1998) personal event memory types, Singer and Blagov (2000) proposed a scoring system with two separate dimensions. The dimension of structure corresponds to the specificity and temporal organization of the narratives, and meaning is the degree to which participants derive lessons from the memories and integrate them into the self-system. This initial system was tested on undergraduate raters who were trained and scored 500 memories over a 4-month period in 2000-2001. Only fair reliabilities (Cohen's κ = .4 - .5; Cohen, 1960) were attained, and subsequent clarification and revision of the manual took place, based on these raters' suggestions and the authors' observations.

Establishing reliability

The revised manual was then tested in the summer of 2001 by recruiting a new graduate student rater, blind to hypotheses, who was trained by the authors of the scoring system. The independent rater was trained using self-defining memories from the current sample, selected to represent both clear and difficult examples of all categories. The criteria were explained and examples from each category were presented to the trainee

in initial training sessions. He was asked to rate 50 memories overnight, and differences with the other two raters were discussed, followed by rating 50 new memories. Training and reliability rating were done separately for structure and meaning. For establishing interrater reliability, all three raters scored 200 memories for structure. One of the authors of the system and the independent rater scored 245 memories for meaning. Self-defining memories that had not been used for training were selected randomly from the sample pool. Percent agreement and Cohen's κ (Cohen, 1960) were calculated (see Table 1 on p. 33). Cohen's κ ranged from 0.54 - 0.98. Highest reliability was found when scoring for two levels of structure (specific events vs. episodic & generic, κ = 0.80 - 0.98) and two levels of meaning (integrative vs. non-integrative, κ = 0.70). Out of 200 memories, 83.5 % were specific and 16.5 % were non-specific; out of 245 memories, 23.7 % were integrative (Blagov, Singer, & Vergnani, 2001). The percentages for structure were quite comparable to the original percentages of 78% specific and 22% summary, found by Singer and Moffitt (1991-92), providing some validation for the current scoring criteria.

Further Support

The entire sample of 1040 self-defining memories from the current sample was scored for structure and meaning in parallel by the two authors of the system, using its updated version. After scoring the memories from every 20 participants, interrater reliability was calculated and disagreements were discussed and settled between the two raters. Agreed-upon scorings were used in later analyses. In order to reduce biases in scoring that could ensue from the raters' recognizing the styles of different participants, the transcripts were mixed so that the each participant's memories were maximally dispersed in each pool of 200. The overall Cohen's κ were .828 for two levels of structure and .718 for meaning as shown in Table 2 (p. 33).

References

Blagov, P. S., Singer, J. A., & Vergnani, M. (2002, March). *Structure and meaning in autobiographical memories: A reliable scoring system.* Poster presented at the meeting of the Eastern Psychological Association, Boston, MA.

Cohen, J. (1960). A coefficient of agreement for nominal scales. *Educational & Psychological Measurement, 20,* 37 - 46.

Pillemer, D. B. (1998). *Momentous events, vivid memories.* Cambridge, MA: Harvard University Press.

Singer, J. A., & Blagov, P. S. (2000, June). *Classification system and scoring manual for self-defining autobiographical memories.* Paper presented at the meeting of the Society for Applied Research on Memory and Cognition, Miami Beach, FL.

Singer, J. A., & Moffitt, K. H. (1991-1992). An experimental investigation of specificity and generality in memory narratives. *Imagination, Cognition & Personality, 11,* 233-257.

Singer, J. A., & Salovey, P. (1993). *The remembered self: Emotion and memory in personality.* New York, NY: Free Press.

Level 1: Structure and Specificity of the Memory Narrative

Specific memory narratives

A specific memory narrative has at least one single-event statement. A single-event statement is a sentence in which the attention of the rememberer is clearly focused upon a happening that meets the following criteria:

1. It is a unique occurrence;
2. It has brief duration of less than one day.

Criterion 1: Unique occurrence.

This means that the rememberer's attention is focused on something that happened on a particular day that could possibly be identified by its date and time.

Criterion 2: Brief duration.

It is clear from the narrative that the single-event statement concerns the happenings of less than one day, or, in some cases, a night and the following morning (i.e., the action of the single-event statement is encapsulated within a 24 hour period). The brevity of the happening also means that it is perceived as an uninterrupted unity.

Note on Speech in the Narrative:

The quoting or paraphrasing of speech or dialogue is always considered a single-event statement when it is clear from the narrative that the focus is on a particular instance of speaking. This should not be confused with memories in which the person remembers, without focusing his or her attention on a particular instance, hearing somebody say the same thing over and over again on different occasions.

Note on Ambiguous Language:

Sometimes the rememberer's use of language makes it difficult for the rater to decide whether a particular sentence is a single-event statement or part of non-specific narrative that does not meet the above criteria. Consider the following sentences: 1. "I remember learning how to bike." 2. "Completing a life-guard course was a significant step for me." 3. "I remember breaking up with my boyfriend." 4. "I will never forget the death of my grandmother." 5. "When my mother remarried, I was totally surprised and confused." 6. "I was happy to be elected captain of the team." In all of these statements, the rememberer might be referring to a specific event that took place in one day, to events that took course over several days or weeks, or to both. For example, sentence 1 might be equivalent to, "I remember the instance when, for the first time, I rode the bike without my sister's help: she remained behind in the street, cheering and congratulating me." It could also mean, "It took me weeks, day after day, trying to learn how to bike. My sister always came to help me, but I was never able to ride without her aid. I persevered and eventually succeeded, but learning how to bike was a difficult process for me." Similarly, sentence 2 might refer to the day when the certificate for completion of the course was awarded to the rememberer, but it could also refer to the process of taking and completing the course. Reading the rest of the six examples carefully will

reveal that memories with different kinds of temporal and narrative structure may be hidden behind the ambiguous use of language by the rememberer. In such cases, the single sentence taken out of context is not specific enough to be called a single-event statement. The rater has to consider the entire transcript of the memory in order to decide whether, for example, the rememberer is talking about the death of the grandmother in terms of a specific event on the day of the funeral or about connected happenings over the course of many days as the family mourned the loss. Looking back at the example of learning how to ride the bicycle, it is important to observe that in some cases "to learn" may only refer to an instance as opposed to a process. By convention, to learn a piece of information through a specific communication ("Learning that I was accepted to college...") is a single-event statement. Contrary to that, mentions of birth, death, marriage, divorce, an election, etc., must not be taken for single-event statements unless Criterion 2 is met, as these labels could designate unique but lengthy periods of time. In summary, the above discussion concerns kinds of statements that could be parts of single-event statements in certain contexts but aren't necessarily. Identifying single-event statements is important to the classification of specific memory narratives, whereas narratives that lack such statements are either episodic or generic and will be discussed later.

Discussion of Specific Memories:

Specific memories have at least one single-event statement as described above. Usually, specific memories are made up of several related single-event statements that retell an uninterrupted sequence of perceptions and actions that is unique in time and brief. The time and place are often specified. Often, much detail is provided, making it possible to imagine the setting and the actors of that particular incident. Participants are identified by names or other labels and described through their dialogue, emotional responses, actions, appearance, physical location, and other attributes. The specificity of detail varies from purely descriptive to reflective memories in which the rememberer "steps out" of the narrative to provide contextual information and to make inferences about the significance of the event or the memory itself. Broader contextual information can present the event as embedded in a more general narrative beyond the time and location of the particular incident.

Types of specific narratives:

<u>Type 1 specific narrative (The pure specific memory):</u>

The memory narrative is composed entirely of related single-event statements pertaining to the happenings of one day, or, in some cases, two consecutive days (e.g., a night and the following morning). The rememberer's attention does not diverge from the incident, and there is no general narrative outside of its timeframe.

Note:

We identified empirically two kinds of statements in specific memory narratives that could arguably be taken as divergences of the rememberer's attention from the specific instance of the Type 1 specific memory. These two kinds of statements are described below, and the point is made that the presence of one or the other should not disqualify a memory narrative that is otherwise clearly Type 1 from being classified as such. The first reason is coding reliability, which we found to be higher after adding this condition.

The second reason is a sort of verbal convention or linguistic necessity that leads to the insertion of these statements in the narratives of otherwise purely specific memories. The first kind of statement is a simple "time-tag" that indicates approximately when the event took place and validates Criterions 1 or 2 for single-event statements. A "time-tag" is a phrase such as "Some time in eight grade" which makes a mention of a period (eight grade) that is not brief and stands outside the specific narrative that follows. This phrase is clearly important only as an assertion than the event happened at a particular time, but it is not an account of any events itself. In other words, it does not significantly reduce the specificity of the narrative. The second kind of statement that usually appears in the beginning or at the end of a specific memory narrative (but might be encountered in the middle) is a statement such as: "This was the first time I rode a bicycle," or "I remember my last soccer game in high school," or "I had never done anything like this before." In both cases, there is an implied link to other events that are outside the rest of the narrative, which satisfies the Type 1 specific memory conditions. The rater of the memory realizes, that the rememberer probably can recall other cases of riding the bicycle or playing soccer in high school. As long as this arguable distraction from the immediate event is limited to a short phrase such as the above, we assume that the importance of this phrase is to better characterize the specific event and that it does not imply that the rememberer actually is thinking of other events besides the Type 1 specific memory.

Type 2 specific narratives (The specific memory with generalization):

There is one single-event statement or several related single-event statements that pertain to the same incident on one particular day. In addition, a general narrative about other events and the autobiographical context of the memory is provided, but it does not involve single-event statements. Clearly, there is a unique point in time upon which the person's attention focuses in the single-event portion of the memory. An important indicator is the presence of any of the following (a) a statement about the uniqueness of the time; (b) an expression of strong emotion; (c) a declaration of the importance of the single-event portion of the memory; (d) imagistic detail; (e) speech or dialogue.

Type 3 specific narratives (The specific memory with multiple singe events):

Both Type 1 and Type 2 specific memories have single-event statements that refer to the happenings of a single 24-hour period. Type 3 specific memories have a different format. A Type 3 memory could be thought of as composed of (a) two or more memories of either Type 1, Type 2 or both, or (b) of at least two specific memories of Type 1 or 2 and one episodic or generic memory. It is organized around a sequential story that extends beyond a single 24-hour period, and there is more than one "cluster" of single-event statements. There is at least one such statement regarding one single event, and at least one more such statement about another single event that does not fall in the same 24 hour period. The series of single events may be assembled into an overall story with an identifiable theme (e.g., "my team's underdog victory at a tournament" or "my first days of college"). Because the timeframe of the memory is more than a day and because the memory relates a sequence of related single occurrences, it resembles an episodic memory, a kind of memories that is discussed next. What differentiates this specific memory from an episodic memory are the single-event statements, which contain details that locate these events in unique moments of time. The single events in the narrative contain any of the following – quoted dialogue, precise details of actions, mention of specific moments in time by hour or date. Further, at least some, if not all, of

the single events mentioned in the story sequence are unique occurrences; they are not blended or depicted as repeated in the course of the narrative.

Final Note on the Specificity of Detail:

The specific memory narrative has at least one statement in which the attention of the rememberer is clearly focused upon happenings from a particular day and time. If there is only one such statement and it does not provide any statement of time, emotion, importance, detail, or dialogue about the specific instance, then the memory is not specific. Specific memory narratives must have single-event statements that allow the reader to locate the event in a unique and clear moment of the past. If a one-day single event is mentioned only in passing and the remainder of the narrative takes as its focus extended events that range over days, weeks, or months, the memory cannot be classified as specific.

Non-specific (generalized) narratives (Episodic and Generic):

Episodic narratives:

These memory narratives lack any single-event statements of the kind that was described previously. If they do mention something happening on a particular day, then it is only as a part of a developing narrative beyond itself, and it is also deprived of imagistic detail, speech, or a statement about strong emotion, importance, or a singling-out statement about the time. The narrative as a whole may have such statements, but they would pertain to a general event with a length of over a day or with unclear duration. The event may be a unity (such as a vacation trip) or it may be composed of several related general events that develop into a story line. Overall, the episodic memory narrative is a generalized narrative of sequential events that fit into a single lengthy timeframe. Narrative of perceptions and actions is generalized, and it merges with the narrative of the context. The span is more than a day, often much longer, for example: junior year in high school, last summer's vacation, a period of unemployment.

Note on Ambiguous Language:

In the discussion of Type 1 memories, it was necessary to discuss some kinds of statements that might appear non-specific but do not disqualify the memories as Type 1. The first kind of such statements, the "time-tag," can be expected to appear in episodic memories to serve the same function as in Type 1 memories. The second kind of statements, the "first time, last time, never before" phrases, can also appear in episodic memories without giving them specific quality. These phrases obviously do not make single-event statements in themselves, as they can refer to long periods of time, but they could be parts of single-event statements in specific memories. In the preliminary discussion of specific memories, six examples of phrases were given, that could refer to either specific events or episodic narratives, depending on the context. It is important to be continually aware of these potential ambiguities. It was said that, for the most part, those statements would be considered non-specific narrative, unless there is additional "proof" that the attention of the rememberer is fixed upon a unique and brief occurrence. Therefore, these statements may occur in episodic memories only if not accompanied by such "proof" (statement of time, emotion, importance, detail, or dialogue about the specific and unique occurrence). In addition, there is a group of very important statements that have been observed to occur in episodic narratives that could cause some confusion. These are statements such as: "By the time I was hospitalized, my condition had gone worse," and "We continued to prepare until the very last day." The point is that, when part of an overall episodic narrative, these phrases are part of it, and do not qualify as single-event statements. They could do so, only if the rememberer went on to tell more about the specific instance of hospitalization or about the specific and unique events on the last day. As long as these moments are mentioned in passing and without additional detail, they remain non-specific in the context of the timeframe of the episodic narrative.

Generic narratives:

The memory is composed of equivalent events that kept occurring over time intervals that are not themselves part of the memory. These separating intervals of time may be of equal duration, especially when they depend on natural cycles. The remembered events themselves blend or fuse together, and they contain the same characters, settings, happenings, and emotions. The narrative may contain an event that stands out as a good example of what all other events in the blend were like, yet the focus remains on the abstraction of repeated experience.

Note:

The generic blend of events that comprises the generic memory narrative may consist of events that would otherwise meet the criteria for either specific or episodic events. For example, the memory could be one of "all summer vacations throughout high school" or "every time I saw the movie '101 Dalmatians.'" A narrative is classified as generic only when it consists entirely of the generic narrative. One exception is when a specific vacation or one particular time of seeing the movie may be mentioned by the rememberer as an example of how all the other similar events happened. A complex memory narrative may contain a generic portion but also a portion in which some specific or episodic event is told that is not in itself part of the generic blend of events. In this case, the memory is classified according to this other portion's characteristics as Type 2 or Type 3 specific or episodic. Memory narratives are classified as generic only if they are "pure" and consist entirely of a generic narrative and possibly an exemplary event that serves to convey that narrative.

Level 2: Memory Integration

This coding system divides memory narratives into two categories of integrative and non-integrative memories. Integrative memories contain statements that ascribe meaning to the memory described. This meaning is usually expressed in statements about what the memory has taught the individual (e.g., "the lesson learned" or "from that point on I realized…"); these insights may be expressed about life in general or specifically about the individual's own life and sense of identity.

Non-integrative memories may be filled with emotion and may contain generalizations about the individual's personality, the impact of the memory, or the activities of the individual, but these generalizations do not explain what the memory means to the individual or how the memory has conveyed meaning in the individual's life. In other words, a memory that contains the generalization, "I was a shy child," is not an integrative memory unless the individual were to add a statement about how this memory caused this shyness to develop or revealed this attribute to the individual in a new light. Memories that contain no generalizations about the individual or events, and simply have a time-stamp (e.g., "It was my junior year in high school" or "I was eight years old when this event took place") are clearly non-integrative memories.

Within both the Integrative and Non-Integrative categories, we include subtypes that will help to locate memories within each category. These subtypes are meant as aids and do not need to be scored in their own right. When scoring, one should always score toward the highest level of integration. For example, a memory may contain a time-stamp and a generalization, but if it also contains a meaning statement, it should be coded as integrative.

Non-Integrative Memories

Two Subtypes

1. Pure Narrative of Events, with or without Time-Stamp

2. Categorization by Emotion, Impact or Attribute (Including Personality Attribute)

Non-integrative narratives of Type 1 (Pure Events. Time Stamps):

The narrative describes the events within the timeframe of the specific event, episode, or blended series of events. There is no discussion of any broader context, category of experience, or importance of the events in the memory. If the emotions, thoughts, or attributes of the participants in the memory are discussed, these statements are located in the timeframe of the memory. For example, "When I fell from the tree, I was so scared that I had broken my leg. I thought what would happen if I could never walk or run again."

Time Stamp - The only statement(s) apart from the description of the events may be a phrase or two that indicates when they happened in the person's life, without giving additional information about the individual's life or a meaning drawn from these events.

Non-integrative narratives of Type 2 (Categorization by Emotion, Impact, Context or Attribute):

The narrative goes beyond the location of the memory in a particular time period to include information about the category of emotion, impact, context, or attribute of the remembered experience. These statements identify the memory as being an exemplar of a type of emotion ("This is one of my happiest memories"), type of impact ("This is one of my most important memories"), type of context ("I was part of the debate team my junior year of high school") or type of attribute ("I was always an angry child"). Beyond locating the memory in this particular memory bin, the narrative makes no interpretative statement about the larger significance or meaning of the memory in general or in the person's life. That is, the narrative does not include any statements about what the individual has learned from the experience described, nor does the individual specify in what particular ways the experience has influenced his or her life.

Individuals may also make generalizations about time in the memory, such as, "This was my first experience with death" or "I recall my first day of school." Though these generalizations or categorizations of the events are not simple time stamps, they are also not integrative unless they contain additional meaning statements that express a meaning or lesson learned from these "First" events. Without such statements, these "First" memories should still be scored as Non-Integrative.

Integrative Memories

Integrative memories step back from narrative events and generalizations described in the memory to make an additional statement about the specific significance or meaning of the memory to the individual. A meaningful statement must extend beyond simple pronouncements that the memory is "important" or "the most painful" or "one that I will never forget," but also include an indication of why the memory holds this quality of importance, emotion or vividness for the individual. There are two subtypes of integrative memories.

The first, "Meaning Not Tied to the Self" encompasses memories that include statements about "lessons learned" or new understandings, but these memories do not link these lessons specifically to the self or the individual's own growth or change. These lessons may be statements about life in general or lessons learned about a particular person, group or institution.

The second, "Meaning Tied to the Self," encompasses memories that include statements about lessons or understandings that are explicitly connected to the individual self and sense of identity.

Two Subtypes

1. Meaning Not Tied to Self
2. Meaning Tied to the Self

Integrative narratives of Type 1 (Meaning Not Tied to Self):

A narrative at this level has at least one statement that contains an insight or lesson about life in general or some important person from the rememberer's life. Statements such as "I believe" or "I think" are permissible at this level, as long as the belief or thought (insight or lesson) does not immediately discuss one's own personality, life, or relationship. Instead, it concerns life in more abstract terms or the personality of an important other.

In offering the meaning found in the memory, the individual may describe how the events serve to reinforce the particular lesson or message stated. On the other hand, the individual may present events that help to explain the termination, reversal or reduction of the individual's belief in a particular viewpoint or perspective.

In every case, the narrative contains (a) explicit meaning phrases ("It was a turning point;" "I came to realize;" "I learned that..." etc.), (b) explicit or implied connections between the message and the memory. That is, it is clear that the individual is expressing a link between the events in the memory and the meaning statement that is expressed.

Integrative narratives of Type 2 (Meaning Tied to the Self):

The critical characteristic of this subtype is that the memory narrative includes a statement that ties the events of the memory to an important theme or lesson learned about the self. It is not enough that the narrative includes statements about characteristics of the self (e.g., "I am funny," or "I get sad at sunsets"). The memory narrative must include a statement about what this attribute means to the individual or how the memory exemplifies a change in this attribute. For example, "Ever since I broke up with my girlfriend, I get sad at sunsets. We were watching one when she told me it was over. Now when I think of a sunset, I realize that I can't always be sure of another person."

Relationship Meaning

The memory narrative may also include a statement about the importance and significance of a relationship in the individual's life. This statement would again need to expand beyond a mere statement of the importance of the relationship (e.g., "She was my first love" or "She is my favorite aunt"), but also explain the meaning or ongoing significance of the relationship in the person's life (e.g., "I always turn to her when I am down," or "She continues to serve as a role model to me years later").

Functional Meaning

One other Self-Meaning statement is the individual's indication that the memory is used in a functional way. For example, "When I am sad, I think of this memory to cheer me up," or "I always recall this memory when I want to remind myself why I keep fighting for social change," or "This memory is a symbol of the relationship my best friend and I have. We share it with each other whenever either of us feels low or isolated."

Appendix A.3 Coding Instructions for Redemption

Coding Narrative Accounts of Autobiographical Scenes for Redemption Sequences

Foley Center for the Study of Lives
Northwestern University
Fourth Revision: July 1999

A redemption sequence is a particular narrative form that appears in some accounts of significant scenes in a person's life story. In a redemption sequence, a demonstrably "bad" or emotionally negative event or circumstance leads to a demonstrably "good" or emotionally positive outcome. The story plot moves from a negative to a positive valence, bad leads to good. Therefore, the initial negative state is "redeemed" or salvaged by the good that follows it.

Redemption is a common theme in both classic and contemporary narratives. In life story research, redemption sequences can be detected in a wide range of accounts that people provide, from their reconstructions of the past events, to their characterizations of what may happen in their lives in the future. The current coding scheme is based on research into the form and content of particular life-story scenes. A scene is a circumscribed event or episode in a life story, situated in time and place, and containing particular characters and action. In our research on life stories, we have focused mainly on the following kinds of scenes: life story "high points" (sometimes called "peak experiences"), life story "low points" (sometimes called "nadir experiences"), life story "turning points," "earliest memories," "significant childhood scenes," "significant adolescent scenes," "significant adult scenes," "decision scenes" (an episode in which the protagonist made a major life decision), "morality scenes" (an episode in which the protagonist confronted a moral dilemma), and a catch-all category that we call "significant other scenes" (in response to the question: "Describe one other important scene in your life story"). For each scene, the subject describes what happened, who was there, what he or she was thinking and feeling, and what the meaning of the scene might be in the context of his or her overall life story (e.g., "what does the scene say about who you are or who you were?"). These descriptions can be collected through life-story interviewing or through open- ended questionnaires in which respondents write down or type out their accounts. Each narrated scene is coded as a whole. Thus, the coding unit for redemption sequences is the narrated account of one scene (e.g., a high point, a turning point, an earliest memory).

The coding scheme for redemption sequences is derived from theoretical writings on redemption scenes and commitment scripts (e.g., Carlson, 1988; McAdams, Diamond, de St. Aubin, & Mansfield, 1997; Tomkins, 1987) and the literature on posttraumatic growth (Tedeschi & Calhoun, 1995). The first literature frames an overall understanding of the movement from bad scenes to good scenes in stories, encoded in the category of "redemption imagery" described below. The second literature speaks to the positive aftermath or growth that may occur in an individual's life once a negative (even traumatic event) leads to a positive outcome, encoded in three subcategories for redemption sequences ("enhanced agency" "enhanced communion," and "ultimate concern") described below. In the overall, then, the redemption sequence coding scheme consists of four theoretically derived thematic categories:

1. Redemption imagery
2. Enhanced agency
3. Enhanced communion
4. Ultimate concerns.

The Prime Test: Redemption Imagery

In scoring a particular narrative account of an autobiographical scene for redemption, the coder must first determine the presence or absence of redemption imagery. If the scene contains redemption imagery, then it receives a score of +1, and the coder continues to look for the presence or absence of each of the three subcategories (enhanced agency, enhanced communion, ultimate concerns) in that particular scene. If the scene does not contain redemption imagery, then it receives a score of 0 and no further subcategory scoring is done for that scene. Thus, if the scene scores 0 for redemption imagery, all redemption scoring of that scene ends, and the coder moves to the next scene.

The essential characteristic of redemption imagery is the movement in the story from a demonstrably negative to a demonstrably positive scene. We may call the negative or bad element of the sequence "A" and the positive or good element of the sequence "B". Thus:

A ---> B

The coder must first determine if there is a negative A state, scene, or situation in the account. Negative scenes are often described in terms of the protagonist's emotional state -- he or she may have felt fear, terror, sadness, grief, anguish, guilt, shame, humiliation, anger, distress, or any of a large number of explicitly negative affective states. Also relevant would be physical pain, injury, and sickness. In other cases, the author may not explicitly describe a negative feeling, but the event itself is an especially negative one -- e.g., death of a friend, divorce, major failure, poverty, addiction, broken relationship, being fired from one's job. The coder should consider a negative A state to be established if the respondent describes a scene in which he or she experienced significant negative affect or pain or if the respondent describes a scene that itself is so negative that it would most assuredly produce negative affect or pain for most any person experiencing it. The coder should be relatively conservative here. Minor setbacks (e.g., misplacing one's purse, waiting in line, getting a less-than-stellar grade on an exam) and mild negative states (e.g., feeling nervous at the beginning of a competitive event, feeling uncertain about one's skills, lacking direction in life) should not count for A. The event needs to be demonstrably negative. Especially negative scenes are often described in life story low points and turning points, but they can occasionally appear in most any kind of account, including even high points.

Once a negative A state has been determine, then the question of what, if anything, follows that state must be asked. For redemption imagery to be scored, the negative A state must lead to an especially positive scene or state. Positive states are often indexed by positive emotions, such as feelings of joy, happiness, excitement, satisfaction, love, and the like. But they can also be indicated by certain especially positive cognitive results, such as increased understanding of self-insight, and by descriptions of events that themselves would likely elicit positive feelings in most people (e.g., close relationships, victory, reconciliation, healing, growth, learning). The positive state of B

that follows the negative A state does not need to be as positive as the A state was negative. For example, the death of one's father is a very negative Redemption Sequences scene. The fact that the father's death ultimately led to an enhanced feeling of self-confidence on the part of the respondent is definitely a positive outcome (B), even though its strength or robustness is less, in absolute terms, than the death itself. Or to put it simply, a very dark cloud can still leave a faint silver lining, and such a sequence would score for redemption. Therefore, redemption sequences occur when some kind of positive outcome follows a negative event, even if that positive outcome pails in comparison to the intensity of the negative event.
Still, the B state must be demonstrably positive. The author must explicitly describe a state that involves positive emotional or cognitive resolution, or one that is itself so positive as to produce such a result in most people. The coder should not make undue inferences about what the respondent means. The respondent needs to describe clearly a move from a negative A to a positive B.

The movement from A to B can take one of two forms. A may <u>cause</u> B (in the respondent's view) or A may merely immediately <u>precede</u> B in time.

In the first case, A leads to B by virtue of causation. A is the event or factor whose prior occurrence to B is the reason that B occurs. For instance, the death of one's spouse (A: bad) may cause a person to gain insight into his own life (B: good). Or a divorce (A) may eventuate in improvement of one's relationships with one's children (B). Or an especially painful delivery (A) produces a healthy baby (B). (Note the delivery did not have to be "painful" to eventuate in the baby, but the delivery itself still would be viewed as "causing" the baby to be born.) These events are constructed as causal narratives; B would not have occurred if A had not "caused" it.

In the second case, A need not cause B but merely precede B immediately in time. For example, a losing season (A: bad) is followed immediately by a championship season (B: good). Or a depressive episode (A) is followed immediately by winning the lottery (B). In these instances, the author is not trying to suggest that A caused B. Instead, A and B are juxtaposed in such a way that a very positive event follows on the heels of a very negative one. The link is temporal, but not necessarily causal. It is important to note that by "temporal," we are referring to chronological time in the plot of the narrative itself. B must follow A in the temporal scheme of the story. As an example of the contrary, consider a respondent who describes a bad experience in his life that occurred at age 30 and then proceeds to go back to incident in childhood that is contrastingly positive. Even though the positive event followed the negative one in the telling of the story, the positive event occurred in time long before the negative event occurred. Thus, such an account would not code for redemption imagery.

The content of A ---> B that makes up a redemptive sequence ranges widely. Common examples, though, fall into the categories of sacrifice, recovery, growth, learning, and improvement. Below are examples of each of these five common types ("S" designates subject):

1. Sacrifice. A character in the story willfully accepts or endures an extremely negative A in order to provide a benefit of B. Typically B is a benefit for another, though the self may also benefit. Thus, A is viewed as something of a sacrifice for the good inherent in B. Examples:

pain of delivery ---> birth of beautiful baby
difficult years working in a low-paying job ---> money saved enhanced child's education
S leaves husband because he wants her to have abortion, poverty ensues ---> joy of loving son

2. Recovery. The person successfully obtains a positive state again after losing it, as in healing, survival, regaining, recuperating, etc. Typically, A is a physical (injury, illness) or psychological (depression, trauma) condition and B is the healing outcome. Examples:

illness ---> cure
depression ---> regained positive outlook on life
near-fatal injuries ---> surprising recovery
alcoholism ---> successful treatment
severe anorexia ---> therapist "saved my life"

3. Growth. A negative experience leads to psychological or interpersonal growth, fulfillment, actualization, strengthening, individuation, etc. Most often, B is a personal/psychological benefit that results for the person from the occurrence of A. Examples:

death of father ---> brings family closer together
injury ---> S learns to be self-sufficient
S is lonely as a child ---> because of this S feels he/she more resilient as an adult
unhappy employment situation ---> S quits and finds independence, fulfillment
depression ---> initiated personality change
panic attack ---> self-understanding
failed love affair ---> S becomes more assertive
mother's death ---> S feels closer to her now
episode of anger and crying about father's death ---> S no longer stutters, decreased anxiety
ran away from home, felt bad ---> S gained personal strength
divorce ---> developed better relationships with children
got fired from job ---> comes to see self as a "whole person"
sexual philandering, drunkenness, fear had AIDS ---> S started taking responsibility for life
death of grandson ---> S re-prioritizes life
family stress and pressure ---> S puts life in perspective, come to value friendships more
S is threatened by angry mob ---> becomes more self-confident, resilient
husband has affair ---> S feels enhanced "strength of ego"
fight with mother-in-law ---> S experiences personal growth
illness, radiation therapy ---> S experiences better self-understanding
drugs, dereliction ---> S moves to new place, changes name, "got life together"
uncle dies ---> S experiences greater empathy for others

near-death experience ---> S sheds self-centered qualities
illness forces S to end career ---> S takes up painting and finds the "love and passion" of life
miscarriage ---> S now appreciates "the little things in life"
S feels he is arrogant and hypocrite ---> S becomes humbler, happier

4. Learning. A person gains new knowledge, wisdom, skills, etc. from a negative event. Whereas growth generally refers to psychological or interpersonal benefits, learning refers to benefits that are more instrumental and less concerned with issues of personal and interpersonal adjustment. Of course, the two types overlap somewhat. Examples:

father is dying ---> father gives sage words of advice
S is worn out at work, exhausting work load ---> S realizes life needs more balance
family poverty means S cannot go to the prom ---> learns lessons about honesty, money
severe criticism from co-workers ---> S becomes better employee
frustrations on job ---> S learns patience
tough neighborhood, fights ---> "but I learned a lot"
near-death experience ---> learned to fear death no longer
turmoil in school ---> S learns new perspectives
mother-in-law hates S ---> S learns how to be a good mother-in-law as a result
S is unhappy, quit school ---> S learns value of hard work to achieve goals

5. Improvement (and other). This is something of a catch-all category for the many examples that do not fit into the four types about but in which a bad situation containing negative affect becomes a better situation containing positive affect. Examples:

bad job ---> new, better job
S experiences a period of chaos in life ---> S experiences happiest time in life
infertility ---> a child is born (similar to recovery type)
very bad marriage ---> very good marriage
S experiences job insecurity, doubts ---> S wins award for excellence
girlfriend is depressed about her family ---> S proposes marriage, which lifts her mood
miserable about unemployment ---> stranger gives S a tip, which leads to a good job
divorce, anger ---> S becomes successful in order to prove her own worth to ex-spouse
death of brother, bad grades at school ---> "things then picked up," better grades, S is happy
hated school --> began liking it
fight and injury ---> S becomes friends with his opponent
S is a terrible student ---> summer reading program enhances confidence
very bad year at college ---> S ends up getting grades of "A"
S is terrified of public speaking ---> S improves speaking ability, experiences success
husband is cold, distant ---> S gets help, counseling, marriage improves
lonely, depressed ---> S experiences conversion to Christianity, feels ecstatic

S drifts into drugs ---> S joins track team and gains direction and purpose in life, stops drugs
unwanted pregnancy ---> S gets life focused, she becomes thankful for pregnancy
S is stuck in low-level job ---> S gets promoted and becomes very successful

The Subcategories: Agency Enhancement, Communion Enhancement, Ultimate Concern

Tedeschi and Calhoun (1995) write that three common positive results of posttraumatic growth are (1) improvements in self, (2) improvements in interpersonal relationships, and (3) enhanced spiritual or religious experiences. Employing Bakan's (1966) distinction between agency and communion as well as the language of Paul Tillich and other theologians, we have reformulated these three into the subcategories of

Enhanced Agency
Enhanced Communion
Ultimate Concerns.

For enhanced agency, score +1 if the transformation from negative to positive in the story produces or leads to an additional enhancement of the protagonist's personal power or agency, if it builds self-confidence, efficacy, or personal resolve, or if it provides the protagonist with insight into personal identity. The author must explicitly state that enhanced agency was a result of the redemptive sequence.

For enhanced communion, score +1 if the transformation from negative to positive in the story produces or leads to an additional enhancement of the protagonist's personal relationships of love, friendship, family ties, and so on. The author must explicitly state that the enhanced communion was a result of the redemption sequence.

These two subcategories -- enhanced agency and enhanced communion -- function as "bonus points" for redemption sequences. They are points that are added on to an account that already scores for redemption imagery. However, the coder should use the bonus points sparingly. The rule of thumb is that each of these two sub categories can be scored +1 only if it is expressed as a direct result of the move from negative to positive states. In other words, once an A --> B sequence has been detected (score +1 for redemption imagery), then the coder looks for additional benefits that go beyond the original redemptive move. For example, an account may score for redemptive imagery by virtue of a young man's move from drug addiction (A) to recovery (B). The "good" outcome is the recovery from drug addiction. If in addition to this good outcome, the young man also experiences enhanced friendship or love, then the account gets an extra point for the subcategory of enhanced communion. These two subcategories are value added. They enable the coder to give occasional extra points for accounts that provide multiple benefits or aspects to the good outcome (B) that follows the negative state (A). By contrast, an account in which a young woman's experience of loneliness (A) is followed by an experiences of deep-felt love (B) would not score for the extra point of communion enhancement because the actual move that makes for the redemptive imagery itself (which is, of course, scored) is itself a move from loneliness (no communion) to love (communion). There is nothing to "add" -- the redemptive imagery category capture it all. Thus, the subcategories of enhanced agency and enhanced communion are only added to the score when the minimal content that produced the

redemptive imagery to begin with leaves behind other, associated content suggestive of additional agentic or communal benefits in B.

For ultimate concern, score +1 if the transformation from negative to positive involves confrontation with or significant involvement in fundamental existential issues or ultimate concerns. The event brings the protagonist face-to-face with death, God, and or religious/spiritual dimensions of life. A point is added for this subcategory because of our belief that redemptive accounts that include such content have a more powerful and personally meaningful quality to them than do other kinds of redemptive accounts.

Total Scores

The coder simply adds up the scores from the prime test and three subcategories for each scene account. Thus scores for a single scene range hypothetically from 0 to 4. The most common score, by far, is 0. Total subject score is the sum of all scene scores.

References

Bakan, D. (1966). The duality of human existence. Boston: Beacon Press.

Carlson, R. (1988). Exemplary lives: The use of psychobiography for theory development. In D.P. McAdams and R.L. Ochberg (Eds.), Psychobiography and life narratives (pp. 105-138). Durham, NC: Duke University Press. (Published as a special issue of the Journal of Personality).

McAdams, D.P., Diamond, A., de St. Aubin, E., & Mansfield, E. (1997). Stories of commitment: The psychosocial construction of generative lives. Journal of Personality and Social Psychology, 72, 678-694.

Tedeschi, R.G., & Calhoun, L.G. (1995). Trauma and transformation. Thousand Oaks, CA: Sage.

Tomkins, S.S. (1987). Script theory. In J. Aronoff, A.I. Rabin, and R.A. Zucker (Eds.), The emergence of personality (pp. 147-216). New York: Springer.

Appendix A.4 Coding Instructions for Contamination

Foley Center for the Study of Lives

School of Education and Social Policy
. Northwestern University

Coding System for Contamination Sequences

Rev. 3/15/98

Background
In a contamination scene, a good or positive event or state becomes bad or negative. That which was good or acceptable becomes contaminated, ruined, undermined, undone, or spoiled. Positive affect gives way to negative affect, so that the negativity overwhelms,
destroys, or erases the effects of the preceding positivity. For some narrators who describe very difficult lives, scenes may begin with an acceptable or mildly positive state, but the typical pattern of spoiling or contamination with negative affect follows. One woman describes a rare moment of pleasure when her sister organizes a birthday surprise for her, but spoils the positive memory with the observation that "To me, good things just don't happen." Another woman summarizes her entire life story with the comment, "Good things happen, but they are always canceled out by an even worse thing happening next." In contamination sequences, things may go from very good to bad or from barely acceptable to worse.

The concept of a contamination scene is similar to what Tomkins (1987) termed a "nuclear scene," wherein an episode of positive affect is quickly transformed into one of strong negative affect, leaving a legacy of ambivalence that may build into a full-blown nuclear life script (see also Carlson, 1988). Tomkins argues that such scenes are most influential when they occur in childhood and are experienced as extremely intensive and confusing. May (1980) describes episodes of enhancement/deprivation in dreams and fantasies, wherein the hero first rises to great prominence (good) and then comes crashing down to earth (bad), as literally depicted in the myth of Icarus. Such a fantasy pattern is noticeable in Thematic Apperception Test (TAT) stories told by men, May suggests, while the opposite pattern of deprivation/enhancement (bad leads to good) is more characteristic of women's fantasies. The heroic strivings of Icarus are followed by tragic consequences. But the "mistake" of flying too close to the sun offers possible positive interpretations, and might be explained as the impetuousness of youth, or even the endeavor to reach an exalted goal. This kind of optimistic spin, however, does not prevail in the autobiographical reconstruction of contamination scenes. Instead, in contamination sequences the consequences are so negative that sometimes it may have been preferable to forego the preceding positive event. The spoiling or contamination often seems to cling persistently, like rotting food that ruins all it touches, or heavy baggage that cannot be left behind and affects everything one experiences.

In some ways, a contamination scene is the opposite of a "redemption scene," in which bad turns to good (McAdams, Diamond, de St. Aubin, & Mansfield, 1997). However, the opposition is not exact. In redemption scenes, the initial bad state or event leads to a good state or event, but the good does not typically undo or erase the bad. For example,

a narrator describes the death of her mother, a bad event, followed by her family becoming closer, a good event. Her mother is still dead, and death is bad, even though the family becomes emotionally closer as a result of the death. Mother's death leads to, or even causes, the closeness to occur, but the closeness does not erase or undermine her death. By contrast, in contamination scenes, the subsequent bad event often does undermine the preceding good one. The good event is ruined or spoiled. It cannot be recalled without pairing it with the bad outcome. Even its original goodness may be lost. For example, (retelling the events out of chronological sequence) a narrator recalls having been beaten by her spouse, and now states that her previously good marriage was never actually s good as she originally thought it was. The whole marriage is retroactively spoiled.

Thus, in some contamination sequences, the initial positive event or state is spoiled. Its positivity is partially or completely erased. As a result, the account of the initial state is often affectively flattened. In coding, it may be difficult to determine how positive the initial state actually was. The essential component is that it deteriorates. Things get worse. The following state or event is less desired, more negative, more painful, more bleak.

The change from good to bad states requires contiguity and chronological sequencing but may vary in other ways. The events or states described must be contiguous in occurrence, with the good preceding the bad. However, frequently the narrator describes the negative outcome or downturn first and then relates the preceding positive event or preferable state. The order of narration is not important, but in chronological time, the good must have preceded the bad.

Also, the relationship between the initial and following event or state may be one of opposition or one of association. The relationship is not necessarily causal.

Example of good and bad events or affective states as opposites:

Receives a gift --> gift is stolen
Wealth --> poverty
Leading the pack in a race --> collapses, finishes last
Pride at graduation --> shame at father's criticism of her weight
Feels appreciated by teacher --> teacher publicly scolds her
New house is a joy --> repair and bills become a nightmare
Receives help from someone --> receives criticism for needing the help
Believes marriage is good --> partner wants divorce

Examples of states or events associated by their temporal or logical connection:

Is playing happily in a park --> cannot find parents
Enjoys senior class party --> class breaks up, loses contact with friends
Gets a promotion --> new job has many hassles
Describes joy at birth of child --> states that next child died
Looks forward to class trip --> is horrified by the poverty she sees
Finally establishes good relationship with a women --> they become homeless

Common Themes

In a contamination sequence, many of the negative events, states, or affects could be categorized under general headings. The following list is not exhaustive: for example, the contamination sequence of enjoying a stolen watermelon and then suffering punishment does not fit the categories listed.

Victimization: physical or verbal abuse, theft
Betrayal: affairs, telling secrets
Loss: of significant others, job, money, property, self-respect, respect for another
Failure: in school, sports, job, courtship
Physical or psychological illness or injury
Disappointment: things do not turn out as expected, things go wrong
Disillusionment: correction of a positive misperception, e.g. role model betrays own teachings
Sex: enjoyment turns to guilt, humiliation, etc.

Some common themes overlap (e.g. victimization and betrayal), or a contamination sequence may contain a combination of themes, such as victimization, disillusionment, and loss. To form a sequence, of course, the negative theme must follow a more positive or acceptable state.

Coding

The presence of any contamination sequence in a single scene or critical event (Peak, Nadir, etc.) results in a score of +1. The absence of any contamination sequence in the scene receives the score 0. These are the only scores used.

Multiple contaminations in the same scene still receive the score of +1. Particularly for persons who do not experience much positivity, like the woman who said good things just do not happen for her, one good event may go bad in several ways. For example, one narrator's peak memory is his elation and excitement on the day of his wedding, but, he continues, the civil ceremony was a disappointment, the judge was later convicted of a crime, the video of the wedding turned out blank, and his bride became upset that he had invited old girlfriends. His positive affect is spoiled by four different negative turns, any one of which constitutes a contamination sequence. Alternatively, several different transformations of good to bad may be crammed into a single scene.

In the case of death, a statement such as "my mother died" is not a contamination sequence. There must be some clear statement either:

a) that the death is significant and follows a more positive state; for example, the narrator's aunt is her role model, best friend, and very important in her life --**>** her aunt dies suddenly, or

b) that the death leads to a bad outcome; for example, a mother dies and her daughter drops out of school, has a difficult time, and begins using drugs; it is strongly receding state implied that the preceding state was more positive. This would not be a contamination sequence if the narrator describes equally negative events preceding the death.

Coding Summary

1. Negative events or affects follow positive ones in chronological time.
2. The order in which events are recalled or narrated is not important.
3. The preceding positive event or affect may range from strongly positive to acceptable.
4. The account of the initial state is often affectively flattened, and the degree of positivity may be subtle.
5. It seems that good events cannot be recalled without being paired with negatives.
6. The subsequent negative event, state, or affect may be a downturn, an undermining, undoing, or spoiling of the previous event, state, or affect.
7. The preceding positivity is partially or completely erased or spoiled.
8. The relationship between positive and negative events, states, or affects may be one of opposites, or of temporal or logical association.
9. The common theses of victimization, betrayal, loss, failure, disappointment, disillusionment, or physical or psychological illness or injury may aid in identifying negative events or states.
10. A contamination sequence is not automatically signaled by mention of a death. However, a contamination does occur when the person who dies was a significant positive influence, role model, or friend, or when the death results in clearly negative outcomes and not a mere continuation of an equally negative previous state.

References

Carlson, R. (1988). Exemplary lives: The use of psychobiography for theory development. In D.P. McAdams and R.L. Ochberg (Eds.), Psychobiography and life narratives (pp. 105-138). Durham, NC: Duke University Press.

May R. (1980). Sex and fantasy: Patterns of male and female development. New York: Norton.

McAdams, D.P., Diamond, A., de St. Aubin, E., & Mansfield, E. (1997). Stories of commitment: The psychosocial construction of generative lives. Journal of Personality and Social Psychology, 72, 678-94.

McAdams, D.P. & Reynolds, J. (Unpublished). Scoring manual for "Redemption Scenes" in Life Story Interviews. Evanston, IL: Northwestern University.

Tomkins, S.S. (1987). Script theory. In J. Aronoff, A.I. Rabin, and R.A. Zucker (Eds.). The emergence of personality (pp. 147-216). New York: Springer.

- The Life Story Interview
- Loyola Generativity Scale (LGS)
- Generative Behavior Checklist (GBC)
- Guided Autobiography
- Coding Systems for Themes of Agency and Communion
- Coding System for Redemption Sequences
- Coding System for Contamination Sequences
- Faith, Politics, and the Life Story
- Foley Longitudinal Study of Adulthood (FLSA)

School of Education and Social Policy 2120 Campus Drive Evanston, IL 60208
Phone: 847-491-8193 E-mail: sesp@northwestern.edu

Appendix A.5 Coding Instructions for Agency and Communion

Coding Autobiographical Episodes for Themes of Agency and Communion

Dan P. McAdams
Northwestern University
Revised: April, 2001

David Bakan (1966) introduced the concepts of agency and communion in the following passage:

> I have adopted the terms "agency" and "communion" to characterize two fundamental modalities in the existence of living forms, agency for the existence of an organism as an individual, and communion for the participation of the individual in some larger organism of which the individual is a part. Agency manifests itself in self-protection, self-assertion, and self-expansion; communion manifests itself in the sense of being at one with other organisms. Agency manifests itself in the formation of separations; communion in the lack of separations. Agency manifests itself in isolation, alienation, and aloneness; communion in contact, openness, and union. Agency manifests itself in the urge to master; communion in noncontractual cooperation. (pp. 14-15).

These two generic "modalities in the existence of living forms" may also be viewed as two thematic clusterings in life narratives, each articulating important life goals, strivings, needs, and desires. Following the work of Bakan and many others, McAdams (1985; McAdams, Hoffman, Mansfield, & Day, 1996) has suggested that agency and communion are the two central superordinate thematic clusterings in life narratives. People's life stories differ with respect to the salience of agency and communion themes, and those differences are measurable. This manual is designed to enable the researcher to capture some of those individual differences in the thematic coding of particular life narrative episodes. It describes a simple and reliable method for coding the salience of agency and communion themes in written or verbal accounts of especially significant autobiographical events, or what McAdams (1985) calls "nuclear episodes" in life stories.

The coding system is designed to detect the salience of agency and communion themes in accounts of discrete life-story episodes, such as life story "high points," "low points," "turning points," and "earliest memories." Such accounts may be collected through life-narrative open-ended questionnaires or through interviews. In general, the coding scheme works best when subjects describe particular events in their lives that they find to be especially personally meaningful -- events that the subjects themselves may see as having had an important impact on their identity. For each event, subjects are typically asked to describe (verbally or in writing) what happened in the event itself, who was involved, what the subject was thinking and feeling during the event, and what (if anything) the event means in the context of the subject's own self- defining life story. Subjects may describe events that are either positive or negative in emotional tone. In general, however, the categories described below refer to positively- valenced themes in life narrative.

In coding an account for themes of agency and communion, the scoring unit is the episode itself. Each episode is coded for the presence (score +1) or absence (score 0) of eight different themes, four under the heading of agency and four under the heading of communion. The four agency themes are: (1) Self-Mastery (SM), (2) Status/Victory (SV), (3) Achievement/Responsibility (AR), and (4) Empowerment (EM). The four communion themes are: (5) Love/Friendship, (6) Dialogue (DG), (7) Caring/Help (CH), and (8) Unity/Togetherness (UT). The coder must determine whether or not the story contains evidence of each of the eight themes. If evidence exists for the theme in the episode, then the theme receives a score of +1 for the corresponding episode. If no evidence exists, the theme receives a score of 0 for that episode. A theme is scored only once per episode. Theme scores may then be summed across agency and across communion categories within an episode, to provide summary scores for agency and communion respectively. Thus, the highest possible score for agency or communion for a given episode would be "4." The lowest score would be "0."

The coding system for agency and communion is a conservative scheme. The scorer should not give a point (+1) for a given theme in a given episode unless there is clear and explicit proof of the theme's existence in the episode. The scorer should be careful not to read anything into the literal description of the account. The scorer should avoid clinical inferences and extensions beyond the written or spoken word.
Two independent coders should score episodes, and then correlation coefficients should be calculated to determine interscorer reliability. Reliabilities may be calculated for each theme score, summed across however many episodes a subject describes, and for the total agency and total communion scores, summed across episodes.
Scorers may need to work together in early phases of coding in order to build up a common understanding, so that eventually their independent codings will show acceptable reliability.

Themes of Agency

Agency encompasses a wide range of psychological and motivational ideas, including the concepts of strength, power, expansion, mastery, control, dominance, autonomy, separation, and independence. Most accounts of important autobiographical experiences are couched in agentic terms to one degree or another. After all, the subject is telling the researcher about an importance experience for the self, so we should not be surprised if the account entails at least a modicum of self-celebration, self-focus, self- expansion, and so on. The necessary focus on the self, therefore, encourages a rhetoric of agency in most autobiographical accounts, especially among contemporary citizens of Western societies, imbued with an ethic of individualism. For example, many turning point episodes will tell how a person moved from dependence to "autonomy." The attainment of autonomy in human development is a very common theme among Westerners, especially those in the middle classes. The four agentic themes articulated below, however, go above and beyond the typical agentic rhetoric of autobiographical expression. They express highly agentic ideas that, even by the cultural standards of contemporary self rhetoric, stand out as especially indicative of Bakan's concept of agency in human lives.

1. SELF-MASTERY (SM).

The story protagonist strives successfully to master, control, enlarge, or perfect the self. Through forceful or effective action, thought, or experience, the protagonist is able to strengthen the self, to become a larger, wiser, or more powerful agent in the world. A relatively common expression of the theme involves the protagonist's attaining a dramatic insight into the meaning of his or her life. The insight may be seen as a transformation in self-awareness or a leap forward in self-understanding that entails the realization of new goals, plans, or missions in life -- a significant insight into one's identity. Another relatively common expression of SM involves the protagonist's experiencing a greatly enhanced sense of control over his or her destiny in the wake of an important event (e.g., divorce, death of a loved one, reaching a life milestone). Other examples of SM typically show up in accounts in which the individual reports that he or she felt "strengthened" by an important event, or in which a person explicitly says that the experience provided him or her with a feeling of power.

Examples of SM through "insight":

A man comes into contact with the spiritual dimensions of his life at a weekend retreat designed to stimulate psychological growth.

A man accepts the awful truth that he is indeed an alcoholic.

A subject responds that her most important goal in life is the attainment of wisdom, which she describes as "the re-creation of myself as a better person."

A woman comes to see her life's mission as being an artist. She quits her job, sets up a studio, and strives to actualize her dream.

A young man experiences a religious conversion which provides him with new insight into his own life.

A middle-aged man realizes that he is being exploited by his current employer.

He breaks away from the firm and embarks upon a new line of work, more in keeping with his life goals.

A woman comes to the conclusion that she has wasted 20 years of her life in a desperate drive for material well-being. She decides to dedicate her life to helping others.

Inspired by reading Freud, a young man comes to the realization that he wants to be a psychotherapist.

After a near-death experience, a man comes to a new understanding of the quality of life. He pledges to slow down, enjoy his family more, take everything one day at a time.

After the death of his son, a man changes his "philosophy of life."

Examples of SM through "control":

A woman reports feelings of deep satisfaction in being able to manage the pain of labor during childbirth. She is able to master the self by controlling her own pain.

A divorce frees up a woman to take control of her own life and the life of her son.

A man feels SM by sticking to a regimen of weight-lifting and dieting; SM is

experienced by controlling (and perfecting) the body.

A drug addict kicks the habit; takes control of his life.

A woman argues with her doctor about the method by which she will give birth to her first child. She wins the argument and is able to have the child "naturally," with minimal assistance from medical technologies. She is thus able to control the situation and control her own bodily processes in accord with her image of herself as a powerful agent.

A young White woman defies her family's objections and marries a black man.

A student is able to control his raging emotions in confronting a professor about a perceived injustice in class. The student prevails in convincing the instructor of his point of view, showing that controlling the self can reap significant external benefits.

Though a highly disciplined regimen of reading and study, a professor continues to improve her mind and enlarge her understanding of her chosen field of study.

Other examples of SM:

A married couple go through tremendous hardships in their first year of marriage, experiencing the death of both sets of parents. They emerge from this period strengthened and better able to cope with life's problems.

A musician experiences a sense of power or mastery during a performance.

An army recruit feels "strong" after finishing basic training.

2. STATUS/ VICTORY (SV).

The protagonist attains a heightened status or prestige among his or her peers, through receiving a special recognition or honor or winning a contest or competition. The implication in SV is that status or victory is achieved via a vis others. There is always an interpersonal and implicitly competitive context in SV. Typically, the person "wins." There is victory or triumph. SV refers to significant recognition, especially prestigious honors, and various kinds of victories over others. Simply "doing a good job," getting good grades, or successfully achieving a goal is not enough to score for SV.

Some examples:

A young woman is elected homecoming queen.

An actor wins a coveted lead part in an upcoming play.

A student graduates from college with special honors (e.g., magna cum laude).

A person receives an award for outstanding achievement.

The quarterback completes a crucial pass, which gives his team the victory in the football game.

A musician receives a standing ovation.

A professor is honored at a party for receiving tenure at the university.

An aspiring writer is granted admission to a prestigious graduate program.

A swimmer wins a race.

A lawyer wins a case.

A person is granted an important position or awarded a prestigious job.

A high school student gains admission to a good university.

A student wins a scholarship or grant.

3. ACHIEVEMENT/RESPONSIBILITY (AR).

The person reports substantial success in the achievement of tasks, jobs, instrumental goals, or in the assumption of important responsibilities. The protagonist of the story feels proud, confident, masterful, accomplished, or successful in (1) meeting significant challenges or overcoming important obstacles concerning instrumental achievement in life or (2) taking on major responsibilities for other people and assuming roles that require the person to be in charge of things or people.
Most often these accomplishments and responsibilities would occur in achievement settings, such as school or work, rather than in more personal settings, such as with reference to spiritual or romantic goals. Rather than "winning" (as under SV), this category requires that the protagonist strive to do things, produce things, or assume responsibilities in such a way as to meet an implicit or explicit standard of excellence. In this sense, AR bears resemblance to the "achievement motivation" scoring categories in McClelland and Atkinson's coding system for TAT stories (McClelland et al., 1953). (By contrast, SM and SV appear to connect thematically to Winter's (1973) "power motivation" scoring categories for TAT stories. Power motivation and achievement motivation are two different manifestations of agency.)

Examples of AR:

A student works hard to perfect a short story for a class assignment. He spends hours polishing word choice, getting the imagery right, and so on.

An executive meets his annual goals for the company.

A young boy builds a tree house, and he is very proud of his accomplishment.

A student masters a class on computer programming.

A secretary takes over an office and turns it into a model of efficiency and productivity.

After having their first child, a couple now realizes the significant financial responsibilities they have assumed.

A woman endeavors to interact with her colleagues in a "healthy and productive manner." Here the explicit reference to being productive in the workplace qualifies the response for AR.

A woman describes her movement from college to graduate school: "I was able to settle down and become focused and to become productive in a much more real way than up until then. I had always produced a lot of stuff academically; I'm also the kind of person who is constantly productive with something, or at least I used to be that way. I would have six projects going on at once." But now she was able to become more focused on one project at a time, which enhanced her productivity.

A father reflects: "You're the head of the family and you're responsible for a lot more than you were before. It's a real maturing experience."

A group of young adults builds a community in the wilderness: "We were building a community. We were really working with our muscles, you know, passing buckets of cement."

A man is accustomed to failing, but he achieves success in an important business venture, building his confidence.

An author publishes her first short story.

A middle-aged mother reflects on her children, who have recently left for college. She decides that she has done an "excellent job" as a caregiver. Even through this is an interpersonal rather than instrumental task, the writer explicitly couches it in achievement terms -- as a job well done.

A pilot completes his first solo flight.

Studying a foreign culture for many years, an anthropologist comes up with a new way of seeing the culture, solving an intellectual problem which she had puzzled over for a long time.

First day on the job, a nurse confronts a difficult assignment, but she is successful in completing the task.

At the age of 65, a man runs in his first marathon.

A young man is kicked out of his house by his parents. He struggles to survive, but eventually he becomes "a successful and responsible adult."

A woman is proud of her college achievements -- in academics as well as in clubs and associations on campus.

A man reports after his divorce: "I challenge myself to the limit academically, physically, and on my job. Since that time I have accomplished virtually any goal I set for myself. I have never been happier."

A woman reports after her divorce: "In order to survive financially and support these children, I decided to enroll in a graduate program in counseling psychology at a major university. I was accepted and began the program with great determination . . . I felt the failure of marriage was reversed by the success of completing a graduate degree through years of difficult and intellectually stimulating study."

4. EMPOWERMENT (EM).

The subject is enlarged, enhanced, empowered, ennobled, built up, or made better through his or her association with someone or something larger and more powerful than the self. The self is made even more agentic by virtue of its involvement with an even more powerful agent of some sort. In EM, the empowering force is usually either (1) God, nature, the cosmos, or some other manifestation of a larger power in the universe; or (2) a highly influential teacher, mentor, minister, therapist, parent, grandparent, or authority figure who provides critical assistance or guidance for the individual. Some examples of EM:

Many religious experiences qualify, as when a person reports that God or some larger force was made manifest to him or her, putting the individual in touch with a larger power of some kind: "Never in my life had I seen such beauty and glory as I did in that moment. Truly it was the Lord's greatness that gave us that brief mystical beauty of nature."

Certain experiences of empowerment in nature may qualify: On a camping trip in Wisconsin, "we decided to walk around the lake one afternoon. The paths were busy, but not so much as to keep us from noticing the small details of nature. The path was challenging, very rocky. The pine smelled so beautiful. The lake seemed powerful but not frightening. We drank from a fresh water spring. The water was so clear. I was filled with a combination of joy, excitement, self-confidence, and peacefulness about the future. The feeling swelled throughout my body. I felt as if I was about to fly or spin with joy."

A psychotherapist helps a person gain insight into life. (May also score for SM.)

A person feels empowered by contact with a guru or spiritual guide.

After the birth of her niece, a woman experiences a feeling "that life is a force that will go beyond our time on this earth." (Here the empowering force is some kind of life force itself.)

A young Jewish girl feels empowered -- given an adult status -- by her Bat Mitzvah.

A man believes he has communicated with his dead sister, in a shadowy, mystical experience. Paranormal experiences like these -- rarely reported in our data -- suggest a kind of empowerment, in that the protagonist is given special access to unusual or supernatural powers.

Themes of Communion

Communion encompasses psychological and motivational ideas concerning love, friendship, intimacy, sharing, belonging, affiliation, merger, union, nurturance, and so on. At its heart, communion involves different people coming together in warm, close, caring, and communicative relationships. McAdams's (1980) thematic coding system for "intimacy motivation," employed with TAT stories, is explicitly modeled after Bakan's conception of communion, as well as related ideas in the writings of Maslow (being-love), Buber (the I-Thou relation), and Sullivan (the need for interpersonal intimacy). The four communion categories below represent a distillation and sharpening of the ten categories employed by McAdams in the TAT coding system for intimacy motivation. In addition, the four categories for communion draw more generally from Murray's (1938) communal concepts of "need for affiliation" and "need for nurturance."

5. LOVE/ FRIENDSHIP (LF).

A protagonist experiences an enhancement of erotic love or friendship toward another person. LF refers primarily to love and friendship between peers, as in heterosexual or homosexual relationships and same-sex as well as opposite-sex platonic friendships. It does not include tender feelings of nurturance or caring as experienced in parent/child relationships. In terms of such dimensions as age and status, therefore, lovers and friends are typically relative equals. In order to score for LF, the experience must be centrally about the development of love or friendship in a particular relationship. This holds even if the relationship eventually declines or ends. What iskey is that the protagonist experiences love or friendship in the event described. Consequently, an account in which a man says he was in love with a woman but the relationship eventually terminated would still count for LF, because the love was

mentioned. However, an account in which a husband focuses on how his marriage was ending would not score for LF because he has not talked about the love he felt for his wife at one time. Simply having fun or enjoying oneself in the presence of a lover or friend does not qualify for LF. Examples of LF:

Two friends feel that they grow emotionally closer to each other after spending time together on a vacation.

A man proposes to a woman. (Or vice versa.)

A woman describes her marriage to a wonderful man as the high point of her life.

A man marvels at the love and commitment his wife has given him over the past 40 years.

A young couple enjoy lovemaking on a Saturday afternoon.

An older woman teaches a young man about sex and love.

A woman is strongly attracted to a man in her class. He finally asks her out.

A couple reflects on their happy honeymoon.

A college student takes a friend to a formal dance: "I went to the formal with my friend, Melissa, even though she had a boyfriend. I felt incredibly happy during the slow dance with her. As I held her close and tight, I felt her acceptance and happiness with me. We felt truly comfortable and happy with each other, as friends. Even though there was no direct romantic relationship between us, I sense a mutual true love."

A person remarks on a good friendship he has experienced.

6. DIALOGUE (DG).

A person experiences a reciprocal and noninstrumental form of communication or dialogue with another person or group of others. DG usually takes the form of a conversation between people. The conversation is viewed as an end in itself (justified for its own sake) rather than as a means to another end. Thus, such instrumental conversations as "interviews" or "planning sessions" do not qualify for DG because they are undertaken for noncommunal reasons (e.g., to obtain information or make plans). Furthermore, highly contentious or unpleasant conversations -- such as hostile arguments or exchanges in which people do not seem to be listening to each other -- do not qualify for DG. In order to score for DG, a conversation need not be about especially intimate topics, though of course it may be. A friendly chat about the weather, for example, would qualify for DG. What is important to note is that the communication between the protagonist and other characters in the story is reciprocal (mutual), nonhostile, and viewed as an end in itself rather than a means to an instrumental end. Note also, that conversations for the express purpose of helping another person (e.g., providing advice, therapy) do qualify for this theme.

Examples of DG:

"We sat across from each other and tossed ideas back and forth, ideas of what we thought the plays were about."

"Sara and I had been writing letters to each other all summer."

"We drank a carafe of wine and had a memorable conversation about love and parents."

"My peak experience was both a time of sadness and joy. Sadness because my friend told me she had cancer. Joy because we had opened up to each other and it was a beautiful experience."

"My mother and I talked in depth about the problems my brother was having. I felt like so much of who I have become is like my mother. I felt warmth and closeness when we said good-bye." (also scores for LF).

Sometimes a communication can be nonverbal, as in this example of DG: "She did not have to say a word. I knew instinctively what she meant."

7. CARING/HELP (CH).

The individual reports that he or she provides care, assistance, nurturance, help, aid, support, or therapy for another, providing for the physical, material, social, or emotional welfare or well-being of the other. Examples of being helped (being cared for, being the object of nurturance) do not score for CH. Some of these, indeed, would qualify for EM under Agency, in that a strong outside force (e.g., a therapist) mayserve to empower the subject. Examples of CH:

Many accounts of childbirth score for CH, as well as accounts of adoption. In order to score, the subject must express a strong emotional reaction of love, tenderness, care, nurturance, joy, warmth, or the like in response to the event.

Accounts of taking care of children as they grow up, meeting their needs and looking after them during difficult times, typically score for CH. Also included here are accounts of providing needed financial support, as in the role of the family breadwinner.

Providing assistance or care for spouses, siblings, parents, friends, co- workers, and colleagues may be included, as well. Mere technical assistance, however, does not qualify for CH. An emotional quality of caring must accompany the assistance, which is usually associated with providing counseling or therapy concerning life problems or interpersonal difficulties.

Developing empathy for other people, even if it is not acted upon in a given event, scores for CH. In one example, a woman describes reading a particular novel when she was a girl and developing an empathic attitude toward impoverished and oppressed people as a result.

8. UNITY/ TOGETHERNESS (UT).

Whereas the communal themes of LF, DG, and CH tend to specific particular relationships between the protagonist and one or a few other people, the theme of Unity/Togetherness captures the communal idea of being part of a larger community. In UT, the protagonist experiences a sense of oneness, unity, harmony, synchrony, togetherness, allegiance, belongingness, or solidarity with a group of people, a community, or even all of humankind. A common manifestation of this theme involves the protagonist's being surrounded by friends and family at an important event (e.g., a wedding, graduation), experiencing strong positive emotion because a community of important others have joined him or her at this time. However, there are many other manifestations of UT, as well. Some examples:

"I was warm, surrounded by friends and positive regard that night. I felt unconditionally loved." This scores for UT, but not for LF in that no particular friendship or love affair is specified.

A young woman describes a camping experience with a number of friends and acquaintances. The emphasis is on the closeness to the group rather than the development of any particular love affair or friendship.

Some accounts of weddings may qualify for both LF and UT. The developing love relationship between spouses provides evidence for LF while the wedding's bringing together of many friends and family members may provide evidence for UT.

Examples of being accepted, cherished, or affirmed by friendship, family, or other social groups qualify for UT.

References

Bakan, D. (1966). The duality of human existence: Isolation and communion in Western man.; Boston: Beacon Press.

McAdams, D.P. (1980). A thematic coding system for the intimacy motive. Journal of Research in Personality, 14, 413-432.

McAdams, D.P. (1985). Power, intimacy, and the life story: Personological inquiries into identity. New York: Guilford Press.

McAdams, D.P. (1993). The stories we live by: Personal myths and the making of the self. New York: William Morrow.

McAdams, D.P., Hoffman, B.J., Mansfield, E.D., & Day, R. (1996). Themes of agency and communion in significant autobiographical scenes. Journal of Personality, 64, 339-378.

McClelland, D.C., Atkinson, J.W., Clark, R.A., & Lowell, E.L. (1953). The achievement motive. New York: Appleton-Century-Crofts.

Murray, H.A. (1938). Explorations in personality. New York: Oxford University Press.

Winter, D.G. (1973). The power motive. New York: The Free Press.

Appendix B.1

Counts, Pearson χ^2 and Adjusted Residuals for Specificity (Specific, Non-Specific) Across the Six Memory Cues by Group

		Group				
		Non-Specific		Specific		Pearson χ^2
Cue	Depression Group	Count	Adjusted Residual	Count	Adjusted Residual	(*df*) = 2
Peak	Never	13	2.8	12	-2.8	8.336*
	Formerly	8	-2.0	34	2.0	
	Currently	8	-0.5	22	0.5	
Turning Point	Never	12	0.4	13	-0.4	1.034
	Formerly	20	0.6	22	-0.6	
	Currently	11	-1.0	19	1.0	
Childhood	Never	9	-0.1	16	0.1	1.869
	Formerly	13	-1.1	29	1.1	
	Currently	14	1.3	16	-1.3	
Adolescence	Never	12	0.7	13	-0.7	11.656**
	Formerly	10	-3.2	32	3.2	
	Currently	19	2.8	11	-2.8	
Adulthood	Never	10	0.1	15	0.0	6.831*
	Formerly	11	-2.3	31	2.3	
	Currently	17	2.4	13	-2.4	
Nadir	Never	11	-0.5	14	0.5	5.987*
	Formerly	16	-1.8	26	1.8	
	Currently	20	2.4	10	-2.4	

Note. * $p < .05$, ** $p < .01$

$N = 97$

Appendix B.2

Counts, Pearson χ^2 and Adjusted Residuals for Specificity (Specific, Episodic, Generic) Across the Six Memory Cues by Group

		Group						
		Specific		Episodic		Generic		Pearson
Cue	Depression Group	Count	Adjusted Residual	Count	Adjusted Residual	Count	Adjusted Residual	χ^2 (*df*) = 4
Peak	Never	12	-2.8	8	2.2	5	1.3	8.615
	Formerly	34	2.0	4	-1.8	4	-0.7	
	Currently	22	0.5	5	-0.1	3	-0.5	
Turning Point	Never	13	-0.4	9	-0.3	3	1.4	3.925
	Formerly	22	-0.6	19	1.3	1	-1.4	
	Currently	19	1.0	9	-1.1	2	0.1	
Childhood	Never	16	0.1	4	-0.4	5	0.2	5.018
	Formerly	29	1.1	9	0.6	4	-2.0	
	Currently	16	-1.3	5	-0.3	9	1.9	
Adolescence	Never	13	-0.7	10	0.6	2	0.2	11.725*
	Formerly	32	3.2	8	-2.9	2	-0.8	
	Currently	11	-2.8	16	2.5	3	0.7	
Adulthood	Never	15	0.0	6	0.0	4	0.3	7.363
	Formerly	31	2.3	8	-1.1	3	-1.8	
	Currently	13	-2.4	10	1.3	7	1.7	
Nadir	Never	14	0.5	7	-1.1	4	0.9	7.253
	Formerly	26	1.8	13	-1.1	3	-1.1	
	Currently	10	-2.4	16	2.2	4	0.4	

Note. * $p < .05$

$N = 97$

Appendix B.3

Counts, Pearson χ^2 and Adjusted Residuals for Agency (Regardless of Affect) Across the Six Memory Cues by Group

		Group				
		Absence of Agency		Presence of Agency		Pearson χ^2
Cue	Depression Group	Count	Adjusted Residual	Count	Adjusted Residual	(*df*) = 2
Peak	Never	18	0.0	7	0.0	1.549
	Formerly	28	-1.1	14	1.1	
	Currently	24	1.2	6	-1.2	
Turning Point	Never	11	-0.3	14	0.3	3.454
	Formerly	16	-1.4	26	1.4	
	Currently	18	1.8	12	-1.8	
Childhood	Never	19	-0.5	6	0.5	0.478
	Formerly	33	-0.2	9	0.2	
	Currently	25	0.6	5	-0.6	
Adolescence	Never	16	-0.5	9	0.5	0.260
	Formerly	29	0.2	13	-0.2	
	Currently	21	0.3	9	-0.3	
Adulthood	Never	14	-0.6	11	0.6	0.704
	Formerly	25	-0.2	17	0.2	
	Currently	20	0.8	10	-0.8	
Nadir	Never	16	-2.2	9	2.2	7.198*
	Formerly	33	-0.2	9	0.2	
	Currently	28	2.3	2	-2.3	

Note. * $p < .05$

$N = 97$

Appendix B.4

Counts, Pearson χ^2 and Adjusted Residuals for Communion Across the Six Memory Cues by Group

		Group				
		Absence of Communion		Presence of Communion		Pearson χ^2
Cue	Depression Group	Count	Adjusted Residual	Count	Adjusted Residual	(*df*) = 2
Peak	Never	5	-1.0	20	1.0	1.037
	Formerly	13	0.6	29	-0.6	
	Currently	9	0.3	21	-0.3	
Turning Point	Never	11	-0.6	14	0.6	0.445
	Formerly	22	0.5	20	-0.5	
	Currently	15	0.1	15	0.0	
Childhood	Never	11	0.2	14	-0.2	1.505
	Formerly	15	-1.1	27	1.1	
	Currently	15	1.0	15	-1.0	
Adolescence	Never	9	-0.3	16	0.3	1.384
	Formerly	14	-0.9	28	0.9	
	Currently	14	1.2	16	-1.2	
Adulthood	Never	9	0.4	16	-0.4	0.657
	Formerly	12	-0.8	30	0.8	
	Currently	11	0.5	19	-0.5	
Nadir	Never	11	1.9	14	-1.9	3.991
	Formerly	9	-1.4	33	1.4	
	Currently	8	-0.3	22	0.3	

N = 97

Appendix B.5

Counts, Pearson χ^2 and Adjusted Residuals for Redemption (Redemption/Non-Redemption) Across the Six Memory Cues by Group

		Group				
		Absence of Redemption		Presence of Redemption		Pearson χ^2
Cue	Depression Group	Count	Adjusted Residual	Count	Adjusted Residual	(*df*) = 2
Peak	Never	19	-1.2	6	1.2	1.389
	Formerly	36	0.5	6	-0.5	
	Currently	26	0.6	4	-0.6	
Turning	Never	16	0.7	9	-0.7	4.939
Point	Formerly	19	-2.2	23	2.2	
	Currently	21	1.6	9	-1.6	
Childhood	Never	21	-0.3	4	0.3	0.697
	Formerly	35	-0.5	7	0.5	
	Currently	27	0.8	3	-0.8	
Adolescence	Never	19	-2.0	6	2.0	5.387
	Formerly	37	0.1	5	-0.1	
	Currently	29	1.8	1	-1.8	
Adulthood	Never	23	1.7	2	-1.7	2.874
	Formerly	32	-0.9	10	0.9	
	Currently	23	-0.6	7	0.6	
Nadir	Never	15	-2.2	10	2.2	4.995
	Formerly	34	0.9	8	-0.9	
	Currently	25	1.1	5	-1.1	

N = 97

Appendix B.6

Counts, Pearson χ^2 and Adjusted Residuals for Contamination Across the Six Memory Cues by Group

		Group				
		Absence of Contamination		Presence of Contamination		Pearson χ^2
Cue	Depression Group	Count	Adjusted Residual	Count	Adjusted Residual	(*df*) = 2
Peak	Never	25	2.1	0	-2.1	10.943**
	Formerly	39	1.1	3	-1.1	
	Currently	22	-3.2	8	3.2	
Turning	Never	25	2.3	0	-2.3	5.380
Point	Formerly	35	-0.8	7	0.8	
	Currently	24	-1.3	6	1.3	
Childhood	Never	25	2.2	0	-2.2	13.189**
	Formerly	39	1.4	3	-1.4	
	Currently	21	-3.5	9	3.5	
Adolescence	Never	23	0.8	2	-0.8	2.365
	Formerly	38	0.7	4	-0.7	
	Currently	24	-1.5	6	1.5	
Adulthood	Never	23	0.1	2	0.0	4.722
	Formerly	41	1.8	1	-1.8	
	Currently	25	-2.0	5	2.0	
Nadir	Never	22	0.4	3	-0.4	0.242
	Formerly	36	0.0	6	0.0	
	Currently	25	-0.4	5	0.4	

Note. ** $p < .01$

$N = 97$

Appendix B.7

Counts, Pearson χ^2 and Adjusted Residuals for Integration Across the Six Memory Cues by Group

		Group				
		Non-Integrative		Integrative		Pearson χ^2
Cue	Depression Group	Count	Adjusted Residual	Count	Adjusted Residual	(*df*) = 2
Peak	Never	17	-1.5	8	1.5	4.095
	Formerly	32	-0.5	10	0.5	
	Currently	27	1.9	3	-1.9	
Turning Point	Never	11	-0.2	14	0.2	9.031**
	Formerly	13	-2.5	29	2.5	
	Currently	20	2.8	10	-2.8	
Childhood	Never	23	0.6	2	-0.6	4.672
	Formerly	34	-2.1	8	2.1	
	Currently	29	1.7	1	-1.7	
Adolescence	Never	18	-2.5	7	2.5	9.261**
	Formerly	36	-0.2	6	0.2	
	Currently	30	2.6	0	-2.6	
Adulthood	Never	20	0.4	5	-0.4	1.552
	Formerly	30	-1.2	12	1.2	
	Currently	25	0.9	2	-0.9	
Nadir	Never	21	-0.4	4	0.4	1.704
	Formerly	35	-0.8	7	0.8	
	Currently	28	1.3	2	-1.3	

Note. ** $p < .01$

$N = 97$

Appendix B.8

Counts, Pearson χ^2 and Adjusted Residuals for Affect Across the Six Memory Cues by Group

		Group						
		Positive		Negative		Mixed		Pearson χ^2
Cue	Depression Group	Count	Adjusted Residual	Count	Adjusted Residual	Count	Adjusted Residual	(*df*) = 4
Peak	Never	17	0.9	4	-0.5	4	-0.5	8.565
	Formerly	30	1.9	7	-0.6	5	-1.7	
	Currently	12	-2.8	8	1.2	10	2.3	
Turning	Never	9	1.2	2	-2.1	14	0.8	11.269*
Point	Formerly	8	-1.5	9	-0.5	25	1.7	
	Currently	9	0.5	12	2.5	9	-2.6	
Childhood	Never	9	0.0	2	-2.7	14	2.5	14.295**
	Formerly	18	1.2	11	-0.5	13	-0.7	
	Currently	8	-1.3	15	3.1	7	-1.6	
Adolescence	Never	11	1.2	3	-2.6	11	1.4	9.890*
	Formerly	16	0.7	14	0.1	12	-0.8	
	Currently	6	-2.0	15	2.4	9	-0.4	
Adulthood	Never	14	0.0	4	-0.2	7	0.3	5.313
	Formerly	27	1.3	4	-1.8	11	0.1	
	Currently	14	-1.3	9	2.2	7	-0.4	
Nadir	Never	0	0.0	16	-1.1	9	1.1	1.189
	Formerly	0	0.0	32	0.8	10	-0.8	
	Currently	0	0.0	22	0.2	8	-0.2	

Note. * $p < .05$, ** $p < .01$

$N = 97$

Appendix B.9.1 Formation of Participant Groups

Frequencies

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	42	43.3	43.3	43.3
	Female	55	56.7	56.7	100.0
	Total	97	100.0	100.0	

Frequencies

ParticipantGroups

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never depressed	25	25.8	25.8	25.8
	Formerly depressed	42	43.3	43.3	69.1
	Currently depressed	30	30.9	30.9	100.0
	Total	97	100.0	100.0	

Crosstabs

ParticipantGroups * Gender Crosstabulation

Count

		Gender		Total
		Male	Female	
ParticipantGroups	Never depressed	13	12	25
	Formerly depressed	13	29	42
	Currently depressed	16	14	30
Total		42	55	97

Appendix B.9.2 Depression Groups by Self Defining Memory Information

Memory 1 – Peak
Oneway

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min	Max
						Lower Bound	Upper Bound		
Mem1 Clarity	Never depressed	23	5.52	.593	.124	5.27	5.78	4	6
	Formerly depressed	41	5.63	.662	.103	5.43	5.84	4	6
	Currently depressed	28	5.71	.713	.135	5.44	5.99	3	6
	Total	92	5.63	.658	.069	5.49	5.77	3	6
Mem1 Intensity	Never depressed	23	5.52	.665	.139	5.23	5.81	4	6
	Formerly depressed	41	5.20	1.005	.157	4.88	5.51	2	6
	Currently depressed	28	5.57	.836	.158	5.25	5.90	2	6
	Total	92	5.39	.889	.093	5.21	5.58	2	6
Mem1 Importance	Never depressed	23	5.78	.671	.140	5.49	6.07	3	6
	Formerly depressed	41	5.49	.597	.093	5.30	5.68	4	6
	Currently depressed	28	5.57	.742	.140	5.28	5.86	4	6
	Total	92	5.59	.666	.069	5.45	5.72	3	6
Mem1 Resolution	Never depressed	23	5.61	.891	.186	5.22	5.99	2	6
	Formerly depressed	40	5.23	1.368	.216	4.79	5.66	1	6
	Currently depressed	28	3.79	2.149	.406	2.95	4.62	1	6
	Total	91	4.88	1.718	.180	4.52	5.24	1	6

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Mem1Clarity	Between Groups	.469	2	.235	.536	.587
	Within Groups	38.966	89	.438		
	Total	39.435	91			
Mem1Intensity	Between Groups	2.878	2	1.439	1.855	.162
	Within Groups	69.035	89	.776		
	Total	71.913	91			
Mem1Importance	Between Groups	1.290	2	.645	1.472	.235
	Within Groups	39.014	89	.438		
	Total	40.304	91			
Mem1Resolution	Between Groups	50.503	2	25.251	10.327	.000
	Within Groups	215.168	88	2.445		
	Total	265.670	90			

Post Hoc Tests

Multiple Comparisons

Scheffe

Dependent Variable	(I) ParticipantGroups	(J) ParticipantGroups	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Mem1 Clarity	Never depressed	Formerly depressed	-.112	.172	.809	-.54	.32
		Currently depressed	-.193	.186	.588	-.66	.27
	Formerly depressed	Never depressed	.112	.172	.809	-.32	.54
		Currently depressed	-.080	.162	.885	-.48	.32
	Currently depressed	Never depressed	.193	.186	.588	-.27	.66
		Formerly depressed	.080	.162	.885	-.32	.48
Mem1 Intensity	Never depressed	Formerly depressed	.327	.229	.367	-.24	.90
		Currently depressed	-.050	.248	.980	-.67	.57
	Formerly depressed	Never depressed	-.327	.229	.367	-.90	.24
		Currently depressed	-.376	.216	.225	-.91	.16
	Currently depressed	Never depressed	.050	.248	.980	-.57	.67
		Formerly depressed	.376	.216	.225	-.16	.91
Mem1 Importance	Never depressed	Formerly depressed	.295	.172	.238	-.13	.72
		Currently depressed	.211	.186	.528	-.25	.68
	Formerly depressed	Never depressed	-.295	.172	.238	-.72	.13
		Currently depressed	-.084	.162	.876	-.49	.32
	Currently depressed	Never depressed	-.211	.186	.528	-.68	.25
		Formerly depressed	.084	.162	.876	-.32	.49
Mem1 Resolution	Never depressed	Formerly depressed	.384	.409	.646	-.64	1.40
		Currently depressed	1.823*	.440	.000	.73	2.92
	Formerly depressed	Never depressed	-.384	.409	.646	-1.40	.64
		Currently depressed	1.439*	.385	.002	.48	2.40
	Currently depressed	Never depressed	-1.823*	.440	.000	-2.92	-.73
		Formerly depressed	-1.439*	.385	.002	-2.40	-.48

*. The mean difference is significant at the 0.05 level.

Memory 2 – Turning Point

Oneway

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min	Max
						Lower Bound	Upper Bound		
Mem2 Clarity	Never depressed	22	5.27	1.032	.220	4.82	5.73	2	6
	Formerly depressed	41	5.34	.728	.114	5.11	5.57	4	6
	Currently depressed	26	5.69	.549	.108	5.47	5.91	4	6
	Total	89	5.43	.782	.083	5.26	5.59	2	6
Mem2 Intensity	Never depressed	22	5.18	1.006	.215	4.74	5.63	2	6
	Formerly depressed	41	5.29	.782	.122	5.05	5.54	3	6
	Currently depressed	26	5.46	.706	.138	5.18	5.75	4	6
	Total	89	5.31	.820	.087	5.14	5.49	2	6
Mem2 Importance	Never depressed	23	5.52	.947	.198	5.11	5.93	2	6
	Formerly depressed	41	5.66	.530	.083	5.49	5.83	4	6
	Currently depressed	26	5.58	.758	.149	5.27	5.88	3	6
	Total	90	5.60	.716	.075	5.45	5.75	2	6
Mem2 Resolution	Never depressed	23	5.26	1.421	.296	4.65	5.88	1	6
	Formerly depressed	41	5.10	.970	.151	4.79	5.40	2	6
	Currently depressed	26	4.23	1.904	.373	3.46	5.00	1	6
	Total	90	4.89	1.457	.154	4.58	5.19	1	6

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Mem2Clarity	Between Groups	2.654	2	1.327	2.232	.113
	Within Groups	51.122	86	.594		
	Total	53.775	88			
Mem2Intensity	Between Groups	.969	2	.484	.716	.492
	Within Groups	58.222	86	.677		
	Total	59.191	88			
Mem2Importance	Between Groups	.295	2	.148	.283	.754
	Within Groups	45.305	87	.521		
	Total	45.600	89			
Mem2Resolution	Between Groups	16.229	2	8.114	4.089	.020
	Within Groups	172.660	87	1.985		
	Total	188.889	89			

Post Hoc Tests

Multiple Comparisons

Scheffe

Dependent Variable	(I) ParticipantGroups	(J) ParticipantGroups	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Mem2 Clarity	Never depressed	Formerly depressed	-.069	.204	.945	-.58	.44
		Currently depressed	-.420	.223	.177	-.98	.14
	Formerly depressed	Never depressed	.069	.204	.945	-.44	.58
		Currently depressed	-.351	.193	.199	-.83	.13
	Currently depressed	Never depressed	.420	.223	.177	-.14	.98
		Formerly depressed	.351	.193	.199	-.13	.83
Mem2 Intensity	Never depressed	Formerly depressed	-.111	.217	.878	-.65	.43
		Currently depressed	-.280	.238	.505	-.87	.31
	Formerly depressed	Never depressed	.111	.217	.878	-.43	.65
		Currently depressed	-.169	.206	.716	-.68	.34
	Currently depressed	Never depressed	.280	.238	.505	-.31	.87
		Formerly depressed	.169	.206	.716	-.34	.68
Mem2 Importance	Never depressed	Formerly depressed	-.137	.188	.768	-.60	.33
		Currently depressed	-.055	.207	.965	-.57	.46
	Formerly depressed	Never depressed	.137	.188	.768	-.33	.60
		Currently depressed	.082	.181	.903	-.37	.53
	Currently depressed	Never depressed	.055	.207	.965	-.46	.57
		Formerly depressed	-.082	.181	.903	-.53	.37
Mem2 Resolution	Never depressed	Formerly depressed	.163	.367	.906	-.75	1.08
		Currently depressed	1.030*	.403	.043	.03	2.03
	Formerly depressed	Never depressed	-.163	.367	.906	-1.08	.75
		Currently depressed	.867	.353	.054	-.01	1.75
	Currently depressed	Never depressed	-1.030*	.403	.043	-2.03	-.03
		Formerly depressed	-.867	.353	.054	-1.75	.01

*. The mean difference is significant at the 0.05 level.

Memory 3 – Childhood

Oneway

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min	Max
						Lower Bound	Upper Bound		
Mem3 Clarity	Never depressed	23	4.57	1.237	.258	4.03	5.10	2	6
	Formerly depressed	40	4.55	1.154	.182	4.18	4.92	2	6
	Currently depressed	27	5.33	.679	.131	5.06	5.60	4	6
	Total	90	4.79	1.107	.117	4.56	5.02	2	6
Mem3 Intensity	Never depressed	23	4.48	.947	.198	4.07	4.89	3	6
	Formerly depressed	40	4.43	1.107	.175	4.07	4.78	2	6
	Currently depressed	27	4.78	1.050	.202	4.36	5.19	2	6
	Total	90	4.54	1.051	.111	4.32	4.76	2	6
Mem3 Importance	Never depressed	23	5.22	.795	.166	4.87	5.56	4	6
	Formerly depressed	40	4.63	1.213	.192	4.24	5.01	2	6
	Currently depressed	27	4.85	1.486	.286	4.26	5.44	1	6
	Total	90	4.84	1.226	.129	4.59	5.10	1	6
Mem3 Resolution	Never depressed	23	4.83	1.403	.293	4.22	5.43	1	6
	Formerly depressed	39	4.69	1.379	.221	4.25	5.14	1	6
	Currently depressed	27	3.78	1.805	.347	3.06	4.49	1	6
	Total	89	4.45	1.574	.167	4.12	4.78	1	6

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Mem3Clarity	Between Groups	11.437	2	5.718	5.100	.008
	Within Groups	97.552	87	1.121		
	Total	108.989	89			
Mem3Intensity	Between Groups	2.141	2	1.071	.969	.384
	Within Groups	96.181	87	1.106		
	Total	98.322	89			
Mem3Importance	Between Groups	5.127	2	2.563	1.733	.183
	Within Groups	128.695	87	1.479		
	Total	133.822	89			
Mem3Resolution	Between Groups	17.744	2	8.872	3.810	.026
	Within Groups	200.279	86	2.329		
	Total	218.022	88			

Post Hoc Tests

Multiple Comparisons

Scheffe

Dependent Variable	(I) Participant Groups	(J) Participant Groups	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Mem3 Clarity	Never depressed	Formerly depressed	.015	.277	.998	-.67	.71
		Currently depressed	-.768*	.300	.043	-1.52	-.02
	Formerly depressed	Never depressed	-.015	.277	.998	-.71	.67
		Currently depressed	-.783*	.264	.015	-1.44	-.13
	Currently depressed	Never depressed	.768*	.300	.043	.02	1.52
		Formerly depressed	.783*	.264	.015	.13	1.44
Mem3 Intensity	Never depressed	Formerly depressed	.053	.275	.981	-.63	.74
		Currently depressed	-.300	.298	.606	-1.04	.44
	Formerly depressed	Never depressed	-.053	.275	.981	-.74	.63
		Currently depressed	-.353	.262	.407	-1.01	.30
	Currently depressed	Never depressed	.300	.298	.606	-.44	1.04
		Formerly depressed	.353	.262	.407	-.30	1.01
Mem3 Importance	Never depressed	Formerly depressed	.592	.318	.183	-.20	1.39
		Currently depressed	.366	.345	.573	-.49	1.23
	Formerly depressed	Never depressed	-.592	.318	.183	-1.39	.20
		Currently depressed	-.227	.303	.756	-.98	.53
	Currently depressed	Never depressed	-.366	.345	.573	-1.23	.49
		Formerly depressed	.227	.303	.756	-.53	.98
Mem3 Resolution	Never depressed	Formerly depressed	.134	.401	.946	-.87	1.13
		Currently depressed	1.048	.433	.059	-.03	2.13
	Formerly depressed	Never depressed	-.134	.401	.946	-1.13	.87
		Currently depressed	.915	.382	.062	-.04	1.87
	Currently depressed	Never depressed	-1.048	.433	.059	-2.13	.03
		Formerly depressed	-.915	.382	.062	-1.87	.04

*. The mean difference is significant at the 0.05 level.

Memory 4 - Adolescence

Oneway

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min	Max
						Lower Bound	Upper Bound		
Mem4 Clarity	Never depressed	22	4.82	1.296	.276	4.24	5.39	1	6
	Formerly depressed	41	5.10	.944	.147	4.80	5.40	2	6
	Currently depressed	26	5.46	.761	.149	5.15	5.77	4	6
	Total	89	5.13	1.013	.107	4.92	5.35	1	6
Mem4 Intensity	Never depressed	22	4.50	1.406	.300	3.88	5.12	1	6
	Formerly depressed	41	4.90	1.068	.167	4.57	5.24	2	6
	Currently depressed	26	5.27	.919	.180	4.90	5.64	3	6
	Total	89	4.91	1.145	.121	4.67	5.15	1	6
Mem4 Importance	Never depressed	22	5.09	1.231	.262	4.55	5.64	1	6
	Formerly depressed	41	4.44	1.343	.210	4.02	4.86	1	6
	Currently depressed	25	5.04	.978	.196	4.64	5.44	3	6
	Total	88	4.77	1.248	.133	4.51	5.04	1	6
Mem4 Resolution	Never depressed	22	4.95	1.253	.267	4.40	5.51	2	6
	Formerly depressed	40	4.45	1.377	.218	4.01	4.89	1	6
	Currently depressed	26	3.96	1.612	.316	3.31	4.61	1	6
	Total	88	4.43	1.453	.155	4.12	4.74	1	6

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Mem4Clarity	Between Groups	5.038	2	2.519	2.538	.085
	Within Groups	85.344	86	.992		
	Total	90.382	88			
Mem4Intensity	Between Groups	7.056	2	3.528	2.803	.066
	Within Groups	108.225	86	1.258		
	Total	115.281	88			
Mem4Importance	Between Groups	8.579	2	4.289	2.874	.062
	Within Groups	126.876	85	1.493		
	Total	135.455	87			
Mem4Resolution	Between Groups	11.775	2	5.887	2.913	.060
	Within Groups	171.816	85	2.021		
	Total	183.591	87			

Post Hoc Tests

Multiple Comparisons

Scheffe

Dependent Variable	(I) ParticipantGroups	(J) ParticipantGroups	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Mem4 Clarity	Never depressed	Formerly depressed	-.279	.263	.572	-.94	.38
		Currently depressed	-.643	.289	.089	-1.36	.08
	Formerly depressed	Never depressed	.279	.263	.572	-.38	.94
		Currently depressed	-.364	.250	.350	-.99	.26
	Currently depressed	Never depressed	.643	.289	.089	-.08	1.36
		Formerly depressed	.364	.250	.350	-.26	.99
Mem4 Intensity	Never depressed	Formerly depressed	-.402	.296	.402	-1.14	.34
		Currently depressed	-.769	.325	.066	-1.58	.04
	Formerly depressed	Never depressed	.402	.296	.402	-.34	1.14
		Currently depressed	-.367	.281	.431	-1.07	.33
	Currently depressed	Never depressed	.769	.325	.066	-.04	1.58
		Formerly depressed	.367	.281	.431	-.33	1.07
Mem4 Importance	Never depressed	Formerly depressed	.652	.323	.137	-.15	1.46
		Currently depressed	.051	.357	.990	-.84	.94
	Formerly depressed	Never depressed	-.652	.323	.137	-1.46	.15
		Currently depressed	-.601	.310	.159	-1.37	.17
	Currently depressed	Never depressed	-.051	.357	.990	-.94	.84
		Formerly depressed	.601	.310	.159	-.17	1.37
Mem4 Resolution	Never depressed	Formerly depressed	.505	.377	.413	-.44	1.44
		Currently depressed	.993	.412	.060	-.03	2.02
	Formerly depressed	Never depressed	-.505	.377	.413	-1.44	.44
		Currently depressed	.488	.358	.399	-.40	1.38
	Currently depressed	Never depressed	-.993	.412	.060	-2.02	.03
		Formerly depressed	-.488	.358	.399	-1.38	.40

Memory 5 – Adulthood

Oneway

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min	Max
						Lower Bound	Upper Bound		
Mem5 Clarity	Never depressed	20	5.15	.988	.221	4.69	5.61	3	6
	Formerly depressed	40	5.75	.494	.078	5.59	5.91	4	6
	Currently depressed	26	5.88	.326	.064	5.75	6.02	5	6
	Total	86	5.65	.665	.072	5.51	5.79	3	6
Mem5 Intensity	Never depressed	20	5.40	.821	.184	5.02	5.78	3	6
	Formerly depressed	40	5.55	.714	.113	5.32	5.78	4	6
	Currently depressed	26	5.77	.514	.101	5.56	5.98	4	6
	Total	86	5.58	.694	.075	5.43	5.73	3	6
Mem5 Importance	Never depressed	20	5.50	.688	.154	5.18	5.82	4	6
	Formerly depressed	40	5.65	.662	.105	5.44	5.86	3	6
	Currently depressed	26	5.58	.857	.168	5.23	5.92	2	6
	Total	86	5.59	.726	.078	5.44	5.75	2	6
Mem5 Resolution	Never depressed	19	5.37	1.300	.298	4.74	6.00	2	6
	Formerly depressed	39	5.38	1.138	.182	5.02	5.75	1	6
	Currently depressed	25	4.36	2.059	.412	3.51	5.21	1	6
	Total	83	5.07	1.560	.171	4.73	5.41	1	6

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Mem5Clarity	Between Groups	6.831	2	3.416	9.233	.000
	Within Groups	30.704	83	.370		
	Total	37.535	85			
Mem5Intensity	Between Groups	1.615	2	.807	1.705	.188
	Within Groups	39.315	83	.474		
	Total	40.930	85			
Mem5Importance	Between Groups	.310	2	.155	.289	.750
	Within Groups	44.446	83	.535		
	Total	44.756	85			
Mem5Resolution	Between Groups	18.154	2	9.077	4.003	.022
	Within Groups	181.412	80	2.268		
	Total	199.566	82			

Post Hoc Tests

Multiple Comparisons

Scheffe

Dependent Variable	(I) ParticipantGroups	(J) ParticipantGroups	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Mem5 Clarity	Never depressed	Formerly depressed	-.600*	.167	.002	-1.02	-.18
		Currently depressed	-.735*	.181	.001	-1.19	-.28
	Formerly depressed	Never depressed	.600*	.167	.002	.18	1.02
		Currently depressed	-.135	.153	.681	-.52	.25
	Currently depressed	Never depressed	.735*	.181	.001	.28	1.19
		Formerly depressed	.135	.153	.681	-.25	.52
Mem5 Intensity	Never depressed	Formerly depressed	-.150	.188	.729	-.62	.32
		Currently depressed	-.369	.205	.203	-.88	.14
	Formerly depressed	Never depressed	.150	.188	.729	-.32	.62
		Currently depressed	-.219	.173	.453	-.65	.21
	Currently depressed	Never depressed	.369	.205	.203	-.14	.88
		Formerly depressed	.219	.173	.453	-.21	.65
Mem5 Importance	Never depressed	Formerly depressed	-.150	.200	.756	-.65	.35
		Currently depressed	-.077	.218	.939	-.62	.47
	Formerly depressed	Never depressed	.150	.200	.756	-.35	.65
		Currently depressed	.073	.184	.925	-.39	.53
	Currently depressed	Never depressed	.077	.218	.939	-.47	.62
		Formerly depressed	-.073	.184	.925	-.53	.39
Mem5 Resolution	Never depressed	Formerly depressed	-.016	.421	.999	-1.07	1.03
		Currently depressed	1.008	.458	.095	-.13	2.15
	Formerly depressed	Never depressed	.016	.421	.999	-1.03	1.07
		Currently depressed	1.025*	.386	.034	.06	1.99
	Currently depressed	Never depressed	-1.008	.458	.095	-2.15	.13
		Formerly depressed	-1.025*	.386	.034	-1.99	-.06

*. The mean difference is significant at the 0.05 level.

Memory 6 – Nadir

Oneway

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min	Max
						Lower Bound	Upper Bound		
Mem6 Clarity	Never depressed	23	5.22	.902	.188	4.83	5.61	3	6
	Formerly depressed	41	5.37	.799	.125	5.11	5.62	3	6
	Currently depressed	25	5.80	.408	.082	5.63	5.97	5	6
	Total	89	5.45	.769	.082	5.29	5.61	3	6
Mem6 Intensity	Never depressed	23	5.13	1.100	.229	4.65	5.61	2	6
	Formerly depressed	41	5.37	1.019	.159	5.04	5.69	2	6
	Currently depressed	25	5.64	.638	.128	5.38	5.90	4	6
	Total	89	5.38	.959	.102	5.18	5.58	2	6
Mem6 Importance	Never depressed	23	4.96	1.296	.270	4.40	5.52	1	6
	Formerly depressed	41	5.20	1.289	.201	4.79	5.60	1	6
	Currently depressed	25	5.64	.638	.128	5.38	5.90	4	6
	Total	89	5.26	1.163	.123	5.01	5.50	1	6
Mem6 Resolution	Never depressed	23	4.09	1.703	.355	3.35	4.82	1	6
	Formerly depressed	40	4.15	1.626	.257	3.63	4.67	1	6
	Currently depressed	25	2.40	1.732	.346	1.69	3.11	1	6
	Total	88	3.64	1.833	.195	3.25	4.02	1	6

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Mem6Clarity	Between Groups	4.597	2	2.299	4.168	.019
	Within Groups	47.425	86	.551		
	Total	52.022	88			
Mem6Intensity	Between Groups	3.130	2	1.565	1.728	.184
	Within Groups	77.881	86	.906		
	Total	81.011	88			
Mem6Importance	Between Groups	5.901	2	2.950	2.242	.112
	Within Groups	113.156	86	1.316		
	Total	119.056	88			
Mem6Resolution	Between Groups	53.438	2	26.719	9.505	.000
	Within Groups	238.926	85	2.811		
	Total	292.364	87			

Post Hoc Tests

Multiple Comparisons

Scheffe

Dependent Variable	(I) ParticipantGroups	(J) ParticipantGroups	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Mem6 Clarity	Never depressed	Formerly depressed	-.148	.193	.746	-.63	.33
		Currently depressed	-.583*	.215	.029	-1.12	-.05
	Formerly depressed	Never depressed	.148	.193	.746	-.33	.63
		Currently depressed	-.434	.188	.076	-.90	.04
	Currently depressed	Never depressed	.583*	.215	.029	.05	1.12
		Formerly depressed	.434	.188	.076	-.04	.90
Mem6 Intensity	Never depressed	Formerly depressed	-.235	.248	.639	-.85	.38
		Currently depressed	-.510	.275	.186	-1.19	.18
	Formerly depressed	Never depressed	.235	.248	.639	-.38	.85
		Currently depressed	-.274	.241	.527	-.88	.33
	Currently depressed	Never depressed	.510	.275	.186	-.18	1.19
		Formerly depressed	.274	.241	.527	-.33	.88
Mem6 Importance	Never depressed	Formerly depressed	-.239	.299	.728	-.98	.51
		Currently depressed	-.683	.331	.125	-1.51	.14
	Formerly depressed	Never depressed	.239	.299	.728	-.51	.98
		Currently depressed	-.445	.291	.316	-1.17	.28
	Currently depressed	Never depressed	.683	.331	.125	-.14	1.51
		Formerly depressed	.445	.291	.316	-.28	1.17
Mem6 Resolution	Never depressed	Formerly depressed	-.063	.439	.990	-1.16	1.03
		Currently depressed	1.687*	.484	.003	.48	2.89
	Formerly depressed	Never depressed	.063	.439	.990	-1.03	1.16
		Currently depressed	1.750*	.427	.000	.69	2.81
	Currently depressed	Never depressed	-1.687*	.484	.003	-2.89	-.48
		Formerly depressed	-1.750*	.427	.000	-2.81	-.69

*. The mean difference is significant at the 0.05 level.

Appendix B.9.3 Specificity (overall) Analysis of Variance

Oneway

Descriptives

OverallSpecificity

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Never depressed	25	3.3200	2.07605	.41521	2.4630	4.1770	.00	6.00
Formerly depressed	42	4.1429	1.66120	.25633	3.6252	4.6605	1.00	6.00
Currently depressed	30	3.0333	1.73172	.31617	2.3867	3.6800	1.00	6.00
Total	97	3.5876	1.84703	.18754	3.2154	3.9599	.00	6.00

ANOVA

OverallSpecificity

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	23.956	2	11.978	3.709	.028
Within Groups	303.550	94	3.229		
Total	327.505	96			

Post Hoc Tests

Multiple Comparisons

OverallSpecificity
Scheffe

(I) ParticipantGroups	(J) ParticipantGroups	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Never depressed	Formerly depressed	-.82286	.45393	.199	-1.9519	.3062
	Currently depressed	.28667	.48663	.841	-.9237	1.4971
Formerly depressed	Never depressed	.82286	.45393	.199	-.3062	1.9519
	Currently depressed	1.10952*	.42957	.040	.0411	2.1780
Currently depressed	Never depressed	-.28667	.48663	.841	-1.4971	.9237
	Formerly depressed	-1.10952*	.42957	.040	-2.1780	-.0411

*. The mean difference is significant at the 0.05 level.

Appendix B.9.4 Specificity (episodic/generic) Chi Square

ParticipantGroups * Memory 1 (Peak) Specificity

Crosstab

			Memory 1 (Peak) Specificity			Total
			Specific	Episodic	Generic	
Participant Groups	Never depressed	Count	12	8	5	25
		Expected Count	17.5	4.4	3.1	25.0
		% within ParticipantGroups	48.0%	32.0%	20.0%	100.0%
		% of Total	12.4%	8.2%	5.2%	25.8%
		Std. Residual	-1.3	1.7	1.1	
		Adjusted Residual	-2.8	2.2	1.3	
	Formerly depressed	Count	34	4	4	42
		Expected Count	29.4	7.4	5.2	42.0
		% within ParticipantGroups	81.0%	9.5%	9.5%	100.0%
		% of Total	35.1%	4.1%	4.1%	43.3%
		Std. Residual	.8	-1.2	-.5	
		Adjusted Residual	2.0	-1.8	-.7	
	Currently depressed	Count	22	5	3	30
		Expected Count	21.0	5.3	3.7	30.0
		% within ParticipantGroups	73.3%	16.7%	10.0%	100.0%
		% of Total	22.7%	5.2%	3.1%	30.9%
		Std. Residual	.2	-.1	-.4	
		Adjusted Residual	.5	-.1	-.5	
Total		Count	68	17	12	97
		Expected Count	68.0	17.0	12.0	97.0
		% within ParticipantGroups	70.1%	17.5%	12.4%	100.0%
		% of Total	70.1%	17.5%	12.4%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.615[a]	4	.071
Likelihood Ratio	8.362	4	.079
Linear-by-Linear Association	3.055	1	.080
N of Valid Cases	97		

a. 3 cells (33.3%) have expected count less than 5. The minimum expected count is 3.09.

ParticipantGroups * Memory 2 (Turning Point) Specificity

Crosstab

			Memory 2 (Turning Point) Specificity			Total
			Specific	Episodic	Generic	
Participant Groups	Never depressed	Count	13	9	3	25
		Expected Count	13.9	9.5	1.5	25.0
		% within ParticipantGroups	52.0%	36.0%	12.0%	100.0%
		% of Total	13.4%	9.3%	3.1%	25.8%
		Std. Residual	-.2	-.2	1.2	
		Adjusted Residual	-.4	-.3	1.4	
	Formerly depressed	Count	22	19	1	42
		Expected Count	23.4	16.0	2.6	42.0
		% within ParticipantGroups	52.4%	45.2%	2.4%	100.0%
		% of Total	22.7%	19.6%	1.0%	43.3%
		Std. Residual	-.3	.7	-1.0	
		Adjusted Residual	-.6	1.3	-1.4	
	Currently depressed	Count	19	9	2	30
		Expected Count	16.7	11.4	1.9	30.0
		% within ParticipantGroups	63.3%	30.0%	6.7%	100.0%
		% of Total	19.6%	9.3%	2.1%	30.9%
		Std. Residual	.6	-.7	.1	
		Adjusted Residual	1.0	-1.1	.1	
Total		Count	54	37	6	97
		Expected Count	54.0	37.0	6.0	97.0
		% within ParticipantGroups	55.7%	38.1%	6.2%	100.0%
		% of Total	55.7%	38.1%	6.2%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.925[a]	4	.416
Likelihood Ratio	3.931	4	.415
Linear-by-Linear Association	.991	1	.320
N of Valid Cases	97		

a. 3 cells (33.3%) have expected count less than 5. The minimum expected count is 1.55.

ParticipantGroups * Memory 3 (Childhood) Specificity

Crosstab

			Memory 3 (Childhood) Specificity			Total
			Specific	Episodic	Generic	
Participant Groups	Never depressed	Count	16	4	5	25
		Expected Count	15.7	4.6	4.6	25.0
		% within ParticipantGroups	64.0%	16.0%	20.0%	100.0%
		% of Total	16.5%	4.1%	5.2%	25.8%
		Std. Residual	.1	-.3	.2	
		Adjusted Residual	.1	-.4	.2	
	Formerly depressed	Count	29	9	4	42
		Expected Count	26.4	7.8	7.8	42.0
		% within ParticipantGroups	69.0%	21.4%	9.5%	100.0%
		% of Total	29.9%	9.3%	4.1%	43.3%
		Std. Residual	.5	.4	-1.4	
		Adjusted Residual	1.1	.6	-2.0	
	Currently depressed	Count	16	5	9	30
		Expected Count	18.9	5.6	5.6	30.0
		% within ParticipantGroups	53.3%	16.7%	30.0%	100.0%
		% of Total	16.5%	5.2%	9.3%	30.9%
		Std. Residual	-.7	-.2	1.5	
		Adjusted Residual	-1.3	-.3	1.9	
Total		Count	61	18	18	97
		Expected Count	61.0	18.0	18.0	97.0
		% within ParticipantGroups	62.9%	18.6%	18.6%	100.0%
		% of Total	62.9%	18.6%	18.6%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.018[a]	4	.285
Likelihood Ratio	5.099	4	.277
Linear-by-Linear Association	1.131	1	.288
N of Valid Cases	97		

a. 2 cells (22.2%) have expected count less than 5. The minimum expected count is 4.64.

ParticipantGroups * Memory 4 (Adolescence) Specificity

Crosstab

			Memory 4 (Adolescence) Specificity			Total
			Specific	Episodic	Generic	
Participant Groups	Never depressed	Count	13	10	2	25
		Expected Count	14.4	8.8	1.8	25.0
		% within ParticipantGroups	52.0%	40.0%	8.0%	100.0%
		% of Total	13.4%	10.3%	2.1%	25.8%
		Std. Residual	-.4	.4	.1	
		Adjusted Residual	-.7	.6	.2	
	Formerly depressed	Count	32	8	2	42
		Expected Count	24.2	14.7	3.0	42.0
		% within ParticipantGroups	76.2%	19.0%	4.8%	100.0%
		% of Total	33.0%	8.2%	2.1%	43.3%
		Std. Residual	1.6	-1.8	-.6	
		Adjusted Residual	3.2	-2.9	-.8	
	Currently depressed	Count	11	16	3	30
		Expected Count	17.3	10.5	2.2	30.0
		% within ParticipantGroups	36.7%	53.3%	10.0%	100.0%
		% of Total	11.3%	16.5%	3.1%	30.9%
		Std. Residual	-1.5	1.7	.6	
		Adjusted Residual	-2.8	2.5	.7	
Total		Count	56	34	7	97
		Expected Count	56.0	34.0	7.0	97.0
		% within ParticipantGroups	57.7%	35.1%	7.2%	100.0%
		% of Total	57.7%	35.1%	7.2%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11.725[a]	4	.020
Likelihood Ratio	12.071	4	.017
Linear-by-Linear Association	1.400	1	.237
N of Valid Cases	97		

a. 3 cells (33.3%) have expected count less than 5. The minimum expected count is 1.80.

ParticipantGroups * Memory 5 (Adulthood) Specificity

Crosstab

			Memory 5 (Adulthood) Specificity			Total
			Specific	Episodic	Generic	
Participant Groups	Never depressed	Count	15	6	4	25
		Expected Count	15.2	6.2	3.6	25.0
		% within ParticipantGroups	60.0%	24.0%	16.0%	100.0%
		% of Total	15.5%	6.2%	4.1%	25.8%
		Std. Residual	.0	.0	.2	
		Adjusted Residual	.0	.0	.3	
	Formerly depressed	Count	31	8	3	42
		Expected Count	25.5	10.4	6.1	42.0
		% within ParticipantGroups	73.8%	19.0%	7.1%	100.0%
		% of Total	32.0%	8.2%	3.1%	43.3%
		Std. Residual	1.1	-.7	-1.2	
		Adjusted Residual	2.3	-1.1	-1.8	
	Currently depressed	Count	13	10	7	30
		Expected Count	18.2	7.4	4.3	30.0
		% within ParticipantGroups	43.3%	33.3%	23.3%	100.0%
		% of Total	13.4%	10.3%	7.2%	30.9%
		Std. Residual	-1.2	.9	1.3	
		Adjusted Residual	-2.4	1.3	1.7	
Total		Count	59	24	14	97
		Expected Count	59.0	24.0	14.0	97.0
		% within ParticipantGroups	60.8%	24.7%	14.4%	100.0%
		% of Total	60.8%	24.7%	14.4%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.363[a]	4	.118
Likelihood Ratio	7.510	4	.111
Linear-by-Linear Association	1.803	1	.179
N of Valid Cases	97		

a. 2 cells (22.2%) have expected count less than 5. The minimum expected count is 3.61.

ParticipantGroups * Memory 6 (Nadir/Low Point) Specificity

Crosstab

			Memory 6 (Nadir/Low Point) Specificity			Total
			Specific	Episodic	Generic	
Participant Groups	Never depressed	Count	14	7	4	25
		Expected Count	12.9	9.3	2.8	25.0
		% within ParticipantGroups	56.0%	28.0%	16.0%	100.0%
		% of Total	14.4%	7.2%	4.1%	25.8%
		Std. Residual	.3	-.7	.7	
		Adjusted Residual	.5	-1.1	.9	
	Formerly depressed	Count	26	13	3	42
		Expected Count	21.6	15.6	4.8	42.0
		% within ParticipantGroups	61.9%	31.0%	7.1%	100.0%
		% of Total	26.8%	13.4%	3.1%	43.3%
		Std. Residual	.9	-.7	-.8	
		Adjusted Residual	1.8	-1.1	-1.1	
	Currently depressed	Count	10	16	4	30
		Expected Count	15.5	11.1	3.4	30.0
		% within ParticipantGroups	33.3%	53.3%	13.3%	100.0%
		% of Total	10.3%	16.5%	4.1%	30.9%
		Std. Residual	-1.4	1.5	.3	
		Adjusted Residual	-2.4	2.2	.4	
Total		Count	50	36	11	97
		Expected Count	50.0	36.0	11.0	97.0
		% within ParticipantGroups	51.5%	37.1%	11.3%	100.0%
		% of Total	51.5%	37.1%	11.3%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.253[a]	4	.123
Likelihood Ratio	7.338	4	.119
Linear-by-Linear Association	1.398	1	.237
N of Valid Cases	97		

a. 3 cells (33.3%) have expected count less than 5. The minimum expected count is 2.84.

Appendix B.9.5 Specificity (specific/non-specific) Chi Square

ParticipantGroups * Mem1SpecNonSpec

Crosstab

			Mem1SpecNonSpec		Total
			Non-specific	Specific	
Participant Groups	Never depressed	Count	13	12	25
		Expected Count	7.5	17.5	25.0
		% within ParticipantGroups	52.0%	48.0%	100.0%
		% of Total	13.4%	12.4%	25.8%
		Std. Residual	2.0	-1.3	
		Adjusted Residual	2.8	-2.8	
	Formerly depressed	Count	8	34	42
		Expected Count	12.6	29.4	42.0
		% within ParticipantGroups	19.0%	81.0%	100.0%
		% of Total	8.2%	35.1%	43.3%
		Std. Residual	-1.3	.8	
		Adjusted Residual	-2.0	2.0	
	Currently depressed	Count	8	22	30
		Expected Count	9.0	21.0	30.0
		% within ParticipantGroups	26.7%	73.3%	100.0%
		% of Total	8.2%	22.7%	30.9%
		Std. Residual	-.3	.2	
		Adjusted Residual	-.5	.5	
Total		Count	29	68	97
		Expected Count	29.0	68.0	97.0
		% within ParticipantGroups	29.9%	70.1%	100.0%
		% of Total	29.9%	70.1%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.336[a]	2	.015
Likelihood Ratio	8.025	2	.018
Linear-by-Linear Association	3.639	1	.056
N of Valid Cases	97		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.47.

ParticipantGroups * Mem2SpecNonSpec

Crosstab

			Mem2SpecNonSpec		Total
			Non-specific	Specific	
Participant Groups	Never depressed	Count	12	13	25
		Expected Count	11.1	13.9	25.0
		% within ParticipantGroups	48.0%	52.0%	100.0%
		% of Total	12.4%	13.4%	25.8%
		Std. Residual	.3	-.2	
		Adjusted Residual	.4	-.4	
	Formerly depressed	Count	20	22	42
		Expected Count	18.6	23.4	42.0
		% within ParticipantGroups	47.6%	52.4%	100.0%
		% of Total	20.6%	22.7%	43.3%
		Std. Residual	.3	-.3	
		Adjusted Residual	.6	-.6	
	Currently depressed	Count	11	19	30
		Expected Count	13.3	16.7	30.0
		% within ParticipantGroups	36.7%	63.3%	100.0%
		% of Total	11.3%	19.6%	30.9%
		Std. Residual	-.6	.6	
		Adjusted Residual	-1.0	1.0	
Total		Count	43	54	97
		Expected Count	43.0	54.0	97.0
		% within ParticipantGroups	44.3%	55.7%	100.0%
		% of Total	44.3%	55.7%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.034[a]	2	.596
Likelihood Ratio	1.045	2	.593
Linear-by-Linear Association	.758	1	.384
N of Valid Cases	97		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 11.08.

ParticipantGroups * Mem3SpecNonSpec

Crosstab

			Mem3SpecNonSpec		Total
			Non-specific	Specific	
Participant Groups	Never depressed	Count	9	16	25
		Expected Count	9.3	15.7	25.0
		% within ParticipantGroups	36.0%	64.0%	100.0%
		% of Total	9.3%	16.5%	25.8%
		Std. Residual	.0	.1	
		Adjusted Residual	-.1	.1	
	Formerly depressed	Count	13	29	42
		Expected Count	15.6	26.4	42.0
		% within ParticipantGroups	31.0%	69.0%	100.0%
		% of Total	13.4%	29.9%	43.3%
		Std. Residual	-.7	.5	
		Adjusted Residual	-1.1	1.1	
	Currently depressed	Count	14	16	30
		Expected Count	11.1	18.9	30.0
		% within ParticipantGroups	46.7%	53.3%	100.0%
		% of Total	14.4%	16.5%	30.9%
		Std. Residual	.9	-.7	
		Adjusted Residual	1.3	-1.3	
Total		Count	36	61	97
		Expected Count	36.0	61.0	97.0
		% within ParticipantGroups	37.1%	62.9%	100.0%
		% of Total	37.1%	62.9%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.869[a]	2	.393
Likelihood Ratio	1.855	2	.395
Linear-by-Linear Association	.766	1	.382
N of Valid Cases	97		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 9.28.

ParticipantGroups * Mem4SpecNonSpec

Crosstab

			Mem4SpecNonSpec		Total
			Non-specific	Specific	
Participant Groups	Never depressed	Count	12	13	25
		Expected Count	10.6	14.4	25.0
		% within ParticipantGroups	48.0%	52.0%	100.0%
		% of Total	12.4%	13.4%	25.8%
		Std. Residual	.4	-.4	
		Adjusted Residual	.7	-.7	
	Formerly depressed	Count	10	32	42
		Expected Count	17.8	24.2	42.0
		% within ParticipantGroups	23.8%	76.2%	100.0%
		% of Total	10.3%	33.0%	43.3%
		Std. Residual	-1.8	1.6	
		Adjusted Residual	-3.2	3.2	
	Currently depressed	Count	19	11	30
		Expected Count	12.7	17.3	30.0
		% within ParticipantGroups	63.3%	36.7%	100.0%
		% of Total	19.6%	11.3%	30.9%
		Std. Residual	1.8	-1.5	
		Adjusted Residual	2.8	-2.8	
Total		Count	41	56	97
		Expected Count	41.0	56.0	97.0
		% within ParticipantGroups	42.3%	57.7%	100.0%
		% of Total	42.3%	57.7%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11.656[a]	2	.003
Likelihood Ratio	11.989	2	.002
Linear-by-Linear Association	1.769	1	.183
N of Valid Cases	97		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 10.57.

ParticipantGroups * Mem5SpecNonSpec

Crosstab

			Mem5SpecNonSpec		Total
			Non-specific	Specific	
Participant Groups	Never depressed	Count	10	15	25
		Expected Count	9.8	15.2	25.0
		% within ParticipantGroups	40.0%	60.0%	100.0%
		% of Total	10.3%	15.5%	25.8%
		Std. Residual	.1	.0	
		Adjusted Residual	.1	.0	
	Formerly depressed	Count	11	31	42
		Expected Count	16.5	25.5	42.0
		% within ParticipantGroups	26.2%	73.8%	100.0%
		% of Total	11.3%	32.0%	43.3%
		Std. Residual	-1.3	1.1	
		Adjusted Residual	-2.3	2.3	
	Currently depressed	Count	17	13	30
		Expected Count	11.8	18.2	30.0
		% within ParticipantGroups	56.7%	43.3%	100.0%
		% of Total	17.5%	13.4%	30.9%
		Std. Residual	1.5	-1.2	
		Adjusted Residual	2.4	-2.4	
Total		Count	38	59	97
		Expected Count	38.0	59.0	97.0
		% within ParticipantGroups	39.2%	60.8%	100.0%
		% of Total	39.2%	60.8%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.831[a]	2	.033
Likelihood Ratio	6.880	2	.032
Linear-by-Linear Association	1.928	1	.165
N of Valid Cases	97		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 9.79.

ParticipantGroups * Mem6SpecNonSpec

Crosstab

			Mem6SpecNonSpec		Total
			Non-specific	Specific	
Participant Groups	Never depressed	Count	11	14	25
		Expected Count	12.1	12.9	25.0
		% within ParticipantGroups	44.0%	56.0%	100.0%
		% of Total	11.3%	14.4%	25.8%
		Std. Residual	-.3	.3	
		Adjusted Residual	-.5	.5	
	Formerly depressed	Count	16	26	42
		Expected Count	20.4	21.6	42.0
		% within ParticipantGroups	38.1%	61.9%	100.0%
		% of Total	16.5%	26.8%	43.3%
		Std. Residual	-1.0	.9	
		Adjusted Residual	-1.8	1.8	
	Currently depressed	Count	20	10	30
		Expected Count	14.5	15.5	30.0
		% within ParticipantGroups	66.7%	33.3%	100.0%
		% of Total	20.6%	10.3%	30.9%
		Std. Residual	1.4	-1.4	
		Adjusted Residual	2.4	-2.4	
Total		Count	47	50	97
		Expected Count	47.0	50.0	97.0
		% within ParticipantGroups	48.5%	51.5%	100.0%
		% of Total	48.5%	51.5%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.987[a]	2	.050
Likelihood Ratio	6.070	2	.048
Linear-by-Linear Association	3.131	1	.077
N of Valid Cases	97		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 12.11.

Appendix B.9.6 Agency (positive agency) Analysis of Variance

Oneway

Descriptives

Agency Total

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Never depressed	25	2.0400	1.51327	.30265	1.4154	2.6646	.00	6.00
Formerly depressed	42	1.9762	2.00594	.30952	1.3511	2.6013	.00	10.00
Currently depressed	30	2.2667	4.77012	.87090	.4855	4.0479	.00	22.00
Total	97	2.0825	3.02995	.30765	1.4718	2.6931	.00	22.00

ANOVA

Agency Total

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.537	2	.769	.082	.921
Within Groups	879.803	94	9.360		
Total	881.340	96			

Post Hoc Tests

Multiple Comparisons

Agency Total
Scheffe

(I) ParticipantGroups	(J) ParticipantGroups	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Never depressed	Formerly depressed	.06381	.77281	.997	-1.8584	1.9860
	Currently depressed	-.22667	.82848	.963	-2.2873	1.8340
Formerly depressed	Never depressed	-.06381	.77281	.997	-1.9860	1.8584
	Currently depressed	-.29048	.73132	.924	-2.1095	1.5285
Currently depressed	Never depressed	.22667	.82848	.963	-1.8340	2.2873
	Formerly depressed	.29048	.73132	.924	-1.5285	2.1095

Appendix B.9.7 Agency (all affect) Analysis of Variance

Oneway

Descriptives

OverallAgency

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Never depressed	25	2.2400	.77889	.15578	1.9185	2.5615	.00	3.00
Formerly depressed	42	2.0952	1.52715	.23564	1.6193	2.5711	.00	6.00
Currently depressed	30	1.4667	1.25212	.22861	.9991	1.9342	.00	4.00
Total	97	1.9381	1.31351	.13337	1.6734	2.2029	.00	6.00

ANOVA

OverallAgency

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	9.983	2	4.992	3.015	.054
Within Groups	155.646	94	1.656		
Total	165.629	96			

Post Hoc Tests

Multiple Comparisons

OverallAgency
Scheffe

(I) ParticipantGroups	(J) ParticipantGroups	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Never depressed	Formerly depressed	.14476	.32505	.906	-.6637	.9532
	Currently depressed	.77333	.34846	.091	-.0934	1.6401
Formerly depressed	Never depressed	-.14476	.32505	.906	-.9532	.6637
	Currently depressed	.62857	.30760	.130	-.1365	1.3937
Currently depressed	Never depressed	-.77333	.34846	.091	-1.6401	.0934
	Formerly depressed	-.62857	.30760	.130	-1.3937	.1365

Appendix B.9.8 Agency (all affect) Chi Square

ParticipantGroups * Memory 1 (Peak) Agentic Theme

Crosstab

			Memory 1 (Peak) Agentic Theme		
			Absence of agentic theme	Presence of agentic theme	Total
Participant Groups	Never depressed	Count	18	7	25
		Expected Count	18.0	7.0	25.0
		% within ParticipantGroups	72.0%	28.0%	100.0%
		% of Total	18.6%	7.2%	25.8%
		Std. Residual	.0	.0	
		Adjusted Residual	.0	.0	
	Formerly depressed	Count	28	14	42
		Expected Count	30.3	11.7	42.0
		% within ParticipantGroups	66.7%	33.3%	100.0%
		% of Total	28.9%	14.4%	43.3%
		Std. Residual	-.4	.7	
		Adjusted Residual	-1.1	1.1	
	Currently depressed	Count	24	6	30
		Expected Count	21.6	8.4	30.0
		% within ParticipantGroups	80.0%	20.0%	100.0%
		% of Total	24.7%	6.2%	30.9%
		Std. Residual	.5	-.8	
		Adjusted Residual	1.2	-1.2	
Total		Count	70	27	97
		Expected Count	70.0	27.0	97.0
		% within ParticipantGroups	72.2%	27.8%	100.0%
		% of Total	72.2%	27.8%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.549[a]	2	.461
Likelihood Ratio	1.590	2	.451
Linear-by-Linear Association	.515	1	.473
N of Valid Cases	97		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.96.

ParticipantGroups * Memory 2 (Turning Point) Agentic Theme

Crosstab

			Memory 2 (Turning Point) Agentic Theme		
			Absence of agentic theme	Presence of agentic theme	Total
Participant Groups	Never depressed	Count	11	14	25
		Expected Count	11.6	13.4	25.0
		% within ParticipantGroups	44.0%	56.0%	100.0%
		% of Total	11.3%	14.4%	25.8%
		Std. Residual	-.2	.2	
		Adjusted Residual	-.3	.3	
	Formerly depressed	Count	16	26	42
		Expected Count	19.5	22.5	42.0
		% within ParticipantGroups	38.1%	61.9%	100.0%
		% of Total	16.5%	26.8%	43.3%
		Std. Residual	-.8	.7	
		Adjusted Residual	-1.4	1.4	
	Currently depressed	Count	18	12	30
		Expected Count	13.9	16.1	30.0
		% within ParticipantGroups	60.0%	40.0%	100.0%
		% of Total	18.6%	12.4%	30.9%
		Std. Residual	1.1	-1.0	
		Adjusted Residual	1.8	-1.8	
Total		Count	45	52	97
		Expected Count	45.0	52.0	97.0
		% within ParticipantGroups	46.4%	53.6%	100.0%
		% of Total	46.4%	53.6%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.454[a]	2	.178
Likelihood Ratio	3.467	2	.177
Linear-by-Linear Association	1.592	1	.207
N of Valid Cases	97		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 11.60.

ParticipantGroups * Memory 3 (Childhood) Agentic Theme

Crosstab

			Memory 3 (Childhood) Agentic Theme		
			Absence of agentic theme	Presence of agentic theme	Total
Participant Groups	Never depressed	Count	19	6	25
		Expected Count	19.8	5.2	25.0
		% within ParticipantGroups	76.0%	24.0%	100.0%
		% of Total	19.6%	6.2%	25.8%
		Std. Residual	-.2	.4	
		Adjusted Residual	-.5	.5	
	Formerly depressed	Count	33	9	42
		Expected Count	33.3	8.7	42.0
		% within ParticipantGroups	78.6%	21.4%	100.0%
		% of Total	34.0%	9.3%	43.3%
		Std. Residual	.0	.1	
		Adjusted Residual	-.2	.2	
	Currently depressed	Count	25	5	30
		Expected Count	23.8	6.2	30.0
		% within ParticipantGroups	83.3%	16.7%	100.0%
		% of Total	25.8%	5.2%	30.9%
		Std. Residual	.2	-.5	
		Adjusted Residual	.6	-.6	
Total		Count	77	20	97
		Expected Count	77.0	20.0	97.0
		% within ParticipantGroups	79.4%	20.6%	100.0%
		% of Total	79.4%	20.6%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.478[a]	2	.788
Likelihood Ratio	.486	2	.784
Linear-by-Linear Association	.456	1	.500
N of Valid Cases	97		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.15.

ParticipantGroups * Memory 4 (Adolescence) Agentic Theme

Crosstab

			Memory 4 (Adolescence) Agentic Theme		
			Absence of agentic theme	Presence of agentic theme	Total
Participant Groups	Never depressed	Count	16	9	25
		Expected Count	17.0	8.0	25.0
		% within ParticipantGroups	64.0%	36.0%	100.0%
		% of Total	16.5%	9.3%	25.8%
		Std. Residual	-.2	.4	
		Adjusted Residual	-.5	.5	
	Formerly depressed	Count	29	13	42
		Expected Count	28.6	13.4	42.0
		% within ParticipantGroups	69.0%	31.0%	100.0%
		% of Total	29.9%	13.4%	43.3%
		Std. Residual	.1	-.1	
		Adjusted Residual	.2	-.2	
	Currently depressed	Count	21	9	30
		Expected Count	20.4	9.6	30.0
		% within ParticipantGroups	70.0%	30.0%	100.0%
		% of Total	21.6%	9.3%	30.9%
		Std. Residual	.1	-.2	
		Adjusted Residual	.3	-.3	
Total		Count	66	31	97
		Expected Count	66.0	31.0	97.0
		% within ParticipantGroups	68.0%	32.0%	100.0%
		% of Total	68.0%	32.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.260[a]	2	.878
Likelihood Ratio	.257	2	.879
Linear-by-Linear Association	.212	1	.645
N of Valid Cases	97		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.99.

ParticipantGroups * Memory 5 (Adulthood) Agentic Theme

Crosstab

			Memory 5 (Adulthood) Agentic Theme		
			Absence of agentic theme	Presence of agentic theme	Total
Participant Groups	Never depressed	Count	14	11	25
		Expected Count	15.2	9.8	25.0
		% within ParticipantGroups	56.0%	44.0%	100.0%
		% of Total	14.4%	11.3%	25.8%
		Std. Residual	-.3	.4	
		Adjusted Residual	-.6	.6	
	Formerly depressed	Count	25	17	42
		Expected Count	25.5	16.5	42.0
		% within ParticipantGroups	59.5%	40.5%	100.0%
		% of Total	25.8%	17.5%	43.3%
		Std. Residual	-.1	.1	
		Adjusted Residual	-.2	.2	
	Currently depressed	Count	20	10	30
		Expected Count	18.2	11.8	30.0
		% within ParticipantGroups	66.7%	33.3%	100.0%
		% of Total	20.6%	10.3%	30.9%
		Std. Residual	.4	-.5	
		Adjusted Residual	.8	-.8	
Total		Count	59	38	97
		Expected Count	59.0	38.0	97.0
		% within ParticipantGroups	60.8%	39.2%	100.0%
		% of Total	60.8%	39.2%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.704[a]	2	.703
Likelihood Ratio	.709	2	.701
Linear-by-Linear Association	.664	1	.415
N of Valid Cases	97		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 9.79.

ParticipantGroups * Memory 6 (Nadir/Low Point) Agentic Theme

Crosstab

			Memory 6 (Nadir/Low Point) Agentic Theme		
			Absence of agentic theme	Presence of agentic theme	Total
Participant Groups	Never depressed	Count	16	9	25
		Expected Count	19.8	5.2	25.0
		% within ParticipantGroups	64.0%	36.0%	100.0%
		% of Total	16.5%	9.3%	25.8%
		Std. Residual	-.9	1.7	
		Adjusted Residual	-2.2	2.2	
	Formerly depressed	Count	33	9	42
		Expected Count	33.3	8.7	42.0
		% within ParticipantGroups	78.6%	21.4%	100.0%
		% of Total	34.0%	9.3%	43.3%
		Std. Residual	.0	.1	
		Adjusted Residual	-.2	.2	
	Currently depressed	Count	28	2	30
		Expected Count	23.8	6.2	30.0
		% within ParticipantGroups	93.3%	6.7%	100.0%
		% of Total	28.9%	2.1%	30.9%
		Std. Residual	.9	-1.7	
		Adjusted Residual	2.3	-2.3	
Total		Count	77	20	97
		Expected Count	77.0	20.0	97.0
		% within ParticipantGroups	79.4%	20.6%	100.0%
		% of Total	79.4%	20.6%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.198[a]	2	.027
Likelihood Ratio	7.707	2	.021
Linear-by-Linear Association	7.124	1	.008
N of Valid Cases	97		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.15.

Appendix B.9.9 Agency Themes Chi Squares

Crosstabs
ParticipantGroups * Memory 1 (Peak) Agentic Theme

Crosstab

			Memory 1 (Peak) Agentic Theme		
			Absence of agentic theme	Presence of agentic theme	Total
Participant Groups	Never depressed	Count	18	7	25
		% within ParticipantGroups	72.0%	28.0%	100.0%
		Adjusted Residual	.0	.0	
	Formerly depressed	Count	28	14	42
		% within ParticipantGroups	66.7%	33.3%	100.0%
		Adjusted Residual	-1.1	1.1	
	Currently depressed	Count	24	6	30
		% within ParticipantGroups	80.0%	20.0%	100.0%
		Adjusted Residual	1.2	-1.2	
Total		Count	70	27	97
		% within ParticipantGroups	72.2%	27.8%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.549[a]	2	.461
Likelihood Ratio	1.590	2	.451
Linear-by-Linear Association	.515	1	.473
N of Valid Cases	97		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.96.

ParticipantGroups * Memory 1 (Peak) Agency - Self Mastery

Crosstab

			Memory 1 (Peak) Agency - Self Mastery			
			Absence of self mastery	Presence of self mastery	9	Total
Participant Groups	Never depressed	Count	25	0	0	25
		% within ParticipantGroups	100.0%	.0%	.0%	100.0%
		Adjusted Residual	1.4	-1.2	-.6	
	Formerly depressed	Count	38	4	0	42
		% within ParticipantGroups	90.5%	9.5%	.0%	100.0%
		Adjusted Residual	-1.7	2.3	-.9	
	Currently depressed	Count	29	0	1	30
		% within ParticipantGroups	96.7%	.0%	3.3%	100.0%
		Adjusted Residual	.5	-1.4	1.5	
Total		Count	92	4	1	97
		% within ParticipantGroups	94.8%	4.1%	1.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.636[a]	4	.106
Likelihood Ratio	9.208	4	.056
Linear-by-Linear Association	1.462	1	.227
N of Valid Cases	97		

a. 6 cells (66.7%) have expected count less than 5. The minimum expected count is .26.

ParticipantGroups * Memory 1 (Peak) Agency - Status/Victory

Crosstab

			Memory 1 (Peak) Agency - Status/Victory			
			Absence of status/victory	Presence of status/victory	9	Total
Participant Groups	Never depressed	Count	22	3	0	25
		% within ParticipantGroups	88.0%	12.0%	.0%	100.0%
		Adjusted Residual	-.3	.5	-.6	
	Formerly depressed	Count	37	5	0	42
		% within ParticipantGroups	88.1%	11.9%	.0%	100.0%
		Adjusted Residual	-.5	.8	-.9	
	Currently depressed	Count	28	1	1	30
		% within ParticipantGroups	93.3%	3.3%	3.3%	100.0%
		Adjusted Residual	.8	-1.4	1.5	
Total		Count	87	9	1	97
		% within ParticipantGroups	89.7%	9.3%	1.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.952[a]	4	.413
Likelihood Ratio	4.399	4	.355
Linear-by-Linear Association	.746	1	.388
N of Valid Cases	97		

a. 6 cells (66.7%) have expected count less than 5. The minimum expected count is .26.

ParticipantGroups * Memory 1 (Peak) Agency - Achievement/Responsibility

Crosstab

			Memory 1 (Peak) Agency - Achievement/Responsibility		
			Absence of achievement/ responsibility	Presence of achievement/r esponsibility	Total
Participant Groups	Never depressed	Count	22	3	25
		% within ParticipantGroups	88.0%	12.0%	100.0%
		Adjusted Residual	.7	-.7	
	Formerly depressed	Count	33	9	42
		% within ParticipantGroups	78.6%	21.4%	100.0%
		Adjusted Residual	-1.1	1.1	
	Currently depressed	Count	26	4	30
		% within ParticipantGroups	86.7%	13.3%	100.0%
		Adjusted Residual	.6	-.6	
Total		Count	81	16	97
		% within ParticipantGroups	83.5%	16.5%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.327[a]	2	.515
Likelihood Ratio	1.319	2	.517
Linear-by-Linear Association	.004	1	.949
N of Valid Cases	97		

a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is 4.12.

Crosstabs

ParticipantGroups * Memory 2 (Turning Point) Agency - Self Mastery

Crosstab

			Memory 2 (Turning Point) Agency - Self Mastery		
			Absence of self mastery	Presence of self mastery	Total
Participant Groups	Never depressed	Count	19	6	25
		% within ParticipantGroups	76.0%	24.0%	100.0%
		Adjusted Residual	.0	.0	
	Formerly depressed	Count	29	13	42
		% within ParticipantGroups	69.0%	31.0%	100.0%
		Adjusted Residual	-1.5	1.5	
	Currently depressed	Count	26	4	30
		% within ParticipantGroups	86.7%	13.3%	100.0%
		Adjusted Residual	1.6	-1.6	
Total		Count	74	23	97
		% within ParticipantGroups	76.3%	23.7%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.005[a]	2	.223
Likelihood Ratio	3.173	2	.205
Linear-by-Linear Association	1.014	1	.314
N of Valid Cases	97		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.93.

ParticipantGroups * Memory 2 (Turning Point) Agency - Status/Victory

Crosstab

			Memory 2 (Turning Point) Agency - Status/Victory		
			Absence of status/victory	Presence of status/victory	Total
Participant Groups	Never depressed	Count	23	2	25
		% within ParticipantGroups	92.0%	8.0%	100.0%
		Adjusted Residual	-1.6	1.6	
	Formerly depressed	Count	41	1	42
		% within ParticipantGroups	97.6%	2.4%	100.0%
		Adjusted Residual	.4	-.4	
	Currently depressed	Count	30	0	30
		% within ParticipantGroups	100.0%	.0%	100.0%
		Adjusted Residual	1.2	-1.2	
Total		Count	94	3	97
		% within ParticipantGroups	96.9%	3.1%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.037[a]	2	.219
Likelihood Ratio	3.373	2	.185
Linear-by-Linear Association	2.800	1	.094
N of Valid Cases	97		

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is .77.

ParticipantGroups * Memory 2 (Turning Point) Agency - Achievement/Responsibility

Crosstab

			Memory 2 (Turning Point) Agency - Achievement/Responsibility		
			Absence of achievement/responsibility	Presence of achievement/responsibility	Total
Participant Groups	Never depressed	Count	18	7	25
		% within ParticipantGroups	72.0%	28.0%	100.0%
		Adjusted Residual	-1.1	1.1	
	Formerly depressed	Count	33	9	42
		% within ParticipantGroups	78.6%	21.4%	100.0%
		Adjusted Residual	-.2	.2	
	Currently depressed	Count	26	4	30
		% within ParticipantGroups	86.7%	13.3%	100.0%
		Adjusted Residual	1.2	-1.2	
Total		Count	77	20	97
		% within ParticipantGroups	79.4%	20.6%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.822[a]	2	.402
Likelihood Ratio	1.866	2	.393
Linear-by-Linear Association	1.795	1	.180
N of Valid Cases	97		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.15.

ParticipantGroups * Memory 2 (Turning Point) Agency - Empowerment

Crosstab

			Memory 2 (Turning Point) Agency - Empowerment		
			Absence of empowerment	Presence of empowerment	Total
Participant Groups	Never depressed	Count	25	0	25
		% within ParticipantGroups	100.0%	.0%	100.0%
		Adjusted Residual	1.0	-1.0	
	Formerly depressed	Count	40	2	42
		% within ParticipantGroups	95.2%	4.8%	100.0%
		Adjusted Residual	-.8	.8	
	Currently depressed	Count	29	1	30
		% within ParticipantGroups	96.7%	3.3%	100.0%
		Adjusted Residual	-.1	.1	
Total		Count	94	3	97
		% within ParticipantGroups	96.9%	3.1%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.194[a]	2	.550
Likelihood Ratio	1.913	2	.384
Linear-by-Linear Association	.431	1	.511
N of Valid Cases	97		

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is .77.

Crosstabs

ParticipantGroups * Memory 3 (Childhood) Agency - Self Mastery

Crosstab

			Memory 3 (Childhood) Agency - Self Mastery		
			Absence of self mastery	Presence of self mastery	Total
Participant Groups	Never depressed	Count	25	0	25
		% within ParticipantGroups	100.0%	.0%	100.0%
		Adjusted Residual	.8	-.8	
	Formerly depressed	Count	40	2	42
		% within ParticipantGroups	95.2%	4.8%	100.0%
		Adjusted Residual	-1.6	1.6	
	Currently depressed	Count	30	0	30
		% within ParticipantGroups	100.0%	.0%	100.0%
		Adjusted Residual	1.0	-1.0	
Total		Count	95	2	97
		% within ParticipantGroups	97.9%	2.1%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.674[a]	2	.263
Likelihood Ratio	3.403	2	.182
Linear-by-Linear Association	.010	1	.922
N of Valid Cases	97		

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is .52.

ParticipantGroups * Memory 3 (Childhood) Agency - Status/Victory

Crosstab

			Memory 3 (Childhood) Agency - Status/Victory		
			Absence of status/victory	Presence of status/victory	Total
Participant Groups	Never depressed	Count	21	4	25
		% within ParticipantGroups	84.0%	16.0%	100.0%
		Adjusted Residual	-2.0	2.0	
	Formerly depressed	Count	40	2	42
		% within ParticipantGroups	95.2%	4.8%	100.0%
		Adjusted Residual	.8	-.8	
	Currently depressed	Count	29	1	30
		% within ParticipantGroups	96.7%	3.3%	100.0%
		Adjusted Residual	1.0	-1.0	
Total		Count	90	7	97
		% within ParticipantGroups	92.8%	7.2%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.934[a]	2	.140
Likelihood Ratio	3.452	2	.178
Linear-by-Linear Association	3.050	1	.081
N of Valid Cases	97		

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is 1.80.

ParticipantGroups * Memory 3 (Childhood) Agency - Achievement/Responsibility

Crosstab

			Memory 3 (Childhood) Agency - Achievement/Responsibility		
			Absence of achievement/ responsibility	Presence of achievement/r esponsibility	Total
Participant Groups	Never depressed	Count	22	3	25
		% within ParticipantGroups	88.0%	12.0%	100.0%
		Adjusted Residual	-.3	.3	
	Formerly depressed	Count	39	3	42
		% within ParticipantGroups	92.9%	7.1%	100.0%
		Adjusted Residual	.9	-.9	
	Currently depressed	Count	26	4	30
		% within ParticipantGroups	86.7%	13.3%	100.0%
		Adjusted Residual	-.7	.7	
Total		Count	87	10	97
		% within ParticipantGroups	89.7%	10.3%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.829[a]	2	.661
Likelihood Ratio	.853	2	.653
Linear-by-Linear Association	.046	1	.830
N of Valid Cases	97		

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is 2.58.

ParticipantGroups * Memory 3 (Childhood) Agency - Empowerment

Crosstab

			Memory 3 (Childhood) Agency - Empowerment	
			Absence of empowerment	Total
Participant Groups	Never depressed	Count	25	25
		% within ParticipantGroups	100.0%	100.0%
		Adjusted Residual	.	
	Formerly depressed	Count	42	42
		% within ParticipantGroups	100.0%	100.0%
		Adjusted Residual	.	
	Currently depressed	Count	30	30
		% within ParticipantGroups	100.0%	100.0%
		Adjusted Residual	.	
Total		Count	97	97
		% within ParticipantGroups	100.0%	100.0%

Chi-Square Tests

	Value
Pearson Chi-Square	.[a]
N of Valid Cases	97

a. No statistics are computed because Memory 3 (Childhood) Agency - Empowerment is a constant.

Crosstabs

ParticipantGroups * Memory 4 (Adolescence) Agency - Self Mastery

Crosstab

			Memory 4 (Adolescence) Agency - Self Mastery			
			Absence of self mastery	Presence of self mastery	9	Total
Participant Groups	Never depressed	Count	23	2	0	25
		% within ParticipantGroups	92.0%	8.0%	.0%	100.0%
		Adjusted Residual	-.4	.7	-.6	
	Formerly depressed	Count	40	2	0	42
		% within ParticipantGroups	95.2%	4.8%	.0%	100.0%
		Adjusted Residual	.5	-.2	-.9	
	Currently depressed	Count	28	1	1	30
		% within ParticipantGroups	93.3%	3.3%	3.3%	100.0%
		Adjusted Residual	-.1	-.5	1.5	
Total		Count	91	5	1	97
		% within ParticipantGroups	93.8%	5.2%	1.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.850[a]	4	.583
Likelihood Ratio	2.935	4	.569
Linear-by-Linear Association	1.106	1	.293
N of Valid Cases	97		

a. 6 cells (66.7%) have expected count less than 5. The minimum expected count is .26.

ParticipantGroups * Memory 4 (Adolescence) Agency - Status/Victory

Crosstab

			Memory 4 (Adolescence) Agency - Status/Victory		
			Absence of status/victory	Presence of status/victory	Total
Participant Groups	Never depressed	Count	20	5	25
		% within ParticipantGroups	80.0%	20.0%	100.0%
		Adjusted Residual	-.9	.9	
	Formerly depressed	Count	38	4	42
		% within ParticipantGroups	90.5%	9.5%	100.0%
		Adjusted Residual	1.2	-1.2	
	Currently depressed	Count	25	5	30
		% within ParticipantGroups	83.3%	16.7%	100.0%
		Adjusted Residual	-.4	.4	
Total		Count	83	14	97
		% within ParticipantGroups	85.6%	14.4%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.568[a]	2	.457
Likelihood Ratio	1.602	2	.449
Linear-by-Linear Association	.076	1	.782
N of Valid Cases	97		

a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is 3.61.

ParticipantGroups * Memory 4 (Adolescence) Agency - Achievement/Responsibility

Crosstab

			Memory 4 (Adolescence) Agency - Achievement/Responsibility		
			Absence of achievement/ responsibility	Presence of achievement/r esponsibility	Total
Participant Groups	Never depressed	Count	21	4	25
		% within ParticipantGroups	84.0%	16.0%	100.0%
		Adjusted Residual	.1	-.1	
	Formerly depressed	Count	34	8	42
		% within ParticipantGroups	81.0%	19.0%	100.0%
		Adjusted Residual	-.6	.6	
	Currently depressed	Count	26	4	30
		% within ParticipantGroups	86.7%	13.3%	100.0%
		Adjusted Residual	.6	-.6	
Total		Count	81	16	97
		% within ParticipantGroups	83.5%	16.5%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.421[a]	2	.810
Likelihood Ratio	.426	2	.808
Linear-by-Linear Association	.089	1	.765
N of Valid Cases	97		

a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is 4.12.

ParticipantGroups * Memory 4 (Adolescence) Agency - Empowerment

Crosstab

			Memory 4 (Adolescence) Agency - Empowerment	
			Absence of empowerment	Total
Participant Groups	Never depressed	Count	25	25
		% within ParticipantGroups	100.0%	100.0%
		Adjusted Residual	.	
	Formerly depressed	Count	42	42
		% within ParticipantGroups	100.0%	100.0%
		Adjusted Residual	.	
	Currently depressed	Count	30	30
		% within ParticipantGroups	100.0%	100.0%
		Adjusted Residual	.	
Total		Count	97	97
		% within ParticipantGroups	100.0%	100.0%

Chi-Square Tests

	Value
Pearson Chi-Square	.[a]
N of Valid Cases	97

a. No statistics are computed because Memory 4 (Adolescence) Agency - Empowerment is a constant.

Crosstabs

ParticipantGroups * Memory 5 (Adulthood) Agency - Self Mastery

Crosstab

			Memory 5 (Adulthood) Agency - Self Mastery		
			Absence of self mastery	Presence of self mastery	Total
Participant Groups	Never depressed	Count	24	1	25
		% within ParticipantGroups	96.0%	4.0%	100.0%
		Adjusted Residual	.5	-.5	
	Formerly depressed	Count	38	4	42
		% within ParticipantGroups	90.5%	9.5%	100.0%
		Adjusted Residual	-1.2	1.2	
	Currently depressed	Count	29	1	30
		% within ParticipantGroups	96.7%	3.3%	100.0%
		Adjusted Residual	.8	-.8	
Total		Count	91	6	97
		% within ParticipantGroups	93.8%	6.2%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.433[a]	2	.488
Likelihood Ratio	1.433	2	.488
Linear-by-Linear Association	.030	1	.863
N of Valid Cases	97		

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is 1.55.

ParticipantGroups * Memory 5 (Adulthood) Agency - Status/Victory

Crosstab

			Memory 5 (Adulthood) Agency - Status/Victory		
			Absence of status/victory	Presence of status/victory	Total
Participant Groups	Never depressed	Count	22	3	25
		% within ParticipantGroups	88.0%	12.0%	100.0%
		Adjusted Residual	-.8	.8	
	Formerly depressed	Count	40	2	42
		% within ParticipantGroups	95.2%	4.8%	100.0%
		Adjusted Residual	1.1	-1.1	
	Currently depressed	Count	27	3	30
		% within ParticipantGroups	90.0%	10.0%	100.0%
		Adjusted Residual	-.4	.4	
Total		Count	89	8	97
		% within ParticipantGroups	91.8%	8.2%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.261[a]	2	.532
Likelihood Ratio	1.313	2	.519
Linear-by-Linear Association	.041	1	.840
N of Valid Cases	97		

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is 2.06.

ParticipantGroups * Memory 5 (Adulthood) Agency - Achievement/Responsibility

Crosstab

			Memory 5 (Adulthood) Agency - Achievement/Responsibility		
			Absence of achievement/ responsibility	Presence of achievement/r esponsibility	Total
Participant Groups	Never depressed	Count	22	3	25
		% within ParticipantGroups	88.0%	12.0%	100.0%
		Adjusted Residual	.4	-.4	
	Formerly depressed	Count	35	7	42
		% within ParticipantGroups	83.3%	16.7%	100.0%
		Adjusted Residual	-.5	.5	
	Currently depressed	Count	26	4	30
		% within ParticipantGroups	86.7%	13.3%	100.0%
		Adjusted Residual	.2	-.2	
Total		Count	83	14	97
		% within ParticipantGroups	85.6%	14.4%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.319[a]	2	.853
Likelihood Ratio	.319	2	.853
Linear-by-Linear Association	.011	1	.915
N of Valid Cases	97		

a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is 3.61.

ParticipantGroups * Memory 5 (Adulthood) Agency - Empowerment

Crosstab

			Memory 5 (Adulthood) Agency - Empowerment		
			Absence of empowerment	Presence of empowerment	Total
Participant Groups	Never depressed	Count	25	0	25
		% within ParticipantGroups	100.0%	.0%	100.0%
		Adjusted Residual	.8	-.8	
	Formerly depressed	Count	41	1	42
		% within ParticipantGroups	97.6%	2.4%	100.0%
		Adjusted Residual	-.2	.2	
	Currently depressed	Count	29	1	30
		% within ParticipantGroups	96.7%	3.3%	100.0%
		Adjusted Residual	-.6	.6	
Total		Count	95	2	97
		% within ParticipantGroups	97.9%	2.1%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.788[a]	2	.674
Likelihood Ratio	1.265	2	.531
Linear-by-Linear Association	.720	1	.396
N of Valid Cases	97		

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is .52.

Crosstabs

ParticipantGroups * Memory 6 (Nadir/Low Point) Agency - Self Mastery

Crosstab

			Memory 6 (Nadir/Low Point) Agency - Self Mastery		
			Absence of self mastery	Presence of self mastery	Total
Participant Groups	Never depressed	Count	22	3	25
		% within ParticipantGroups	88.0%	12.0%	100.0%
		Adjusted Residual	-.8	.8	
	Formerly depressed	Count	38	4	42
		% within ParticipantGroups	90.5%	9.5%	100.0%
		Adjusted Residual	-.4	.4	
	Currently depressed	Count	29	1	30
		% within ParticipantGroups	96.7%	3.3%	100.0%
		Adjusted Residual	1.2	-1.2	
Total		Count	89	8	97
		% within ParticipantGroups	91.8%	8.2%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.513[a]	2	.469
Likelihood Ratio	1.713	2	.425
Linear-by-Linear Association	1.390	1	.238
N of Valid Cases	97		

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is 2.06.

ParticipantGroups * Memory 6 (Nadir/Low Point) Agency - Status/Victory

Crosstab

			Memory 6 (Nadir/Low Point) Agency - Status/Victory	
			Absence of status/victory	Total
Participant Groups	Never depressed	Count	25	25
		% within ParticipantGroups	100.0%	100.0%
		Adjusted Residual	.	
	Formerly depressed	Count	42	42
		% within ParticipantGroups	100.0%	100.0%
		Adjusted Residual	.	
	Currently depressed	Count	30	30
		% within ParticipantGroups	100.0%	100.0%
		Adjusted Residual	.	
Total		Count	97	97
		% within ParticipantGroups	100.0%	100.0%

Chi-Square Tests

	Value
Pearson Chi-Square	.[a]
N of Valid Cases	97

a. No statistics are computed because Memory 6 (Nadir/Low Point) Agency - Status/Victory is a constant.

ParticipantGroups * Memory 6 (Nadir/Low Point) Agency - Achievement/Responsibility

Crosstab

			Memory 6 (Nadir/Low Point) Agency - Achievement/Responsibility		
			Absence of achievement/responsibility	Presence of achievement/responsibility	Total
Participant Groups	Never depressed	Count	23	2	25
		% within ParticipantGroups	92.0%	8.0%	100.0%
		Adjusted Residual	-1.6	1.6	
	Formerly depressed	Count	41	1	42
		% within ParticipantGroups	97.6%	2.4%	100.0%
		Adjusted Residual	.4	-.4	
	Currently depressed	Count	30	0	30
		% within ParticipantGroups	100.0%	.0%	100.0%
		Adjusted Residual	1.2	-1.2	
Total		Count	94	3	97
		% within ParticipantGroups	96.9%	3.1%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.037[a]	2	.219
Likelihood Ratio	3.373	2	.185
Linear-by-Linear Association	2.800	1	.094
N of Valid Cases	97		

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is .77.

ParticipantGroups * Memory 6 (Nadir/Low Point) Agency - Empowerment

Crosstab

			Memory 6 (Nadir/Low Point) Agency - Empowerment		
			Absence of empowerment	Presence of empowerment	Total
Participant Groups	Never depressed	Count	25	0	25
		% within ParticipantGroups	100.0%	.0%	100.0%
		Adjusted Residual	.6	-.6	
	Formerly depressed	Count	42	0	42
		% within ParticipantGroups	100.0%	.0%	100.0%
		Adjusted Residual	.9	-.9	
	Currently depressed	Count	29	1	30
		% within ParticipantGroups	96.7%	3.3%	100.0%
		Adjusted Residual	-1.5	1.5	
Total		Count	96	1	97
		% within ParticipantGroups	99.0%	1.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.257[a]	2	.324
Likelihood Ratio	2.370	2	.306
Linear-by-Linear Association	1.594	1	.207
N of Valid Cases	97		

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is .26.

Appendix B.9.10 Communion (positive communion) Analysis of Variance

Oneway

Descriptives

Communion Total

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Never depressed	25	2.9200	1.97737	.39547	2.1038	3.7362	.00	7.00
Formerly depressed	42	3.1429	2.29072	.35347	2.4290	3.8567	.00	9.00
Currently depressed	30	2.0667	2.28840	.41780	1.2122	2.9212	.00	8.00
Total	97	2.7526	2.24087	.22753	2.3009	3.2042	.00	9.00

ANOVA

Communion Total

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	21.212	2	10.606	2.163	.121
Within Groups	460.850	94	4.903		
Total	482.062	96			

Post Hoc Tests

Multiple Comparisons

Communion Total
Scheffe

(I) ParticipantGroups	(J) ParticipantGroups	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Never depressed	Formerly depressed	-.22286	.55932	.924	-1.6140	1.1683
	Currently depressed	.85333	.59961	.367	-.6381	2.3447
Formerly depressed	Never depressed	.22286	.55932	.924	-1.1683	1.6140
	Currently depressed	1.07619	.52929	.132	-.2403	2.3927
Currently depressed	Never depressed	-.85333	.59961	.367	-2.3447	.6381
	Formerly depressed	-1.07619	.52929	.132	-2.3927	.2403

Appendix B.9.11 Communion (all affect) Analysis of Variance

Oneway

Descriptives

OverallCommunion

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Never depressed	25	3.7600	1.73877	.34775	3.0423	4.4777	.00	6.00
Formerly depressed	42	3.9762	1.37021	.21143	3.5492	4.4032	.00	6.00
Currently depressed	30	3.6000	1.56690	.28608	3.0149	4.1851	.00	6.00
Total	97	3.8041	1.52506	.15485	3.4968	4.1115	.00	6.00

ANOVA

OverallCommunion

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.542	2	1.271	.541	.584
Within Groups	220.736	94	2.348		
Total	223.278	96			

Post Hoc Tests

Multiple Comparisons

OverallCommunion
Scheffe

(I) ParticipantGroups	(J) ParticipantGroups	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Never depressed	Formerly depressed	-.21619	.38709	.856	-1.1790	.7466
	Currently depressed	.16000	.41498	.928	-.8722	1.1922
Formerly depressed	Never depressed	.21619	.38709	.856	-.7466	1.1790
	Currently depressed	.37619	.36631	.592	-.5349	1.2873
Currently depressed	Never depressed	-.16000	.41498	.928	-1.1922	.8722
	Formerly depressed	-.37619	.36631	.592	-1.2873	.5349

Appendix B.9.12 Communion (all affect) Chi Square

ParticipantGroups * Memory 1 (Peak) Communion Theme

Crosstab

			Memory 1 (Peak) Communion Theme		Total
			Absence of communal theme	Presence of communal theme	
Participant Groups	Never depressed	Count	5	20	25
		Expected Count	7.0	18.0	25.0
		% within ParticipantGroups	20.0%	80.0%	100.0%
		% of Total	5.2%	20.6%	25.8%
		Std. Residual	-.7	.5	
		Adjusted Residual	-1.0	1.0	
	Formerly depressed	Count	13	29	42
		Expected Count	11.7	30.3	42.0
		% within ParticipantGroups	31.0%	69.0%	100.0%
		% of Total	13.4%	29.9%	43.3%
		Std. Residual	.4	-.2	
		Adjusted Residual	.6	-.6	
	Currently depressed	Count	9	21	30
		Expected Count	8.4	21.6	30.0
		% within ParticipantGroups	30.0%	70.0%	100.0%
		% of Total	9.3%	21.6%	30.9%
		Std. Residual	.2	-.1	
		Adjusted Residual	.3	-.3	
Total		Count	27	70	97
		Expected Count	27.0	70.0	97.0
		% within ParticipantGroups	27.8%	72.2%	100.0%
		% of Total	27.8%	72.2%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.037[a]	2	.595
Likelihood Ratio	1.085	2	.581
Linear-by-Linear Association	.612	1	.434
N of Valid Cases	97		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.96.

ParticipantGroups * Memory 2 (Turning Point) Communion Theme

Crosstab

			Memory 2 (Turning Point) Communion Theme		
			Absence of communal theme	Presence of communal theme	Total
Participant Groups	Never depressed	Count	11	14	25
		Expected Count	12.4	12.6	25.0
		% within ParticipantGroups	44.0%	56.0%	100.0%
		% of Total	11.3%	14.4%	25.8%
		Std. Residual	-.4	.4	
		Adjusted Residual	-.6	.6	
	Formerly depressed	Count	22	20	42
		Expected Count	20.8	21.2	42.0
		% within ParticipantGroups	52.4%	47.6%	100.0%
		% of Total	22.7%	20.6%	43.3%
		Std. Residual	.3	-.3	
		Adjusted Residual	.5	-.5	
	Currently depressed	Count	15	15	30
		Expected Count	14.8	15.2	30.0
		% within ParticipantGroups	50.0%	50.0%	100.0%
		% of Total	15.5%	15.5%	30.9%
		Std. Residual	.0	.0	
		Adjusted Residual	.1	.0	
Total		Count	48	49	97
		Expected Count	48.0	49.0	97.0
		% within ParticipantGroups	49.5%	50.5%	100.0%
		% of Total	49.5%	50.5%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.445[a]	2	.801
Likelihood Ratio	.446	2	.800
Linear-by-Linear Association	.168	1	.682
N of Valid Cases	97		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 12.37.

ParticipantGroups * Memory 3 (Childhood) Communion Theme

Crosstab

			Memory 3 (Childhood) Communion Theme		
			Absence of communal theme	Presence of communal theme	Total
Participant Groups	Never depressed	Count	11	14	25
		Expected Count	10.6	14.4	25.0
		% within ParticipantGroups	44.0%	56.0%	100.0%
		% of Total	11.3%	14.4%	25.8%
		Std. Residual	.1	-.1	
		Adjusted Residual	.2	-.2	
	Formerly depressed	Count	15	27	42
		Expected Count	17.8	24.2	42.0
		% within ParticipantGroups	35.7%	64.3%	100.0%
		% of Total	15.5%	27.8%	43.3%
		Std. Residual	-.7	.6	
		Adjusted Residual	-1.1	1.1	
	Currently depressed	Count	15	15	30
		Expected Count	12.7	17.3	30.0
		% within ParticipantGroups	50.0%	50.0%	100.0%
		% of Total	15.5%	15.5%	30.9%
		Std. Residual	.7	-.6	
		Adjusted Residual	1.0	-1.0	
Total		Count	41	56	97
		Expected Count	41.0	56.0	97.0
		% within ParticipantGroups	42.3%	57.7%	100.0%
		% of Total	42.3%	57.7%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.505[a]	2	.471
Likelihood Ratio	1.509	2	.470
Linear-by-Linear Association	.264	1	.608
N of Valid Cases	97		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 10.57.

ParticipantGroups * Memory 4 (Adolescence) Communion Theme

Crosstab

			Memory 4 (Adolescence) Communion Theme		
			Absence of communal theme	Presence of communal theme	Total
Participant Groups	Never depressed	Count	9	16	25
		Expected Count	9.5	15.5	25.0
		% within ParticipantGroups	36.0%	64.0%	100.0%
		% of Total	9.3%	16.5%	25.8%
		Std. Residual	-.2	.1	
		Adjusted Residual	-.3	.3	
	Formerly depressed	Count	14	28	42
		Expected Count	16.0	26.0	42.0
		% within ParticipantGroups	33.3%	66.7%	100.0%
		% of Total	14.4%	28.9%	43.3%
		Std. Residual	-.5	.4	
		Adjusted Residual	-.9	.9	
	Currently depressed	Count	14	16	30
		Expected Count	11.4	18.6	30.0
		% within ParticipantGroups	46.7%	53.3%	100.0%
		% of Total	14.4%	16.5%	30.9%
		Std. Residual	.8	-.6	
		Adjusted Residual	1.2	-1.2	
Total		Count	37	60	97
		Expected Count	37.0	60.0	97.0
		% within ParticipantGroups	38.1%	61.9%	100.0%
		% of Total	38.1%	61.9%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.384[a]	2	.501
Likelihood Ratio	1.371	2	.504
Linear-by-Linear Association	.733	1	.392
N of Valid Cases	97		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 9.54.

ParticipantGroups * Memory 5 (Adulthood) Communion Theme

Crosstab

			Memory 5 (Adulthood) Communion Theme		
			Absence of communal theme	Presence of communal theme	Total
Participant Groups	Never depressed	Count	9	16	25
		Expected Count	8.2	16.8	25.0
		% within ParticipantGroups	36.0%	64.0%	100.0%
		% of Total	9.3%	16.5%	25.8%
		Std. Residual	.3	-.2	
		Adjusted Residual	.4	-.4	
	Formerly depressed	Count	12	30	42
		Expected Count	13.9	28.1	42.0
		% within ParticipantGroups	28.6%	71.4%	100.0%
		% of Total	12.4%	30.9%	43.3%
		Std. Residual	-.5	.3	
		Adjusted Residual	-.8	.8	
	Currently depressed	Count	11	19	30
		Expected Count	9.9	20.1	30.0
		% within ParticipantGroups	36.7%	63.3%	100.0%
		% of Total	11.3%	19.6%	30.9%
		Std. Residual	.4	-.2	
		Adjusted Residual	.5	-.5	
Total		Count	32	65	97
		Expected Count	32.0	65.0	97.0
		% within ParticipantGroups	33.0%	67.0%	100.0%
		% of Total	33.0%	67.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.657[a]	2	.720
Likelihood Ratio	.661	2	.718
Linear-by-Linear Association	.010	1	.920
N of Valid Cases	97		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.25.

ParticipantGroups * Memory 6 (Nadir/Low Point) Communion Theme

Crosstab

			Memory 6 (Nadir/Low Point) Communion Theme		
			Absence of communal theme	Presence of communal theme	Total
Participant Groups	Never depressed	Count	11	14	25
		Expected Count	7.2	17.8	25.0
		% within ParticipantGroups	44.0%	56.0%	100.0%
		% of Total	11.3%	14.4%	25.8%
		Std. Residual	1.4	-.9	
		Adjusted Residual	1.9	-1.9	
	Formerly depressed	Count	9	33	42
		Expected Count	12.1	29.9	42.0
		% within ParticipantGroups	21.4%	78.6%	100.0%
		% of Total	9.3%	34.0%	43.3%
		Std. Residual	-.9	.6	
		Adjusted Residual	-1.4	1.4	
	Currently depressed	Count	8	22	30
		Expected Count	8.7	21.3	30.0
		% within ParticipantGroups	26.7%	73.3%	100.0%
		% of Total	8.2%	22.7%	30.9%
		Std. Residual	-.2	.1	
		Adjusted Residual	-.3	.3	
Total		Count	28	69	97
		Expected Count	28.0	69.0	97.0
		% within ParticipantGroups	28.9%	71.1%	100.0%
		% of Total	28.9%	71.1%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.991[a]	2	.136
Likelihood Ratio	3.848	2	.146
Linear-by-Linear Association	1.738	1	.187
N of Valid Cases	97		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.22.

Appendix B.9.13 Communion Themes Chi Squares

Crosstabs

ParticipantGroups * Memory 1 (Peak) Communion - Love/Friendship

Crosstab

			Memory 1 (Peak) Communion - Love/Friendship		
			Absence of love/friendship	Presence of love/friendship	Total
Participant Groups	Never depressed	Count	12	13	25
		% within ParticipantGroups	48.0%	52.0%	100.0%
		Adjusted Residual	-.9	.9	
	Formerly depressed	Count	23	19	42
		% within ParticipantGroups	54.8%	45.2%	100.0%
		Adjusted Residual	-.2	.2	
	Currently depressed	Count	19	11	30
		% within ParticipantGroups	63.3%	36.7%	100.0%
		Adjusted Residual	1.0	-1.0	
Total		Count	54	43	97
		% within ParticipantGroups	55.7%	44.3%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.324[a]	2	.516
Likelihood Ratio	1.331	2	.514
Linear-by-Linear Association	1.302	1	.254
N of Valid Cases	97		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 11.08.

ParticipantGroups * Memory 1 (Peak) Communion - Dialogue

Crosstab

			Memory 1 (Peak) Communion - Dialogue		
			Absence of dialogue	Presence of dialogue	Total
Participant Groups	Never depressed	Count	23	2	25
		% within ParticipantGroups	92.0%	8.0%	100.0%
		Adjusted Residual	.1	-.1	
	Formerly depressed	Count	38	4	42
		% within ParticipantGroups	90.5%	9.5%	100.0%
		Adjusted Residual	-.4	.4	
	Currently depressed	Count	28	2	30
		% within ParticipantGroups	93.3%	6.7%	100.0%
		Adjusted Residual	.4	-.4	
Total		Count	89	8	97
		% within ParticipantGroups	91.8%	8.2%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.192[a]	2	.909
Likelihood Ratio	.194	2	.908
Linear-by-Linear Association	.041	1	.840
N of Valid Cases	97		

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is 2.06.

ParticipantGroups * Memory 1 (Peak) Communion - Caring/Help

Crosstab

			Memory 1 (Peak) Communion - Caring/Help		
			Absence of caring/help	Presence of caring/help	Total
Participant Groups	Never depressed	Count	24	1	25
		% within ParticipantGroups	96.0%	4.0%	100.0%
		Adjusted Residual	-.3	.3	
	Formerly depressed	Count	41	1	42
		% within ParticipantGroups	97.6%	2.4%	100.0%
		Adjusted Residual	.4	-.4	
	Currently depressed	Count	29	1	30
		% within ParticipantGroups	96.7%	3.3%	100.0%
		Adjusted Residual	-.1	.1	
Total		Count	94	3	97
		% within ParticipantGroups	96.9%	3.1%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.145[a]	2	.930
Likelihood Ratio	.146	2	.930
Linear-by-Linear Association	.014	1	.904
N of Valid Cases	97		

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is .77.

ParticipantGroups * Memory 1 (Peak) Communion - Unity/Togetherness

Crosstab

			Memory 1 (Peak) Communion - Unity/Togetherness		
			Absence of unity/togetherness	Presence of unity/togetherness	Total
Participant Groups	Never depressed	Count	21	4	25
		% within ParticipantGroups	84.0%	16.0%	100.0%
		Adjusted Residual	-.1	.1	
	Formerly depressed	Count	34	8	42
		% within ParticipantGroups	81.0%	19.0%	100.0%
		Adjusted Residual	-.9	.9	
	Currently depressed	Count	27	3	30
		% within ParticipantGroups	90.0%	10.0%	100.0%
		Adjusted Residual	1.0	-1.0	
Total		Count	82	15	97
		% within ParticipantGroups	84.5%	15.5%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.103[a]	2	.576
Likelihood Ratio	1.161	2	.560
Linear-by-Linear Association	.435	1	.510
N of Valid Cases	97		

a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is 3.87.

Crosstabs

ParticipantGroups * Memory 2 (Turning Point) Communion - Love/Friendship

Crosstab

			Memory 2 (Turning Point) Communion - Love/Friendship		
			Absence of love/friendship	Presence of love/friendship	Total
Participant Groups	Never depressed	Count	21	4	25
		% within ParticipantGroups	84.0%	16.0%	100.0%
		Adjusted Residual	.4	-.4	
	Formerly depressed	Count	33	9	42
		% within ParticipantGroups	78.6%	21.4%	100.0%
		Adjusted Residual	-.6	.6	
	Currently depressed	Count	25	5	30
		% within ParticipantGroups	83.3%	16.7%	100.0%
		Adjusted Residual	.3	-.3	
Total		Count	79	18	97
		% within ParticipantGroups	81.4%	18.6%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.408[a]	2	.815
Likelihood Ratio	.406	2	.816
Linear-by-Linear Association	.001	1	.980
N of Valid Cases	97		

a. 1 cells (16.7%) have expected count less than 5. The minimum expected count is 4.64.

ParticipantGroups * Memory 2 (Turning Point) Communion - Dialogue

Crosstab

			Memory 2 (Turning Point) Communion - Dialogue		
			Absence of dialogue	Presence of dialogue	Total
Participant Groups	Never depressed	Count	24	1	25
		% within ParticipantGroups	96.0%	4.0%	100.0%
		Adjusted Residual	-.3	.3	
	Formerly depressed	Count	42	0	42
		% within ParticipantGroups	100.0%	.0%	100.0%
		Adjusted Residual	1.5	-1.5	
	Currently depressed	Count	28	2	30
		% within ParticipantGroups	93.3%	6.7%	100.0%
		Adjusted Residual	-1.4	1.4	
Total		Count	94	3	97
		% within ParticipantGroups	96.9%	3.1%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.688[a]	2	.261
Likelihood Ratio	3.670	2	.160
Linear-by-Linear Association	.431	1	.511
N of Valid Cases	97		

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is .77.

ParticipantGroups * Memory 2 (Turning Point) Communion - Caring/Help

Crosstab

			Memory 2 (Turning Point) Communion - Caring/Help		
			Absence of caring/help	Presence of caring/help	Total
Participant Groups	Never depressed	Count	24	1	25
		% within ParticipantGroups	96.0%	4.0%	100.0%
		Adjusted Residual	-.3	.3	
	Formerly depressed	Count	42	0	42
		% within ParticipantGroups	100.0%	.0%	100.0%
		Adjusted Residual	1.5	-1.5	
	Currently depressed	Count	28	2	30
		% within ParticipantGroups	93.3%	6.7%	100.0%
		Adjusted Residual	-1.4	1.4	
Total		Count	94	3	97
		% within ParticipantGroups	96.9%	3.1%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.688[a]	2	.261
Likelihood Ratio	3.670	2	.160
Linear-by-Linear Association	.431	1	.511
N of Valid Cases	97		

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is .77.

ParticipantGroups * Memory 2 (Turning Point) Communion - Unity/Togetherness

Crosstab

			Memory 2 (Turning Point) Communion - Unity/Togetherness		
			Absence of unity/togetherness	Presence of unity/togetherness	Total
Participant Groups	Never depressed	Count	23	2	25
		% within ParticipantGroups	92.0%	8.0%	100.0%
		Adjusted Residual	-1.6	1.6	
	Formerly depressed	Count	42	0	42
		% within ParticipantGroups	100.0%	.0%	100.0%
		Adjusted Residual	1.5	-1.5	
	Currently depressed	Count	29	1	30
		% within ParticipantGroups	96.7%	3.3%	100.0%
		Adjusted Residual	-.1	.1	
Total		Count	94	3	97
		% within ParticipantGroups	96.9%	3.1%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.355[a]	2	.187
Likelihood Ratio	4.056	2	.132
Linear-by-Linear Association	.804	1	.370
N of Valid Cases	97		

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is .77.

Crosstabs

ParticipantGroups * Memory 3 (Childhood) Communion - Love/Friendship

Crosstab

			Memory 3 (Childhood) Communion - Love/Friendship		
			Absence of love/friendship	Presence of love/friendship	Total
Participant Groups	Never depressed	Count	17	8	25
		% within ParticipantGroups	68.0%	32.0%	100.0%
		Adjusted Residual	.1	-.1	
	Formerly depressed	Count	25	17	42
		% within ParticipantGroups	59.5%	40.5%	100.0%
		Adjusted Residual	-1.4	1.4	
	Currently depressed	Count	23	7	30
		% within ParticipantGroups	76.7%	23.3%	100.0%
		Adjusted Residual	1.4	-1.4	
Total		Count	65	32	97
		% within ParticipantGroups	67.0%	33.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.341[a]	2	.310
Likelihood Ratio	2.385	2	.303
Linear-by-Linear Association	.574	1	.449
N of Valid Cases	97		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.25.

ParticipantGroups * Memory 3 (Childhood) Communion - Dialogue

Crosstab

			Memory 3 (Childhood) Communion - Dialogue		
			Absence of dialogue	Presence of dialogue	Total
Participant Groups	Never depressed	Count	25	0	25
		% within ParticipantGroups	100.0%	.0%	100.0%
		Adjusted Residual	.6	-.6	
	Formerly depressed	Count	42	0	42
		% within ParticipantGroups	100.0%	.0%	100.0%
		Adjusted Residual	.9	-.9	
	Currently depressed	Count	29	1	30
		% within ParticipantGroups	96.7%	3.3%	100.0%
		Adjusted Residual	-1.5	1.5	
Total		Count	96	1	97
		% within ParticipantGroups	99.0%	1.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.257[a]	2	.324
Likelihood Ratio	2.370	2	.306
Linear-by-Linear Association	1.594	1	.207
N of Valid Cases	97		

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is .26.

ParticipantGroups * Memory 3 (Childhood) Communion - Caring/Help

Crosstab

			Memory 3 (Childhood) Communion - Caring/Help		
			Absence of caring/help	Presence of caring/help	Total
Participant Groups	Never depressed	Count	24	1	25
		% within ParticipantGroups	96.0%	4.0%	100.0%
		Adjusted Residual	-1.7	1.7	
	Formerly depressed	Count	42	0	42
		% within ParticipantGroups	100.0%	.0%	100.0%
		Adjusted Residual	.9	-.9	
	Currently depressed	Count	30	0	30
		% within ParticipantGroups	100.0%	.0%	100.0%
		Adjusted Residual	.7	-.7	
Total		Count	96	1	97
		% within ParticipantGroups	99.0%	1.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.910[a]	2	.233
Likelihood Ratio	2.742	2	.254
Linear-by-Linear Association	1.959	1	.162
N of Valid Cases	97		

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is .26.

ParticipantGroups * Memory 3 (Childhood) Communion - Unity/Togetherness

Crosstab

			Memory 3 (Childhood) Communion - Unity/Togetherness		
			Absence of unity/togetherness	Presence of unity/togetherness	Total
Participant Groups	Never depressed	Count	25	0	25
		% within ParticipantGroups	100.0%	.0%	100.0%
		Adjusted Residual	1.9	-1.9	
	Formerly depressed	Count	36	6	42
		% within ParticipantGroups	85.7%	14.3%	100.0%
		Adjusted Residual	-1.5	1.5	
	Currently depressed	Count	27	3	30
		% within ParticipantGroups	90.0%	10.0%	100.0%
		Adjusted Residual	-.2	.2	
Total		Count	88	9	97
		% within ParticipantGroups	90.7%	9.3%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.826[a]	2	.148
Likelihood Ratio	5.978	2	.050
Linear-by-Linear Association	1.381	1	.240
N of Valid Cases	97		

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is 2.32.

ParticipantGroups * Memory 4 (Adolescence) Communion - Love/Friendship

Crosstab

			Memory 4 (Adolescence) Communion - Love/Friendship		
			Absence of love/friendship	Presence of love/friendship	Total
Participant Groups	Never depressed	Count	15	10	25
		% within ParticipantGroups	60.0%	40.0%	100.0%
		Adjusted Residual	-.6	.6	
	Formerly depressed	Count	24	18	42
		% within ParticipantGroups	57.1%	42.9%	100.0%
		Adjusted Residual	-1.4	1.4	
	Currently depressed	Count	24	6	30
		% within ParticipantGroups	80.0%	20.0%	100.0%
		Adjusted Residual	2.1	-2.1	
Total		Count	63	34	97
		% within ParticipantGroups	64.9%	35.1%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.378[a]	2	.112
Likelihood Ratio	4.627	2	.099
Linear-by-Linear Association	2.628	1	.105
N of Valid Cases	97		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.76.

ParticipantGroups * Memory 4 (Adolescence) Communion - Dialogue

Crosstab

			Memory 4 (Adolescence) Communion - Dialogue		
			Absence of dialogue	Presence of dialogue	Total
Participant Groups	Never depressed	Count	25	0	25
		% within ParticipantGroups	100.0%	.0%	100.0%
		Adjusted Residual	1.0	-1.0	
	Formerly depressed	Count	39	3	42
		% within ParticipantGroups	92.9%	7.1%	100.0%
		Adjusted Residual	-2.0	2.0	
	Currently depressed	Count	30	0	30
		% within ParticipantGroups	100.0%	.0%	100.0%
		Adjusted Residual	1.2	-1.2	
Total		Count	94	3	97
		% within ParticipantGroups	96.9%	3.1%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.054[a]	2	.132
Likelihood Ratio	5.148	2	.076
Linear-by-Linear Association	.014	1	.904
N of Valid Cases	97		

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is .77.

ParticipantGroups * Memory 4 (Adolescence) Communion - Caring/Help

Crosstab

			Memory 4 (Adolescence) Communion - Caring/Help	
			Absence of caring/help	Total
Participant Groups	Never depressed	Count	25	25
		% within ParticipantGroups	100.0%	100.0%
		Adjusted Residual	.	
	Formerly depressed	Count	42	42
		% within ParticipantGroups	100.0%	100.0%
		Adjusted Residual	.	
	Currently depressed	Count	30	30
		% within ParticipantGroups	100.0%	100.0%
		Adjusted Residual	.	
Total		Count	97	97
		% within ParticipantGroups	100.0%	100.0%

Chi-Square Tests

	Value
Pearson Chi-Square	.[a]
N of Valid Cases	97

a. No statistics are computed because Memory 4 (Adolescence) Communion - Caring/Help is a constant.

ParticipantGroups * Memory 4 (Adolescence) Communion - Unity/Togetherness

Crosstab

			Memory 4 (Adolescence) Communion - Unity/Togetherness		
			Absence of unity/togethern ess	Presence of unity/togethern ess	Total
Participant Groups	Never depressed	Count	24	1	25
		% within ParticipantGroups	96.0%	4.0%	100.0%
		Adjusted Residual	.9	-.9	
	Formerly depressed	Count	36	6	42
		% within ParticipantGroups	85.7%	14.3%	100.0%
		Adjusted Residual	-1.9	1.9	
	Currently depressed	Count	29	1	30
		% within ParticipantGroups	96.7%	3.3%	100.0%
		Adjusted Residual	1.2	-1.2	
Total		Count	89	8	97
		% within ParticipantGroups	91.8%	8.2%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.577[a]	2	.167
Likelihood Ratio	3.630	2	.163
Linear-by-Linear Association	.041	1	.840
N of Valid Cases	97		

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is 2.06.

Crosstabs

ParticipantGroups * Memory 5 (Adulthood) Communion - Love/Friendship

Crosstab

			Memory 5 (Adulthood) Communion - Love/Friendship		
			Absence of love/friendship	Presence of love/friendship	Total
Participant Groups	Never depressed	Count	14	11	25
		% within ParticipantGroups	56.0%	44.0%	100.0%
		Adjusted Residual	.5	-.5	
	Formerly depressed	Count	18	24	42
		% within ParticipantGroups	42.9%	57.1%	100.0%
		Adjusted Residual	-1.5	1.5	
	Currently depressed	Count	18	12	30
		% within ParticipantGroups	60.0%	40.0%	100.0%
		Adjusted Residual	1.1	-1.1	
Total		Count	50	47	97
		% within ParticipantGroups	51.5%	48.5%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.327[a]	2	.312
Likelihood Ratio	2.336	2	.311
Linear-by-Linear Association	.147	1	.702
N of Valid Cases	97		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 12.11.

ParticipantGroups * Memory 5 (Adulthood) Communion - Dialogue

Crosstab

			Memory 5 (Adulthood) Communion - Dialogue		
			Absence of dialogue	Presence of dialogue	Total
Participant Groups	Never depressed	Count	25	0	25
		% within ParticipantGroups	100.0%	.0%	100.0%
		Adjusted Residual	1.0	-1.0	
	Formerly depressed	Count	40	2	42
		% within ParticipantGroups	95.2%	4.8%	100.0%
		Adjusted Residual	-.8	.8	
	Currently depressed	Count	29	1	30
		% within ParticipantGroups	96.7%	3.3%	100.0%
		Adjusted Residual	-.1	.1	
Total		Count	94	3	97
		% within ParticipantGroups	96.9%	3.1%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.194[a]	2	.550
Likelihood Ratio	1.913	2	.384
Linear-by-Linear Association	.431	1	.511
N of Valid Cases	97		

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is .77.

ParticipantGroups * Memory 5 (Adulthood) Communion - Caring/Help

Crosstab

			Memory 5 (Adulthood) Communion - Caring/Help		
			Absence of caring/help	Presence of caring/help	Total
Participant Groups	Never depressed	Count	25	0	25
		% within ParticipantGroups	100.0%	.0%	100.0%
		Adjusted Residual	.6	-.6	
	Formerly depressed	Count	41	1	42
		% within ParticipantGroups	97.6%	2.4%	100.0%
		Adjusted Residual	-1.2	1.2	
	Currently depressed	Count	30	0	30
		% within ParticipantGroups	100.0%	.0%	100.0%
		Adjusted Residual	.7	-.7	
Total		Count	96	1	97
		% within ParticipantGroups	99.0%	1.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.323[a]	2	.516
Likelihood Ratio	1.688	2	.430
Linear-by-Linear Association	.005	1	.945
N of Valid Cases	97		

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is .26.

ParticipantGroups * Memory 5 (Adulthood) Communion - Unity/Togetherness

Crosstab

			Memory 5 (Adulthood) Communion - Unity/Togetherness		
			Absence of unity/togetherness	Presence of unity/togetherness	Total
Participant Groups	Never depressed	Count	22	3	25
		% within ParticipantGroups	88.0%	12.0%	100.0%
		Adjusted Residual	-.3	.3	
	Formerly depressed	Count	37	5	42
		% within ParticipantGroups	88.1%	11.9%	100.0%
		Adjusted Residual	-.5	.5	
	Currently depressed	Count	28	2	30
		% within ParticipantGroups	93.3%	6.7%	100.0%
		Adjusted Residual	.8	-.8	
Total		Count	87	10	97
		% within ParticipantGroups	89.7%	10.3%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.623[a]	2	.732
Likelihood Ratio	.670	2	.715
Linear-by-Linear Association	.449	1	.503
N of Valid Cases	97		

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is 2.58.

ParticipantGroups * Memory 6 (Nadir/Low Point) Communion - Love/Friendship

Crosstab

			Memory 6 (Nadir/Low Point) Communion - Love/Friendship		
			Absence of love/friendship	Presence of love/friendship	Total
Participant Groups	Never depressed	Count	18	7	25
		% within ParticipantGroups	72.0%	28.0%	100.0%
		Adjusted Residual	-2.0	2.0	
	Formerly depressed	Count	35	7	42
		% within ParticipantGroups	83.3%	16.7%	100.0%
		Adjusted Residual	-.3	.3	
	Currently depressed	Count	29	1	30
		% within ParticipantGroups	96.7%	3.3%	100.0%
		Adjusted Residual	2.2	-2.2	
Total		Count	82	15	97
		% within ParticipantGroups	84.5%	15.5%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.429[a]	2	.040
Likelihood Ratio	7.287	2	.026
Linear-by-Linear Association	6.345	1	.012
N of Valid Cases	97		

a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is 3.87.

ParticipantGroups * Memory 6 (Nadir/Low Point) Communion - Dialogue

Crosstab

			Memory 6 (Nadir/Low Point) Communion - Dialogue	
			Absence of dialogue	Total
Participant Groups	Never depressed	Count	25	25
		% within ParticipantGroups	100.0%	100.0%
		Adjusted Residual	.	
	Formerly depressed	Count	42	42
		% within ParticipantGroups	100.0%	100.0%
		Adjusted Residual	.	
	Currently depressed	Count	30	30
		% within ParticipantGroups	100.0%	100.0%
		Adjusted Residual	.	
Total		Count	97	97
		% within ParticipantGroups	100.0%	100.0%

Chi-Square Tests

	Value
Pearson Chi-Square	.[a]
N of Valid Cases	97

a. No statistics are computed because Memory 6 (Nadir/Low Point) Communion - Dialogue is a constant.

ParticipantGroups * Memory 6 (Nadir/Low Point) Communion - Caring/Help

Crosstab

			Memory 6 (Nadir/Low Point) Communion - Caring/Help		
			Absence of caring/help	Presence of caring/help	Total
Participant Groups	Never depressed	Count	23	2	25
		% within ParticipantGroups	92.0%	8.0%	100.0%
		Adjusted Residual	-1.1	1.1	
	Formerly depressed	Count	41	1	42
		% within ParticipantGroups	97.6%	2.4%	100.0%
		Adjusted Residual	.8	-.8	
	Currently depressed	Count	29	1	30
		% within ParticipantGroups	96.7%	3.3%	100.0%
		Adjusted Residual	.3	-.3	
Total		Count	93	4	97
		% within ParticipantGroups	95.9%	4.1%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.320[a]	2	.517
Likelihood Ratio	1.182	2	.554
Linear-by-Linear Association	.665	1	.415
N of Valid Cases	97		

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is 1.03.

ParticipantGroups * Memory 6 (Nadir/Low Point) Communion - Unity/Togetherness

Crosstab

			Memory 6 (Nadir/Low Point) Communion - Unity/Togetherness		
			Absence of unity/togetherness	Presence of unity/togetherness	Total
Participant Groups	Never depressed	Count	23	2	25
		% within ParticipantGroups	92.0%	8.0%	100.0%
		Adjusted Residual	-1.6	1.6	
	Formerly depressed	Count	41	1	42
		% within ParticipantGroups	97.6%	2.4%	100.0%
		Adjusted Residual	.4	-.4	
	Currently depressed	Count	30	0	30
		% within ParticipantGroups	100.0%	.0%	100.0%
		Adjusted Residual	1.2	-1.2	
Total		Count	94	3	97
		% within ParticipantGroups	96.9%	3.1%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.037[a]	2	.219
Likelihood Ratio	3.373	2	.185
Linear-by-Linear Association	2.800	1	.094
N of Valid Cases	97		

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is .77.

Appendix B.9.14 PSI-II Multiple Analysis of Variance

General Linear Model

Descriptive Statistics

	ParticipantGroups	Mean	Std. Deviation	N
PSI Sociotropy Total	Never depressed	86.2400	16.63150	25
	Formerly depressed	88.9524	16.98630	42
	Currently depressed	100.7667	15.24667	30
	Total	91.9072	17.30070	97
PSI Autonomy Total	Never depressed	76.6400	16.34748	25
	Formerly depressed	80.9048	14.85016	42
	Currently depressed	91.9333	16.15428	30
	Total	83.2165	16.64847	97

Multivariate Tests[c]

Effect		Value	F	Hypothesis df	Error df	Sig.
Intercept	Pillai's Trace	.977	1944.604[a]	2.000	93.000	.000
	Wilks' Lambda	.023	1944.604[a]	2.000	93.000	.000
	Hotelling's Trace	41.819	1944.604[a]	2.000	93.000	.000
	Roy's Largest Root	41.819	1944.604[a]	2.000	93.000	.000
Participant Groups	Pillai's Trace	.174	4.488	4.000	188.000	.002
	Wilks' Lambda	.826	4.667[a]	4.000	186.000	.001
	Hotelling's Trace	.211	4.842	4.000	184.000	.001
	Roy's Largest Root	.209	9.831[b]	2.000	94.000	.000

a. Exact statistic

b. The statistic is an upper bound on F that yields a lower bound on the significance level.

c. Design: Intercept + ParticipantGroups

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	PSI Sociotropy Total	3524.334[a]	2	1762.167	6.571	.002
	PSI Autonomy Total	3585.208[b]	2	1792.604	7.319	.001
Intercept	PSI Sociotropy Total	783932.017	1	783932.017	2923.050	.000
	PSI Autonomy Total	640698.882	1	640698.882	2615.865	.000
Participant Groups	PSI Sociotropy Total	3524.334	2	1762.167	6.571	.002
	PSI Autonomy Total	3585.208	2	1792.604	7.319	.001
Error	PSI Sociotropy Total	25209.831	94	268.190		
	PSI Autonomy Total	23023.246	94	244.928		
Total	PSI Sociotropy Total	848087.000	97			
	PSI Autonomy Total	698332.000	97			
Corrected Total	PSI Sociotropy Total	28734.165	96			
	PSI Autonomy Total	26608.454	96			

a. R Squared = .123 (Adjusted R Squared = .104)

b. R Squared = .135 (Adjusted R Squared = .116)

Estimated Marginal Means

ParticipantGroups

Dependent Variable	ParticipantGroups	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
PSI Sociotropy Total	Never depressed	86.240	3.275	79.737	92.743
	Formerly depressed	88.952	2.527	83.935	93.970
	Currently depressed	100.767	2.990	94.830	106.703
PSI Autonomy Total	Never depressed	76.640	3.130	70.425	82.855
	Formerly depressed	80.905	2.415	76.110	85.700
	Currently depressed	91.933	2.857	86.260	97.607

Post Hoc Tests
ParticipantGroups

Multiple Comparisons

Scheffe

Dependent Variable	(I) ParticipantGroups	(J) ParticipantGroups	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
PSI Sociotropy Total	Never depressed	Formerly depressed	-2.7124	4.13679	.807	-13.0017	7.5770
		Currently depressed	-14.5267*	4.43478	.006	-25.5572	-3.4962
	Formerly depressed	Never depressed	2.7124	4.13679	.807	-7.5770	13.0017
		Currently depressed	-11.8143*	3.91473	.013	-21.5513	-2.0773
	Currently depressed	Never depressed	14.5267*	4.43478	.006	3.4962	25.5572
		Formerly depressed	11.8143*	3.91473	.013	2.0773	21.5513
PSI Autonomy Total	Never depressed	Formerly depressed	-4.2648	3.95332	.561	-14.0978	5.5682
		Currently depressed	-15.2933*	4.23809	.002	-25.8346	-4.7520
	Formerly depressed	Never depressed	4.2648	3.95332	.561	-5.5682	14.0978
		Currently depressed	-11.0286*	3.74111	.016	-20.3337	-1.7234
	Currently depressed	Never depressed	15.2933*	4.23809	.002	4.7520	25.8346
		Formerly depressed	11.0286*	3.74111	.016	1.7234	20.3337

Based on observed means.
The error term is Mean Square(Error) = 244.928.

*. The mean difference is significant at the .05 level.

PSI – MANOVA (SUB-SCALES)

General Linear Model

Descriptive Statistics

	ParticipantGroups	Mean	Std. Deviation	N
PSI Concern About What Others Think	Never depressed	25.2800	5.86316	25
	Formerly depressed	25.1667	6.38946	42
	Currently depressed	29.1667	5.74206	30
	Total	26.4330	6.27480	97
PSI Dependency	Never depressed	23.5600	5.96574	25
	Formerly depressed	25.9286	6.18177	42
	Currently depressed	27.8667	4.53898	30
	Total	25.9175	5.83750	97
PSI Pleasing Others	Never depressed	37.4000	7.93725	25
	Formerly depressed	37.8571	6.85947	42
	Currently depressed	43.7333	7.75901	30
	Total	39.5567	7.87132	97
PSI Perfectionism/Self-Criticism	Never depressed	14.4000	4.27200	25
	Formerly depressed	15.0000	3.70234	42
	Currently depressed	17.4333	3.82986	30
	Total	15.5979	4.05344	97
PSI Need for Control	Never depressed	25.2800	6.66783	25
	Formerly depressed	26.8333	6.58867	42
	Currently depressed	30.0333	5.44872	30
	Total	27.4227	6.48851	97
PSI Defensive Separation	Never depressed	36.9600	8.13675	25
	Formerly depressed	39.0714	7.40597	42
	Currently depressed	44.4667	9.47131	30
	Total	40.1959	8.72095	97

Multivariate Tests[c]

Effect		Value	F	Hypothesis df	Error df	Sig.
Intercept	Pillai's Trace	.978	649.911[a]	6.000	89.000	.000
	Wilks' Lambda	.022	649.911[a]	6.000	89.000	.000
	Hotelling's Trace	43.814	649.911[a]	6.000	89.000	.000
	Roy's Largest Root	43.814	649.911[a]	6.000	89.000	.000
Participant Groups	Pillai's Trace	.232	1.973	12.000	180.000	.029
	Wilks' Lambda	.776	2.002[a]	12.000	178.000	.026
	Hotelling's Trace	.277	2.030	12.000	176.000	.024
	Roy's Largest Root	.227	3.404[b]	6.000	90.000	.005

a. Exact statistic

b. The statistic is an upper bound on F that yields a lower bound on the significance level.

c. Design: Intercept + ParticipantGroups

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	PSI Concern Others Think	324.774[a]	2	162.387	4.418	.015
	PSI Dependency	252.928[b]	2	126.464	3.938	.023
	PSI Pleasing Others	760.929[c]	2	380.464	6.895	.002
	PSI Perfectionism/Self-Criticism	151.953[d]	2	75.976	5.010	.009
	PSI Need for Control	333.830[e]	2	166.915	4.232	.017
	PSI Defensive Separation	862.066[f]	2	431.033	6.292	.003
Intercept	PSI Concern Others Think	65247.029	1	65247.029	1775.152	.000
	PSI Dependency	61598.279	1	61598.279	1918.306	.000
	PSI Pleasing Others	145751.668	1	145751.668	2641.340	.000
	PSI Perfectionism/Self-Criticism	22578.717	1	22578.717	1489.020	.000
	PSI Need for Control	69465.476	1	69465.476	1761.067	.000
	PSI Defensive Separation	149468.436	1	149468.436	2181.949	.000
Participant Groups	PSI Concern Others Think	324.774	2	162.387	4.418	.015
	PSI Dependency	252.928	2	126.464	3.938	.023
	PSI Pleasing Others	760.929	2	380.464	6.895	.002
	PSI Perfectionism/Self-Criticism	151.953	2	75.976	5.010	.009
	PSI Need for Control	333.830	2	166.915	4.232	.017
	PSI Defensive Separation	862.066	2	431.033	6.292	.003
Error	PSI Concern Others Think	3455.040	94	36.756		
	PSI Dependency	3018.412	94	32.111		
	PSI Pleasing Others	5187.010	94	55.181		
	PSI Perfectionism/Self-Criticism	1425.367	94	15.163		
	PSI Need for Control	3707.840	94	39.445		
	PSI Defensive Separation	6439.212	94	68.502		
Total	PSI Concern Others Think	71554.000	97			
	PSI Dependency	68428.000	97			
	PSI Pleasing Others	157727.000	97			
	PSI Perfectionism/Self-Criticism	25177.000	97			
	PSI Need for Control	76986.000	97			
	PSI Defensive Separation	164025.000	97			
Corrected Total	PSI Concern Others Think	3779.814	96			
	PSI Dependency	3271.340	96			
	PSI Pleasing Others	5947.938	96			
	PSI Perfectionism/Self-Criticism	1577.320	96			
	PSI Need for Control	4041.670	96			
	PSI Defensive Separation	7301.278	96			

a. R Squared = .086 (Adjusted R Squared = .066)

b. R Squared = .077 (Adjusted R Squared = .058)

c. R Squared = .128 (Adjusted R Squared = .109)

d. R Squared = .096 (Adjusted R Squared = .077)

e. R Squared = .083 (Adjusted R Squared = .063)

f. R Squared = .118 (Adjusted R Squared = .099)

Post Hoc Tests

ParticipantGroups

Multiple Comparisons

Scheffe

Dependent Variable	(I) ParticipantGroups	(J) ParticipantGroups	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
PSI Concern About What Others Think	Never depressed	Formerly depressed	.1133	1.53146	.997	-3.6958	3.9225
		Currently depressed	-3.8867	1.64177	.066	-7.9702	.1969
	Formerly depressed	Never depressed	-.1133	1.53146	.997	-3.9225	3.6958
		Currently depressed	-4.0000*	1.44925	.026	-7.6047	-.3953
	Currently depressed	Never depressed	3.8867	1.64177	.066	-.1969	7.9702
		Formerly depressed	4.0000*	1.44925	.026	.3953	7.6047
PSI Dependency	Never depressed	Formerly depressed	-2.3686	1.43142	.259	-5.9289	1.1918
		Currently depressed	-4.3067*	1.53453	.023	-8.1235	-.4899
	Formerly depressed	Never depressed	2.3686	1.43142	.259	-1.1918	5.9289
		Currently depressed	-1.9381	1.35459	.363	-5.3073	1.4311
	Currently depressed	Never depressed	4.3067*	1.53453	.023	.4899	8.1235
		Formerly depressed	1.9381	1.35459	.363	-1.4311	5.3073
PSI Pleasing Others	Never depressed	Formerly depressed	-.4571	1.87645	.971	-5.1244	4.2101
		Currently depressed	-6.3333*	2.01162	.009	-11.3368	-1.3299
	Formerly depressed	Never depressed	.4571	1.87645	.971	-4.2101	5.1244
		Currently depressed	-5.8762*	1.77572	.006	-10.2929	-1.4595
	Currently depressed	Never depressed	6.3333*	2.01162	.009	1.3299	11.3368
		Formerly depressed	5.8762*	1.77572	.006	1.4595	10.2929
PSI Perfectionism/Self-Criticism	Never depressed	Formerly depressed	-.6000	.98365	.831	-3.0466	1.8466
		Currently depressed	-3.0333*	1.05451	.019	-5.6562	-.4105
	Formerly depressed	Never depressed	.6000	.98365	.831	-1.8466	3.0466
		Currently depressed	-2.4333*	.93085	.037	-4.7486	-.1181
	Currently depressed	Never depressed	3.0333*	1.05451	.019	.4105	5.6562
		Formerly depressed	2.4333*	.93085	.037	.1181	4.7486
PSI Need for Control	Never depressed	Formerly depressed	-1.5533	1.58650	.621	-5.4994	2.3927
		Currently depressed	-4.7533*	1.70078	.023	-8.9836	-.5230
	Formerly depressed	Never depressed	1.5533	1.58650	.621	-2.3927	5.4994
		Currently depressed	-3.2000	1.50133	.109	-6.9342	.5342
	Currently depressed	Never depressed	4.7533*	1.70078	.023	.5230	8.9836
		Formerly depressed	3.2000	1.50133	.109	-.5342	6.9342
PSI Defensive Separation	Never depressed	Formerly depressed	-2.1114	2.09072	.602	-7.3116	3.0888
		Currently depressed	-7.5067*	2.24132	.005	-13.0814	-1.9319
	Formerly depressed	Never depressed	2.1114	2.09072	.602	-3.0888	7.3116
		Currently depressed	-5.3952*	1.97849	.028	-10.3163	-.4742
	Currently depressed	Never depressed	7.5067*	2.24132	.005	1.9319	13.0814
		Formerly depressed	5.3952*	1.97849	.028	.4742	10.3163

Based on observed means.
The error term is Mean Square(Error) = 68.502.

*. The mean difference is significant at the .05 level.

Appendix B.9.15 PSI-II Analyses of Variance

Oneway

Descriptives

PSI Concern About What Others Think

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Never depressed	25	25.2800	5.86316	1.17263	22.8598	27.7002	15.00	37.00
Formerly depressed	42	25.1667	6.38946	.98592	23.1756	27.1578	13.00	36.00
Currently depressed	30	29.1667	5.74206	1.04835	27.0225	31.3108	15.00	40.00
Total	97	26.4330	6.27480	.63711	25.1683	27.6976	13.00	40.00

ANOVA

PSI Concern About What Others Think

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	324.774	2	162.387	4.418	.015
Within Groups	3455.040	94	36.756		
Total	3779.814	96			

Post Hoc Tests

Multiple Comparisons

PSI Concern About What Others Think
Scheffe

(I) ParticipantGroups	(J) ParticipantGroups	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Never depressed	Formerly depressed	.11333	1.53146	.997	-3.6958	3.9225
	Currently depressed	-3.88667	1.64177	.066	-7.9702	.1969
Formerly depressed	Never depressed	-.11333	1.53146	.997	-3.9225	3.6958
	Currently depressed	-4.00000*	1.44925	.026	-7.6047	-.3953
Currently depressed	Never depressed	3.88667	1.64177	.066	-.1969	7.9702
	Formerly depressed	4.00000*	1.44925	.026	.3953	7.6047

*. The mean difference is significant at the 0.05 level.

Oneway

Descriptives

PSI Dependency

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Never depressed	25	23.5600	5.96574	1.19315	21.0975	26.0225	14.00	37.00
Formerly depressed	42	25.9286	6.18177	.95387	24.0022	27.8549	12.00	35.00
Currently depressed	30	27.8667	4.53898	.82870	26.1718	29.5615	19.00	38.00
Total	97	25.9175	5.83750	.59271	24.7410	27.0940	12.00	38.00

ANOVA

PSI Dependency

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	252.928	2	126.464	3.938	.023
Within Groups	3018.412	94	32.111		
Total	3271.340	96			

Post Hoc Tests

Multiple Comparisons

PSI Dependency
Scheffe

(I) ParticipantGroups	(J) ParticipantGroups	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Never depressed	Formerly depressed	-2.36857	1.43142	.259	-5.9289	1.1918
	Currently depressed	-4.30667*	1.53453	.023	-8.1235	-.4899
Formerly depressed	Never depressed	2.36857	1.43142	.259	-1.1918	5.9289
	Currently depressed	-1.93810	1.35459	.363	-5.3073	1.4311
Currently depressed	Never depressed	4.30667*	1.53453	.023	.4899	8.1235
	Formerly depressed	1.93810	1.35459	.363	-1.4311	5.3073

*. The mean difference is significant at the 0.05 level.

Oneway

Descriptives

PSI Pleasing Others

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Never depressed	25	37.4000	7.93725	1.58745	34.1237	40.6763	21.00	52.00
Formerly depressed	42	37.8571	6.85947	1.05844	35.7196	39.9947	24.00	52.00
Currently depressed	30	43.7333	7.75901	1.41660	40.8361	46.6306	28.00	60.00
Total	97	39.5567	7.87132	.79921	37.9703	41.1431	21.00	60.00

ANOVA

PSI Pleasing Others

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	760.929	2	380.464	6.895	.002
Within Groups	5187.010	94	55.181		
Total	5947.938	96			

Post Hoc Tests

Multiple Comparisons

PSI Pleasing Others
Scheffe

(I) ParticipantGroups	(J) ParticipantGroups	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Never depressed	Formerly depressed	-.45714	1.87645	.971	-5.1244	4.2101
	Currently depressed	-6.33333*	2.01162	.009	-11.3368	-1.3299
Formerly depressed	Never depressed	.45714	1.87645	.971	-4.2101	5.1244
	Currently depressed	-5.87619*	1.77572	.006	-10.2929	-1.4595
Currently depressed	Never depressed	6.33333*	2.01162	.009	1.3299	11.3368
	Formerly depressed	5.87619*	1.77572	.006	1.4595	10.2929

*. The mean difference is significant at the 0.05 level.

Oneway

Descriptives

PSI Perfectionism/Self-Criticism

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Never depressed	25	14.4000	4.27200	.85440	12.6366	16.1634	7.00	22.00
Formerly depressed	42	15.0000	3.70234	.57128	13.8463	16.1537	7.00	22.00
Currently depressed	30	17.4333	3.82986	.69923	16.0032	18.8634	9.00	24.00
Total	97	15.5979	4.05344	.41156	14.7810	16.4149	7.00	24.00

ANOVA

PSI Perfectionism/Self-Criticism

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	151.953	2	75.976	5.010	.009
Within Groups	1425.367	94	15.163		
Total	1577.320	96			

Post Hoc Tests

Multiple Comparisons

PSI Perfectionism/Self-Criticism
Scheffe

(I) ParticipantGroups	(J) ParticipantGroups	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Never depressed	Formerly depressed	-.60000	.98365	.831	-3.0466	1.8466
	Currently depressed	-3.03333*	1.05451	.019	-5.6562	-.4105
Formerly depressed	Never depressed	.60000	.98365	.831	-1.8466	3.0466
	Currently depressed	-2.43333*	.93085	.037	-4.7486	-.1181
Currently depressed	Never depressed	3.03333*	1.05451	.019	.4105	5.6562
	Formerly depressed	2.43333*	.93085	.037	.1181	4.7486

*. The mean difference is significant at the 0.05 level.

Oneway

Descriptives

PSI Need for Control

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Never depressed	25	25.2800	6.66783	1.33357	22.5277	28.0323	12.00	44.00
Formerly depressed	42	26.8333	6.58867	1.01665	24.7802	28.8865	14.00	47.00
Currently depressed	30	30.0333	5.44872	.99479	27.9987	32.0679	21.00	42.00
Total	97	27.4227	6.48851	.65881	26.1150	28.7304	12.00	47.00

ANOVA

PSI Need for Control

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	333.830	2	166.915	4.232	.017
Within Groups	3707.840	94	39.445		
Total	4041.670	96			

Post Hoc Tests

Multiple Comparisons

PSI Need for Control
Scheffe

(I) ParticipantGroups	(J) ParticipantGroups	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Never depressed	Formerly depressed	-1.55333	1.58650	.621	-5.4994	2.3927
	Currently depressed	-4.75333*	1.70078	.023	-8.9836	-.5230
Formerly depressed	Never depressed	1.55333	1.58650	.621	-2.3927	5.4994
	Currently depressed	-3.20000	1.50133	.109	-6.9342	.5342
Currently depressed	Never depressed	4.75333*	1.70078	.023	.5230	8.9836
	Formerly depressed	3.20000	1.50133	.109	-.5342	6.9342

*. The mean difference is significant at the 0.05 level.

Oneway

Descriptives

PSI Defensive Separation

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Never depressed	25	36.9600	8.13675	1.62735	33.6013	40.3187	24.00	59.00
Formerly depressed	42	39.0714	7.40597	1.14277	36.7636	41.3793	28.00	55.00
Currently depressed	30	44.4667	9.47131	1.72922	40.9300	48.0033	26.00	62.00
Total	97	40.1959	8.72095	.88548	38.4382	41.9535	24.00	62.00

ANOVA

PSI Defensive Separation

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	862.066	2	431.033	6.292	.003
Within Groups	6439.212	94	68.502		
Total	7301.278	96			

Post Hoc Tests

Multiple Comparisons

PSI Defensive Separation
Scheffe

(I) ParticipantGroups	(J) ParticipantGroups	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Never depressed	Formerly depressed	-2.11143	2.09072	.602	-7.3116	3.0888
	Currently depressed	-7.50667*	2.24132	.005	-13.0814	-1.9319
Formerly depressed	Never depressed	2.11143	2.09072	.602	-3.0888	7.3116
	Currently depressed	-5.39524*	1.97849	.028	-10.3163	-.4742
Currently depressed	Never depressed	7.50667*	2.24132	.005	1.9319	13.0814
	Formerly depressed	5.39524*	1.97849	.028	.4742	10.3163

*. The mean difference is significant at the 0.05 level.

Appendix B.9.16 Redemption (plus enhanced redemption) Analysis of Variance

Oneway

Descriptives

OverallRedemption

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Never depressed	25	1.4800	1.35769	.27154	.9196	2.0404	.00	4.00
Formerly depressed	42	1.4048	1.34454	.20747	.9858	1.8237	.00	5.00
Currently depressed	30	.9667	1.21721	.22223	.5122	1.4212	.00	4.00
Total	97	1.2887	1.31465	.13348	1.0237	1.5536	.00	5.00

ANOVA

OverallRedemption

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4.592	2	2.296	1.338	.267
Within Groups	161.326	94	1.716		
Total	165.918	96			

Post Hoc Tests

Multiple Comparisons

OverallRedemption
Scheffe

(I) ParticipantGroups	(J) ParticipantGroups	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Never depressed	Formerly depressed	.07524	.33093	.974	-.7479	.8983
	Currently depressed	.51333	.35476	.355	-.3691	1.3957
Formerly depressed	Never depressed	-.07524	.33093	.974	-.8983	.7479
	Currently depressed	.43810	.31316	.380	-.3408	1.2170
Currently depressed	Never depressed	-.51333	.35476	.355	-1.3957	.3691
	Formerly depressed	-.43810	.31316	.380	-1.2170	.3408

Appendix B.9.17 Redemption (overall) Analysis of Variance

Oneway

Descriptives

Redemption Total

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Never depressed	25	1.8000	2.00000	.40000	.9744	2.6256	.00	8.00
Formerly depressed	42	1.9286	2.41331	.37238	1.1765	2.6806	.00	13.00
Currently depressed	30	1.2000	1.78885	.32660	.5320	1.8680	.00	8.00
Total	97	1.6701	2.13464	.21674	1.2399	2.1003	.00	13.00

ANOVA

Redemption Total

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	9.858	2	4.929	1.084	.343
Within Groups	427.586	94	4.549		
Total	437.443	96			

Post Hoc Tests

Multiple Comparisons

Redemption Total
Scheffe

(I) ParticipantGroups	(J) ParticipantGroups	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Never depressedå	Formerly depressed	-.12857	.53875	.972	-1.4686	1.2115
	Currently depressed	.60000	.57756	.585	-.8366	2.0366
Formerly depressed	Never depressed	.12857	.53875	.972	-1.2115	1.4686
	Currently depressed	.72857	.50983	.364	-.5395	1.9967
Currently depressed	Never depressed	-.60000	.57756	.585	-2.0366	.8366
	Formerly depressed	-.72857	.50983	.364	-1.9967	.5395

Appendix B.9.18 Redemption (overall) Chi Square

ParticipantGroups * Memory 1 (Peak) Redemption

Crosstab

			Memory 1 (Peak) Redemption		Total
			Absence of redemption	Presence of redemption	
Participant Groups	Never depressed	Count	19	6	25
		Expected Count	20.9	4.1	25.0
		% within ParticipantGroups	76.0%	24.0%	100.0%
		% of Total	19.6%	6.2%	25.8%
		Std. Residual	-.4	.9	
		Adjusted Residual	-1.2	1.2	
	Formerly depressed	Count	36	6	42
		Expected Count	35.1	6.9	42.0
		% within ParticipantGroups	85.7%	14.3%	100.0%
		% of Total	37.1%	6.2%	43.3%
		Std. Residual	.2	-.4	
		Adjusted Residual	.5	-.5	
	Currently depressed	Count	26	4	30
		Expected Count	25.1	4.9	30.0
		% within ParticipantGroups	86.7%	13.3%	100.0%
		% of Total	26.8%	4.1%	30.9%
		Std. Residual	.2	-.4	
		Adjusted Residual	.6	-.6	
Total		Count	81	16	97
		Expected Count	81.0	16.0	97.0
		% within ParticipantGroups	83.5%	16.5%	100.0%
		% of Total	83.5%	16.5%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.389[a]	2	.499
Likelihood Ratio	1.306	2	.520
Linear-by-Linear Association	1.047	1	.306
N of Valid Cases	97		

a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is 4.12.

ParticipantGroups * Memory 2 (Turning Point) Redemption

Crosstab

			Memory 2 (Turning Point) Redemption		
			Absence of redemption	Presence of redemption	Total
Participant Groups	Never depressed	Count	16	9	25
		Expected Count	14.4	10.6	25.0
		% within ParticipantGroups	64.0%	36.0%	100.0%
		% of Total	16.5%	9.3%	25.8%
		Std. Residual	.4	-.5	
		Adjusted Residual	.7	-.7	
	Formerly depressed	Count	19	23	42
		Expected Count	24.2	17.8	42.0
		% within ParticipantGroups	45.2%	54.8%	100.0%
		% of Total	19.6%	23.7%	43.3%
		Std. Residual	-1.1	1.2	
		Adjusted Residual	-2.2	2.2	
	Currently depressed	Count	21	9	30
		Expected Count	17.3	12.7	30.0
		% within ParticipantGroups	70.0%	30.0%	100.0%
		% of Total	21.6%	9.3%	30.9%
		Std. Residual	.9	-1.0	
		Adjusted Residual	1.6	-1.6	
Total		Count	56	41	97
		Expected Count	56.0	41.0	97.0
		% within ParticipantGroups	57.7%	42.3%	100.0%
		% of Total	57.7%	42.3%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.939[a]	2	.085
Likelihood Ratio	4.976	2	.083
Linear-by-Linear Association	.331	1	.565
N of Valid Cases	97		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 10.57.

ParticipantGroups * Memory 3 (Childhood) Redemption

Crosstab

			Memory 3 (Childhood) Redemption		Total
			Absence of redemption	Presence of redemption	
Participant Groups	Never depressed	Count	21	4	25
		Expected Count	21.4	3.6	25.0
		% within ParticipantGroups	84.0%	16.0%	100.0%
		% of Total	21.6%	4.1%	25.8%
		Std. Residual	.0	.2	
		Adjusted Residual	-.3	.3	
	Formerly depressed	Count	35	7	42
		Expected Count	35.9	6.1	42.0
		% within ParticipantGroups	83.3%	16.7%	100.0%
		% of Total	36.1%	7.2%	43.3%
		Std. Residual	-.2	.4	
		Adjusted Residual	-.5	.5	
	Currently depressed	Count	27	3	30
		Expected Count	25.7	4.3	30.0
		% within ParticipantGroups	90.0%	10.0%	100.0%
		% of Total	27.8%	3.1%	30.9%
		Std. Residual	.3	-.6	
		Adjusted Residual	.8	-.8	
Total		Count	83	14	97
		Expected Count	83.0	14.0	97.0
		% within ParticipantGroups	85.6%	14.4%	100.0%
		% of Total	85.6%	14.4%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.697[a]	2	.706
Likelihood Ratio	.737	2	.692
Linear-by-Linear Association	.434	1	.510
N of Valid Cases	97		

a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is 3.61.

ParticipantGroups * Memory 4 (Adolescence) Redemption

Crosstab

			Memory 4 (Adolescence) Redemption		
			Absence of redemption	Presence of redemption	Total
Participant Groups	Never depressed	Count	19	6	25
		Expected Count	21.9	3.1	25.0
		% within ParticipantGroups	76.0%	24.0%	100.0%
		% of Total	19.6%	6.2%	25.8%
		Std. Residual	-.6	1.7	
		Adjusted Residual	-2.0	2.0	
	Formerly depressed	Count	37	5	42
		Expected Count	36.8	5.2	42.0
		% within ParticipantGroups	88.1%	11.9%	100.0%
		% of Total	38.1%	5.2%	43.3%
		Std. Residual	.0	.0	
		Adjusted Residual	.1	-.1	
	Currently depressed	Count	29	1	30
		Expected Count	26.3	3.7	30.0
		% within ParticipantGroups	96.7%	3.3%	100.0%
		% of Total	29.9%	1.0%	30.9%
		Std. Residual	.5	-1.4	
		Adjusted Residual	1.8	-1.8	
Total		Count	85	12	97
		Expected Count	85.0	12.0	97.0
		% within ParticipantGroups	87.6%	12.4%	100.0%
		% of Total	87.6%	12.4%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.387[a]	2	.068
Likelihood Ratio	5.621	2	.060
Linear-by-Linear Association	5.265	1	.022
N of Valid Cases	97		

a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is 3.09.

ParticipantGroups * Memory 5 (Adulthood) Redemption

Crosstab

			Memory 5 (Adulthood) Redemption		Total
			Absence of redemption	Presence of redemption	
Participant Groups	Never depressed	Count	23	2	25
		Expected Count	20.1	4.9	25.0
		% within ParticipantGroups	92.0%	8.0%	100.0%
		% of Total	23.7%	2.1%	25.8%
		Std. Residual	.6	-1.3	
		Adjusted Residual	1.7	-1.7	
	Formerly depressed	Count	32	10	42
		Expected Count	33.8	8.2	42.0
		% within ParticipantGroups	76.2%	23.8%	100.0%
		% of Total	33.0%	10.3%	43.3%
		Std. Residual	-.3	.6	
		Adjusted Residual	-.9	.9	
	Currently depressed	Count	23	7	30
		Expected Count	24.1	5.9	30.0
		% within ParticipantGroups	76.7%	23.3%	100.0%
		% of Total	23.7%	7.2%	30.9%
		Std. Residual	-.2	.5	
		Adjusted Residual	-.6	.6	
Total		Count	78	19	97
		Expected Count	78.0	19.0	97.0
		% within ParticipantGroups	80.4%	19.6%	100.0%
		% of Total	80.4%	19.6%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.874[a]	2	.238
Likelihood Ratio	3.318	2	.190
Linear-by-Linear Association	1.855	1	.173
N of Valid Cases	97		

a. 1 cells (16.7%) have expected count less than 5. The minimum expected count is 4.90.

ParticipantGroups * Memory 6 (Nadir/Low Point) Redemption

Crosstab

			Memory 6 (Nadir/Low Point) Redemption		
			Absence of redemption	Presence of redemption	Total
Participant Groups	Never depressed	Count	15	10	25
		Expected Count	19.1	5.9	25.0
		% within ParticipantGroups	60.0%	40.0%	100.0%
		% of Total	15.5%	10.3%	25.8%
		Std. Residual	-.9	1.7	
		Adjusted Residual	-2.2	2.2	
	Formerly depressed	Count	34	8	42
		Expected Count	32.0	10.0	42.0
		% within ParticipantGroups	81.0%	19.0%	100.0%
		% of Total	35.1%	8.2%	43.3%
		Std. Residual	.3	-.6	
		Adjusted Residual	.9	-.9	
	Currently depressed	Count	25	5	30
		Expected Count	22.9	7.1	30.0
		% within ParticipantGroups	83.3%	16.7%	100.0%
		% of Total	25.8%	5.2%	30.9%
		Std. Residual	.4	-.8	
		Adjusted Residual	1.1	-1.1	
Total		Count	74	23	97
		Expected Count	74.0	23.0	97.0
		% within ParticipantGroups	76.3%	23.7%	100.0%
		% of Total	76.3%	23.7%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.995[a]	2	.082
Likelihood Ratio	4.675	2	.097
Linear-by-Linear Association	3.824	1	.051
N of Valid Cases	97		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.93.

Appendix B.9.19 Contamination Analysis of Variance

Oneway

Descriptives

Contamination Total

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Never depressed	25	.2800	.45826	.09165	.0908	.4692	.00	1.00
Formerly depressed	42	.5714	.73726	.11376	.3417	.8012	.00	2.00
Currently depressed	30	1.3000	1.62205	.29614	.6943	1.9057	.00	6.00
Total	97	.7216	1.11563	.11328	.4968	.9465	.00	6.00

ANOVA

Contamination Total

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	15.859	2	7.929	7.193	.001
Within Groups	103.626	94	1.102		
Total	119.485	96			

Post Hoc Tests

Multiple Comparisons

Contamination Total
Scheffe

(I) ParticipantGroups	(J) ParticipantGroups	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Never depressed	Formerly depressed	-.29143	.26522	.549	-.9511	.3683
	Currently depressed	-1.02000*	.28433	.002	-1.7272	-.3128
Formerly depressed	Never depressed	.29143	.26522	.549	-.3683	.9511
	Currently depressed	-.72857*	.25099	.018	-1.3528	-.1043
Currently depressed	Never depressed	1.02000*	.28433	.002	.3128	1.7272
	Formerly depressed	.72857*	.25099	.018	.1043	1.3528

*. The mean difference is significant at the 0.05 level.

Appendix B.9.20 Contamination Chi Square

ParticipantGroups * Memory 1 (Peak) Contamination

Crosstab

			Memory 1 (Peak) Contamination		
			Absence of contamination	Presence of contamination	Total
Participant Groups	Never depressed	Count	25	0	25
		Expected Count	22.2	2.8	25.0
		% within ParticipantGroups	100.0%	.0%	100.0%
		% of Total	25.8%	.0%	25.8%
		Std. Residual	.6	-1.7	
		Adjusted Residual	2.1	-2.1	
	Formerly depressed	Count	39	3	42
		Expected Count	37.2	4.8	42.0
		% within ParticipantGroups	92.9%	7.1%	100.0%
		% of Total	40.2%	3.1%	43.3%
		Std. Residual	.3	-.8	
		Adjusted Residual	1.1	-1.1	
	Currently depressed	Count	22	8	30
		Expected Count	26.6	3.4	30.0
		% within ParticipantGroups	73.3%	26.7%	100.0%
		% of Total	22.7%	8.2%	30.9%
		Std. Residual	-.9	2.5	
		Adjusted Residual	-3.2	3.2	
Total		Count	86	11	97
		Expected Count	86.0	11.0	97.0
		% within ParticipantGroups	88.7%	11.3%	100.0%
		% of Total	88.7%	11.3%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	10.943[a]	2	.004
Likelihood Ratio	12.183	2	.002
Linear-by-Linear Association	9.935	1	.002
N of Valid Cases	97		

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is 2.84.

ParticipantGroups * Memory 2 (Turning Point) Contamination

Crosstab

			Memory 2 (Turning Point) Contamination		Total
			Absence of contamination	Presence of contamination	
Participant Groups	Never depressed	Count	25	0	25
		Expected Count	21.6	3.4	25.0
		% within ParticipantGroups	100.0%	.0%	100.0%
		% of Total	25.8%	.0%	25.8%
		Std. Residual	.7	-1.8	
		Adjusted Residual	2.3	-2.3	
	Formerly depressed	Count	35	7	42
		Expected Count	36.4	5.6	42.0
		% within ParticipantGroups	83.3%	16.7%	100.0%
		% of Total	36.1%	7.2%	43.3%
		Std. Residual	-.2	.6	
		Adjusted Residual	-.8	.8	
	Currently depressed	Count	24	6	30
		Expected Count	26.0	4.0	30.0
		% within ParticipantGroups	80.0%	20.0%	100.0%
		% of Total	24.7%	6.2%	30.9%
		Std. Residual	-.4	1.0	
		Adjusted Residual	-1.3	1.3	
Total		Count	84	13	97
		Expected Count	84.0	13.0	97.0
		% within ParticipantGroups	86.6%	13.4%	100.0%
		% of Total	86.6%	13.4%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.380[a]	2	.068
Likelihood Ratio	8.557	2	.014
Linear-by-Linear Association	4.425	1	.035
N of Valid Cases	97		

a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is 3.35.

ParticipantGroups * Memory 3 (Childhood) Contamination

Crosstab

			Memory 3 (Childhood) Contamination		
			Absence of contamination	Presence of contamination	Total
Participant Groups	Never depressed	Count	25	0	25
		Expected Count	21.9	3.1	25.0
		% within ParticipantGroups	100.0%	.0%	100.0%
		% of Total	25.8%	.0%	25.8%
		Std. Residual	.7	-1.8	
		Adjusted Residual	2.2	-2.2	
	Formerly depressed	Count	39	3	42
		Expected Count	36.8	5.2	42.0
		% within ParticipantGroups	92.9%	7.1%	100.0%
		% of Total	40.2%	3.1%	43.3%
		Std. Residual	.4	-1.0	
		Adjusted Residual	1.4	-1.4	
	Currently depressed	Count	21	9	30
		Expected Count	26.3	3.7	30.0
		% within ParticipantGroups	70.0%	30.0%	100.0%
		% of Total	21.6%	9.3%	30.9%
		Std. Residual	-1.0	2.7	
		Adjusted Residual	-3.5	3.5	
Total		Count	85	12	97
		Expected Count	85.0	12.0	97.0
		% within ParticipantGroups	87.6%	12.4%	100.0%
		% of Total	87.6%	12.4%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	13.189[a]	2	.001
Likelihood Ratio	14.339	2	.001
Linear-by-Linear Association	11.715	1	.001
N of Valid Cases	97		

a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is 3.09.

ParticipantGroups * Memory 4 (Adolescence) Contamination

Crosstab

			Memory 4 (Adolescence) Contamination		
			Absence of contamination	Presence of contamination	Total
Participant Groups	Never depressed	Count	23	2	25
		Expected Count	21.9	3.1	25.0
		% within ParticipantGroups	92.0%	8.0%	100.0%
		% of Total	23.7%	2.1%	25.8%
		Std. Residual	.2	-.6	
		Adjusted Residual	.8	-.8	
	Formerly depressed	Count	38	4	42
		Expected Count	36.8	5.2	42.0
		% within ParticipantGroups	90.5%	9.5%	100.0%
		% of Total	39.2%	4.1%	43.3%
		Std. Residual	.2	-.5	
		Adjusted Residual	.7	-.7	
	Currently depressed	Count	24	6	30
		Expected Count	26.3	3.7	30.0
		% within ParticipantGroups	80.0%	20.0%	100.0%
		% of Total	24.7%	6.2%	30.9%
		Std. Residual	-.4	1.2	
		Adjusted Residual	-1.5	1.5	
Total		Count	85	12	97
		Expected Count	85.0	12.0	97.0
		% within ParticipantGroups	87.6%	12.4%	100.0%
		% of Total	87.6%	12.4%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.365[a]	2	.306
Likelihood Ratio	2.225	2	.329
Linear-by-Linear Association	1.907	1	.167
N of Valid Cases	97		

a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is 3.09.

ParticipantGroups * Memory 5 (Adulthood) Contamination

Crosstab

			Memory 5 (Adulthood) Contamination		Total
			Absence of contamination	Presence of contamination	
Participant Groups	Never depressed	Count	23	2	25
		Expected Count	22.9	2.1	25.0
		% within ParticipantGroups	92.0%	8.0%	100.0%
		% of Total	23.7%	2.1%	25.8%
		Std. Residual	.0	.0	
		Adjusted Residual	.1	.0	
	Formerly depressed	Count	41	1	42
		Expected Count	38.5	3.5	42.0
		% within ParticipantGroups	97.6%	2.4%	100.0%
		% of Total	42.3%	1.0%	43.3%
		Std. Residual	.4	-1.3	
		Adjusted Residual	1.8	-1.8	
	Currently depressed	Count	25	5	30
		Expected Count	27.5	2.5	30.0
		% within ParticipantGroups	83.3%	16.7%	100.0%
		% of Total	25.8%	5.2%	30.9%
		Std. Residual	-.5	1.6	
		Adjusted Residual	-2.0	2.0	
Total		Count	89	8	97
		Expected Count	89.0	8.0	97.0
		% within ParticipantGroups	91.8%	8.2%	100.0%
		% of Total	91.8%	8.2%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.722[a]	2	.094
Likelihood Ratio	4.822	2	.090
Linear-by-Linear Association	1.600	1	.206
N of Valid Cases	97		

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is 2.06.

ParticipantGroups * Memory 6 (Nadir/Low Point) Contamination

Crosstab

			Memory 6 (Nadir/Low Point) Contamination		
			Absence of contamination	Presence of contamination	Total
Participant Groups	Never depressed	Count	22	3	25
		Expected Count	21.4	3.6	25.0
		% within ParticipantGroups	88.0%	12.0%	100.0%
		% of Total	22.7%	3.1%	25.8%
		Std. Residual	.1	-.3	
		Adjusted Residual	.4	-.4	
	Formerly depressed	Count	36	6	42
		Expected Count	35.9	6.1	42.0
		% within ParticipantGroups	85.7%	14.3%	100.0%
		% of Total	37.1%	6.2%	43.3%
		Std. Residual	.0	.0	
		Adjusted Residual	.0	.0	
	Currently depressed	Count	25	5	30
		Expected Count	25.7	4.3	30.0
		% within ParticipantGroups	83.3%	16.7%	100.0%
		% of Total	25.8%	5.2%	30.9%
		Std. Residual	-.1	.3	
		Adjusted Residual	-.4	.4	
Total		Count	83	14	97
		Expected Count	83.0	14.0	97.0
		% within ParticipantGroups	85.6%	14.4%	100.0%
		% of Total	85.6%	14.4%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.242[a]	2	.886
Likelihood Ratio	.243	2	.886
Linear-by-Linear Association	.239	1	.625
N of Valid Cases	97		

a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is 3.61.

Appendix B.9.21 Integration Analysis of Variance

Oneway

Descriptives

OverallIntegration

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Never depressed	25	1.6000	1.50000	.30000	.9808	2.2192	.00	6.00
Formerly depressed	42	1.7143	1.50261	.23186	1.2460	2.1825	.00	6.00
Currently depressed	30	.7000	.91539	.16713	.3582	1.0418	.00	3.00
Total	97	1.3711	1.40919	.14308	1.0871	1.6551	.00	6.00

ANOVA

OverallIntegration

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	19.768	2	9.884	5.437	.006
Within Groups	170.871	94	1.818		
Total	190.639	96			

Post Hoc Tests

Multiple Comparisons

OverallIntegration
Scheffe

(I) ParticipantGroups	(J) ParticipantGroups	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Never depressed	Formerly depressed	-.11429	.34058	.945	-.9614	.7328
	Currently depressed	.90000	.36511	.053	-.0081	1.8081
Formerly depressed	Never depressed	.11429	.34058	.945	-.7328	.9614
	Currently depressed	1.01429*	.32229	.009	.2127	1.8159
Currently depressed	Never depressed	-.90000	.36511	.053	-1.8081	.0081
	Formerly depressed	-1.01429*	.32229	.009	-1.8159	-.2127

*. The mean difference is significant at the 0.05 level.

Appendix B.9.22 Integration Chi Square

ParticipantGroups * Mem1IntegNonintegr

Crosstab

			Mem1IntegNonintegr		Total
			Non-integrative	Integrative	
Participant Groups	Never depressed	Count	17	8	25
		Expected Count	19.6	5.4	25.0
		% within ParticipantGroups	68.0%	32.0%	100.0%
		% of Total	17.5%	8.2%	25.8%
		Std. Residual	-.6	1.1	
		Adjusted Residual	-1.5	1.5	
	Formerly depressed	Count	32	10	42
		Expected Count	32.9	9.1	42.0
		% within ParticipantGroups	76.2%	23.8%	100.0%
		% of Total	33.0%	10.3%	43.3%
		Std. Residual	-.2	.3	
		Adjusted Residual	-.5	.5	
	Currently depressed	Count	27	3	30
		Expected Count	23.5	6.5	30.0
		% within ParticipantGroups	90.0%	10.0%	100.0%
		% of Total	27.8%	3.1%	30.9%
		Std. Residual	.7	-1.4	
		Adjusted Residual	1.9	-1.9	
Total		Count	76	21	97
		Expected Count	76.0	21.0	97.0
		% within ParticipantGroups	78.4%	21.6%	100.0%
		% of Total	78.4%	21.6%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.095[a]	2	.129
Likelihood Ratio	4.399	2	.111
Linear-by-Linear Association	3.943	1	.047
N of Valid Cases	97		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.41.

ParticipantGroups * Mem2IntegNonintegr

Crosstab

			Mem2IntegNonintegr		Total
			Non-integrative	Integrative	
Participant Groups	Never depressed	Count	11	14	25
		Expected Count	11.3	13.7	25.0
		% within ParticipantGroups	44.0%	56.0%	100.0%
		% of Total	11.3%	14.4%	25.8%
		Std. Residual	-.1	.1	
		Adjusted Residual	-.2	.2	
	Formerly depressed	Count	13	29	42
		Expected Count	19.1	22.9	42.0
		% within ParticipantGroups	31.0%	69.0%	100.0%
		% of Total	13.4%	29.9%	43.3%
		Std. Residual	-1.4	1.3	
		Adjusted Residual	-2.5	2.5	
	Currently depressed	Count	20	10	30
		Expected Count	13.6	16.4	30.0
		% within ParticipantGroups	66.7%	33.3%	100.0%
		% of Total	20.6%	10.3%	30.9%
		Std. Residual	1.7	-1.6	
		Adjusted Residual	2.8	-2.8	
Total		Count	44	53	97
		Expected Count	44.0	53.0	97.0
		% within ParticipantGroups	45.4%	54.6%	100.0%
		% of Total	45.4%	54.6%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.031[a]	2	.011
Likelihood Ratio	9.175	2	.010
Linear-by-Linear Association	3.306	1	.069
N of Valid Cases	97		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 11.34.

ParticipantGroups * Mem3IntegNonintegr

Crosstab

			Mem3IntegNonintegr		Total
			Non-integrative	Integrative	
Participant Groups	Never depressed	Count	23	2	25
		Expected Count	22.2	2.8	25.0
		% within ParticipantGroups	92.0%	8.0%	100.0%
		% of Total	23.7%	2.1%	25.8%
		Std. Residual	.2	-.5	
		Adjusted Residual	.6	-.6	
	Formerly depressed	Count	34	8	42
		Expected Count	37.2	4.8	42.0
		% within ParticipantGroups	81.0%	19.0%	100.0%
		% of Total	35.1%	8.2%	43.3%
		Std. Residual	-.5	1.5	
		Adjusted Residual	-2.1	2.1	
	Currently depressed	Count	29	1	30
		Expected Count	26.6	3.4	30.0
		% within ParticipantGroups	96.7%	3.3%	100.0%
		% of Total	29.9%	1.0%	30.9%
		Std. Residual	.5	-1.3	
		Adjusted Residual	1.7	-1.7	
Total		Count	86	11	97
		Expected Count	86.0	11.0	97.0
		% within ParticipantGroups	88.7%	11.3%	100.0%
		% of Total	88.7%	11.3%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.672[a]	2	.097
Likelihood Ratio	4.985	2	.083
Linear-by-Linear Association	.442	1	.506
N of Valid Cases	97		

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is 2.84.

ParticipantGroups * Mem4IntegNonintegr

Crosstab

			Mem4IntegNonintegr		Total
			Non-integrative	Integrative	
Participant Groups	Never depressed	Count	18	7	25
		Expected Count	21.6	3.4	25.0
		% within ParticipantGroups	72.0%	28.0%	100.0%
		% of Total	18.6%	7.2%	25.8%
		Std. Residual	-.8	2.0	
		Adjusted Residual	-2.5	2.5	
	Formerly depressed	Count	36	6	42
		Expected Count	36.4	5.6	42.0
		% within ParticipantGroups	85.7%	14.3%	100.0%
		% of Total	37.1%	6.2%	43.3%
		Std. Residual	.0	.2	
		Adjusted Residual	-.2	.2	
	Currently depressed	Count	30	0	30
		Expected Count	26.0	4.0	30.0
		% within ParticipantGroups	100.0%	.0%	100.0%
		% of Total	30.9%	.0%	30.9%
		Std. Residual	.8	-2.0	
		Adjusted Residual	2.6	-2.6	
Total		Count	84	13	97
		Expected Count	84.0	13.0	97.0
		% within ParticipantGroups	86.6%	13.4%	100.0%
		% of Total	86.6%	13.4%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.261[a]	2	.010
Likelihood Ratio	12.331	2	.002
Linear-by-Linear Association	9.164	1	.002
N of Valid Cases	97		

a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is 3.35.

ParticipantGroups * Mem5IntegNonintegr

Crosstab

			Mem5IntegNonintegr		Total
			Non-integrative	Integrative	
Participant Groups	Never depressed	Count	20	5	25
		Expected Count	19.3	5.7	25.0
		% within ParticipantGroups	80.0%	20.0%	100.0%
		% of Total	20.6%	5.2%	25.8%
		Std. Residual	.2	-.3	
		Adjusted Residual	.4	-.4	
	Formerly depressed	Count	30	12	42
		Expected Count	32.5	9.5	42.0
		% within ParticipantGroups	71.4%	28.6%	100.0%
		% of Total	30.9%	12.4%	43.3%
		Std. Residual	-.4	.8	
		Adjusted Residual	-1.2	1.2	
	Currently depressed	Count	25	5	30
		Expected Count	23.2	6.8	30.0
		% within ParticipantGroups	83.3%	16.7%	100.0%
		% of Total	25.8%	5.2%	30.9%
		Std. Residual	.4	-.7	
		Adjusted Residual	.9	-.9	
Total		Count	75	22	97
		Expected Count	75.0	22.0	97.0
		% within ParticipantGroups	77.3%	22.7%	100.0%
		% of Total	77.3%	22.7%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.552[a]	2	.460
Likelihood Ratio	1.556	2	.459
Linear-by-Linear Association	.133	1	.716
N of Valid Cases	97		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.67.

ParticipantGroups * Mem6IntegNonintegr

Crosstab

			Mem6IntegNonintegr		Total
			Non-integrative	Integrative	
Participant Groups	Never depressed	Count	21	4	25
		Expected Count	21.6	3.4	25.0
		% within ParticipantGroups	84.0%	16.0%	100.0%
		% of Total	21.6%	4.1%	25.8%
		Std. Residual	-.1	.4	
		Adjusted Residual	-.4	.4	
	Formerly depressed	Count	35	7	42
		Expected Count	36.4	5.6	42.0
		% within ParticipantGroups	83.3%	16.7%	100.0%
		% of Total	36.1%	7.2%	43.3%
		Std. Residual	-.2	.6	
		Adjusted Residual	-.8	.8	
	Currently depressed	Count	28	2	30
		Expected Count	26.0	4.0	30.0
		% within ParticipantGroups	93.3%	6.7%	100.0%
		% of Total	28.9%	2.1%	30.9%
		Std. Residual	.4	-1.0	
		Adjusted Residual	1.3	-1.3	
Total		Count	84	13	97
		Expected Count	84.0	13.0	97.0
		% within ParticipantGroups	86.6%	13.4%	100.0%
		% of Total	86.6%	13.4%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.704[a]	2	.427
Likelihood Ratio	1.902	2	.386
Linear-by-Linear Association	1.111	1	.292
N of Valid Cases	97		

a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is 3.35.

Appendix B.9.23 Affect Chi Square

ParticipantGroups * Memory 1 (Peak) Affect

Crosstab

			Memory 1 (Peak) Affect			Total
			Positive	Negative	Mixed	
Participant Groups	Never depressed	Count	17	4	4	25
		Expected Count	15.2	4.9	4.9	25.0
		% within ParticipantGroups	68.0%	16.0%	16.0%	100.0%
		% of Total	17.5%	4.1%	4.1%	25.8%
		Std. Residual	.5	-.4	-.4	
		Adjusted Residual	.9	-.5	-.5	
	Formerly depressed	Count	30	7	5	42
		Expected Count	25.5	8.2	8.2	42.0
		% within ParticipantGroups	71.4%	16.7%	11.9%	100.0%
		% of Total	30.9%	7.2%	5.2%	43.3%
		Std. Residual	.9	-.4	-1.1	
		Adjusted Residual	1.9	-.6	-1.7	
	Currently depressed	Count	12	8	10	30
		Expected Count	18.2	5.9	5.9	30.0
		% within ParticipantGroups	40.0%	26.7%	33.3%	100.0%
		% of Total	12.4%	8.2%	10.3%	30.9%
		Std. Residual	-1.5	.9	1.7	
		Adjusted Residual	-2.8	1.2	2.3	
Total		Count	59	19	19	97
		Expected Count	59.0	19.0	19.0	97.0
		% within ParticipantGroups	60.8%	19.6%	19.6%	100.0%
		% of Total	60.8%	19.6%	19.6%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.565[a]	4	.073
Likelihood Ratio	8.467	4	.076
Linear-by-Linear Association	4.865	1	.027
N of Valid Cases	97		

a. 2 cells (22.2%) have expected count less than 5. The minimum expected count is 4.90.

ParticipantGroups * Memory 2 (Turning Point) Affect

Crosstab

			Memory 2 (Turning Point) Affect			Total
			Positive	Negative	Mixed	
Participant Groups	Never depressed	Count	9	2	14	25
		Expected Count	6.7	5.9	12.4	25.0
		% within ParticipantGroups	36.0%	8.0%	56.0%	100.0%
		% of Total	9.3%	2.1%	14.4%	25.8%
		Std. Residual	.9	-1.6	.5	
		Adjusted Residual	1.2	-2.1	.8	
	Formerly depressed	Count	8	9	25	42
		Expected Count	11.3	10.0	20.8	42.0
		% within ParticipantGroups	19.0%	21.4%	59.5%	100.0%
		% of Total	8.2%	9.3%	25.8%	43.3%
		Std. Residual	-1.0	-.3	.9	
		Adjusted Residual	-1.5	-.5	1.7	
	Currently depressed	Count	9	12	9	30
		Expected Count	8.0	7.1	14.8	30.0
		% within ParticipantGroups	30.0%	40.0%	30.0%	100.0%
		% of Total	9.3%	12.4%	9.3%	30.9%
		Std. Residual	.3	1.8	-1.5	
		Adjusted Residual	.5	2.5	-2.6	
Total		Count	26	23	48	97
		Expected Count	26.0	23.0	48.0	97.0
		% within ParticipantGroups	26.8%	23.7%	49.5%	100.0%
		% of Total	26.8%	23.7%	49.5%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11.269[a]	4	.024
Likelihood Ratio	11.944	4	.018
Linear-by-Linear Association	.956	1	.328
N of Valid Cases	97		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.93.

ParticipantGroups * Memory 3 (Childhood) Affect

Crosstab

			Memory 3 (Childhood) Affect			Total
			Positive	Negative	Mixed	
Participant Groups	Never depressed	Count	9	2	14	25
		Expected Count	9.0	7.2	8.8	25.0
		% within ParticipantGroups	36.0%	8.0%	56.0%	100.0%
		% of Total	9.3%	2.1%	14.4%	25.8%
		Std. Residual	.0	-1.9	1.8	
		Adjusted Residual	.0	-2.7	2.5	
	Formerly depressed	Count	18	11	13	42
		Expected Count	15.2	12.1	14.7	42.0
		% within ParticipantGroups	42.9%	26.2%	31.0%	100.0%
		% of Total	18.6%	11.3%	13.4%	43.3%
		Std. Residual	.7	-.3	-.4	
		Adjusted Residual	1.2	-.5	-.7	
	Currently depressed	Count	8	15	7	30
		Expected Count	10.8	8.7	10.5	30.0
		% within ParticipantGroups	26.7%	50.0%	23.3%	100.0%
		% of Total	8.2%	15.5%	7.2%	30.9%
		Std. Residual	-.9	2.2	-1.1	
		Adjusted Residual	-1.3	3.1	-1.6	
Total		Count	35	28	34	97
		Expected Count	35.0	28.0	34.0	97.0
		% within ParticipantGroups	36.1%	28.9%	35.1%	100.0%
		% of Total	36.1%	28.9%	35.1%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	14.295[a]	4	.006
Likelihood Ratio	14.711	4	.005
Linear-by-Linear Association	.899	1	.343
N of Valid Cases	97		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.22.

ParticipantGroups * Memory 4 (Adolescence) Affect

Crosstab

			Memory 4 (Adolescence) Affect			Total
			Positive	Negative	Mixed	
Participant Groups	Never depressed	Count	11	3	11	25
		Expected Count	8.5	8.2	8.2	25.0
		% within ParticipantGroups	44.0%	12.0%	44.0%	100.0%
		% of Total	11.3%	3.1%	11.3%	25.8%
		Std. Residual	.9	-1.8	1.0	
		Adjusted Residual	1.2	-2.6	1.4	
	Formerly depressed	Count	16	14	12	42
		Expected Count	14.3	13.9	13.9	42.0
		% within ParticipantGroups	38.1%	33.3%	28.6%	100.0%
		% of Total	16.5%	14.4%	12.4%	43.3%
		Std. Residual	.5	.0	-.5	
		Adjusted Residual	.7	.1	-.8	
	Currently depressed	Count	6	15	9	30
		Expected Count	10.2	9.9	9.9	30.0
		% within ParticipantGroups	20.0%	50.0%	30.0%	100.0%
		% of Total	6.2%	15.5%	9.3%	30.9%
		Std. Residual	-1.3	1.6	-.3	
		Adjusted Residual	-2.0	2.4	-.4	
Total		Count	33	32	32	97
		Expected Count	33.0	32.0	32.0	97.0
		% within ParticipantGroups	34.0%	33.0%	33.0%	100.0%
		% of Total	34.0%	33.0%	33.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.890[a]	4	.042
Likelihood Ratio	10.776	4	.029
Linear-by-Linear Association	.251	1	.616
N of Valid Cases	97		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.25.

ParticipantGroups * Memory 5 (Adulthood) Affect

Crosstab

			Memory 5 (Adulthood) Affect			Total
			Positive	Negative	Mixed	
Participant Groups	Never depressed	Count	14	4	7	25
		Expected Count	14.2	4.4	6.4	25.0
		% within ParticipantGroups	56.0%	16.0%	28.0%	100.0%
		% of Total	14.4%	4.1%	7.2%	25.8%
		Std. Residual	.0	-.2	.2	
		Adjusted Residual	.0	-.2	.3	
	Formerly depressed	Count	27	4	11	42
		Expected Count	23.8	7.4	10.8	42.0
		% within ParticipantGroups	64.3%	9.5%	26.2%	100.0%
		% of Total	27.8%	4.1%	11.3%	43.3%
		Std. Residual	.7	-1.2	.1	
		Adjusted Residual	1.3	-1.8	.1	
	Currently depressed	Count	14	9	7	30
		Expected Count	17.0	5.3	7.7	30.0
		% within ParticipantGroups	46.7%	30.0%	23.3%	100.0%
		% of Total	14.4%	9.3%	7.2%	30.9%
		Std. Residual	-.7	1.6	-.3	
		Adjusted Residual	-1.3	2.2	-.4	
Total		Count	55	17	25	97
		Expected Count	55.0	17.0	25.0	97.0
		% within ParticipantGroups	56.7%	17.5%	25.8%	100.0%
		% of Total	56.7%	17.5%	25.8%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.313[a]	4	.257
Likelihood Ratio	5.167	4	.271
Linear-by-Linear Association	.059	1	.808
N of Valid Cases	97		

a. 1 cells (11.1%) have expected count less than 5. The minimum expected count is 4.38.

ParticipantGroups * Memory 6 (Nadir/Low Point) Affect

Crosstab

			Memory 6 (Nadir/Low Point) Affect		Total
			Negative	Mixed	
Participant Groups	Never depressed	Count	16	9	25
		Expected Count	18.0	7.0	25.0
		% within ParticipantGroups	64.0%	36.0%	100.0%
		% of Total	16.5%	9.3%	25.8%
		Std. Residual	-.5	.8	
		Adjusted Residual	-1.1	1.1	
	Formerly depressed	Count	32	10	42
		Expected Count	30.3	11.7	42.0
		% within ParticipantGroups	76.2%	23.8%	100.0%
		% of Total	33.0%	10.3%	43.3%
		Std. Residual	.3	-.5	
		Adjusted Residual	.8	-.8	
	Currently depressed	Count	22	8	30
		Expected Count	21.6	8.4	30.0
		% within ParticipantGroups	73.3%	26.7%	100.0%
		% of Total	22.7%	8.2%	30.9%
		Std. Residual	.1	-.1	
		Adjusted Residual	.2	-.2	
Total		Count	70	27	97
		Expected Count	70.0	27.0	97.0
		% within ParticipantGroups	72.2%	27.8%	100.0%
		% of Total	72.2%	27.8%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.189[a]	2	.552
Likelihood Ratio	1.158	2	.560
Linear-by-Linear Association	.515	1	.473
N of Valid Cases	97		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.96.

Appendix B.9.24 Positive Affect Chi Square

Crosstabs

Participant Groups * Mem1AffectPos

Crosstab

			Mem1AffectPos		Total
			Not Just Positive	Positive	
Participant Groups	Never depressed	Count	8	17	25
		Adjusted Residual	-.9	.9	
	Formerly depressed	Count	12	30	42
		Adjusted Residual	-1.9	1.9	
	Currently depressed	Count	18	12	30
		Adjusted Residual	2.8	-2.8	
Total		Count	38	59	97

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.982[a]	2	.018
Likelihood Ratio	7.909	2	.019
Linear-by-Linear Association	4.906	1	.027
N of Valid Cases	97		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 9.79.

Participant Groups * Mem2AffectPos

Crosstab

			Mem2AffectPos		Total
			Not Just Positive	Positive	
Participant Groups	Never depressed	Count	16	9	25
		Adjusted Residual	-1.2	1.2	
	Formerly depressed	Count	34	8	42
		Adjusted Residual	1.5	-1.5	
	Currently depressed	Count	21	9	30
		Adjusted Residual	-.5	.5	
Total		Count	71	26	97

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.522[a]	2	.283
Likelihood Ratio	2.549	2	.280
Linear-by-Linear Association	.166	1	.684
N of Valid Cases	97		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.70.

Participant Groups * Mem3AffectPos

Crosstab

			Mem3AffectPos		Total
			Not Just Positive	Positive	
Participant Groups	Never depressed	Count	16	9	25
		Adjusted Residual	.0	.0	
	Formerly depressed	Count	24	18	42
		Adjusted Residual	-1.2	1.2	
	Currently depressed	Count	22	8	30
		Adjusted Residual	1.3	-1.3	
Total		Count	62	35	97

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.989[a]	2	.370
Likelihood Ratio	2.025	2	.363
Linear-by-Linear Association	.616	1	.432
N of Valid Cases	97		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 9.02.

Participant Groups * Mem4AffectPos

Crosstab

			Mem4AffectPos		Total
			Not Just Positive	Positive	
Participant Groups	Never depressed	Count	14	11	25
		Adjusted Residual	-1.2	1.2	
	Formerly depressed	Count	26	16	42
		Adjusted Residual	-.7	.7	
	Currently depressed	Count	24	6	30
		Adjusted Residual	2.0	-2.0	
Total		Count	64	33	97

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.047[a]	2	.132
Likelihood Ratio	4.246	2	.120
Linear-by-Linear Association	3.617	1	.057
N of Valid Cases	97		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.51.

Participant Groups * Mem5AffectPos

Crosstab

			Mem5AffectPos		Total
			Not Just Positive	Positive	
Participant Groups	Never depressed	Count	11	14	25
		Adjusted Residual	.1	-.1	
	Formerly depressed	Count	15	27	42
		Adjusted Residual	-1.3	1.3	
	Currently depressed	Count	16	14	30
		Adjusted Residual	1.3	-1.3	
Total		Count	42	55	97

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.220[a]	2	.330
Likelihood Ratio	2.224	2	.329
Linear-by-Linear Association	.592	1	.442
N of Valid Cases	97		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 10.82.

Participant Groups * Mem6AffectPos

Crosstab

			Mem6AffectPos	Total
			Not Just Positive	
Participant Groups	Never depressed	Count	25	25
		Adjusted Residual	.	
	Formerly depressed	Count	42	42
		Adjusted Residual	.	
	Currently depressed	Count	30	30
		Adjusted Residual	.	
Total		Count	97	97

Chi-Square Tests

	Value
Pearson Chi-Square	.[a]
N of Valid Cases	97

a. No statistics are computed because Mem6AffectPos is a constant.

Appendix B.9.25 Negative Affect Chi Square

Crosstabs

Participant Groups * Mem1AffectNeg

Crosstab

			Mem1AffectNeg		Total
			Not just negative	Negatvie	
Participant Groups	Never depressed	Count	21	4	25
		Adjusted Residual	.5	-.5	
	Formerly depressed	Count	35	7	42
		Adjusted Residual	.6	-.6	
	Currently depressed	Count	22	8	30
		Adjusted Residual	-1.2	1.2	
Total		Count	78	19	97

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.386[a]	2	.500
Likelihood Ratio	1.333	2	.513
Linear-by-Linear Association	1.047	1	.306
N of Valid Cases	97		

a. 1 cells (16.7%) have expected count less than 5. The minimum expected count is 4.90.

Participant Groups * Mem2AffectNeg

Crosstab

			Mem2AffectNeg		Total
			Not just negative	Negatvie	
Participant Groups	Never depressed	Count	23	2	25
		Adjusted Residual	2.1	-2.1	
	Formerly depressed	Count	33	9	42
		Adjusted Residual	.5	-.5	
	Currently depressed	Count	18	12	30
		Adjusted Residual	-2.5	2.5	
Total		Count	74	23	97

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.933[a]	2	.019
Likelihood Ratio	8.296	2	.016
Linear-by-Linear Association	7.765	1	.005
N of Valid Cases	97		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.93.

Participant Groups * Mem3AffectNeg

Crosstab

			Mem3AffectNeg		Total
			Not just negative	Negatvie	
Participant Groups	Never depressed	Count	23	2	25
		Adjusted Residual	2.7	-2.7	
	Formerly depressed	Count	31	11	42
		Adjusted Residual	.5	-.5	
	Currently depressed	Count	15	15	30
		Adjusted Residual	-3.1	3.1	
Total		Count	69	28	97

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11.973[a]	2	.003
Likelihood Ratio	12.753	2	.002
Linear-by-Linear Association	11.759	1	.001
N of Valid Cases	97		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.22.

Participant Groups * Mem4AffectNeg

Crosstab

			Mem4AffectNeg		Total
			Not just negative	Negatvie	
Participant Groups	Never depressed	Count	22	3	25
		Adjusted Residual	2.6	-2.6	
	Formerly depressed	Count	28	14	42
		Adjusted Residual	-.1	.1	
	Currently depressed	Count	15	15	30
		Adjusted Residual	-2.4	2.4	
Total		Count	65	32	97

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.911[a]	2	.012
Likelihood Ratio	9.614	2	.008
Linear-by-Linear Association	8.762	1	.003
N of Valid Cases	97		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.25.

Participant Groups * Mem5AffectNeg

Crosstab

			Mem5AffectNeg		Total
			Not just negative	Negatvie	
Participant Groups	Never depressed	Count	21	4	25
		Adjusted Residual	.2	-.2	
	Formerly depressed	Count	38	4	42
		Adjusted Residual	1.8	-1.8	
	Currently depressed	Count	21	9	30
		Adjusted Residual	-2.2	2.2	
Total		Count	80	17	97

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.130[a]	2	.077
Likelihood Ratio	4.988	2	.083
Linear-by-Linear Association	2.127	1	.145
N of Valid Cases	97		

a. 1 cells (16.7%) have expected count less than 5. The minimum expected count is 4.38.

Participant Groups * Mem6AffectNeg

Crosstab

			Mem6AffectNeg		Total
			Not just negative	Negatvie	
Participant Groups	Never depressed	Count	9	16	25
		Adjusted Residual	1.1	-1.1	
	Formerly depressed	Count	10	32	42
		Adjusted Residual	-.8	.8	
	Currently depressed	Count	8	22	30
		Adjusted Residual	-.2	.2	
Total		Count	27	70	97

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.189[a]	2	.552
Likelihood Ratio	1.158	2	.560
Linear-by-Linear Association	.515	1	.473
N of Valid Cases	97		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.96.

Appendix B.9.26 Memory Clusters Related to Depression Groups

Crosstabs

Memory 1 Clusters * Participant Groups

Crosstab

			Participant Groups			Total
			Never depressed	Formerly depressed	Currently depressed	
Memory 1 Clusters	1	Count	4	7	12	23
		% within Participant Groups	16.0%	16.7%	40.0%	23.7%
		Adjusted Residual	-1.1	-1.4	2.5	
	2	Count	21	35	18	74
		% within Participant Groups	84.0%	83.3%	60.0%	76.3%
		Adjusted Residual	1.1	1.4	-2.5	
Total		Count	25	42	30	97
		% within Participant Groups	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.374[a]	2	.041
Likelihood Ratio	6.048	2	.049
Linear-by-Linear Association	4.641	1	.031
N of Valid Cases	97		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.93.

Memory 2 Clusters * Participant Groups

Crosstab

			Participant Groups			Total
			Never depressed	Formerly depressed	Currently depressed	
Memory 2 Clusters	1	Count	18	28	15	61
		% within Participant Groups	72.0%	66.7%	50.0%	62.9%
		Adjusted Residual	1.1	.7	-1.8	
	2	Count	7	14	15	36
		% within Participant Groups	28.0%	33.3%	50.0%	37.1%
		Adjusted Residual	-1.1	-.7	1.8	
Total		Count	25	42	30	97
		% within Participant Groups	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.281[a]	2	.194
Likelihood Ratio	3.250	2	.197
Linear-by-Linear Association	2.924	1	.087
N of Valid Cases	97		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 9.28.

Memory 3 Clusters * Participant Groups

Crosstab

			Participant Groups			Total
			Never depressed	Formerly depressed	Currently depressed	
Memory 3 Clusters	1	Count	8	14	8	30
		% within Partic Groups	32.0%	33.3%	26.7%	30.9%
		Adjusted Residual	.1	.4	-.6	
	2	Count	8	12	3	23
		% within Partic Groups	32.0%	28.6%	10.0%	23.7%
		Adjusted Residual	1.1	1.0	-2.1	
	3	Count	9	16	19	44
		% within Partic Groups	36.0%	38.1%	63.3%	45.4%
		Adjusted Residual	-1.1	-1.3	2.4	
Total		Count	25	42	30	97
		% within Participant Groups	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.893[a]	4	.142
Likelihood Ratio	7.299	4	.121
Linear-by-Linear Association	2.097	1	.148
N of Valid Cases	97		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.93.

Memory 4 Clusters * Participant Groups

Crosstab

			Participant Groups			Total
			Never depressed	Formerly depressed	Currently depressed	
Memory 4 Clusters	1	Count	8	16	6	30
		% within Partic Groups	32.0%	38.1%	20.0%	30.9%
		Adjusted Residual	.1	1.3	-1.6	
	2	Count	10	19	23	52
		% within Partic Groups	40.0%	45.2%	76.7%	53.6%
		Adjusted Residual	-1.6	-1.4	3.0	
	3	Count	7	7	1	15
		% within Partic Groups	28.0%	16.7%	3.3%	15.5%
		Adjusted Residual	2.0	.3	-2.2	
Total		Count	25	42	30	97
		% within Participant Groups	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11.688[a]	4	.020
Likelihood Ratio	12.425	4	.014
Linear-by-Linear Association	.428	1	.513
N of Valid Cases	97		

a. 2 cells (22.2%) have expected count less than 5. The minimum expected count is 3.87.

Memory 5 Clusters * Participant Groups

Crosstab

			Participant Groups			
			Never depressed	Formerly depressed	Currently depressed	Total
Memory 5 Clusters	1	Count	20	38	21	79
		% within Partic Groups	80.0%	90.5%	70.0%	81.4%
		Adjusted Residual	-.2	2.0	-1.9	
	2	Count	5	4	9	18
		% within Partic Groups	20.0%	9.5%	30.0%	18.6%
		Adjusted Residual	.2	-2.0	1.9	
Total		Count	25	42	30	97
		% within Participant Groups	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.901[a]	2	.086
Likelihood Ratio	4.978	2	.083
Linear-by-Linear Association	1.129	1	.288
N of Valid Cases	97		

a. 1 cells (16.7%) have expected count less than 5. The minimum expected count is 4.64.

Memory 6 Clusters * Participant Groups

Crosstab

			Participant Groups			
			Never depressed	Formerly depressed	Currently depressed	Total
Memory 6 Clusters	1	Count	8	8	4	20
		% within Participant Groups	32.0%	19.0%	13.3%	20.6%
		Adjusted Residual	1.6	-.3	-1.2	
	2	Count	17	34	26	77
		% within Participant Groups	68.0%	81.0%	86.7%	79.4%
		Adjusted Residual	-1.6	.3	1.2	
Total		Count	25	42	30	97
		% within Participant Groups	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.015[a]	2	.221
Likelihood Ratio	2.914	2	.233
Linear-by-Linear Association	2.796	1	.095
N of Valid Cases	97		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.15.

Memory 2 Clusters without Affect * Participant Groups

Crosstab

			Participant Groups			
			Never depressed	Formerly depressed	Currently depressed	Total
Memory 2 Clusters without Affect	1	Count	8	21	5	34
		% within Participant Groups	32.0%	50.0%	16.7%	35.1%
		Adjusted Residual	-.4	2.7	-2.5	
	2	Count	17	14	19	50
		% within Participant Groups	68.0%	33.3%	63.3%	51.5%
		Adjusted Residual	1.9	-3.1	1.6	
	3	Count	0	7	6	13
		% within Participant Groups	.0%	16.7%	20.0%	13.4%
		Adjusted Residual	-2.3	.8	1.3	
Total		Count	25	42	30	97
		% within Participant Groups	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	15.120[a]	4	.004
Likelihood Ratio	18.921	4	.001
Linear-by-Linear Association	4.199	1	.040
N of Valid Cases	97		

a. 2 cells (22.2%) have expected count less than 5. The minimum expected count is 3.35.

Appendix B.9.27 Comparison of Proportions for Clusters

Memory 1

Report

Memory 1 Clusters		Mem 1 (Peak) Specificity/ NonSpec	Mem 1 (Peak) Int /NonInt	Mem 1 (Peak) Agentic Theme	Mem 1 (Peak) Commun Theme	Mem 1 (Peak) Redem ption	Mem 1 (Peak) Contam ination	Mem1 Affect Pos	Mem1 Affect Neg
1	Mean	.6522	.1304	.13	.70	.09	.48	.0000	.8261
	N	23	23	23	23	23	23	23	23
	SD	.48698	.34435	.344	.470	.288	.511	.00000	.38755
2	Mean	.7162	.2432	.32	.73	.19	.00	.7973	.0000
	N	74	74	74	74	74	74	74	74
	SD	.45391	.43197	.471	.447	.394	.000	.40476	.00000
Tot	Mean	.7010	.2165	.28	.72	.16	.11	.6082	.1959
	N	97	97	97	97	97	97	97	97
	SD	.46018	.41399	.451	.451	.373	.319	.49068	.39894

Memory 2

Report

Memory 2 Clusters without Affect		Mem 2 (Turning Point) Spec NonSpec	Mem 2 (Turning Point) Int NonInt	Mem 2 (Turning Point) Agentic Theme	Mem 2 (Turning Point) Communion Theme	Mem 2 (Turning Point) Redemp-tion	Mem 2 (Turning Point) Contamina-tion	Mem2 Affect Pos	Mem2 Affect Neg
1	Mean	.4412	.9118	.94	.44	1.00	.00	.2647	.0000
	N	34	34	34	34	34	34	34	34
	SD	.50399	.28790	.239	.504	.000	.000	.44781	.00000
2	Mean	.6400	.3600	.32	.60	.12	.00	.3400	.2400
	N	50	50	50	50	50	50	50	50
	SD	.48487	.48487	.471	.495	.328	.000	.47852	.43142
3	Mean	.5385	.3077	.31	.31	.08	1.00	.0000	.8462
	N	13	13	13	13	13	13	13	13
	SD	.51887	.48038	.480	.480	.277	.000	.00000	.37553
Tot	Mean	.5567	.5464	.54	.51	.42	.13	.2680	.2371
	N	97	97	97	97	97	97	97	97
	SD	.49936	.50043	.501	.503	.497	.342	.44524	.42752

Memory 3

Report

Memory 3 Clusters		Memory 3 (Childhood) Spec/ NonSpec	Memory 3 (Childhood) Int/ NonInt	Mem 3 (Childh'd) Agentic Theme	Mem 3 (Childh'd) Communi Theme	Memory 3 (Childh'd) Redemp-tion	Memory 3 (Childh'd) Contamina-tion	Mem3 AffectPos	Mem3 AffectNeg
1	Mean	.5000	.0000	.23	.77	.00	.00	1.0000	.0000
	N	30	30	30	30	30	30	30	30
	SD	.50855	.00000	.430	.430	.000	.000	.00000	.00000
2	Mean	.7826	.4783	.43	.65	.61	.00	.2174	.0870
	N	23	23	23	23	23	23	23	23
	SD	.42174	.51075	.507	.487	.499	.000	.42174	.28810
3	Mean	.6364	.0000	.07	.41	.00	.27	.0000	.5909
	N	44	44	44	44	44	44	44	44
	SD	.48661	.00000	.255	.497	.000	.451	.00000	.49735
Tot	Mean	.6289	.1134	.21	.58	.14	.12	.3608	.2887
	N	97	97	97	97	97	97	97	97
	SD	.48562	.31873	.407	.497	.353	.331	.48273	.45549

Memory 4

Report

Memory 4 Clusters		Memory 4 (Adol) Specificity/ Non-Spec	Memory 4 (Adol) Integration/ Non-Integ	Memory 4 (Adol) Agentic Theme	Memory 4 (Adol) Communion Theme	Memory 4 (Adol) Redemp-tion	Memory 4 (Adol) Contamina-tion	Mem4-Affect Pos	Mem4-Affect Neg
1	Mean	.7000	.0000	.37	.77	.00	.00	1.0000	.0000
	N	30	30	30	30	30	30	30	30
	SD	.46609	.00000	.490	.430	.000	.000	.00000	.00000
2	Mean	.5192	.0577	.21	.54	.00	.21	.0000	.6154
	N	52	52	52	52	52	52	52	52
	SD	.50450	.23544	.412	.503	.000	.412	.00000	.49125
3	Mean	.5333	.6667	.60	.60	.80	.07	.2000	.0000
	N	15	15	15	15	15	15	15	15
	SD	.51640	.48795	.507	.507	.414	.258	.41404	.00000
Total	Mean	.5773	.1340	.32	.62	.12	.12	.3402	.3299
	N	97	97	97	97	97	97	97	97
	SD	.49655	.34244	.469	.488	.331	.331	.47624	.47262

Memory 5

Report

Memory 5 Clusters		Memory 5 (Adulthood) Specificity / Non-Specificity	Memory 5 (Adulthood) Integration-/Non-Integration	Memory 5 (Adulthood) Agentic Theme	Memory 5 (Adulthood) Communion Theme	Memory 5 (Adulthood) Redemp-tion	Memory 5 (Adulthood) Contamination	Mem5 Affect Pos	Mem5 Affect Neg
1	Mean	.6456	.2658	.42	.70	.24	.00	.6962	.0000
	N	79	79	79	79	79	79	79	79
	SD	.48140	.44459	.496	.463	.430	.000	.46283	.00000
2	Mean	.4444	.0556	.28	.56	.00	.44	.0000	.9444
	N	18	18	18	18	18	18	18	18
	SD	.51131	.23570	.461	.511	.000	.511	.00000	.23570
Tot	Mean	.6082	.2268	.39	.67	.20	.08	.5670	.1753
	N	97	97	97	97	97	97	97	97
	SD	.49068	.42094	.491	.473	.399	.277	.49806	.38216

Memory 6

Report

Memory 6 Clusters		Memory 6 (Nadir) Speci/ NonSpec	Memory 6 (Nadir) Integ/ NonInteg	Memory 6 (Nadir) Agentic Theme	Memory 6 (Nadir) Communion Theme	Memory 6 (Nadir) Redemp-tion	Memory 6 (Nadir) Contami na-tion	Mem6 Affect Pos	Mem6 Affect Neg
1	Mean	.1000	.5000	.70	.70	.95	.00	.0000	.0500
	N	20	20	20	20	20	20	20	20
	SD	.30779	.51299	.470	.470	.224	.000	.00000	.22361
2	Mean	.6234	.0390	.08	.71	.05	.18	.0000	.8961
	N	77	77	77	77	77	77	77	77
	SD	.48772	.19477	.270	.455	.223	.388	.00000	.30713
Total	Mean	.5155	.1340	.21	.71	.24	.14	.0000	.7216
	N	97	97	97	97	97	97	97	97
	SD	.50236	.34244	.407	.455	.428	.353	.00000	.45052

Memory 2 without Affect Variables

Report

Memory 2 Clusters without Affect			Memory 2 (Turning Point) Spec/ Non-Specificity	Memory 2 (Turning Point) Integ/ Non-Integration	Mem 2 (Turning Point) Agentic Theme	Memory 2 (Turning Point) Communion Theme	Memory 2 (Turning Point) Redemp-tion	Memory 2 (Turning Point) Contamina-tion
	1	Mean	.4412	.9118	.94	.44	1.00	.00
		N	34	34	34	34	34	34
		Std. Dev	.50399	.28790	.239	.504	.000	.000
	2	Mean	.6400	.3600	.32	.60	.12	.00
		N	50	50	50	50	50	50
		Std. Dev	.48487	.48487	.471	.495	.328	.000
	3	Mean	.5385	.3077	.31	.31	.08	1.00
		N	13	13	13	13	13	13
		Std. Dev	.51887	.48038	.480	.480	.277	.000
	Total	Mean	.5567	.5464	.54	.51	.42	.13
		N	97	97	97	97	97	97
		Std. Dev	.49936	.50043	.501	.503	.497	.342

Appendix B.9.28 Clusters (Peak Cue) by Self Report Data

Oneway

Descriptives

		N	Mean	SD	Std. Error	95% Confidence Interval for Mean		Min	Max
						Lower Bound	Upper Bound		
BDI Total	Cluster 1 - Cont/NA	23	23.0000	19.61215	4.08942	14.5191	31.4809	.00	49.00
	Cluster 2 – Int/Red/PA	74	13.6486	16.18170	1.88108	9.8997	17.3976	.00	51.00
	Total	97	15.8660	17.41385	1.76811	12.3563	19.3756	.00	51.00
PSI Sociotropy Total	Cluster 1	23	94.4783	19.20196	4.00389	86.1747	102.781	51.00	134.00
	Cluster 2	74	91.1081	16.72630	1.94439	87.2329	94.9833	49.00	123.00
	Total	97	91.9072	17.30070	1.75662	88.4204	95.3941	49.00	134.00
PSI Autonomy Total	Cluster 1	23	87.9565	17.71871	3.69461	80.2944	95.6187	47.00	128.00
	Cluster 2	74	81.7432	16.14325	1.87661	78.0032	85.4833	50.00	125.00
	Total	97	83.2165	16.64847	1.69040	79.8611	86.5719	47.00	128.00
Mem1 Clarity	Cluster 1	22	5.82	.395	.084	5.64	5.99	5	6
	Cluster 2	70	5.57	.714	.085	5.40	5.74	3	6
	Total	92	5.63	.658	.069	5.49	5.77	3	6
Mem1 Intensity	Cluster 1	22	5.41	.796	.170	5.06	5.76	4	6
	Cluster 2	70	5.39	.921	.110	5.17	5.61	2	6
	Total	92	5.39	.889	.093	5.21	5.58	2	6
Mem1 Importance	Cluster 1	22	5.77	.528	.113	5.54	6.01	4	6
	Cluster 2	70	5.53	.696	.083	5.36	5.69	3	6
	Total	92	5.59	.666	.069	5.45	5.72	3	6
Mem1 Resolution	Cluster 1	22	2.91	1.925	.410	2.06	3.76	1	6
	Cluster 2	69	5.51	1.052	.127	5.25	5.76	1	6
	Total	91	4.88	1.718	.180	4.52	5.24	1	6

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
BDI Total	Between Groups	1534.393	1	1534.393	5.286	.024
	Within Groups	27576.865	95	290.283		
	Total	29111.258	96			
PSI Sociotropy Total	Between Groups	199.291	1	199.291	.663	.417
	Within Groups	28534.874	95	300.367		
	Total	28734.165	96			
PSI Autonomy Total	Between Groups	677.375	1	677.375	2.482	.119
	Within Groups	25931.078	95	272.959		
	Total	26608.454	96			
Mem1 Clarity	Between Groups	1.019	1	1.019	2.388	.126
	Within Groups	38.416	90	.427		
	Total	39.435	91			
Mem1 Intensity	Between Groups	.009	1	.009	.011	.915
	Within Groups	71.904	90	.799		
	Total	71.913	91			
Mem1 Importance	Between Groups	.998	1	.998	2.285	.134
	Within Groups	39.306	90	.437		
	Total	40.304	91			
Mem1 Resolution	Between Groups	112.606	1	112.606	65.475	.000
	Within Groups	153.065	89	1.720		
	Total	265.670	90			

Appendix B.9.29 Clusters (Turning Point Cue) by Self Report Data

Oneway – PSI-II

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min	Max
						Lower Bound	Upper Bound		
PSI Sociotropy Total	Cluster 1 - Int/Red/Agency	34	87.1176	18.67224	3.20226	80.6026	93.6327	49.00	119.00
	Cluster 2 - Spec/Comm	50	93.5000	16.47540	2.32997	88.8177	98.1823	51.00	124.00
	Cluster 3 - Contaminated	13	98.3077	14.40130	3.99420	89.6051	107.0103	77.00	134.00
	Total	97	91.9072	17.30070	1.75662	88.4204	95.3941	49.00	134.00
PSI Autonomy Total	Cluster 1 - Int/Red/Agency	34	79.5588	14.16182	2.42873	74.6175	84.5001	58.00	125.00
	Cluster 2 - Spec/Comm	50	82.7000	16.20059	2.29111	78.0958	87.3042	47.00	121.00
	Cluster 3 - Contaminated	13	94.7692	20.26143	5.61951	82.5254	107.0131	59.00	128.00
	Total	97	83.2165	16.64847	1.69040	79.8611	86.5719	47.00	128.00

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
PSI Sociotropy Total	Between Groups	1439.366	2	719.683	2.479	.089
	Within Groups	27294.799	94	290.370		
	Total	28734.165	96			
PSI Autonomy Total	Between Groups	2203.264	2	1101.632	4.243	.017
	Within Groups	24405.190	94	259.630		
	Total	26608.454	96			

Post Hoc Tests

Multiple Comparisons

Scheffe

Dependent Variable	(I) Memory 2 (Turning Point without Affect) Clusters	(J) Memory 2 (Turning Point without Affect) Clusters	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
PSI Sociotropy Total	Cluster 1 - Int/Red/Agency	Cluster 2 - Spec/Comm	-6.38235	3.78784	.247	-15.8037	3.0390
		Cluster 3 - Contaminated	-11.19005	5.55666	.137	-25.0110	2.6309
	Cluster 2 - Spec/Comm	Cluster 1 - Int/Red/Agency	6.38235	3.78784	.247	-3.0390	15.8037
		Cluster 3 - Contaminated	-4.80769	5.30505	.664	-18.0028	8.3874
	Cluster 3 - Contaminated	Cluster 1 - Int/Red/Agency	11.19005	5.55666	.137	-2.6309	25.0110
		Cluster 2 - Spec/Comm	4.80769	5.30505	.664	-8.3874	18.0028

PSI Autonomy Total	Cluster 1 - Int/Red/Agency	Cluster 2 - Spec/Comm	-3.14118	3.58173	.682	-12.0499	5.7676
		Cluster 3 - Contaminated	-15.21041*	5.25430	.018	-28.2793	-2.1415
	Cluster 2 - Spec/Comm	Cluster 1 - Int/Red/Agency	3.14118	3.58173	.682	-5.7676	12.0499
		Cluster 3 - Contaminated	-12.06923	5.01638	.060	-24.5464	.4079
	Cluster 3 - Contaminated	Cluster 1 - Int/Red/Agency	15.21041*	5.25430	.018	2.1415	28.2793
		Cluster 2 - Spec/Comm	12.06923	5.01638	.060	-.4079	24.5464

*. The mean difference is significant at the 0.05 level.

Oneway - BDI

Descriptives

BDI Total

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min	Max
					Lower Bound	Upper Bound		
Cluster 1 - Int/Red/Agency	34	9.8529	12.82311	2.19915	5.3787	14.3271	.00	47.00
Cluster 2 - Spec/Comm	50	17.8200	17.77259	2.51342	12.7691	22.8709	.00	49.00
Cluster 3 - Contaminated	13	24.0769	22.19407	6.15553	10.6652	37.4887	.00	51.00
Total	97	15.8660	17.41385	1.76811	12.3563	19.3756	.00	51.00

ANOVA

BDI Total

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2296.690	2	1148.345	4.026	.021
Within Groups	26814.568	94	285.261		
Total	29111.258	96			

Post Hoc Tests

Multiple Comparisons

BDI Total
Scheffe

(I) Memory 2 (Turning Point without Affect) Clusters	(J) Memory 2 (Turning Point without Affect) Clusters	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Cluster 1 - Int/Red/Agency	Cluster 2 - Spec/Comm	-7.96706	3.75437	.111	-17.3052	1.3711
	Cluster 3 - Contaminated	-14.22398*	5.50756	.040	-27.9228	-.5252
Cluster 2 - Spec/Comm	Cluster 1 - Int/Red/Agen	7.96706	3.75437	.111	-1.3711	17.3052
	Cluster 3 - Contaminated	-6.25692	5.25818	.495	-19.3354	6.8216
Cluster 3 - Contaminated	Cluster 1 - Int/Red/Agen	14.22398*	5.50756	.040	.5252	27.9228
	Cluster 2 - Spec/Comm	6.25692	5.25818	.495	-6.8216	19.3354

*. The mean difference is significant at the 0.05 level.

Oneway – Self-Defining Memory Information

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Mem2 Clarity	Cluster 1 - Int/Red/Agen	32	5.44	.669	.118	5.20	5.68	4	6
	Cluster 2 - Spec/Comm	47	5.34	.867	.126	5.09	5.59	2	6
	Cluster 3 - Contaminated	10	5.80	.632	.200	5.35	6.25	4	6
	Total	89	5.43	.782	.083	5.26	5.59	2	6
Mem2 Intensity	Cluster 1 - Int/Red/Agen	32	5.41	.665	.118	5.17	5.65	4	6
	Cluster 2 - Spec/Comm	47	5.15	.932	.136	4.88	5.42	2	6
	Cluster 3 - Contaminated	10	5.80	.422	.133	5.50	6.10	5	6
	Total	89	5.31	.820	.087	5.14	5.49	2	6
Mem2 Importance	Cluster 1 - Int/Red/Agen	32	5.78	.491	.087	5.60	5.96	4	6
	Cluster 2 - Spec/Comm	48	5.52	.825	.119	5.28	5.76	2	6
	Cluster 3 - Contaminated	10	5.40	.699	.221	4.90	5.90	4	6
	Total	90	5.60	.716	.075	5.45	5.75	2	6
Mem2 Resolution	Cluster 1 - Int/Red/Agen	32	5.22	.975	.172	4.87	5.57	3	6
	Cluster 2 - Spec/Comm	48	4.77	1.741	.251	4.27	5.28	1	6
	Cluster 3 - Contaminated	10	4.40	1.075	.340	3.63	5.17	2	6
	Total	90	4.89	1.457	.154	4.58	5.19	1	6

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Mem2 Clarity	Between Groups	1.747	2	.874	1.444	.242
	Within Groups	52.028	86	.605		
	Total	53.775	88			
Mem2 Intensity	Between Groups	3.915	2	1.957	3.045	.053
	Within Groups	55.276	86	.643		
	Total	59.191	88			
Mem2 Importance	Between Groups	1.752	2	.876	1.738	.182
	Within Groups	43.848	87	.504		
	Total	45.600	89			
Mem2 Resolution	Between Groups	6.541	2	3.270	1.560	.216
	Within Groups	182.348	87	2.096		
	Total	188.889	89			

Post Hoc Tests

Multiple Comparisons

Scheffe

Dependent Variable	(I) Memory 2 (Turning Point without Affect) Clusters	(J) Memory 2 (Turning Point without Affect) Clusters	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Mem2 Clarity	Cluster 1 - Int/Red/Agen	Cluster 2 - Spec/Comm	.097	.178	.862	-.35	.54
		Cluster 3 - Contaminated	-.362	.282	.441	-1.06	.34
	Cluster 2 - Spec/Comm	Cluster 1 - Int/Red/Agen	-.097	.178	.862	-.54	.35
		Cluster 3 - Contaminated	-.460	.271	.243	-1.13	.22
	Cluster 3 - Contaminated	Cluster 1 - Int/Red/Agen	.362	.282	.441	-.34	1.06
		Cluster 2 - Spec/Comm	.460	.271	.243	-.22	1.13
Mem2 Intensity	Cluster 1 - Int/Red/Agen	Cluster 2 - Spec/Comm	.257	.184	.379	-.20	.72
		Cluster 3 - Contaminated	-.394	.290	.403	-1.12	.33
	Cluster 2 - Spec/Comm	Cluster 1 - Int/Red/Agen	-.257	.184	.379	-.72	.20
		Cluster 3 - Contaminated	-.651	.279	.072	-1.35	.04
	Cluster 3 - Contaminated	Cluster 1 - Int/Red/Agen	.394	.290	.403	-.33	1.12
		Cluster 2 - Spec/Comm	.651	.279	.072	-.04	1.35
Mem2 Importance	Cluster 1 - Int/Red/Agen	Cluster 2 - Spec/Comm	.260	.162	.280	-.14	.66
		Cluster 3 - Contaminated	.381	.257	.338	-.26	1.02
	Cluster 2 - Spec/Comm	Cluster 1 - Int/Red/Agen	-.260	.162	.280	-.66	.14
		Cluster 3 - Contaminated	.121	.247	.887	-.49	.74
	Cluster 3 - Contaminated	Cluster 1 - Int/Red/Agen	-.381	.257	.338	-1.02	.26
		Cluster 2 - Spec/Comm	-.121	.247	.887	-.74	.49
Mem2 Resolution	Cluster 1 - Int/Red/Agen	Cluster 2 - Spec/Comm	.448	.330	.403	-.37	1.27
		Cluster 3 - Contaminated	.819	.524	.301	-.49	2.13
	Cluster 2 - Spec/Comm	Cluster 1 - Int/Red/Agen	-.448	.330	.403	-1.27	.37
		Cluster 3 - Contaminated	.371	.503	.763	-.88	1.62
	Cluster 3 - Contaminated	Cluster 1 - Int/Red/Agen	-.819	.524	.301	-2.13	.49
		Cluster 2 - Spec/Comm	-.371	.503	.763	-1.62	.88

Appendix B.9.30 Clusters (Adolescence Cue) by Self Report Data

Oneway – PSI-II

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min	Max
						Lower Bound	Upper Bound		
PSI Sociotropy Total	Cluster 1 - Spec/PA	30	90.1333	17.68056	3.22801	83.5313	96.7354	49.00	121.00
	Cluster 2 - Cont/NA	52	94.4038	16.97779	2.35440	89.6772	99.1305	63.00	134.00
	Cluster 3 - Red/Age	15	86.8000	17.23452	4.44993	77.2558	96.3442	51.00	117.00
	Total	97	91.9072	17.30070	1.75662	88.4204	95.3941	49.00	134.00
PSI Autonomy Total	Cluster 1 - Spec/PA	30	77.4000	14.65370	2.67539	71.9282	82.8718	47.00	98.00
	Cluster 2 - Cont/NA	52	86.9423	17.76692	2.46383	81.9960	91.8886	58.00	128.00
	Cluster 3 - Red/Age	15	81.9333	13.41889	3.46474	74.5022	89.3645	64.00	104.00
	Total	97	83.2165	16.64847	1.69040	79.8611	86.5719	47.00	128.00

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
PSI Sociotropy Total	Between Groups	809.779	2	404.890	1.363	.261
	Within Groups	27924.386	94	297.068		
	Total	28734.165	96			
PSI Autonomy Total	Between Groups	1761.493	2	880.747	3.332	.040
	Within Groups	24846.960	94	264.329		
	Total	26608.454	96			

Post Hoc Tests

Multiple Comparisons

Scheffe

Dependent Variable	(I) Memory 4 (Adolescence) Clusters	(J) Memory 4 (Adolescence) Clusters	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
PSI Sociotropy Total	Cluster 1 - Specific/Pos Affect	Cluster 2 - Contaminated/NA	-4.27051	3.95160	.560	-14.0992	5.5582
		Cluster 3 - Redemption/Agency	3.33333	5.45039	.830	-10.2233	16.8900
	Cluster 2 - Contaminated/Neg Affect	Cluster 1 - Specific/Pos Affect	4.27051	3.95160	.560	-5.5582	14.0992
		Cluster 3 - Redemption/Agency	7.60385	5.05147	.326	-4.9605	20.1682
	Cluster 3 - Redemption/Agency	Cluster 1 - Specific/Pos Affect	-3.33333	5.45039	.830	-16.8900	10.2233
		Cluster 2 - Contaminated/NA	-7.60385	5.05147	.326	-20.1682	4.9605
PSI Autonomy Total	Cluster 1 - Specific/Pos Affect	Cluster 2 - Contaminated/NA	-9.54231*	3.72750	.042	-18.8136	-.2710
		Cluster 3 - Redemption/Agency	-4.53333	5.14130	.679	-17.3211	8.2545
	Cluster 2 - Contaminated/Neg Affect	Cluster 1 - Specific/Pos Affect	9.54231*	3.72750	.042	.2710	18.8136
		Cluster 3 - Redemption/Agency	5.00897	4.76500	.577	-6.8429	16.8608
	Cluster 3 - Redemption/Agency	Cluster 1 - Specific/Pos Affect	4.53333	5.14130	.679	-8.2545	17.3211
		Cluster 2 - Contaminated/NA	-5.00897	4.76500	.577	-16.8608	6.8429

*. The mean difference is significant at the 0.05 level.

Oneway – BDI-II

Descriptives

BDI Total

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Cluster 1 - Specific/Pos Affect	30	12.9000	16.50569	3.01351	6.7367	19.0633	.00	51.00
Cluster 2 - Contaminated/Neg Affect	52	19.9231	18.79596	2.60653	14.6902	25.1559	.00	49.00
Cluster 3 - Redemption/Agency	15	7.7333	8.78690	2.26877	2.8673	12.5994	.00	36.00
Total	97	15.8660	17.41385	1.76811	12.3563	19.3756	.00	51.00

ANOVA

BDI Total

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2111.932	2	1055.966	3.676	.029
Within Groups	26999.326	94	287.227		
Total	29111.258	96			

Post Hoc Tests

Multiple Comparisons

BDI Total
Scheffe

(I) Memory 4 (Adolescence) Clusters	(J) Memory 4 (Adolescence) Clusters	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Cluster 1 - Specific/Pos Affect	Cluster 2 - Cont/NA	-7.02308	3.88559	.201	-16.6876	2.6415
	Cluster 3 - RedAgency	5.16667	5.35936	.630	-8.1635	18.4969
Cluster 2 - Contaminated/Neg Affect	Cluster 1 - Spec/PA	7.02308	3.88559	.201	-2.6415	16.6876
	Cluster 3 - RedAgency	12.18974	4.96710	.054	-.1648	24.5443
Cluster 3 - Redemption/Agency	Cluster 1 - Spec/PA	-5.16667	5.35936	.630	-18.4969	8.1635
	Cluster 2 - Cont/NA	-12.18974	4.96710	.054	-24.5443	.1648

Oneway - Self-Defining Memory Information

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min	Max
						Lower Bound	Upper Bound		
Mem4 Clarity	Cluster 1 - Specific/PA	29	5.31	.806	.150	5.00	5.62	3	6
	Cluster 2 - Cont/NA	48	5.21	1.031	.149	4.91	5.51	1	6
	Cluster 3 - Red/Agency	12	4.42	1.165	.336	3.68	5.16	2	6
	Total	89	5.13	1.013	.107	4.92	5.35	1	6
Mem4 Intensity	Cluster 1 - Specific/PA	29	4.72	1.192	.221	4.27	5.18	2	6
	Cluster 2 - Cont/NA	48	5.19	1.024	.148	4.89	5.48	1	6
	Cluster 3 - Red/Agency	12	4.25	1.215	.351	3.48	5.02	3	6
	Total	89	4.91	1.145	.121	4.67	5.15	1	6
Mem4 Importance	Cluster 1 - Specific/PA	29	4.86	1.156	.215	4.42	5.30	2	6
	Cluster 2 - Cont/NA	47	4.83	1.274	.186	4.46	5.20	1	6
	Cluster 3 - Red/Agency	12	4.33	1.371	.396	3.46	5.20	2	6
	Total	88	4.77	1.248	.133	4.51	5.04	1	6
Mem4 Resolution	Cluster 1 - Specific/PA	28	5.11	1.066	.201	4.69	5.52	2	6
	Cluster 2 - Cont/NA	48	3.98	1.564	.226	3.53	4.43	1	6
	Cluster 3 - Red/Agency	12	4.67	1.155	.333	3.93	5.40	2	6
	Total	88	4.43	1.453	.155	4.12	4.74	1	6

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Mem4Clarity	Between Groups	7.342	2	3.671	3.802	.026
	Within Groups	83.040	86	.966		
	Total	90.382	88			
Mem4Intensity	Between Groups	9.925	2	4.963	4.051	.021
	Within Groups	105.356	86	1.225		
	Total	115.281	88			
Mem4Importance	Between Groups	2.701	2	1.351	.865	.425
	Within Groups	132.753	85	1.562		
	Total	135.455	87			
Mem4Resolution	Between Groups	23.267	2	11.633	6.168	.003
	Within Groups	160.324	85	1.886		
	Total	183.591	87			

Post Hoc Tests

Multiple Comparisons

Scheffe

Dependent Variable	(I) Memory 4 (Adolescence) Clusters	(J) Memory 4 (Adolescence) Clusters	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Mem4 Clarity	Cluster 1 - Specific/PA	Cluster 2 - Cont/NA	.102	.231	.907	-.47	.68
		Cluster 3 - Red/Agency	.894*	.337	.034	.05	1.73
	Cluster 2 - Cont/NA	Cluster 1 - Specific/PA	-.102	.231	.907	-.68	.47
		Cluster 3 - Red/Agency	.792*	.317	.049	.00	1.58
	Cluster 3 - Redemption/Agency	Cluster 1 - Specific/PA	-.894*	.337	.034	-1.73	-.05
		Cluster 2 - Cont/NA	-.792*	.317	.049	-1.58	.00
Mem4 Intensity	Cluster 1 - Specific/PA	Cluster 2 - Cont/NA	-.463	.260	.211	-1.11	.19
		Cluster 3 - Red/Agency	.474	.380	.462	-.47	1.42
	Cluster 2 - Cont/NA	Cluster 1 - Specific/PA	.463	.260	.211	-.19	1.11
		Cluster 3 - Red/Agency	.938*	.357	.036	.05	1.83
	Cluster 3 - Redemption/Agency	Cluster 1 - Specific/PA	-.474	.380	.462	-1.42	.47
		Cluster 2 - Cont/NA	-.938*	.357	.036	-1.83	-.05
Mem4 Importance	Cluster 1 - Specific/PA	Cluster 2 - Cont/NA	.032	.295	.994	-.70	.77
		Cluster 3 - Red/Agency	.529	.429	.471	-.54	1.60
	Cluster 2 - Cont/NA	Cluster 1 - Specific/PA	-.032	.295	.994	-.77	.70
		Cluster 3 - Red/Agency	.496	.404	.473	-.51	1.50
	Cluster 3 - Redemption/Agency	Cluster 1 - Specific/PA	-.529	.429	.471	-1.60	.54
		Cluster 2 - Cont/NA	-.496	.404	.473	-1.50	.51
Mem4 Resolution	Cluster 1 - Specific/PA	Cluster 2 - Cont/NA	1.128*	.327	.004	.31	1.94
		Cluster 3 - Red/Agency	.440	.474	.651	-.74	1.62
	Cluster 2 - Cont/NA	Cluster 1 - Specific/PA	-1.128*	.327	.004	-1.94	-.31
		Cluster 3 - Redemption/Agency	-.688	.443	.305	-1.79	.42
	Cluster 3 - Redemption/Agency	Cluster 1 - Specific/PA	-.440	.474	.651	-1.62	.74
		Cluster 2 - Cont/NA	.688	.443	.305	-.42	1.79

*. The mean difference is significant at the 0.05 level.

Appendix B.9.31 Clusters (Peak by Turning Point) Chi Square

Crosstabs

Mem 1 (Peak) Clusters * Mem 2 (Turning Point without Affect) Clusters Crosstabulation

			Memory 2 (Turning Point without Affect) Clusters			Total
			1	2	3	
Memory 1 (Peak) Clusters	1	Count	6	13	4	23
		Expected Count	8.1	11.9	3.1	23.0
		% within Mem 1 Clusters	26.1%	56.5%	17.4%	100.0%
		Std. Residual	-.7	.3	.5	
		Adjusted Residual	-1.0	.5	.6	
	2	Count	28	37	9	74
		Expected Count	25.9	38.1	9.9	74.0
		% within Mem 1 Clusters	37.8%	50.0%	12.2%	100.0%
		Std. Residual	.4	-.2	-.3	
		Adjusted Residual	1.0	-.5	-.6	
Total		Count	34	50	13	97
		Expected Count	34.0	50.0	13.0	97.0
		% within Mem 1 Clusters	35.1%	51.5%	13.4%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.194[a]	2	.550
Likelihood Ratio	1.218	2	.544
Linear-by-Linear Association	1.144	1	.285
N of Valid Cases	97		

a. 1 cells (16.7%) have expected count less than 5. The minimum expected count is 3.08.

Appendix B.9.32 Clusters (Peak by Adolescence) Chi Square

Crosstabs

Memory 1 (Peak) Clusters * Memory 4 (Adolescence) Clusters Crosstabulation

			Memory 4 (Adolescence) Clusters			Total
			1	2	3	
Memory 1 (Peak) Clusters	1	Count	9	13	1	23
		Expected Count	7.1	12.3	3.6	23.0
		% within Mem 1 Clusters	39.1%	56.5%	4.3%	100.0%
		Std. Residual	.7	.2	-1.4	
		Adjusted Residual	1.0	.3	-1.7	
	2	Count	21	39	14	74
		Expected Count	22.9	39.7	11.4	74.0
		% within Mem 1 Clusters	28.4%	52.7%	18.9%	100.0%
		Std. Residual	-.4	-.1	.8	
		Adjusted Residual	-1.0	-.3	1.7	
Total		Count	30	52	15	97
		Expected Count	30.0	52.0	15.0	97.0
		% within Mem 1 Clusters	30.9%	53.6%	15.5%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.113[a]	2	.211
Likelihood Ratio	3.777	2	.151
Linear-by-Linear Association	2.531	1	.112
N of Valid Cases	97		

a. 1 cells (16.7%) have expected count less than 5. The minimum expected count is 3.56.

Appendix B.9.33 Clusters (Turning Point by Adolescence) Chi Square

Crosstabs

Memory 2 (Turning Point without Affect) Clusters * Memory 4 (Adolescence) Clusters Crosstabulation

			Memory 4 (Adolescence) Clusters			Total
			1	2	3	
Memory 2 (Turning Point without Affect) Clusters	1	Count	10	17	7	34
		Expected Count	10.5	18.2	5.3	34.0
		% within Mem 2 Clusters	29.4%	50.0%	20.6%	100.0%
		Std. Residual	-.2	-.3	.8	
		Adjusted Residual	-.2	-.5	1.0	
	2	Count	15	28	7	50
		Expected Count	15.5	26.8	7.7	50.0
		% within Mem 2 Clusters	30.0%	56.0%	14.0%	100.0%
		Std. Residual	-.1	.2	-.3	
		Adjusted Residual	-.2	.5	-.4	
	3	Count	5	7	1	13
		Expected Count	4.0	7.0	2.0	13.0
		% within Mem 2 Clusters	38.5%	53.8%	7.7%	100.0%
		Std. Residual	.5	.0	-.7	
		Adjusted Residual	.6	.0	-.8	
Total		Count	30	52	15	97
		Expected Count	30.0	52.0	15.0	97.0
		% within Mem 2 Clusters	30.9%	53.6%	15.5%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.568[a]	4	.814
Likelihood Ratio	1.616	4	.806
Linear-by-Linear Association	.956	1	.328
N of Valid Cases	97		

a. 2 cells (22.2%) have expected count less than 5. The minimum expected count is 2.01.

Appendix B.9.34 Correlations between Depression and AM Variables

Correlations

Descriptive Statistics

	Mean	Std. Deviation	N
BDI Total	15.8660	17.41385	97
Overall Specificity	3.5876	1.84703	97
Overall Integration	1.3711	1.40919	97
Overall Redemption	1.2887	1.31465	97
Overall Contamination	.7216	1.11563	97
Overall Agency	1.9381	1.31351	97
Overall Communion	3.8041	1.52506	97

Correlations

		BDI Total	Overall Specificity	Overall Integration	Overall Redemption	Overall Contamination	Overall Agency	Overall Communion
BDI Total	Pearson Correlation	1	-.182	-.326**	-.158	.392**	-.202*	-.131
	Sig. (2-tailed)		.074	.001	.123	.000	.047	.200
	N	97	97	97	97	97	97	97
Overall Specificity	Pearson Correlation	-.182	1	.115	.174	.004	.097	.045
	Sig. (2-tailed)	.074		.260	.088	.966	.346	.662
	N	97	97	97	97	97	97	97
Overall Integration	Pearson Correlation	-.326**	.115	1	.599**	-.179	.350**	.252*
	Sig. (2-tailed)	.001	.260		.000	.080	.000	.013
	N	97	97	97	97	97	97	97
Overall Redemption	Pearson Correlation	-.158	.174	.599**	1	-.094	.457**	.283**
	Sig. (2-tailed)	.123	.088	.000		.361	.000	.005
	N	97	97	97	97	97	97	97
Overall Contamination	Pearson Correlation	.392**	.004	-.179	-.094	1	-.175	-.039
	Sig. (2-tailed)	.000	.966	.080	.361		.086	.708
	N	97	97	97	97	97	97	97
Overall Agency	Pearson Correlation	-.202*	.097	.350**	.457**	-.175	1	-.011
	Sig. (2-tailed)	.047	.346	.000	.000	.086		.912
	N	97	97	97	97	97	97	97
Overall Communion	Pearson Correlation	-.131	.045	.252*	.283**	-.039	-.011	1
	Sig. (2-tailed)	.200	.662	.013	.005	.708	.912	
	N	97	97	97	97	97	97	97

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Appendix B.9.35 Multiple Regression

Descriptive Statistics

	Mean	Std. Deviation	N
BDI Total	15.8660	17.41385	97
OverallContamination	.7216	1.11563	97
OverallIntegration	1.3711	1.40919	97
OverallAgency	1.9381	1.31351	97

Correlations

		BDI Total	Overall Contamination	Overall Integration	Overall Agency
Pearson Correlation	BDI Total	1.000	.392	-.326	-.202
	OverallContamination	.392	1.000	-.179	-.175
	OverallIntegration	-.326	-.179	1.000	.350
	OverallAgency	-.202	-.175	.350	1.000
Sig. (1-tailed)	BDI Total	.	.000	.001	.024
	OverallContamination	.000	.	.040	.043
	OverallIntegration	.001	.040	.	.000
	OverallAgency	.024	.043	.000	.
N	BDI Total	97	97	97	97
	OverallContamination	97	97	97	97
	OverallIntegration	97	97	97	97
	OverallAgency	97	97	97	97

Variables Entered/Removed

Model	Variables Entered	Variables Removed	Method
1	OverallAgency, OverallContamination, OverallIntegration[a]	.	Enter

a. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.474[a]	.224	.199	15.58291

a. Predictors: (Constant), OverallAgency, OverallContamination, OverallIntegration

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6528.342	3	2176.114	8.962	.000[a]
	Residual	22582.915	93	242.827		
	Total	29111.258	96			

a. Predictors: (Constant), OverallAgency, OverallContamination, OverallIntegration

b. Dependent Variable: BDI Total

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	17.677	3.330		5.308	.000
	OverallContamination	5.280	1.460	.338	3.617	.000
	OverallIntegration	-3.037	1.215	-.246	-2.500	.014
	OverallAgency	-.752	1.302	-.057	-.577	.565

a. Dependent Variable: BDI Total

Appendix B.9.36 Multiple Regression with only Significant Independent Variables

Descriptive Statistics

	Mean	Std. Deviation	N
BDI Total	15.8660	17.41385	97
OverallSpecificity	3.5876	1.84703	97
OverallIntegration	1.3711	1.40919	97
OverallAgency	1.9381	1.31351	97
OverallCommunion	3.8041	1.52506	97
OverallRedemption	1.2887	1.31465	97
OverallContamination	.7216	1.11563	97

Correlations

		BDI Total	Overall Specificity	Overall Integration	Overall Agency	Overall Communion	Overall Redemption	Overall Contamination
Pearson Correlation	BDI Total	1.000	-.182	-.326	-.202	-.131	-.158	.392
	OverallSpecificity	-.182	1.000	.115	.097	.045	.174	.004
	OverallIntegration	-.326	.115	1.000	.350	.252	.599	-.179
	OverallAgency	-.202	.097	.350	1.000	-.011	.457	-.175
	OverallCommunion	-.131	.045	.252	-.011	1.000	.283	-.039
	OverallRedemption	-.158	.174	.599	.457	.283	1.000	-.094
	OverallContamination	.392	.004	-.179	-.175	-.039	-.094	1.000
Sig. (1-tailed)	BDI Total	.	.037	.001	.024	.100	.062	.000
	OverallSpecificity	.037	.	.130	.173	.331	.044	.483
	OverallIntegration	.001	.130	.	.000	.006	.000	.040
	OverallAgency	.024	.173	.000	.	.456	.000	.043
	OverallCommunion	.100	.331	.006	.456	.	.002	.354
	OverallRedemption	.062	.044	.000	.000	.002	.	.180
	OverallContamination	.000	.483	.040	.043	.354	.180	.

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	OverallContamination	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
2	OverallIntegration	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).

a. Dependent Variable: BDI Total

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.392[a]	.154	.145	16.10308
2	.471[b]	.221	.205	15.52756

a. Predictors: (Constant), OverallContamination

b. Predictors: (Constant), OverallContamination, OverallIntegration

ANOVA[c]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4476.887	1	4476.887	17.265	.000[a]
	Residual	24634.370	95	259.309		
	Total	29111.258	96			
2	Regression	6447.364	2	3223.682	13.370	.000[b]
	Residual	22663.894	94	241.105		
	Total	29111.258	96			

a. Predictors: (Constant), OverallContamination

b. Predictors: (Constant), OverallContamination, OverallIntegration

c. Dependent Variable: BDI Total

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	11.449	1.950		5.870	.000
	OverallContamination	6.121	1.473	.392	4.155	.000
2	(Constant)	16.461	2.571		6.402	.000
	OverallContamination	5.383	1.444	.345	3.729	.000
	OverallIntegration	-3.268	1.143	-.264	-2.859	.005

a. Dependent Variable: BDI Total

Excluded Variables[c]

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics: Tolerance
1	OverallSpecificity	-.184[a]	-1.978	.051	-.200	1.000
	OverallIntegration	-.264[a]	-2.859	.005	-.283	.968
	OverallAgency	-.138[a]	-1.443	.152	-.147	.969
	OverallCommunion	-.116[a]	-1.235	.220	-.126	.999
	OverallRedemption	-.122[a]	-1.290	.200	-.132	.991
2	OverallSpecificity	-.155[b]	-1.712	.090	-.175	.986
	OverallAgency	-.057[b]	-.577	.565	-.060	.864
	OverallCommunion	-.055[b]	-.580	.564	-.060	.936
	OverallRedemption	.052[b]	.455	.650	.047	.640

a. Predictors in the Model: (Constant), OverallContamination

b. Predictors in the Model: (Constant), OverallContamination, OverallIntegration

c. Dependent Variable: BDI Total

Appendix B.9.37 Multiple Regression Interaction Effects

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	OverallAgency, OverallIntegration[a]	.	Enter
2	agencybyintegration[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: BDI Total

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics: R Square Change	F Change	df1	df2	Sig. F Change
1	.339[a]	.115	.096	16.55404	.115	6.116	2	94	.003
2	.361[b]	.131	.103	16.49627	.016	1.660	1	93	.201

a. Predictors: (Constant), OverallAgency, OverallIntegration

b. Predictors: (Constant), OverallAgency, OverallIntegration, agencybyintegration

ANOVA[c]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3351.837	2	1675.918	6.116	.003[a]
	Residual	25759.421	94	274.036		
	Total	29111.258	96			
2	Regression	3803.444	3	1267.815	4.659	.004[b]
	Residual	25307.813	93	272.127		
	Total	29111.258	96			

a. Predictors: (Constant), OverallAgency, OverallIntegration

b. Predictors: (Constant), OverallAgency, OverallIntegration, agencybyintegration

c. Dependent Variable: BDI Total

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	23.371	3.117		7.497	.000
	OverallIntegration	-3.596	1.280	-.291	-2.809	.006
	OverallAgency	-1.329	1.373	-.100	-.967	.336
2	(Constant)	26.720	4.050		6.597	.000
	OverallIntegration	-6.458	2.562	-.523	-2.521	.013
	OverallAgency	-3.028	1.901	-.228	-1.593	.115
	agencybyintegration	1.173	.911	.326	1.288	.201

a. Dependent Variable: BDI Total

Excluded Variables[b]

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
						Tolerance
1	agencybyintegration	.326[a]	1.288	.201	.132	.146

a. Predictors in the Model: (Constant), OverallAgency, OverallIntegration
b. Dependent Variable: BDI Total

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	OverallContamination, OverallAgency[a]	.	Enter
2	agencybycontamination[a]	.	Enter

a. All requested variables entered.
b. Dependent Variable: BDI Total

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.415[a]	.172	.155	16.01208	.172	9.772	2	94	.000
2	.420[b]	.177	.150	16.05342	.005	.517	1	93	.474

a. Predictors: (Constant), OverallContamination, OverallAgency
b. Predictors: (Constant), OverallContamination, OverallAgency, agencybycontamination

ANOVA[c]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5010.907	2	2505.453	9.772	.000[a]
	Residual	24100.351	94	256.387		
	Total	29111.258	96			
2	Regression	5144.022	3	1714.674	6.653	.000[b]
	Residual	23967.235	93	257.712		
	Total	29111.258	96			

a. Predictors: (Constant), OverallContamination, OverallAgency
b. Predictors: (Constant), OverallContamination, OverallAgency, agencybycontamination
c. Dependent Variable: BDI Total

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	15.255	3.274		4.660	.000
	OverallAgency	-1.824	1.264	-.138	-1.443	.152
	OverallContamination	5.745	1.488	.368	3.861	.000
2	(Constant)	14.178	3.608		3.929	.000
	OverallAgency	-1.152	1.575	-.087	-.731	.466
	OverallContamination	6.716	2.013	.430	3.336	.001
	agencybycontamination	-.810	1.127	-.100	-.719	.474

a. Dependent Variable: BDI Total

Excluded Variables[b]

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
						Tolerance
1	agencybycontamination	-.100[a]	-.719	.474	-.074	.461

a. Predictors in the Model: (Constant), OverallContamination, OverallAgency
b. Dependent Variable: BDI Total

Regression

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	OverallIntegration, OverallContamination[a]	.	Enter
2	integrationbycontamination[a]	.	Enter

a. All requested variables entered.
b. Dependent Variable: BDI Total

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.471[a]	.221	.205	15.52756	.221	13.370	2	94	.000
2	.472[b]	.223	.198	15.59939	.001	.136	1	93	.713

a. Predictors: (Constant), OverallIntegration, OverallContamination
b. Predictors: (Constant), OverallIntegration, OverallContamination, integrationbycontamination

ANOVA[c]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6447.364	2	3223.682	13.370	.000[a]
	Residual	22663.894	94	241.105		
	Total	29111.258	96			
2	Regression	6480.561	3	2160.187	8.877	.000[b]
	Residual	22630.696	93	243.341		
	Total	29111.258	96			

a. Predictors: (Constant), OverallIntegration, OverallContamination
b. Predictors: (Constant), OverallIntegration, OverallContamination, integrationbycontamination
c. Dependent Variable: BDI Total

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	16.461	2.571		6.402	.000
	OverallContamination	5.383	1.444	.345	3.729	.000
	OverallIntegration	-3.268	1.143	-.264	-2.859	.005
2	(Constant)	16.229	2.659		6.104	.000
	OverallContamination	5.889	1.995	.377	2.952	.004
	OverallIntegration	-3.059	1.280	-.248	-2.391	.019
	integrationbycontamination	-.588	1.592	-.048	-.369	.713

a. Dependent Variable: BDI Total

Excluded Variables[b]

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
						Tolerance
1	integrationbycontamination	-.048[a]	-.369	.713	-.038	.500

a. Predictors in the Model: (Constant), OverallIntegration, OverallContamination
b. Dependent Variable: BDI Total

Appendix B.9.38 Proportions (Specificity)

Means

Report

Participant Groups		Memory 1 (Peak) Specificity	Memory 2 (Turning Point) Specificity	Memory 3 (Childhood) Specificity	Memory 4 (Adolescence) Specificity	Memory 5 (Adulthood) Specificity	Memory 6 (Nadir) Specificity
Never depressed	Mean	.4800	.5200	.6400	.5200	.6000	.5600
	N	25	25	25	25	25	25
	SD	.50990	.50990	.48990	.50990	.50000	.50662
Formerly depressed	Mean	.8095	.5238	.6905	.7619	.7381	.6190
	N	42	42	42	42	42	42
	SD	.39744	.50549	.46790	.43108	.44500	.49151
Currently depressed	Mean	.7333	.6333	.5333	.3667	.4333	.3333
	N	30	30	30	30	30	30
	SD	.44978	.49013	.50742	.49013	.50401	.47946
Total	Mean	.7010	.5567	.6289	.5773	.6082	.5155
	N	97	97	97	97	97	97
	SD	.46018	.49936	.48562	.49655	.49068	.50236

Appendix B.9.39 Proportions (Agency)

Means

Report

Participant Groups		Memory 1 (Peak) Agentic Theme	Memory 2 (Turning Point) Agentic Theme	Memory 3 (Childhood) Agentic Theme	Memory 4 (Adolescence) Agentic Theme	Memory 5 (Adulthood) Agentic Theme	Memory 6 (Nadir/Low Point) Agentic Theme
Never depressed	Mean	.28	.56	.24	.36	.44	.36
	N	25	25	25	25	25	25
	Std. Deviation	.458	.507	.436	.490	.507	.490
Formerly depressed	Mean	.33	.62	.21	.31	.40	.21
	N	42	42	42	42	42	42
	Std. Deviation	.477	.492	.415	.468	.497	.415
Currently depressed	Mean	.20	.40	.17	.30	.33	.07
	N	30	30	30	30	30	30
	Std. Deviation	.407	.498	.379	.466	.479	.254
Total	Mean	.28	.54	.21	.32	.39	.21
	N	97	97	97	97	97	97
	Std. Deviation	.451	.501	.407	.469	.491	.407

Appendix B.9.40 Proportions (Communion)

Means

Report

Participant Groups		Memory 1 (Peak) Communion Theme	Memory 2 (Turning Point) Communion Theme	Memory 3 (Childhood) Communion Theme	Memory 4 (Adolescence) Communion Theme	Memory 5 (Adulthood) Communion Theme	Memory 6 (Nadir/Low Point) Communion Theme
Never depressed	Mean	.80	.56	.56	.64	.64	.56
	N	25	25	25	25	25	25
	SD	.408	.507	.507	.490	.490	.507
Formerly depressed	Mean	.69	.48	.64	.67	.71	.79
	N	42	42	42	42	42	42
	SD	.468	.505	.485	.477	.457	.415
Currently depressed	Mean	.70	.50	.50	.53	.63	.73
	N	30	30	30	30	30	30
	SD	.466	.509	.509	.507	.490	.450
Total	Mean	.72	.51	.58	.62	.67	.71
	N	97	97	97	97	97	97
	SD	.451	.503	.497	.488	.473	.455

Appendix B.9.41 Proportions (Redemption)

Means

Report

Participant Groups		Memory 1 (Peak) Redemption	Memory 2 (Turning Point) Redemption	Memory 3 (Childhood) Redemption	Memory 4 (Adolescence) Redemption	Memory 5 (Adulthood) Redemption	Memory 6 (Nadir/Low Point) Redemption
Never depressed	Mean	.24	.36	.16	.24	.08	.40
	N	25	25	25	25	25	25
	SD	.436	.490	.374	.436	.277	.500
Formerly depressed	Mean	.14	.55	.17	.12	.24	.19
	N	42	42	42	42	42	42
	SD	.354	.504	.377	.328	.431	.397
Currently depressed	Mean	.13	.30	.10	.03	.23	.17
	N	30	30	30	30	30	30
	SD	.346	.466	.305	.183	.430	.379
Total	Mean	.16	.42	.14	.12	.20	.24
	N	97	97	97	97	97	97
	SD	.373	.497	.353	.331	.399	.428

Appendix B.9.42 Proportions (Contamination)

Means

Report

Participant Groups		Memory 1 (Peak) Contamination	Memory 2 (Turning Point) Contamination	Memory 3 (Childhood) Contamination	Memory 4 (Adolescence) Contamination	Memory 5 (Adulthood) Contamination	Memory 6 (Nadir/Low Point) Contamination
Never depressed	Mean	.00	.00	.00	.08	.08	.12
	N	25	25	25	25	25	25
	SD	.000	.000	.000	.277	.277	.332
Formerly depressed	Mean	.07	.17	.07	.10	.02	.14
	N	42	42	42	42	42	42
	SD	.261	.377	.261	.297	.154	.354
Currently depressed	Mean	.27	.20	.30	.20	.17	.17
	N	30	30	30	30	30	30
	SD	.450	.407	.466	.407	.379	.379
Total	Mean	.11	.13	.12	.12	.08	.14
	N	97	97	97	97	97	97
	SD	.319	.342	.331	.331	.277	.353

Appendix B.9.43 Proportions (Integration)

Means

Report

Participant Groups		Memory 1 (Peak) Integration	Memory 2 (Turning Point) Integration	Memory 3 (Childhood) Integration	Memory 4 (Adolescence) Integration	Memory 5 (Adulthood) Integration	Memory 6 (Nadir) Integration
Never depressed	Mean	.3200	.5600	.0800	.2800	.2000	.1600
	N	25	25	25	25	25	25
	SD	.47610	.50662	.27689	.45826	.40825	.37417
Formerly depressed	Mean	.2381	.6905	.1905	.1429	.2857	.1667
	N	42	42	42	42	42	42
	SD	.43108	.46790	.39744	.35417	.45723	.37720
Currently depressed	Mean	.1000	.3333	.0333	.0000	.1667	.0667
	N	30	30	30	30	30	30
	SD	.30513	.47946	.18257	.00000	.37905	.25371
Total	Mean	.2165	.5464	.1134	.1340	.2268	.1340
	N	97	97	97	97	97	97
	SD	.41399	.50043	.31873	.34244	.42094	.34244

Appendix B.9.44 Proportions (Positive Affect)

Means

Report

Participant Groups		Mem1 AffectPos	Mem2 AffectPos	Mem3 AffectPos	Mem4 AffectPos	Mem5 AffectPos	Mem6 AffectPos
Never depressed	Mean	.6800	.3600	.3600	.4400	.5600	.0000
	N	25	25	25	25	25	25
	SD	.47610	.48990	.48990	.50662	.50662	.00000
Formerly depressed	Mean	.7143	.1905	.4286	.3810	.6429	.0000
	N	42	42	42	42	42	42
	SD	.45723	.39744	.50087	.49151	.48497	.00000
Currently depressed	Mean	.4000	.3000	.2667	.2000	.4667	.0000
	N	30	30	30	30	30	30
	SD	.49827	.46609	.44978	.40684	.50742	.00000
Total	Mean	.6082	.2680	.3608	.3402	.5670	.0000
	N	97	97	97	97	97	97
	SD	.49068	.44524	.48273	.47624	.49806	.00000

Appendix B.9.45 Proportions (Negative Affect)

Means

Report

Participant Groups		Mem1 AffectNeg	Mem2 AffectNeg	Mem3 AffectNeg	Mem4 AffectNeg	Mem5 AffectNeg	Mem6 AffectNeg
Never depressed	Mean	.1600	.0800	.0800	.1200	.1600	.6400
	N	25	25	25	25	25	25
	SD	.37417	.27689	.27689	.33166	.37417	.48990
Formerly depressed	Mean	.1667	.2143	.2619	.3333	.0952	.7619
	N	42	42	42	42	42	42
	SD	.37720	.41530	.44500	.47712	.29710	.43108
Currently depressed	Mean	.2667	.4000	.5000	.5000	.3000	.7333
	N	30	30	30	30	30	30
	SD	.44978	.49827	.50855	.50855	.46609	.44978
Total	Mean	.1959	.2371	.2887	.3299	.1753	.7216
	N	97	97	97	97	97	97
	SD	.39894	.42752	.45549	.47262	.38216	.45052

Appendix B.9.46 Proportions (Memory 1)

Means

Report

Participant Groups		Memory 1 (Peak) Specificity	Memory 1 (Peak) Integration	Memory 1 (Peak) Agentic Theme	Memory 1 (Peak) Communion Theme	Memory 1 (Peak) Redemption	Memory 1 (Peak) Contamination	Mem1 Affect Pos	Mem1 Affect Neg
Never depressed	Mean	.4800	.3200	.28	.80	.24	.00	.6800	.1600
	N	25	25	25	25	25	25	25	25
	SD	.50990	.47610	.458	.408	.436	.000	.47610	.37417
Formerly depressed	Mean	.8095	.2381	.33	.69	.14	.07	.7143	.1667
	N	42	42	42	42	42	42	42	42
	SD	.39744	.43108	.477	.468	.354	.261	.45723	.37720
Currently depressed	Mean	.7333	.1000	.20	.70	.13	.27	.4000	.2667
	N	30	30	30	30	30	30	30	30
	SD	.44978	.30513	.407	.466	.346	.450	.49827	.44978
Total	Mean	.7010	.2165	.28	.72	.16	.11	.6082	.1959
	N	97	97	97	97	97	97	97	97
	SD	.46018	.41399	.451	.451	.373	.319	.49068	.39894

Appendix B.9.47 Proportions (Memory 2)

Means

Report

Participant Groups		Memory 2 (Turning Point) Specificity	Memory 2 (Turning Point) Integration	Memory 2 (Turning Point) Agentic Theme	Mem 2 (Turning Point) Commu nion Theme	Memory 2 (Turning Point) Redemptio n	Memory 2 (Turning Point) Contamina tion	Mem2 Affect Pos	Mem2 Affect Neg
Never depressed	Mean	.5200	.5600	.56	.56	.36	.00	.3600	.0800
	N	25	25	25	25	25	25	25	25
	SD	.50990	.50662	.507	.507	.490	.000	.48990	.27689
Formerly depressed	Mean	.5238	.6905	.62	.48	.55	.17	.1905	.2143
	N	42	42	42	42	42	42	42	42
	SD	.50549	.46790	.492	.505	.504	.377	.39744	.41530
Currently depressed	Mean	.6333	.3333	.40	.50	.30	.20	.3000	.4000
	N	30	30	30	30	30	30	30	30
	SD	.49013	.47946	.498	.509	.466	.407	.46609	.49827
Total	Mean	.5567	.5464	.54	.51	.42	.13	.2680	.2371
	N	97	97	97	97	97	97	97	97
	SD	.49936	.50043	.501	.503	.497	.342	.44524	.42752

Appendix B.9.48 Proportions (Memory 3)

Means

Report

Participant Groups		Memory 3 (Childh'd) Specificity	Memory 3 (Childh'd) Integration	Memory 3 (Childh'd) Agentic Theme	Memory 3 (Childhd) Communi on Theme	Memory 3 (Childhd) Redempti on	Memory 3 (Childhd) Contamin ation	Mem3 Affect Pos	Mem3 Affect Neg
Never depressed	Mean	.6400	.0800	.24	.56	.16	.00	.3600	.0800
	N	25	25	25	25	25	25	25	25
	Std. Deviation	.48990	.27689	.436	.507	.374	.000	.48990	.27689
Formerly depressed	Mean	.6905	.1905	.21	.64	.17	.07	.4286	.2619
	N	42	42	42	42	42	42	42	42
	Std. Deviation	.46790	.39744	.415	.485	.377	.261	.50087	.44500
Currently depressed	Mean	.5333	.0333	.17	.50	.10	.30	.2667	.5000
	N	30	30	30	30	30	30	30	30
	Std. Deviation	.50742	.18257	.379	.509	.305	.466	.44978	.50855
Total	Mean	.6289	.1134	.21	.58	.14	.12	.3608	.2887
	N	97	97	97	97	97	97	97	97
	Std. Deviation	.48562	.31873	.407	.497	.353	.331	.48273	.45549

Appendix B.9.49 Proportions (Memory 4)

Means

Report

Participant Groups		Memory 4 (Adolescence) Specificity	Memory 4 (Adolescence) Integration	Memory 4 (Adolescence) Agentic Theme	Memory 4 (Adolescence) Communion Theme	Memory 4 (Adolescence) Redemption	Memory 4 (Adolescence) Contamination	Mem4 Affect Pos	Mem4 Affect Neg
Never depressed	Mean	.5200	.2800	.36	.64	.24	.08	.4400	.1200
	N	25	25	25	25	25	25	25	25
	SD	.50990	.45826	.490	.490	.436	.277	.50662	.33166
Formerly depressed	Mean	.7619	.1429	.31	.67	.12	.10	.3810	.3333
	N	42	42	42	42	42	42	42	42
	SD	.43108	.35417	.468	.477	.328	.297	.49151	.47712
Currently depressed	Mean	.3667	.0000	.30	.53	.03	.20	.2000	.5000
	N	30	30	30	30	30	30	30	30
	SD	.49013	.00000	.466	.507	.183	.407	.40684	.50855
Total	Mean	.5773	.1340	.32	.62	.12	.12	.3402	.3299
	N	97	97	97	97	97	97	97	97
	SD	.49655	.34244	.469	.488	.331	.331	.47624	.47262

Appendix B.9.50 Proportions (Memory 5)

Means

Report

Participant Groups		Memory 5 (Adulth'd) Specificity	Memory 5 (Adulth'd) Integration	Memory 5 (Adulth'd) Agentic Theme	Memory 5 (Adulth'd) Communion Theme	Memory 5 (Adulth'd) Redemption	Memory 5 (Adulth'd) Contamination	Mem5 Affect Pos	Mem5 Affect Neg
Never depressed	Mean	.6000	.2000	.44	.64	.08	.08	.5600	.1600
	N	25	25	25	25	25	25	25	25
	SD	.50000	.40825	.507	.490	.277	.277	.50662	.37417
Formerly depressed	Mean	.7381	.2857	.40	.71	.24	.02	.6429	.0952
	N	42	42	42	42	42	42	42	42
	SD	.44500	.45723	.497	.457	.431	.154	.48497	.29710
Currently depressed	Mean	.4333	.1667	.33	.63	.23	.17	.4667	.3000
	N	30	30	30	30	30	30	30	30
	SD	.50401	.37905	.479	.490	.430	.379	.50742	.46609
Total	Mean	.6082	.2268	.39	.67	.20	.08	.5670	.1753
	N	97	97	97	97	97	97	97	97
	SD	.49068	.42094	.491	.473	.399	.277	.49806	.38216

Appendix B.9.51 Proportions (Memory 6)

Means

Report

Participant Groups		Memory 6 (Nadir) Specificity	Memory 6 (Nadir) Integration	Memory 6 (Nadir) Agentic Theme	Memory 6 (Nadir) Communion Theme	Memory 6 (Nadir) Redemption	Memory 6 (Nadir) Contamination	Mem6 Affect Pos	Mem6 Affect Neg
Never depressed	Mean	.5600	.1600	.36	.56	.40	.12	.0000	.6400
	N	25	25	25	25	25	25	25	25
	SD	.50662	.37417	.490	.507	.500	.332	.00000	.48990
Formerly depressed	Mean	.6190	.1667	.21	.79	.19	.14	.0000	.7619
	N	42	42	42	42	42	42	42	42
	SD	.49151	.37720	.415	.415	.397	.354	.00000	.43108
Currently depressed	Mean	.3333	.0667	.07	.73	.17	.17	.0000	.7333
	N	30	30	30	30	30	30	30	30
	SD	.47946	.25371	.254	.450	.379	.379	.00000	.44978
Total	Mean	.5155	.1340	.21	.71	.24	.14	.0000	.7216
	N	97	97	97	97	97	97	97	97
	SD	.50236	.34244	.407	.455	.428	.353	.00000	.45052