

The narrative structure of stressful interpersonal events

Ivy K. Ho,¹ Tamara L. Newton² and Allyssa McCabe¹

¹ University of Massachusetts Lowell | ² University of Louisville

Narrating personal experiences helps people make sense of them and contributes to improved well-being. However, little is known about how people recount stressful experiences that are interpersonal in nature. In this study, middle-aged North American women ($N=36$), with lifetime histories of victimization, provided accounts of a recent stressful interpersonal event. High Point Analysis was applied to analyze the narratives. The majority (55%) of narratives were characterized by extensive evaluative content, categorized as End at High Point. The next most common (38%) category of responses were Emotional Narratives, characterized by a concentration of evaluative statements with little or no complicating action. Thus, participants' memories of their stressful interpersonal events were caught in an unresolved, emotionally charged, limbo. Results reveal a novel approach to analyzing narratives of interpersonal stressors, and shed light on the relationship between victimization histories and narration of interpersonal experiences.

Keywords: High Point Analysis, stressful events, interpersonal encounters

Introduction

To narrate a personal experience is to make sense of that experience (McCabe, 1996). The present project sought to determine how women, who had lifetime histories of victimization, made sense of negative interpersonal events that had been a source of stress in the last few months of their lives. There are many ways of analyzing both content and form of narration (McCabe, 2017; Westby & Culatta, 2016). Past research reviewed below has focused on analyzing the content of narratives, but relatively little attention has been paid to the form of such narratives. Form of narration may reveal aspects of emotion in ways that are less consciously monitored than content or articulation, a psycholinguistic finding that is broader than narrative (Deese, 1984). What is more, the relatively modest attention paid to form of narration has so far neglected to establish reliability in what

ordinary readers call good narrative structure (Ramirez-Esparza & Pennebaker, 2006). Rather than tap what seems to be those highly variable individual esthetics, there are approaches to analyzing narrative that codify what a good narrative should consist of.

In previous research on narrative form, people in general recount negative experiences in a different way than they do positive ones. One way in which these accounts differ is in the use of cognitive processing words, i.e., words associated with thinking, reasoning, and causal connections. For example, compared to participants who wrote essays about positive events in their lives, those who wrote about negative events used more cognitive processing words – specifically, causal connector words (e.g., *because*, *so*) – perhaps because these words helped the authors to explain their emotional reactions to negative experiences (Klein & Boals, 2010). Similarly, among women who wrote essays to recall experiences that ranged from being intensely negative to intensely positive, narratives about negative events contained not only more cognitive processing words than positive ones, but also more negative emotion words and more passive sentences (Bohanek et al., 2005). Collectively, these studies indicate that stressful negative events are recounted in distinct narratives by people who have experienced them.

The present study addresses two limitations in the literature on narrative structure of negative memories. First, because participants in narrative research are typically given broad instructions to write about any experience of their choice (e.g., Bohanek et al., 2005; Niles et al., 2016), little is known about how people recount negative experiences that are specifically interpersonal in nature. In other words, it is still not known how people recount stressful interpersonal encounters, such as an argument with a spouse or a confrontation with a neighbor. It is important to study stressful interpersonal encounters because these experiences are associated with impaired physical and emotional well-being. For example, among older adults, current negative social interactions predicted increases in negative affect six months later, whereas positive social interactions were associated only with current emotional states but were not predictive of future affect (Newsom et al., 2003). Negative social interactions have also been linked to poor physical health. For example, people who reported experiencing adverse interactions or conflict in their close relationships were at higher risk for heart disease (De Vogli et al., 2007). Just as negative interpersonal encounters are associated with poor health outcomes, there is some evidence that narrating these experiences may contribute to improved well-being (e.g., Pennebaker & Seagal, 1999). Therefore, it is important to increase knowledge on how people talk about negative events that are specifically interpersonal in nature.

Second, the present research examined narratives provided by a sample of women who report lifetime experiences of victimization. Research thus far on

individuals with victimization histories has focused on their narratives of those victimization experiences themselves (e.g., Byrne et al., 2001) but not on their narratives of stressful but *non-traumatic* interpersonal experiences. It is important to address this gap in knowledge because interpersonal victimization and interpersonal functioning are closely related. Specifically, a history of interpersonal victimization is associated with poor interpersonal functioning (e.g., Cloitre et al., 1997; DiLillo, 2001), perhaps because of interpersonal distrust and psychological problems such as low self-esteem and depression (DiLillo, 2001).

High Point Analysis

High Point Analysis, adapted by Peterson and McCabe (1983) from Labov (1972), is one such approach that is explicit about what comprises a good narrative. Specifically, High Point Analysis examines emotional evaluation and resolution of narration, both of which we predicted would be salient for women with histories of victimization. High Point Analysis has been used to characterize narrative coherence (Reese et al., 2011) as well as the narrative structure of a “good story” (McCabe & Peterson, 1984). It has also been successfully used to examine narratives of specific adult populations, including inpatients with borderline personality disorder (Jørgensen et al., 2012) and high functioning autism (McCabe et al., 2013).

The present project attempted to further apply High Point Analysis to determine narrative form(s); specifically, we examined the narratives of a sample of predominantly European North American women, with histories of interpersonal victimization, who recounted negative interpersonal encounters. Previous research indicated that the most typical narrative form of European North American children, telling various personal experiences when they were six years old or older, was “classic” (Peterson & McCabe, 1983). Classic narratives begin with orientation, then narrate a sequence of complicating actions, defined as “a chain of causal or instrumental events” (Ouyang & McKeown, 2014), culminating in an evaluated high point or climax, followed by a series of resolving actions. As the women in the present study are considerably older, we expect them to also tell most of their experiences in classic format.

In sum, research on how people tell stories indicates that negative experiences are recounted in characteristic narratives, as noted above. There has been no research on the ways in which people recount negative experiences of an interpersonal nature, even though negative social exchanges are predictive of poor physical and psychological well-being. Interpersonal functioning is particularly important to study among those who have experienced trauma and victimization. Therefore, in the present study, we examined the narratives of women who have had lifetime experiences of victimization as they talked about a recent stressful,

but non-traumatic, interpersonal encounter with the goal of determining whether or not these narratives were told in the classic form that would be expected given their age and culture.

Method

Participants

The data were part of a larger study on cardiovascular reactivity among post-menopausal women who had experienced victimization (Newton et al., 2005). The participants were 39 women recruited from a rural/urban community in the southeastern United States. The interviews of three participants could not be transcribed due to technical problems during audiotaping. Demographic data of the remaining 36 participants are presented in Table 2.

Table 1. Number of participants endorsing each criminal victimization event

Event	<i>n</i>	% of sample
Theft	33	92
Molestation	27	75
Physical assault	25	69
Breaking & Entering	24	67
Stalking	22	61
Vandalism	19	57
Auto theft	19	53
Sexual assault	18	50
Attempted sexual assault	12	33
Childhood physical abuse	11	31
Robbed/mugged	6	17
Homicide – family member/close friend	4	11

Note. *N* = 36

Table 2. Demographic characteristics of participants (*N* = 36)

Mean age (years)	51.5 (<i>SD</i> = 4.16; range = 45–62)
Self-Identified Ethnicity (%)	
European American	86
African American	9
Hispanic American	3
Asian American	3

Mean age (years)	51.5 (<i>SD</i> = 4.16; range = 45–62)
Educational Status (%)	
Grade 12 or less	3
High school or equivalent	22
Some college or two-year degree	39
Four-year college degree	14
Some grad/professional school	8
Completed grad/professional school	17
Currently Employed (%)	78
Annual Household Income (%)	
<20K	29
20–40K	31
40–60K	20
60–80K	3
80–100K	9
>100K	9
Marital Status (%)	
Currently married/partnered	35
Divorced/separated	50
Widowed	8
Never married	6

Materials

Assessing victimization status

Participants' victimization histories were assessed using 16 items that were compiled from four separate surveys in order to form a comprehensive assessment of lifetime experience of potentially traumatic events and criminal victimization. Four items from the Basic Screen Questionnaire of the National Crime Victimization Survey (U.S. Department of Justice, 1999) assessed criminal victimization such as theft and breaking and entering. Seven items from the Stressful Life Events Screening Questionnaire (Goodman et al., 1998) assessed events such as muggings, and physical and sexual assault. One item from the National Violence Against Women Survey (Tjaden & Thoennes, 1998) assessed stalking. Four items from the life events checklist of the Clinician Administered PTSD Scale (Blake et al., 1998) assessed additional potentially traumatic events such as fire or natural disaster.

Data regarding the number of participants endorsing each criminal victimization event are presented in Table 1. As shown, theft was reported most frequently, followed by molestation, and physical assault.

Collection of narratives

Participants responded to the Social Competence Interview (SCI; Ewart & Kolodner, 1991), a semi-structured one-on-one interview about interpersonal problems that have been a source of stress in the last few months, and that are a source of recurring conflict or stress. The original SCI, written to assess physiological, cognitive and affective responses to social stress among adolescents, was designed to last 14 minutes. The first two minutes are devoted to determining if the problem discussed was a source of ongoing stress (i.e., factual description). In the next two to eight minutes, interviewees provide a detailed description of what happened, how they felt during the stressful encounter, the physical surroundings, verbal exchange, and the consequences of the problem (i.e., emotional reliving). During the last six minutes of the interview, interviewees describe the ideal outcome of the problem situation, and how they might cope with the problem should it arise again in the future (i.e., cognitive reflection), though these were excluded from the present analysis.

Several changes were made to the SCI in order to adapt it to suit the purposes of the present study. Problem situations that are relevant to an adult sample (e.g., owing people money, problems with a work supervisor) were added, and duration of interview portions were not limited. For the present paper, we analyzed only narratives from the factual description portion of the interview. Prompts for this portion were open-ended and solicited a retelling of the interpersonal conflict the participant selected (“Tell me about [problem]”; “Give me an example when [problem] occurred”). We selected the freestanding portion of the narrator’s response for further analysis, which is what the narrator said before the interviewer began very specific follow-up questions during the emotional reliving portion. For some of the participants, the interviewers provided prompts (e.g., “Tell me more...”), and responses to these prompts were treated as a separate narrative. As noted, participants’ responses to the rest of the SCI (namely, emotional reliving and cognitive reflection) were not included in the present analyses. A total of 51 freestanding narratives were analyzed.

Procedure

Data collection occurred over two laboratory sessions. At session 1, following the informed consent procedure, each participant responded to the 16 trauma and victimization survey items, and other questionnaires. Approximately one week later, the participant returned for session 2, during which the audio-recorded SCI was conducted by the first author or a research assistant. Participants selected,

from a stack of index cards that had one problem situation printed on each card, the one problem situation that was most relevant to each of them. Each participant received \$ 30 as compensation for her time.

High Point Analysis

In the first step of High Point Analysis, we broke the freestanding narratives into propositions, defined as one verb plus its complements (i.e., “I *asked* her to help me sort things out and *organize* them” counts as two propositions). Each proposition was assigned to one of the following categories depending on its primary function (Peterson & McCabe, 1983): (1) *orientation*, which is descriptive information about who, what, where, and when something happened, (2) *complicating and resolving actions*, which refer to simple past tense events (e.g., “I went to talk to her about this issue”) that comprise the experience, with complicating action referring to those actions that build to the high point or climax, and resolution referring to actions that resolved the climax, (3) *evaluation*, which refers to statements that tell the listener what to think about a person, place, thing, event, or the entire experience. Evaluation includes onomatopoeia, stress, repetition, compulsion words (“had to do that”), exaggeration, negatives, intentions, purposes, causal explanations, judgments, and internal emotional states (Peterson & McCabe, 1983).

In the second step of High Point Analysis, we determined the macrostructure of the narrative as a whole. In order to do this, it is necessary to identify the narrative macrostructure by answering each one of the questions presented in Figure 1 (following McCabe & Rollins, 1994). If coders answer *yes* to a question they proceed to the next question. If they answer *no*, that results in the determination of the type of narrative structure displayed in the right-hand column. High Point Analysis scores each narrative as one of the following mutually exclusive structures. The categories we employed are an adaptation of Peterson and McCabe’s (1983) system for scoring the narrative structure of children due to the fact that some categories were not found in the present data, while others found in the present data were not found among the children’s narratives:

1. *Classic Narrative*: Narrative begins with orientation followed by a series of complicating actions that culminate in a high point (a cluster of evaluation or climax) and that are then followed by a series of resolving actions.
2. *End at the High-Point*: Narrative also begins with orientation followed by a series of complicating actions that then end abruptly in a high point (evaluative climax). There is no resolution of this.

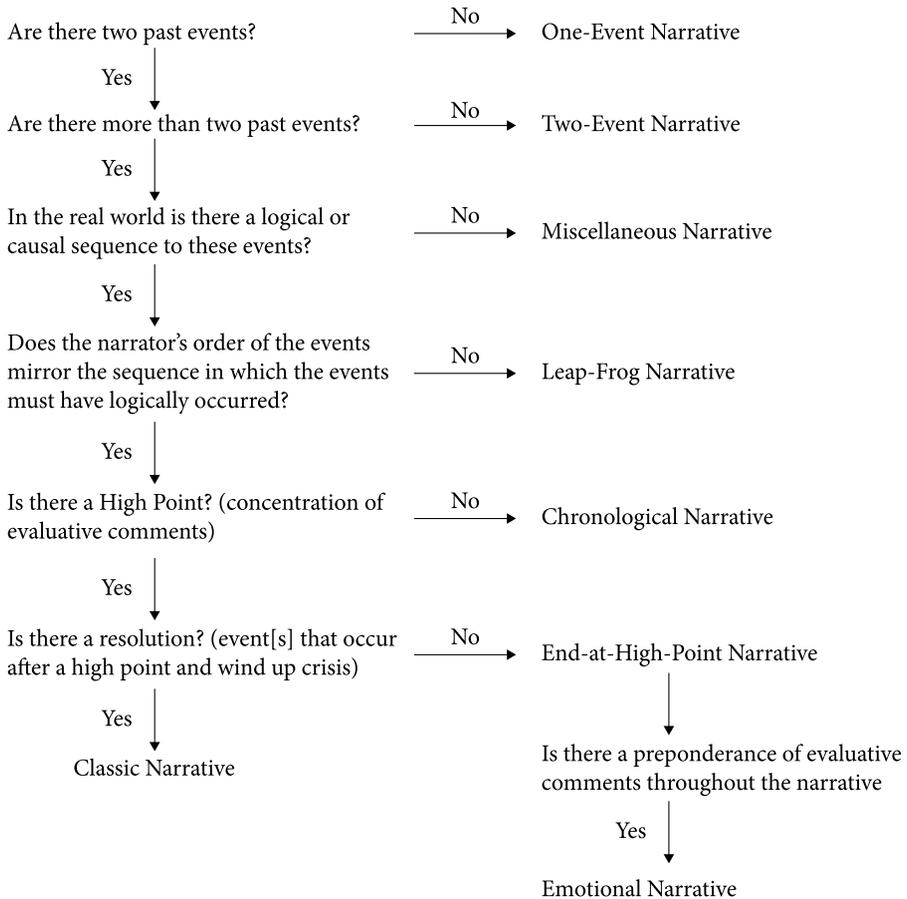


Figure 1. High Point Analysis. Adapted from McCabe and Rollins (1994)

3. *Chronological Narrative*: Narrative consists of a series of actions that are not tightly linked, nor particularly evaluative. This type is often only lightly evaluated – like a list of the rides taken at an amusement park.
4. *Emotional Narrative*: This was a structure that emerged from narratives in this corpus of data that did not fit in any of the aforementioned categories used in McCabe and Rollins (1994). Emotional narratives are the opposite of chronological narratives in that they consisted almost exclusively of emotional evaluation with hardly any or even no true actions.

Results

Inter-rater reliability

The data were analyzed by two research assistants who were trained in High Point Analysis, who then each independently coded the data. We estimated interrater reliability using Cohen's kappa to correct for chance occurrence. Inter-rater reliability of the macrostructure coding, calculated by randomly sampling 20% of the freestanding narratives, was estimated to be .76, indicating substantial agreement (Landis & Koch, 1977). We also calculated the correlation of propositions coded as evaluative between the two coders, $r(51) = .935, p < .01$.

Narrative analysis

Table 3 shows the number and percentage of freestanding narratives across each macrostructure category. The overwhelming majority were characterized by evaluative content, with 30 responses (55%) categorized as End at High-Point. These responses contained descriptions of stressful interpersonal encounters characterized by evaluative statements and ended without resolution. The percentage of evaluative propositions in these End at High-Point narratives, as a proportion of all propositions, was 41%. Consider the following example of End at High-point narration told by one of the participants (evaluation clauses are in italics).

Table 3. The number and percentage of freestanding narratives across each macrostructure category

Macrostructure category	Number of freestanding narratives	Percent of all freestanding narratives
One-event narrative	1	.02
Two-event narrative	0	0
Miscellaneous narrative	0	0
Leap-frog narrative	0	0
End at the high-point	30	55
Chronological narrative	2	.04
Classic narrative	1	.02
Emotional narrative	21	38

My boyfriend, I told his brother that I had something to go to, if I went down there with them, that I had to be guaranteed that I would get back. Well, they

told me that I could, that I would get back, and then come time to do it, to come back, *the time we were supposed to leave, it did not happen. Somebody given me their word, I expect them to, you know, if I am going out of my way to go with the, because to share the driving, should not they try to you know either say I cannot do it or at least try to do it. Just the fact that they lied, I mean, they could have said no I cannot, you know instead of me just telling them directly I have something I got to do, I have to be back. And just acting like well it is nothing, she will get over it. You know that just, that made me real mad. Made me real mad, because I said I did not want to go at first because, I mean, who wants to ride in a car for that many hours. But I thought well I will go I will help out with driving that way, you know, it is his aunt, that way I might be some support. But they get down there, and then you know, everybody not being able to get together at the right time that everybody agreed on to come back, and then my boyfriend was lollygagging somewhere else, and it just, it made me mad.*

The next most common (21 responses, or 38%) category of responses were Emotional Narratives, characterized by a concentration of evaluative statements with little or no complicating action. The percentage of evaluative propositions in these Emotional Narratives, as a proportion of all propositions, was 61%. The following is an example of an Emotional Narrative (which contains a few opening orientation comments and some reported dialogue at the end, but is otherwise exclusively evaluative):

Well, my daughter is, um, recent she is newly married and she is having a baby. They just moved so *they have been putting a lot of stress on me. Um, because she is going through a very emotional period, pregnancy, she is going, you know, her hormones are raging from 0 to 1000, and so she has put a lot of pressure on her husband, she has put a lot of pressure on me, and they are calling, he is calling, he calls me because he cannot handle her emotional states at times. And so even, even as let us see, last night she is going to move to (state), she is going to be delivering (date), and she is talking about "In five weeks, I am going to (state) and I am going to not have any more stress or any, she is going to go to my mom's."* I said, "Well, you will be three weeks away from delivery, you cannot do that." *I am like, you know, she is giving us a hard time. And it is putting a lot of stress on us.*

Discussion

One purpose of this study was to determine whether the narrative structure of stressful interpersonal interaction by those who have experienced victimization could be reliably coded, and our use of High Point Analysis with its definition of good narrative structure allowed us to accomplish that. In contrast, previous efforts using individuals to rate the structure of narratives of traumatic experi-

ences was not successful in establishing acceptable rates of reliability (Ramirez-Esparza & Pennebaker, 2006).

The second main purpose of this project was to determine the specific forms of the narratives of stressful interpersonal interactions told by women with a history of victimization. Given the women's age and cultural background, they were expected primarily to tell stories that conformed to a classic narrative pattern. However, only one such story was produced in that form. Instead, the form of narration found in the present work revealed a compromised – *unresolved* – way of talking about stressful interpersonal interactions. Prior work has established that lifetime experience of victimization is associated with compromised interpersonal functioning (DiLillo, 2001). To our knowledge, the present study is the first to explore this association by examining the narrative structure of the recollections of stressful, but non-traumatic, interpersonal encounters among women with lifetime victimization histories. Our results show that these narratives are characterized by a preponderance of evaluative statements, as well as a notable lack of story resolution. Among our sample of women with histories of lifetime victimization, recent negative social interactions appear to be revived during the retelling. The fraught narratives were characterized by prosodic stress, compulsion words, negatives, causal explanations, judgments, and internal emotional states. Although many of the accounts included actions, a significant portion of accounts were inundated with emotionally-laden statements. All but one of the narratives remain unresolved, as if the encounters were stuck in a perpetual emotionally charged limbo in their participants' memories.

Associations with memory for traumatic events

Our findings are also remarkable because of how commonplace it is for people to share stories about their interpersonal conflicts with others. Disclosure of stressors has been found to be beneficial to one's well-being, yielding gains in both psychological (Smyth & Helm, 2003) and physical well-being (Pennebaker et al., 1990). On the other hand, the structures of the narratives we collected suggest that our participants kept perseverating in negative emotion. This stands in contrast to prior research that found even six-year-old children are able to and usually do tell stories about a variety of types of experiences – ranging from seemingly benign experiences (e.g., a birthday party) to ones that were probably stressful (e.g., getting a shot at a doctor's office) – that end in a resolution of the stories' climax (Peterson & McCabe, 1983).

There are several potential explanations for this unexpected finding. First, unresolved narratives may be characteristic of stressful interpersonal events. To test this, future research should explicitly compare narratives of interpersonal and

non-interpersonal stressful events. Second, there may have been features of the method (i.e., the Social Competence Interview) that contributed to unresolved narratives. For example, participants may have been expecting the interviewer to ask follow up questions and therefore perhaps they did not spontaneously resolve the story they were recounting. Third, the unresolved narratives may reflect the fact that the stressful interpersonal events were recounted by women with lifetime histories of victimization.

Although it is beyond the scope of the present research to compare traumatic with nontraumatic memories, these results provide a novel form of evidence for the hypothesis that interpersonal victimization affects non-traumatic interpersonal interactions by interfering with beliefs about others and the world. Prominent theories of victimization and PTSD [i.e., Emotion Processing Theory (Foa & Rothbaum, 1998) and Cognitive Processing Theory (Resick & Schnicke, 1992)] posit that traumatic experiences alter one's beliefs about self, others and the world, and provide plausible explanations for how pre-victimization beliefs about others interfere with the successful processing of current interpersonal discord. Interpersonal beliefs, whether positive ("Others always treat me fairly") or negative ("People will take advantage of me if I let them") may have been contradicted or confirmed, respectively, when one became a target of victimization. In addition, cognitive errors can occur when making adjustments to one's pre-victimization beliefs about others in the aftermath of interpersonal victimization. The resulting interpersonal schemas may disrupt cognitive and emotional processing of negative interactions, such that the women in our sample were caught in a perseverative web of unresolved emotion.

Clinical background and implications

One clinical approach, Focused Expressive Writing, is built upon research evidence that writing about one's most stressful or traumatic experience can yield physical and psychological health benefits (Smyth & Helm, 2003). Although the curative mechanism is not clear, research indicates that constructing a narrative of one's stressful experiences helps reorganize those episodic memories, thereby making them more coherent. In fact, having a coherent narrative structure appeared to be essential in order for health benefits to accrue. One study (Smyth et al., 2001) compared a control group who wrote about a neutral topic, a fragmented experimental group who wrote separate sentences to describe specified aspects (i.e., event, feelings, thoughts, sensations) of "the most traumatic or stressful event" in their lives, and a narrative experimental group who were instructed to "try to form a narrative" about their most traumatic or stressful experience. Five weeks later, the narrative experimental group demonstrated greater physical health improve-

ment than the other two groups, which were not distinguishable from each other in terms of health outcomes. However, this study, like many others that examined the health correlates of disclosure (e.g., Pennebaker et al., 1990), did not precisely operationalize “traumatic” or “stressful” in their instructions to participants; as a result, participants’ topics of disclosure varied greatly from experiences that met diagnostic criteria for trauma to stressful but non-traumatic negative events. Therefore, the implications of this body of research must be interpreted with caution.

In a complementary, but somewhat different way, the Story-Editing Approach (Wilson, 2011) summarizes research that shows even seemingly minimal efforts to change the specific form of the ways certain people tell stories about various troublesome situations can yield substantial results. For example, (Pennebaker, 1997, 2004) found that writing about a traumatic situation in which something happened that does not make sense and is unpleasant to think about allowed people to reflect upon the experience and reframe what happened; the people who benefitted most were those who wrote the most jumbled, incoherent initial account of the traumatic event but eventually told a coherent story that explained the event and gave it meaning. Another approach involved first-year college students who were not doing as well as they wanted and were worried about their grades (Wilson & Linville, 1982). In that project, researchers showed the struggling students results from a survey of upper-class students that showed many of those students’ freshman grades were lower than they had expected but that their GPA improved significantly from the first semester of their freshman year thereafter. Compared to similar students who received no such information, the story-editing group attained better grades as sophomores and were less likely to drop out of college. The second goal of the present project – determining the form of narratives of non-traumatic but stressful social interactions told by women with a history of victimization – suggests a very specific possible intervention: getting the women to figure out how to resolve their narratives and, thus, their dilemmas.

Limitations and conclusion

This study did not include narratives from women who had not undergone interpersonal victimization, nor narratives about positive interpersonal encounters. Between- and within-subject comparisons of narratives of interpersonal encounters are needed to better understand the way in which people express and process these experiences. Also, our sample included only middle-aged, predominantly White, women and it is unclear whether these findings are applicable to women of other demographic groups.

History of victimization is associated with disruption in interpersonal functioning, and negative social encounters may predict future well-being. However,

little is known about how people with lifetime experiences of victimization recount memories of non-traumatic but stressful social encounters. Results from the present study suggest that, among a sample of post-menopausal women who report prior experiences of victimization, narratives of current negative interpersonal encounters are characterized by a preponderance of evaluative statements, most of which are negative. Furthermore, these recollections are marked by a striking lack of story resolution. These findings underscore the need for further research into how beliefs about self and others affect one's recollection of interpersonal stressors, as well as the links between memories for traumatic encounters and those for negative (but non-traumatic) experiences. Furthermore, since memory is affected by early gendered parent-child interactions (Peterson et al., 2008), future work might want also to examine participants' childhood relationships with parents to determine whether more positive parenting enables people with victimization histories to nonetheless tell coherent, resolved narratives (recall that one participant did tell a resolved, classic narrative). Results also have implications for clinical approaches that are based on expressive/narrative perspectives.

References

- Blake, D., Weathers, F., Nagy, L., Kaloupek, D., Charney, D., & Keane, T. (1998). *Clinician Administered PTSD Scale for DSM-IV*. National Center for Posttraumatic Stress Disorder.
- Bohanek, J.G., Fivush, R., & Walker, E. (2005). Memories of positive and negative emotional events. *Applied Cognitive Psychology, 19*, 51–66. <https://doi.org/10.1002/acp1064>
- Byrne, C.A., Hyman, I.E., & Scott, K.L. (2001). Comparisons of memories for traumatic events and other experiences. *Applied Cognitive Psychology, 15*, S119–S133. <https://doi.org/10.1002/acp.837>
- Cloitre, M., Scarvalone, P., & Difede, J. (1997). Posttraumatic stress disorder, self- and interpersonal dysfunction among sexually retraumatized women. *Journal of Traumatic Stress, 10*, 437–452. <https://doi.org/10.1002/jts.2490100309>
- Deese, J. (1984). *Thought into language: The psychology of a language*. Englewood Cliffs, NJ: Prentice-Hall, Inc.
- De Vogli, R., Chandola, T., & Marmot, M.G. (2007). Negative aspects of close relationships and heart disease. *JAMA Internal Medicine, 8*, 1951–1957. <https://doi.org/10.1001/archinte.167.18.195>
- DiLillo, D. (2001). Interpersonal functioning among women reporting a history of childhood sexual abuse: Empirical findings and methodological issues. *Clinical Psychology Review, 21*, 553–576. [https://doi.org/10.1016/S0272-7358\(99\)00072-0](https://doi.org/10.1016/S0272-7358(99)00072-0)
- Ewart, C.K., & Kolodner, K.B. (1991). Social Competence Interview for assessing physiological reactivity in adolescents. *Psychosomatic Medicine, 53*, 289–304. <https://doi.org/10.1097/00006842-199105000-00003>

- Foa, E. B., & Rothbaum, B. O. (1998). *Treating the trauma of rape: Cognitive behavioral therapy for PTSD*. New York: Guilford Press.
- Goodman, L. A., Corcoran, C., Turner, K., Yuan, N., & Green, B. L. (1998). Assessing traumatic event exposure: General issues and preliminary findings for the Stressful Life Events Screening Questionnaire. *Journal of Traumatic Stress, 11*, 521–542.
<https://doi.org/10.1023/A:1024456713321>
- Jørgensen, C. R., Bernsten, D., Bech, M., Kjølbbye, M., Bennedsen, B. E., & Ramsgaard, S. B. (2012). Identity-related autobiographical memories and cultural life scripts in patients with Borderline Personality Disorder. *Consciousness and Cognition, 21*, 788–798.
<https://doi.org/10.1016/j.concog.2012.01.010>
- Klein, K. & Boals, A. (2010). Coherence and narrative structure in personal accounts of stressful events. *Journal of Social and Clinical Psychology, 29*, 256–280.
<https://doi.org/10.1521/jscp.2010.29.3.256>
- Labov, W. (1972). *Language in the inner city*. Philadelphia, PA: University of Pennsylvania Press.
- Landis, J. R., & Koch, G. G. (1977). The measurement of observer agreement for categorical data. *Biometrics, 33*(1), 159–174. <https://doi.org/10.2307/2529310>
- McCabe, A. (1996). *Chameleon readers: Teaching children to appreciate all kinds of good stories*. New York: McGraw Hill.
- McCabe, A. (2017). Children's personal narratives reflect where they come from, reveal who they are, and predict where they are going. In N. Kucirkova, C. Snow, V. Grover & C. McBride (Eds.), *The Routledge International Handbook of Early Literacy Education* (pp. 308–324). Abington, U.K.: Routledge.
- McCabe, A., Hillier, A., & Shapiro, C. (2013). Structure of personal narratives of adults with autism spectrum disorder. *Journal of Autism and Developmental Disorders, 43*, 733–738.
<https://doi.org/10.1007/s10803-012-1585-x>
- McCabe, A., & Peterson, C. (1984). What makes a good story? *Journal of Psycholinguistic Research, 13*, 457–480. <https://doi.org/10.1007/BF01068179>
- McCabe, A., & Rollins, P. R. (1994). Assessment of preschool narrative skills: Prerequisite for literacy. *American Journal of Speech-Language Pathology: A Journal of Clinical Practice, 3*, 45–56. <https://doi.org/10.1044/1058-0360.0301.45>
- Newsom, J. T., Nishishiba, M., Morgan, D. L., & Rook, K. S. (2003). The relative importance of three domains of positive and negative social exchanges: A longitudinal model with comparable measures. *Psychology and Aging, 18*, 746–754.
<https://doi.org/10.1037/0882-7974.18.4.746>
- Newton, T. L., Parker, B. C., Ho, I. K. (2005). Ambulatory cardiovascular functioning in healthy postmenopausal women with victimization histories. *Biological Psychology, 70*, 121–130.
<https://doi.org/10.1016/j.biopsycho.2004.12.003>
- Niles, A. N., Haltom, K. E. B., Lieberman, M. D., Hur, C., & Stanton, A. L. (2016). Writing content predicts benefit from written expressive disclosure: Evidence for repeated exposure and self-affirmation. *Cognition and Emotion, 30*, 258–274.
<https://doi.org/10.1080/02699931.2014.995598>
- Ouyang, J., & McKeown, K. (2014, May). Towards automatic detection of narrative structure. Paper presented at the Ninth International Conference on Language Resources and Evaluation. Reykjavik, Iceland.
- Pennebaker, J. W. (1997). *Opening up: The healing power of expressing emotions* (Rev. ed.). New York: Guilford.

- Pennebaker, J.W. (2004). *Writing to heal: A guided journal for recovering from trauma & emotional upheaval*. Oakland, CA: New Harbinger Publications.
- Pennebaker, J.W., Colder, M., & Sharp, L.K. (1990). Accelerating the coping process. *Journal of Personality and Social Psychology*, 58, 528–537. <https://doi.org/10.1037/0022-3514.58.3.528>
- Pennebaker, J.W., & Seagal, J.D. (1999). Forming a story: The health benefits of narrative. *Journal of Clinical Psychology*, 55, 1243–1254. [https://doi.org/10.1002/\(SICI\)1097-4679\(199910\)55:10<1243::AID-JCLP6>3.0.CO;2-N](https://doi.org/10.1002/(SICI)1097-4679(199910)55:10<1243::AID-JCLP6>3.0.CO;2-N)
- Peterson, C., & McCabe, A. (1983). *Developmental psycholinguistics: Three ways of looking at a child's narrative*. NY: Plenum. <https://doi.org/10.1007/978-1-4757-0608-6>
- Peterson, C., Smorti, A., & Tani, F. (2008). Parental influences on earliest memories. *Memory*, 16(6), 569–578. <https://doi.org/10.1080/02687030802025984>
- Ramirez-Esparza, N., & Pennebaker, J.W. (2006). Do good stories produce good health? *Narrative Inquiry*, 16(1), 211–219. <https://doi.org/10.1075/ni.16.1.26ram>
- Reese, E., Haden, C.A., Baker-Ward, L., Bauer, P., Fivush, R., & Ornstein, P.A. (2011). Coherence of personal narratives across the lifespan: A multidimensional model and coding method. *Journal of Cognitive Development*, 12, 424–462. <https://doi.org/10.1080/15248372-2011-587854>
- Resick, P.A., & Schnicke, M.K. (1992). Cognitive Processing Therapy for sexual assault victims. *Journal of Consulting and Clinical Psychology*, 60, 748–760. <https://doi.org/10.1037/0022-006X.60.5.748>
- Smyth, J., & Helm, R. (2003). Focused expressive writing as self-help for stress and trauma. *JCLP/In Session: Psychotherapy in Practice*, 59, 227–235. <https://doi.org/10.1002/jclp.10144>
- Smyth, J., True, N., & Souto, J. (2001). Effects of writing about traumatic experiences: The necessity for narrative structuring. *Journal of Social and Clinical Psychology*, 20, 161–172. <https://doi.org/10.1521/jscp.20.2.161.22266>
- Tjaden, P., & Thoennes, N. (1998, November). Prevalence, incidence, and consequences of violence against women: Findings from the National Violence Against Women Survey. *National Institute of Justice Centers for Disease Control and Prevention: Research in Brief*. U.S. Department of Justice, Bureau of Justice Statistics (1999). *National Crime Victimization Survey. Basic Screen Questionnaire*.
- Westby, C., & Culatta, B. (2016). Telling tales: Personal event narratives and life stories. *Language, Speech and Hearing Services in Schools*, 47(4), 260–282. https://doi.org/10.1044/2016_LSHSS-15-0073
- Wilson, T.D. (2011). *Redirect: Changing the stories we live by*. Boston: Back Bay Books.
- Wilson, T.D., & Linville, P.W. (1982). Improving the academic performance of college freshmen: Attribution therapy revisited. *Journal of Personality and Social Psychology*, 42, 367–376. <https://doi.org/10.1037/0022-3514.42.2.367>

Address for correspondence

Ivy K. Ho
Department of Psychology
University of Massachusetts Lowell
113 Wilder Street, Suite 300
Lowell, MA 01854-3059
USA
Ivy_Ho@uml.edu

Co-author information

Tamara L. Newton
University of Louisville
Department of Psychological & Brain
Sciences
tnewton@louisville.edu

Allyssa McCabe
University of Massachusetts Lowell
Department of Psychology
Allyssa_McCabe@uml.edu