Brief report

Collaborative narration of the past and extraversion

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Abstract

We propose that collaborative narration is a process in which narrative identity develops, and we examine individual differences in extraversion in such narration. Two studies are presented: retrospective and experience sampling episodes of collaborative narration, the first with self-defining memories, the second with everyday narration. Across both studies, extraversion was associated with an increased frequency in collaborative narration. This finding was not explained by the ‘talkativeness’ item in the extraversion measures. Further, more extraverted people shared their self-defining memories with more people and were more comfortable sharing than less extraverted people, the impact of extraversion was specific to mutual reminiscence in everyday narration, and mutual reminiscence was more enjoyable for those who are more extraverted than introverted. Implications from these data for understanding individual differences in identity and narrative development are discussed.

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1. Introduction

Collaborative narration has been growing as an area of research that examines the role of the social context of remembering in developing a narrative identity (e.g., McLean, 2005; Pasupathi, 2001; Pasupathi & Rich, 2005; Thorne, 2000; Thorne, McLean, & Lawrence, 2004). The basic premise behind studying collaborative narration is that people construct narratives of past experience in conversation with others and those narratives have implications for how people form a narrative identity (e.g., Davies & Harré, 1990; Pasupathi, 2001; Thorne, 2000). No research of which we are aware, however, has examined personality traits in this social process of narration, which these studies did. Specifically, we examined extraversion in reference to general frequencies of reminiscing and affect while talking about the past in different narration contexts.

In contrast to previous work, which has variously employed terms like ‘memory telling,’ ‘storytelling,’ or ‘collaborative remembering,’ we use the term ‘collaborative narration.’ We do so because any conversation is intrinsically collaborative and conversations involving the exchange of memories are, likewise, collaborative (Bavelas, Coates, & Johnson, 2000; Clark, 1996). Listeners contribute to conversations even when they do not make a single verbal utterance because speakers depend on a continuous stream of feedback in formulating even a simple utterance. Terms like ‘memory telling’ imply relative passivity on the part of listeners.

We begin by reviewing narrative identity, then its relationship to collaborative narration, and then we discuss why extraversion should be the individual difference of interest here.

1.1. Narrative identity

McAdams (1995) has proposed that personality has three levels, reflected at the broadest and first level by traits, then by characteristic adaptations or motivational concerns, and then by the narrative life story. The fullest analysis of personality lies in examining the life story, which constitutes one’s identity (McAdams, 1993). A life story connects one’s past, present, and future to provide unity and purpose to one’s life, and the story is proposed to be internal and evolving (McAdams, 1993). Constructing a coherent life story has implications for personality functioning and well-being (e.g., Baerger & McAdams, 1999; Bauer, McAdams, & Sakeda, 2005), which underscores the importance of understanding how stories are constructed.

Prior work has connected the different levels of McAdams’ framework in several ways. There is a substantial body of work showing that motives (level 2) are connected to narrative content (level 3), such that those high on the need for communion or intimacy report narratives focused on relationships, and those high on the need for power or agency report narratives about authority and control (e.g., McAdams & Constantian, 1983; Woike, 1995). The structure of narratives also varies by motivation, with agentic individuals reporting more differentiated narratives and communals reporting more integrated narratives (Woike, Gershkovich, Piorkowski, & Polo, 1999). These kinds of results hold for natural diary studies, interview methods, and experimental manipulations. Recent work examining traits (level 1) and narrative structure and content (level 3) has shown that openness to experience was related to the structural complexity of narratives, neuroticism was related to negative affect in narratives, and agreeableness was associated with communal themes in narratives (McAdams et al., 2004; see also Webster, 1994).
All of the studies described above have examined either narrative content (e.g., communal themes) or narrative structure (e.g., plot) in relation to traits and motives. The present studies offer a slightly different vantage point on McAdams’ (1995) levels of personality, focusing on trait and narrative levels. We did not attempt to show how traits are reflected in the content of life story narratives, but rather how traits may be reflected in processes of life story construction, which engenders a dynamic view of the levels of personality.

1.2. Collaborative narration

While research on narrative identity has predominantly been focused on internal constructions, research on collaborative narration suggests that attention should be paid to the social processes involved in the construction of narrative identity (e.g., Pasupathi, 2001; Thorne, 2000). Prior research has shown that people engage in talking about the past frequently and regularly (e.g., Rimé, Mesquita, Philippot, & Boca, 1991) and that such talk influences later recollections of past events (e.g., Pasupathi & Rich, 2005; Pasupathi, Stallworth, & Murdoch, 1998). Further, talking about the past may provide more coherence and certainty in one’s stories (Pasupathi, 2001; Rimé et al., 1991; Thorne, 2000; Weldon & Bellinger, 1997). While research on collaborative narration certainly suggests that it is an important process in narrative construction, prior research has not examined individual differences in such narration, which the present studies did.

1.3. Extraversion

We focus on a trait-level of analysis as a starting point for this nascent area of research on personality and the social processing of narratives because traits are ubiquitous in and relevant to our everyday behavior and lives (McCrae & Costa, 1996), of which collaborative narration is a part (Pasupathi, 2001). We started with extraversion because, of the traits in the five-factor model, it is one of the more socially focused traits.

Theoretically, the dynamics of extraversion-introversion have been conceived of as approaches towards the world that focus outward or inward (Eysenck, 1952, 1967; Jung, 1913/1971) and empirically, extraversion-introversion represent variations in talkativeness, dominance, forcefulness, energy, warmth, enthusiasm, and sociability (Costa & McCrae, 1992). Such variations have been seen in conversational behavior with novel social partners (e.g., Thorne, 1987). Extraversion is also related to feeling closer to friends (Berry, Willingham, & Thayer, 2000), and since sharing memories is one way of developing intimacy (Alea & Bluck, 2003) we expected extraversion to be positively correlated with the frequency of collaborative narration.

Extraversion is not only associated with engaging in social interactions, but also with positive affect. For example, Barrett (1997) found that extraversion was related to positive feelings on daily ratings over a 90-day period. Further, positivity ratings increased when retrospectively recalling how people felt over those 90-days, suggesting that extraversion may bias retrospective recollections. We addressed this issue by including both retrospective and experience sampling data. Further, because of the propensity towards social interaction, positive affect may be particularly salient when one is socially engaged. Indeed, in a study of stranger’s conversations Thorne (1987) found that more extraverted people were more inclined towards speech acts surrounding compliments, agreements, and pleasure talk, which suggests that conversations are more pleasurable for more extraverted people.
Therefore, we expected extraversion to be related to positive affect during collaborative narration.

We not only examined affect in collaborative narration generally, but also in specific kinds of narration contexts because prior research has also shown that the expression of extraversion and introversion varies by social context (Thorne, 1987). The second study afforded the opportunity to examine two kinds of narration contexts, mutual reminiscence, when individuals in conversation exchange stories in turn, and asymmetric narration, when one person is talking and the other listening. This kind of analysis may be able to tease apart whether dominance or sociability is more important in collaborative narration, as both are components of extraversion.

1.4. The present studies

We combined two different methods, retrospective reports and experience sampling, two kinds of narration, sharing self-defining memories and everyday reminiscing, two kinds of narration contexts, mutual and asymmetric, as well as two samples, one of which was a broad adult lifespan sample. The breadth of samples and methods speaks to the strength of these studies to address the relationships between collaborative narration and extraversion.

Study 1 was comprised of a college student sample, in which we examined whether extraversion was related to retrospective reports of sharing self-defining memories, which are considered central memories in the developing life story (Singer & Salovey, 1993; Thorne, 2000). Study 1 examined the number of people with whom specific self-defining memories were shared, the general frequency of sharing self-defining memories, and how comfortable one generally felt sharing such memories. Study 2 employed an experience sampling method in an adult lifespan community sample, in which the frequency and type of collaborative narration were assessed, for mutual and asymmetric reminiscing, as well as the affect of the participant during collaborative narration.

**Hypothesis 1.** Extraversion will be positively correlated with the frequency of collaborative narration.

**Hypothesis 2.** Extraversion will be positively correlated with positive affect during collaborative narration.

2. Study 1

2.1. Method

2.1.1. Participants

The sample consisted of 185 participants, \((n = 89 \text{ males})\) collected from the psychology subject pool at a public university in Northern California. The majority of participants were Caucasian \((n = 115)\), followed by Asian \((n = 31)\), Latino \((n = 11)\), African-American \((n = 2)\), mixed race \((n = 14)\), other \((n = 7)\), and those who did not report ethnicity \((n = 5)\). Age ranged from 16 to 27 years \((M = 18.7 \text{ years}; \ SD = 1.2)\). Participants received course credit for participating in research. Participants were part of a larger study (McLean, 2004), in which other self-report measures of personality and well-being were administered, but were not examined here.
2.1.2. Measures

2.1.2.1. Extraversion. Participants completed the entire 44-item Big Five Inventory (John & Srivastava, 1999). Only the extraversion subscale (8 items) was used in the current study, which assesses characteristics, such as sociability and assertiveness. Reliability for this sample was adequate (Cronbach’s $\alpha = .87$). One item on the BFI item is “is talkative,” which overlaps semantically with self-reports of talking to people, the main dependent measure of the study. Therefore, we conducted analyses with and without the ‘talkativeness’ item to eliminate any overlap in measurement.

2.1.2.2. Self-defining memory questionnaire. This written questionnaire elicits narratives of three self-defining memories, which are defined as vivid, highly memorable, personally important, at least one year old, and are the kind of memories that convey powerfully how one has come to be the person one currently is (see Singer & Mooytt, 1991–1992), and narratives of sharing the memories with someone else. Written narratives were not examined in the present study, but rather ratings for the number of people with whom each memory was shared and the general frequency of and comfort in sharing. Specifically, after writing about each memory participants reported the number of people with whom they had shared each memory, and after reporting all of their memories, they rated the frequency with which they usually share self-defining memories from ‘never’ to ‘all the time’ (5-point scale), and whether they were comfortable sharing self-defining memories in general (yes, no). Note that for the number of people told, we capped the largest number at 20. Not many people reported sharing with more than 20 people, but some did report “hundreds” so we capped at 20 to avoid extremes.

2.1.3. Procedure

Participants signed an informed consent after questions about the study were answered. Participants completed the materials in a room, alone, and were given as much time as they needed to complete the entire questionnaire packet (including questionnaires not employed in the present study), which took an average of one hour to one and one-half hours. Variation in completion time was due to length of written narratives and speed of completing surveys.

2.2. Results

Data were aggregated across the three memories so that correlations could be computed on a person-level of analysis. The mean score on extraversion–introversion in this sample was 25, and the mean score on extraversion items was 3.2, which is similar to past studies (e.g., Benet-Martinez & John, 1998). There were no gender differences for scores on extraversion, amount of people told, frequency of sharing, or comfort in sharing.

On average, participants reported sharing their specific memories with eight people. As expected and as can be seen in Fig. 1, more extraverted individuals told more people their self-defining memories (see Table 1). Also, as expected, more extraverted people engaged in generally sharing self-defining memories more often than less extraverted people (see Table 1). Table 1 also shows that results hold without the ‘talkativeness’ item of the extraversion scale.

Seventy-five percent of the participants reported being comfortable sharing their self-defining memories in general, 22% reported being uncomfortable, and 3% did not answer the question. As expected, those who reported feeling comfortable sharing self-defining memories were more likely to be extraverted than introverted, $t(174) = -2.91$, $p < .01$ with the ‘talkativeness’ item, and $t(174) = -2.78$, $p < .01$ without the ‘talkativeness’ item.
While this study offers insight into the sharing of an important component of the life story, self-defining memories, there are some limitations to this study, which Study 2 was able to address. First, retrospective reports are vulnerable to trait-related biases. Second, this was a limited sample of college students, which inhibits generalizability. Third, questions about frequency and comfort in sharing were general, and did not apply to an explicit set of memories.

3. Study 2

3.1. Method

3.1.1. Participants

Participants were 194 residents of the San Francisco Bay Area (n = 92 males, n = 134 European-Americans, n = 60 African-Americans), taking part in an ongoing experience-
sampling study (for details see Carstensen, Pasupathi, Mayr, & Nesselroade, 2000). Participants ranged in age from 18 to 93 (M = 55.8 years; SD = 22.0).

3.1.2. Measures

3.1.2.1. Extraversion. The NEO-FFI (Costa & McCrae, 1985) was used to measure extraversion for this study. The NEO-FFI includes 12 items reflecting different aspects of extraversion, such as sociability and assertiveness; reliability in this sample was adequate (Cronbach’s α = .92). Average scores were used for analyses.

3.1.2.2. Frequency of collaborative narration. Frequency of collaborative narration was measured with two different variables, both derived from two experience-sampling questions. First, we assessed the frequency of sampling occasions that people reported both talking about their own past and listening to others do so, mutual reminiscing. Second, we assessed the frequency of all sampling occasions on which people reported talking about their own past, but not listening to others, asymmetric reminiscing.

3.1.2.3. Affect during collaborative narration. On each sampling occasion, participants rated their current emotional experience across 19 different emotion terms, 11 negative and 8 positive, on a 7-point scale ranging from ‘not at all’ to ‘most ever.’ We computed four scores by averaging across positive and negative emotions separately for sampling occasions where participants reported being engaged in mutual reminiscence and occasions where participants reported being engaged in asymmetric reminiscing (see Pasupathi & Carstensen, 2003). This resulted in measures of average positive (α = .89) and negative (α = .94) emotional experience during mutual reminiscing, and average positive (α = .87) and negative (α = .92) emotion during asymmetric reminiscing. Because not all participants reported on both activities, analyses involving these variables have varying sample sizes attributable to missing data.

3.1.3. Procedure

Participants came to two laboratory sessions, one prior to and one following the experience-sampling portion of the study. In the initial session, they completed measures of demographics, personality, self-reported health, and brief cognitive assessments. They also received an introduction to the sampling questionnaires and the pager.

Participants then carried a pager for a period of 1 week, during which they received five pages per day, randomly distributed across the day with two constraints. Pages were delivered only between 9 a.m. and 9 p.m. (or an alternative 12 h period selected by participants), and were separated by at least 20 min. Each time participants were paged, they completed a four-page questionnaire which asked how they were feeling, what they were doing, and whether or not they were with others. Among these questions were two questions: ‘Are you telling someone about a past experience?’ (yes or no); and ‘Are you listening to someone else tell about a past experience?’ (yes or no). Participants mailed completed sampling forms at the end of each evening in postage-paid, pre-addressed envelopes; participants who missed more than five sampling occasions were excluded from analyses. Participants whose forms did not arrive as expected received reminder telephone calls. Following the week of experience-sampling, participants returned to the laboratory for debriefing and compensation ($150).
3.2. Results

All of the results include all of the extraverted items on the NEO, but importantly, results hold when controlling for the ‘talkativeness’ item. As in Study 1, these results are not simply a behavioral validation of extraverts being more talkative in general. Descriptively, across all participants, participants reported being engaged in mutual reminiscing an average of 5.9% of the time ($SD = 6.8$, range 0–34); and asymmetric reminiscing an average of 3.7 percent of the time ($SD = 4.9$, range 0–34). We excluded one individual who reported mutual reminiscing 100% of the time. Not surprisingly, given the specificity with which they were defined for participants (and for us), both mutual and asymmetric reminiscing were low-frequency events.

3.2.1. Frequency

A repeated measures general linear model examined the frequency of collaborative narration as a function of type of narration (mutual versus asymmetric, within-subjects), gender, ethnicity, and extraversion (continuous). Two-way interactions between the three between-subjects effects were also examined. There were no gender or ethnicity effects or interactions and no main effects of between-subjects variables. The results suggested two significant effects: a main effect of the type of narration, $F(1,186) = 5.2, p < .03, \eta^2 = .03$, and an interaction of extraversion with narration type, $F(1,186) = 8.3, p < .05, \eta^2 = .04$. Based on the descriptive data, mutual reminiscing was more frequent than asymmetric narration, and this is consistent with research suggesting chaining of autobiographical remembering in conversations (Ervin-Tripp & Kuentay, 1995; Hyman & Faries, 1992; Norrick, 2000). To follow up on this two-way interaction and because extraversion is a continuous variable, correlational analyses were conducted separately for narration type. As expected and as can be seen in Table 2, extraversion was positively and significantly correlated with mutual narration, but was uncorrelated with asymmetric narration, with and without the ‘talkativeness’ item, though removal of this item does diminish the strength of the correlation. These results are shown in Fig. 2.

3.2.2. Affect

To examine positive and negative experiences in collaborative narration contexts, we correlated extraversion with the four emotional experience scores. The results are presented in Table 2, and as expected, more extraverted individuals who were engaged in mutual reminiscing found this activity more emotionally positive and less emotionally negative than less extraverted individuals. This pattern of results was not evident for asymmetric reminiscing.

Table 2

<table>
<thead>
<tr>
<th></th>
<th>Asymmetric reminiscing</th>
<th>Mutual reminiscing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>.04 (.04, ns) $n = 193$ ($n = 194$)</td>
<td>.27** (.18*) $n = 193$ ($n = 194$)</td>
</tr>
<tr>
<td>Positive emotion</td>
<td>.14 (.13, ns) $n = 108$</td>
<td>.32** (.31**) $n = 130$</td>
</tr>
<tr>
<td>Negative emotion</td>
<td>.02 (.02, ns) $n = 107$</td>
<td>-.21* (-.20) $n = 130$</td>
</tr>
</tbody>
</table>

* $p < .05$.
** $p < .01$.

Note. Correlations without the talkativeness items are in parentheses.
4. Discussion

Across different age groups, samples, gender, and kinds of narrated events (self-defining and everyday), results showed that extraversion was related to engaging in more frequent collaborative narration, particularly for mutual everyday reminiscing, and to positive affect during collaborative narration. Further, Study 2 was able to address some of the shortcomings of Study 1 by eliminating retrospective bias, examining a broader sample, and looking at different kinds of collaborative narration and, importantly, the general findings of Study 1 held in Study 2. We first address the frequency and affect findings, and then elaborate connections between levels of personality, particularly in terms of the process of forming a narrative identity.

4.1. Frequency and affect

That more extraverted people engaged in collaborative narration more frequently and appeared to find such narration pleasurable suggests a potentially different process of narrative construction for more extraverted people, compared to more introverted people. As we would expect, the immediate and social nature of collaborative narration is what appears to be important to extraversion. A prior study of the frequency of simply reminiscing about (recalling) the past, found that extraversion was not related to frequency of reminiscing (Webster, 1994) and since reminiscing was not defined as a social act, these findings coupled with ours suggest that more extraverted people are not more inclined towards reminiscing generally, but towards reminiscing socially. We do note here that in our study there was an overlap in the samples with some extraverts engaged in little telling
(Figs. 1 and 2), so caution should be taken in interpreting this as a phenomenon representative of all extraverts.

The results of Study 2 paint a more specific picture of the kinds of collaborative narration in which people engage and it appears that for more extraverted people the joy in sharing stories is truly in sharing them. Indeed, the conversational chains of mutual reminiscence that some researchers have discussed (Ervin-Tripp & Kuentay, 1995; Hyman & Faries, 1992; Norrick, 2000) appear to be more pleasurable to more extraverted than introverted people. Future work should consider whether the difference in frequency of collaborative narration can be accounted for by social network size (see Lang, Staudinger, & Carstensen, 1998).

While extraversion is related to frequency of and pleasure in collaborative narration, we do not want to suggest that introversion signals a lack of socially embedded narratives. All narratives take a social and communicative form (Bruner, 1990), but the construction of any specific narrative may be more or less open to proximal social influence. More extraverted people appear to create audience-oriented stories, making it possible that more extraverted people open up their narrative self to greater degrees of social influence. Nevertheless, while more introverted people appear to create less audience oriented narratives we expect that their narratives will also be social as they use social or cultural narrative structuring and motifs.

4.2. Larger implications for relations between trait and narrative levels of personality

Prior work connecting traits and narratives has focused on associations between traits and narrative content (e.g., McAdams et al., 2004), and the present studies suggest two different vantage points from which to view the connections between these two levels of personality, both focused on process rather than content. From one vantage point, traits are seen as influencing the processes by which people construct narrative aspects of identity. From the other, narration can be viewed as a process by which traits are connected to other outcomes. Our results do not speak directly to either of these possibilities, but do suggest that extraversion and collaborative narration are related in ways that warrant further examination.

From the first perspective, individual differences in extraversion may influence the frequency of and manner in which people talk about their pasts, which in turn may be important to the self-narratives one constructs, and thus to narrative identity. For example, talking about the past can reduce negative emotions associated with events (Pasupathi, 2003), help people to find meaning in those events (Rimé et al., 1991), and increase the certainty of the memory of the event (Weldon & Bellinger, 1997). These findings raise the possibility that more extraverted individuals are forming more coherent stories, feel better about difficult past events because of sharing them, and feel more certain of the stories they are constructing about themselves. Indeed, the results of Study 1 show that memories important to the development of the life story are being shared more often, with more people, and with greater comfort by more extraverted individuals. Certainly, collaborative narration is not the only route to creating a narrative identity, but it is a route with specific implications for the type of identity created. Importantly, we suggest that it is not that more extraverted people have an advantage at life story construction, but that they are creating the life story in more socially connected ways and via more socially engaged processes than more introverted people.
From the second perspective, we consider how collaborative narration may ‘mediate’ the relations between traits and other characteristics. For example, prior research has shown that more extraverted people have larger social networks, though not necessarily more intimate friends (Lang et al., 1998), and that sharing memories is often done to connect with others (Alea & Bluck, 2003). Thus, collaborative narration may be one way that the relationship between extraversion and social network size is maintained. There are other possibilities to examine from this vantage point, and we offer social network as only one example.

The implications we have discussed demand further research that examines narrative construction and conversation over time to assess causal factors on story and identity construction. While these studies identified a relationship between an aspect of trait personality and narrative approaches to self, they did not address possible implications of this relationship for the process of self-construction and of maintaining self-continuity, nor did we examine the nuances of conversational topics and relationships between narrators. We did not expect to answer the deeper questions about relationships, personality continuity, and conversational nuance in this study, but rather hoped to lay preliminary groundwork for future research in this largely neglected area of study. Overall, extraversion plays a role in collaborative narration, and research should continue to examine individual differences in the social processes by which narratives are formed.

References


