Summer 8-2011

Remembering You: Effects of Gender Identity and Narrative Recall Mode on Autobiographical Narratives

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Remembering You:

Effects of Gender Identity and Narrative Recall Mode on Autobiographical Narratives

A thesis submitted in partial fulfillment of the requirements

for the degree of Master of Science in Experimental Psychology

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August, 2011

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Acknowledgements

First, I would like to acknowledge and thank my advisor, Janine P. Buckner, Ph.D., who gave her support and guidance throughout my entire graduate experience. You are both a mentor and a friend.

In addition, I would like to thank my committee, Marianne Lloyd, Ph.D. and Andrew Simon, Ph.D., Psy.D. for all of their support and guidance throughout my thesis process and graduate degree.

A special thanks to my research assistants, Warren Scott, Sejal Brahmbhatt, and Jennifer Noonan. To Sejal Brahmbhatt and Jennifer Noonan, thank you for helping me with my data collection. I would like to especially thank Warren Scott for helping me with my data transcription. Overall, without the three of you, I would have been more sleep and sanity deprived over the last year.

Dedication

To Sean, the love of my life. Thank you for your understanding, patience, and love throughout the last two years, while I obtained one of my life's dreams.

I love you very much!

Table of Contents

List of Figures

List of Tables

Abstract

The present study examined the influence of narrative recall mode (written vs. oral) and gender identity (feminine, masculine, androgynous, and undifferentiated) on participants' expressions of a memory. Participants were asked the same memory cue: "Tell me about the day you were accepted to the University," and narratives were obtained either through oral or written collection. Each participant (n=246: men=62, women=184) was given a demographic sheet and the 40-item Extended Personal Attributes Questionnaire (EPAQ), which measured each participant's masculine and feminine traits regarding the self, and categorized each participant into either masculine, feminine, androgynous, or undifferentiated gender identity (Spence, Helmreich, & Holahan, 1979). Narratives were coded for theme (socialization), structure (detail), and content (emotionality) using a scheme adapted from Buckner and Fivush (1998). The present study employed a 2 x 4 mixed method research design with memory recall mode as a between subjects factor and gender identity as the within subjects factor. A two-way ANOVA was conducted. Participants, who identified as feminine and undifferentiated expressed significantly more negative emotions in the written versus oral mode. In addition, a main effect was found whereby participants expressed higher amounts of positive emotion as well as overall emotion in the oral (recorded) recall mode versus written memory recall mode. These findings are in line with previous research (e.g., Esterling, 1994) which revealed that sharing a memory verbally aroused more positive affect within participants when compared to written expressions. Recent research (Wong, Pituch & Rochlen, 2006) also suggests that feminine-typed persons may link higher emotional expression to social approval and have more practice/knowledge with expressing one's emotions. Masculine-typed individuals may be less likely to express these forms of emotions due to societal pressures and expectations. In fact, Wong and others (2006)

pointed out that men-masculine individuals showed restrictive emotionality, difficulty identifying feelings, high need for social desirability, and difficulty communicating emotions to others. Findings suggest important implications for socialization practices and the kinds of communicative practices afforded to masculine and feminine individuals from an early age. Implications and applications to future research based on the present variables of interest are also discussed.

Keywords: autobiographical memory, gender identity, masculine, feminine, androgynous, undifferentiated, written narratives, oral narratives, adolescent, narrative emotionality, narrative structure, narrative detail, narrative theme, sociability

Introduction

"Memory is often thought of as a set of selves or a record of the self across a lifetime – an autobiography" (Bluck, 2003, p. 117).

Autobiographical memories involve thinking about the past in the present moment (Bluck, 2003; Markus, 1977; Markus, 1982, Ross & Conway, 1986). Bluck (2003) referred to memory as recalling a form of past self. By definition, then, autobiographical memory is a collection of facts and events that have been interpreted and integrated into a consistent story about one's self (Bruner, 1978; Neisser, 1988; Buckner & Fivush, 2000). It is comprised of personally-relevant facts or experiences that specifically connote a sense of identity to the remembering person (Buckner & Fivush, 2000). These autobiographical memories about a personal experience are recalled in a single-event recollection (an "episode"), are placed in a particular location and time, and are specific to the thoughts, behaviors, attitudes, and perceptions of the person who is doing the remembering (Neisser, 1988; Tulving 1984). As such, a "self-narrative" is a potential source of information about the sensations, actions, and knowledge committed or acquired by this individual in the past, as it is told in the present by the rememberer/author (Bruner, 1978, Ross & Conway, 1986).

Autobiographical narratives act as an anchor, serving as evidence of the person from the past through the present person's memories, (Bluck, 2003; Buckner, 2000; Buckner & Fivush, 1998; Markus, 1977). Moreover, not only do narratives serve the purposes of the self, but they are also valued as meaningful tools by which information is passed from one generation, group, or person, to another (Nelson, 2003). Indeed, by some accounts, children and parents (primarily mothers), reflect on the past together frequently through daily conversations (Reese & Fivush, 1993).

These narratives and the concept of self are found to differ across cultures (Janssen, Chessa & Murre, 2005; Markus & Kitayma, 2003; Unemori, Omoregie, & Markus, 2004) as well as within each culture, an observation seen within various societal groups (Buckner & Fivush, 1998; Buckner & Fivush, 2000; Goddard, Dritschel, & Burton, 1998; Markus et al., 1982;Niedzwienska, 2003; Pillemer, Wink, DiDonato, & Sanborn, 2003; Reese & Fivush, 1993; Tannen, 1990). For instance, many eastern cultures value more interpersonal aspects of self, while Western cultures tend to focus more upon intrapersonal identities (Nelson, 2003). The value system and beliefs of Western cultures influence individuals in many ways. For example, Westernized individuals refer to their self, give more detail about the self, see the self as being individual from others, and reference the self as past, present and future more than individuals in Eastern cultures (Fivush & Buckner, 2003; Markus, & Kitayama, 2003; Unemori et al., 2004). However, not every person in an independent or interdependent culture will speak about the self in the same manner (Markus & Kitayama, 2003; Unemori et al., 2004).

One of the largest bodies of research of within-group differences in self-narratives focuses on sex differences (Markus & Kitayama, 2003). Indeed, gender role beliefs and stereotypes held by members within a given cultural group have been shown to influence personal views of self and the meaningful episodes of one's life (Buckner & Fivush, 1998; Fivush, Brotman, Buckner, & Goodman, 2000; Markus & Kitayama, 2003; Ross & Holmberg, 1990; Stapley & Haviland, 1989). Before describing individual differences in self-construct, however, first let us examine the interplay between identity and memory more generally.

Self/Self-Schemas

There is an enormous amount of research dedicated to the field of self and self-schemas (Bluck, Alea, Habermas and Rubin, 2005; Markus, 1977; Markus, Crane, Bernstein & Siladi,

1982). Bluck, et al. (2005) explored different functions of self which are created due to an individual's need to form new relationships as well as facilitate higher social bonding within existing relationships. One of these aspects that Bluck et al. (2005) defines is the importance of establishing a sense of self-continuity, or Identity Maintenance, which over time, is an important component central to autobiographical memory. Another function of self is the Social Function, which encompasses developing relationships and nurturing them.

Self-concepts and knowledge about the self (including memories of personal experiences, or autobiographical memories) are closely associated cognitive constructs in a Self-Memory-System, and each part functions in ways to inform the other (Conway, 2000; Conway & Plydell-Pearce, 2003). Thus, individuals who repeatedly have the same experiences over time internalize this knowledge as an identifiable characteristic of self (Markus, 1977) and construe from these experiences that they have a tendency to define themselves as such. For example, a person who has specific memories of themselves being a very aggressive person during arguments learns that she is a confrontational person. These repeated experiences build the basis of self-knowledge (self-schema"), which in turn organize past experiences so that the self can process and store relevant information to be used for "future judgments, decisions, inferences, or predictions..." (Markus, 1977, p. 64). With more activation over time, this set of schema renders beliefs, knowledge, and memory about the self to be more stable and elaborate in detail (Markus, 1977).

Hazel Markus (1977) was one of the first—though certainly not the last (e.g., see Buckner, 2000, or Susan Bluck et al.,2005)—to explain the self-schema as a means through which an individual processes information and can both retrieve information more rapidly as well as predict future behavior more easily. These self-schema also lead to resistance to conflicting self-information in the service of maintaining a consistent knowledge set about who

one believes the self to be. In fact, studies (e.g., Markus, 1977; Markus et al, 1982) reveal that self-schemas have a major influence over participants' selection of words, the kinds of self-descriptions endorsed or reported, how fast individuals process information, and how quickly they react to stimuli. For instance, decades ago, work by Markus (1977) revealed that when asked to decide whether words are self-relevant or not, participants' reaction times were faster for words that were judged to be relevant to self in comparison to words that were not related to their own definitions of self. Markus (1977; Markus et al, 1982) also revealed that individuals provided a significantly higher number of past experiences and significantly more details when the participant identified more with personality words presented to them as memory cues. However, if participants believed that specific personality word prompts did not pertain to their perceived self, memories reported in response to such prompts contained fewer memories and significantly fewer details.

Taken together, this set of data suggests that when an individual has internalized a self-schema, he or she will be able to provide more information about past experiences that relate to that specific characteristic. Similar patterns of advantage for self-relevant (vs. non-relevant) cues have been reported in more recent work since this original work by Markus (e.g., Goddard et al., 1998; Niedzwienska, 2003; Pillemer et al., 2003). This work reveals a number of issues regarding memory and identity. For example, the incorporation, retrieval, and development of self and self-schemas appear to be vital to autobiographical memory functions (and vice versa) (Buckner & Fivush, 2000; Markus, 1977; Markus et al., 1982; Nelson, 2003). Cognitive-developmental research has in fact revealed that parental help and story-telling assist in the building of children's' sense of self as well as their ability to internalize memories. Moreover, as described below, the different stories that are told to sons or daughters may even create

differences in children's self-schemas and their ability to remember specific memories (Buckner & Fivush, 1998; Buckner & Fivush, 2000; Nelson, 2003).

Gendered Selves as Schemas

Self-relevant processing. Different from one's biological sex, which does not change, (since it is a *biological* category), gender is a *social* category set by cultural beliefs and stereotypes from the surrounding society, which shapes one's choices, attitudes, and behaviors (Bussey & Bandura, 1984; Perry & Bussey, 1979). The present study is interested in how people perceive themselves on the spectrum of masculine and feminine traits simultaneously, their gender role, and how these traits create different expressions of memories. Thus, individuals who feel that they are feminine or masculine learn to incorporate social stereotypes as characteristics into their self-scheme (Bem, 1981; Bussey & Bandura, 1984; Perry & Bussey, 1979).

To demonstrate this point, Hazel Markus and colleagues (Markus, et al. 1982), using their standard self-schema methodology in a different series of studies, examined the selection of words that people chose to describe themselves. This research study revealed that when participants were given a list of stereotypical gender words, feminine participants described their self with significantly more feminine than masculine stereotyped words, (e.g. affectionate, understanding, sensitive to the needs of others) while the masculine participants described their self with the reverse pattern (e.g. assertive, independent, ambitious). This indicates that individuals may in fact use knowledge about gender (learned through societal stereotypes and influences) to construct their identity. Consequently, this gender filter then functions to not only shape the ways that we understand, encode, and store the experiences that we had in the past, but can also serve as a filter when we later share memories of these experiences with others in narrative contexts in the present (Cvasa, 2007). This could be one way in which the experiences

we have may become internalized and highly salient as either masculine-themed (e.g. taking on a dominant achievement-orientation), feminine-themed (e.g. being stereotypically social or emotional viewpoints), possess neither quality, or have both highly present within our own identity and the tales of our past experiences.

Gendered memories. Past research suggests that patterns of differences between men's and women's self or self-schema can attribute to the many differences expressed in their narratives. In fact, both women and men who identify themselves as "feminine" access, recognize, and rehearse autobiographical memory differently than women and men who perceive themselves to be more masculine (Markus et al., 1982).

The work of Goddard, Dritschel, and Burton (1998) and others (e.g., Pillemer et al, 2003) reveals that overall, women and men's memory narratives tend to cluster around gender stereotypic topics and thereby confirm the cultural expectations for gender role conformity. It is not surprising, then, that women report more specific memories than men in response to memory cues that are perceived by participants as being most salient to feminine characteristics of identity (i.e., traits such as being social, connected, or emotional). Men, also show this pattern; for instance, men's autobiographical memories were rated as more vivid than women's when the memories pertained to baseball and current events, arguably assumed by many to be more "masculine" domains of knowledge (Rubin et al., 1999).

More recent research has also revealed that women generally recount a greater number of memories than men, on average (Pillemer et al., 2003). This same research indicates that women may access and report more autobiographical memory stories and do so at a quicker rate, perhaps due to cultural socialization practices which afford girls more verbal interactions with adults throughout development, and lead to greater schematization of such qualities into their self-

knowledge. This greater experience in verbal interactions may also provide girls more opportunities to practice and hone their memory organizational and rehearsal skills (for discussion on developmental aspects, see Buckner & Fivush, 1998 or Buckner & Fivush, 2000). Moreover, this pattern may also emerge as an artifact of social stereotypes which "cue" women to be more talkative and verbal than their male counterparts (Tannen, 1990).

In support of this stereotyped pattern of conversational behavior, Goddard et al. (1998) found that men more quickly accessed factual information than social information, which, they posit, leads to higher rehearsal and organization of factual information rather than deepening their focus upon social communication skills (Goddard et al., 1998). This, they purport, could possibly explain differences in the ways that men and women internalize and even recall information from past experiences (see also Ross & Holmberg, 1990).

In addition to the specificity and facts contained within men's and women's autobiographical memories, sex differences have been reported along a vast array of other dimensions, including narrative theme, structure, and content. Women and men differ across the narrative topics they select to talk about (Davis, 1999; Goddard et al., 1998; Hubner & Fredrickson, 1999; McLean & Thorne, 2003; Newman, Groom, Handelman, & Pennebaker, 2008; Niedzwienska, 2003; Rubin, Schulkind, & Rahhal, 1999; Seidlitz & Diener, 1998). Some differences have also consistently been reported in the amount of references they make to self and to relationships contained in their reported memories (Buckner & Fivush, 1998; McLean & Thorne, 2003; Niedzwienska, 2003; Pillemer et al., 2003). The structure (e.g., length, details, coherence) (Niedzwienska, 2003; Pohl, Bender, & Lachmann, 2005) and emotionality within memory stories (e.g., Bauer, Stennes, & Haight, 2003; Bluck, 2003; Buckner & Fivush, 1998; Fivush, et al., 2000; Goddard et al., 1998; Niedzwienska, 2003; Pohl et al., 2005) have also been

documented in research. Clearly, then, there are gender-based styles of reminiscing to which individuals subscribe when reporting their past experiences. In the following section, I briefly describe some of these differences apparent in dimensions of autobiographical memory reporting.

Narrative Differences

Narrative theme. Most research has been highly concentrated on biological sex differences within narrative themes (Davis, 1999; Goddard et al., 1998; Hubner & Fredrickson, 1999; Niedzwienska, 2003; Seidlitz & Diener, 1998). Men more often describe narrative themes related to accidents and trips, status and victory, and memories from adolescence (Niedzwienska, 2003) as well as sports, technology, cars, partying, dating, and everyday issues (Sehulster, 2006). Quite differently, women, on average, report a higher number of memories pertaining to closeness with others than men (McLean & Thorne, 2003). Women's narratives more often than men's are also more likely to relate to events important in others' lives as well as their own, such as illness, death, births, career issues, caring, and helping of others (Niedzwienska, 2003), but they also cite personal issues, hobbies, music making and writing more frequently than men (Sehulster, 2006). Furthermore, in comparison to men, women's narratives have been rated as being more relevant to childhood themes and experiences (Davis, 1999) but less descriptive of conflicts and prize-winning (Niedzwienska, 2003). Moreover, in narratives of loss, women have been shown to use significantly more references to death preparation of others (Pillemer et al., 2003).

In comparison to men, women also report significantly more memories in which they take the perspective of an outside observer (such as being a camera observing the memory from another person's view) (Huebner & Fredrickson, 1999) and share more negative and positive life

events than do men (who report more neutral memories) (Seidlitz & Diener, 1998). Quite differently, men establish significantly more themes regarding rank ordering (pecking), while in contrast, women's memories are described as being more communal and open in rank (Goddard et al., 1998).

Another specific theme that has been analyzed much in past research is the social-versus-autonomous nature of self-narratives. The contents of women's narratives are often rated as being more communal than men's, and they also score significantly higher in terms of expressing both care of others and helping (Niedzwienska, 2003). Another fascinating difference is that women report more specific information regarding individuals they know such as children, grandchildren, parents, or siblings (Pillemer et al., 2003). In fact, through analysis of 14,000 text samples, one research team found that women used more varied social words to mention friends (i.e., "best friend," "co-worker," " pal"), family (i.e., mother, brother, cousin), and humans in general (i.e., boy, woman, group) than did men (Newman et al., 2008). Girlsand women incorporate more words about social experiences into their self-narratives than their male counterparts and also make proportionally more references to interpersonal relations by mentioning specific-others and non-specific others by names/pronouns and relationship titles as well as by quoting dialogue more often than do boys and men (Buckner & Fivush, 1998, Niedzwienska, 2003).

Narrative structure. Another area of self-narrative research concentrates on narrative structure employed by men and women in their memory reports. With regards to adjectives and adverbs, women have been shown to provide more words and descriptive detail than men (Niedzwienska, 2003; Seidlitz & Diener, 1998), and their narratives are rated as significantly more vivid and descriptive than men's (Pohl et al., 2005). Indeed, parents themselves have been

shown to speak more and with greater detail to their daughters than their sons; these and other types of gender-specific messages about the appropriateness of sharing personal information (and the depth of details about such self-disclosure) could very well be internalized as part of a developing child's foundational self-schema (i.e., as being a more- or less-descriptive person when it comes to talking with others about the past) (Buckner & Fivush, 2000; Fivush, et al., 2000).

Narrative content. Relating to gender-specific narrative content, one area that has abundantly been explored is the expression of emotionality through self-narratives. Research has revealed that women score significantly higher than men on empathy and emotionality ratings, while men score significantly higher than women on assertiveness scales (Pohl et al., 2005). By virtue of the fact that they use higher amounts of emotion talk in their narrative reports, women have been rated as being more sensitive to others and as having a higher sense of empathy and emotionality than men (Goddard et al., 1998). Moreover, while men/boys and women/girls both experience negative emotions, they express them in different ways when sharing memories of these emotional experiences (Davis, 1999; Stapley & Haviland, 1989).

Indeed, research has revealed that women use a higher amount of positively-valenced and negatively-valenced emotion-based words in their narratives than men (Bauer, Stennes, & Haight, 2003; Bloise & Johnson, 2007; Davis, 1999; Fivush, Brotman, Buckner, & Goodman, 2000; Niedzwienska, 2003; Pohl et al., 2005). Furthermore, women report significantly more information about the source or object of their emotions through their narratives than men (Niedzwienska, 2003). Whereas boys' reports of memories possess a higher amount of outer-directed negative emotions ("hitting" and "yelling"), girls reports of memories include more

inner-directed negative emotions ("depressed" and "isolate self from others") (Stapley & Haviland, 1989).

Similar to the way that gender patterns are evident in the kinds of social references individuals make within their memory narratives, research by Buckner and Fivush (1998) further demonstrates that female narratives include a wider variety of words to convey the same specific emotions than men describe. While men may talk about a particular episode in which they felt sad, they may only use the word "sad" or "sadness" to discuss their affect. Women, on the other hand, may use additional descriptors of the same emotion, such as "feeling down," "depressed," "disappointed," or other such synonyms for the very same feeling. The only exception where male narratives tend to exceed female narratives in terms of the number of expressions used for the same emotion is when participants discuss anger (Fivush & Buckner, 2003; Newman et al., 2008). Newman, et al. (2008) and Hubner and Fredrickson (1999) further report that women report more positive feeling words (i.e., happy and joy), anxiety-based words (i.e. nervous, afraid, and tense), and sadness (i.e., grief, cry, and sad) than men.

Oral versus Written Narratives

Close to one-hundred years of research exists that examines the differences between written and oral language (Bloomfield, 1933; Borchers, 1936; Devito, 1965; Devito, 1966; Devito, 1967a; Devito, 1967b; Drieman, 1962; Redeker, 1984; Woolbert, 1922). Much of this work predominantly concentrates on structural detail of content. Written language has been reported to possess shorter texts, longer words, more attributives, and higher usage of vocabulary than oral/spoken language (Drieman, 1962). Devito (1965; 1966; 1967a; 1967b) revealed that written language possesses more abstract and concrete nouns as well as more adjectives than oral communications, but fewer verbs, adverbs, and self-references than language that is spoken.

Despite this early research, a paucity of research still exists with respect to comparing how narrative reports of *memories* represent a specific form of linguistic communication shaped by the modes in which they are shared. Not a single study simply and directly examines the ways in which spoken or written autobiographical narratives may be different or similar within or between participant groups.

Research by Prince and Graves (1980) examined biological sex differences within eighth grader's ability to accurately use the syntax of a language, and found that boys deviated from "standard usage" more than girls. The usage of standard language was based on Hunt's (1965) and O'Donnell, Griffin and Norris' (1967) work where standards were created for specific grade levels. Moreover, Prince and Graves (1980) found that girls used more words in written versus oral language, and boys used more words in oral versus written language.

There is still research that needs to be done in this area. Despite the well-documented case for biological sex differences among eighth grade children in narrative research (a la Prince & Graves, 1980), significant work still has not investigated gender identity differences across different modes of autobiographical memory recall (written or oral recall). Even though the work by Prince and Graves (1980) has provided some insight into gender/sex differences and many other research studies (Devito, 1966; 1967a; 1967b) provided grammatical and syntactic differences between written and oral language, these findings do not address gender identity (just differences attributed to biological sex and narrative mode differences). Gender is more than just biological; it is also an individual's personality, which includes gender identity. Only looking at a person for his or her biological sex category is like looking at the surface and not knowing what lies underneath (what motivates his or her behaviors and choices), which the present study wants to begin to try to understand.

Statement of the Problem

The way an individual perceives him or herself in the present moment can lead to different autobiographical memories shared in narrative form. Gender is a major component of an individual's self. However, while there is little dispute in the literature that self-constructions influence memory narratives, surprisingly few attempts have been made to standardize either the methods by which this research is conducted, or the measures that have been utilized to capture such gender effects. Narrative differences have been drawn across studies about all kinds of events, from intensely emotional experiences and even traumatic events to the most mundane or set-up situations (such as remembering a lab-created exploration or story-telling event). Sometimes participants all recall the same event (usually an experience they had in a contrived lab-created event), but more often than not, they nominate and tell about their own experiences. This leads investigators to generalize their findings from a wide variety of event types. Moreover, while most developmental research relies on oral or spoken means of narrative solicitation, studies of college-aged individuals and adults capture autobiographical memory through written narratives as well. These studies are combined together to create a pool of literature on gendered reminiscence. Sometimes data patterns are contradictory (as in the case of narrative length, e.g. McLean & Thorne, 2003; Niedzwienska, 2003; Pillemer et al., 2003 vs. Brizendine, 2006; Mulac, Lundell, & Bradac; 1986; Mulac, Wiemann, Widenmann, & Gibson, 1988) however no attempts have been made to investigate whether the methodology itself is the largest contributor to variation in results, which the present study will investigate.

In addition, it is very interesting that the mode of recall of an individual's narrative, in oral or written format, has not been examined systematically within the sex differences literature or, in fact, anywhere. Past research has either solely utilized written or orally collected narratives

to analyze these data. However, because there is more than one way an individual communicates and expresses him or herself, the present study collected and analyzed, for comparison, both written and oral narratives. Although some review of developmental literature would be relevant in the context of this subject matter, the present study focused solely on emerging adults. Thus, the primary purpose of the present study was to contribute to this area by analyzing and comparing differences between written and oral/spoken narratives, in an age group primarily focused on the self and identity to begin with. While we did not examine written and spoken narratives elicited from the same individuals, every participant was asked to report a memory of the very same event, which enabled us to compare narrative measures across groups of individuals without needing to account for variations in intensity and duration of the experiences participants selected to recall.

In addition to fill an existing gap in narrative research, the present study collected and analyzed only gender identity (feminine, masculine, androgynous, and undifferentiated) and not biological-sex. With respect to personality, this study utilized a measure of gender identity that enabled us to uniquely examine the impact of these beliefs on self-narratives. This study seeks to bring a new light into narrative research by asking, "Does our society and culture teach us how we express memories to others?" This research therefore begins to elucidate the influence that gender identity may exert upon the selection of word structure, theme, and usage of emotion words in narratives shared in two different modes--spoken and written narratives.

This study employed a 2 x 4 mixed methods research design, where participants' mode of reporting memories (written versus oral narrative) and participants' gender identity (femininity, masculinity, androgynous, and undifferentiated) were examined across the three specific narrative measures indicated above (narrative structure, theme, and emotional content).

Research Question

The present study is based on an experimental approach. The following anticipated results, though predicted gender identity outcomes between memory recall modes, were based on previous sex differences in narrative research. This approach was implemented due to an absence of supportive narrative research that pertained to gender identity differences surrounding narrative theme, narrative structure, and narrative content.

What follows below are specific descriptions of the results anticipated for each narrative measure obtained.

Narrative theme: socially referenced narratives and autonomous versus social themes. Past research (Buckner & Fivush, 1998, Newman et al., 2008; Niedzwienska, 2003; Pillemer et al., 2003) on sex differences revealed that women expressed higher socially themed narratives than men. As a result, the current research anticipated a two-way interaction for narrative theme, in which feminine-typed individuals would share highly social themed narratives and contain a large amount of social references, regardless of whether memories were obtained during oral or written recall modes; masculine-typed individuals, however, would express more social themes and social references during the written versus oral mode. Due to a lack of research pertaining to the last two gender identities, androgynous and undifferentiated identified participants would not express a significant difference between narrative modes (written versus oral) through narrative theme. In addition, these same gender identified participants would not significantly differ from one another as well as both feminine and masculine identified participants.

Narrative structure: low detailed versus high detailed narrative. Because previous narrative research (Niedzwienska, 2003; Pohl et al., 2005; Seidlitz & Diener, 1998) revealed that

women expressed higher levels of detail in their narratives than men, the present research study anticipated a two-way interaction where feminine-typed individuals (following women) would express more detail in their narrative then masculine-typed individuals (following men). Previous research (Cvasa, 2007) has also revealed that participants' narratives change when in the presence of others individuals (researcher or other students). Being more specific, we anticipated masculine-typed participants would express significantly more narrative detail in the written (absence of others) versus oral mode (presence of others), as opposed to feminine-typed participants, who would not express a significantly different amount of detail between these memory recall modes. Again, due to the lack of research, the present study anticipates androgynous and undifferentiated identified participants would not differ from each other in terms of narrative detail regardless of the mode of narrative recall they used (written versus oral). In addition, these participants also would not significantly differ from feminine and masculine identified participants.

Narrative content: non-emotional versus emotional narrative. Lastly, the present research anticipated a two-way interaction whereby individuals who identify as masculine would not express as much emotionality through their narratives as would feminine-typed participants. This specific prediction was based upon Stapley and Haviland's (1989) research, which revealed boys to be more emotional in autonomous settings versus social settings. In the current study, the oral narrative mode was considered to be synonymous to Stapley and Haviland's social remembering context and the written mode similar to the autonomous context. Again, the present study anticipated that androgynous and undifferentiated identified participants would not differ significantly in content between narrative modes (written versus oral). In addition, these

participant types would not significantly differ from each other or from feminine and masculine identified participants.

Method

Participants

The present research study was conducted with 261 undergraduate students. Five participants were dropped due to incomplete data sets and 10 were dropped due to being outliers, which was determined by any participant score higher than three standard deviations above or below the mean for any of the dependent variables. Final analysis was run on 246 participants (184 women, 62 men, *M*age = 19.02, age range: 18-32, ethnicity majority: Caucasian = 56.1 %) (See Table 1 for demographics). Each participant was enrolled in an introductory-level psychology course at a private university located in the northeastern region of North America. Students were recruited via an online psychology research pool ("the SONA system"). The experimenters followed the Psychology Department's protocol, which included posting a recruitment flyer describing this study on the psychology research bulletin board (see Appendix J). Each participant received class credit towards his or her psychology class and was granted either research participation credit or extra credit, depending upon the instructor's preferences.

The number of participants was determined by G-Power (Buchner, Erdfelder, & Faul, 1997). Since there is currently an absence of research within this area (no previous effect sizes were obtained), the actual number of participants was obtained through a standard t-test.

Table 1: Participant Demographics

Measure	Feminine		Masculine		Androgynous		Undifferentiated		Overall	
N	58		49		63		76		246	
	M	***SD***	***M***	***SD***	***M***	***SD***	***M***	***SD***	***M***	***SD***
Age	19.065	1.293	18.984	1.601	19.318	2.023	18.79	1.299	19.024	1.451
Year in School [1]	1.855	0.943	1.738	0.96	1.873	0.992	1.632	0.846	1.797	0.952
SES [2]	2.806	0.753	2.844	0.75	2.873	0.793	2.921	0.796	2.825	0.749

Note[1]: Year in school was based on a scale of 1-5 1= Freshmen year, 2 = Sophomore year, 3= Junior Year, 4= Senior year, and 5= more than four years in higher education/college.
Note[2]: 1= Upper class, 2= Upper-middle class, 3= Middle class, 4= Middle-lower class, and 5= Lower class Socio-Economic Status.

Materials

Demographic sheet. Each participant was given a demographic sheet to obtain general information regarding each participant. The demographic sheet collected each participant's year in school (freshman, sophomore, junior, senior, or other), age, biological sex (male or female), socio-economic status, which was asked as the SES that best described own family as growing up, as well as ethnicity (African-American (black), European-American (white), Spanish-American, or other). (see Appendix H)

Extended Personal Attributes Questionnaire (EPAQ). Along with the demographic sheet, each participant was asked to complete a paper version of the 40-item Extended Personal Attributes Questionnaire (EPAQ) (Spence, Helmreich & Holahan, 1979), which measured each participant's masculine and feminine traits regarding their personal self. The EPAQ is comprised of adjectives, which participants endorse as being relevant to self. The scale is based on a one-to-five scale, where the numbers one and five represent the polar adjective (e.g. 1 = very dependent on others and 5 = very independent), with the numbers two, three, and four varying in between.

These adjectives relate to one of four scales of gender identity: positive masculinity (e.g., independent, feels superior, active), negative masculinity (egotistical, greedy, arrogant), positive femininity (helpful, devoted to others, aware of others' feelings), and negative femininity (spineless, whiny, subordinates self to others). The present study examined two (positive masculine and positive feminine traits) of the four scales. The positive scales were used to identify four gender types: masculine (high in positive masculine traits but low in positive feminine traits), feminine (high in positive feminine traits but low in positive masculine traits), androgynous (high in both positive masculine and positive feminine traits), and undifferentiated (low in both positive masculine and positive feminine traits). The EPAQ has high reliability, with Cronbach's α for each subscale ranging from .76 to .85. (see Appendix G)

Narrative. Each participant was randomly assigned to either a verbal or written memory-telling condition, but all participants were verbally cued to remember the day he or she was accepted into the university. The participants in the written condition used a computer provided in the interview room (laptop or desktop) to type their self-narrative, while the other half verbally recited the self-narrative/memory to the present researcher, who used an audio recorder to collect the participants' oral data. (see Appendices B, D, E, and F for participant and experimenter protocol)

Procedure

Each 20 minute research session contained one participant and collected a single narrative. Each Participant was first randomly assigned to one of two groups (written narrative mode or oral narrative mode). Each participant was given a packet that contained two copies of the informed consent sheets (see Appendices A and C), the demographic sheet (see Appendix H), a description of the present research study (what was to be expected during the research study)

(see Appendices B and D), as well as a paper copy of the Extended Personal Attributes Questionnaire (see Appendix G). Then the participants read along in their packet while the researcher read the study protocol aloud (see Appendices E and F). After the protocol was read through, participants were either prepared to type their memory/narratives into the provided computer or prepared to orally recite their narratives to the present researcher in an interview-like setting. Before the narrative collection, the researcher cued the participant with a memory cue:

Written: Please write about the day you found out that YOU were accepted to Seton Hall University (see Appendices D and F).

Oral: Please speak about the day you found out that YOU were accepted to Seton Hall University (see Appendices B and E).

Then the experimenter asked each participant, "Are you ready…?" "Okay, begin typing/speaking your memory now." The memory was collected for no more than five-minutes, which was timed via a stop watch (see Appendices B, D, E, and F for participant and experimenter protocol). After each participant completed his or her narrative/memory, he or she was asked to continue with the packet and completed the EPAQ (see Appendix G). There was no time limit on completion of either the demographic sheet or the EPAQ.

During the collection of the narratives, the researcher *only* gave neutral responses (e.g., "Is that all?" or "What else?") to each participant. Only the oral memories were recorded via an audio tape recorder for later verbatim transcription. Lastly, each participant was given a debriefing sheet to read while the experimenter read the information aloud (Appendix I). Once the debriefing sheet had been read and all the participant's questions answered, the research

session ended. The participant was able to leave the lab with one signed informed consent sheet and a copy of the debriefing sheet.

Coding

Written (computer) versus oral (audio recorded) narratives: cued memory. Both handwritten and oral narratives were coded for structure and content using a scheme adapted from Buckner and Fivush (1998) (see Appendix K). Every narrative was examined and coded using an instance-based scheme. Off-task talk (words or phrases that did not contribute to the overall memory recall account e.g. "I'm almost done.", "I am not a good writer.", or "I don't remember anything else"), were not included in coding either structure or content of each narrative. Only on-task talk and writing were examined for specific words that related to each of the following categories:

Narrative theme. Social theme was measured by counting separately the number of references made to others and "togetherness". For example, in the sentence, "I went to a party to celebrate my **roommate's** birthday" only one social reference ("roomate's") was counted. In the sentence, "**We** all went out to celebrate our graduation," one reference to togetherness (the pronoun "We") was counted.

In a second thematic coding pass, narratives were also categorized into one of two mutually exclusive categories: as being only about the participant and his or her own thoughts, feelings, and behaviors (an "autonomous" narrative), or as a narrative that incorporates other people's presence, thoughts, feelings, and behaviors into the episode (a "social" narrative).

Narrative structure. Structure was also measured as a count of the total number of adjectives + adverbs, the use of which produced a more descriptive narrative ("I ran *so fast* to the mailbox." or "I was *so anxious.*" or "The day was going *really slowly*").

Narrative content. Content was only measured in terms of emotionality. Emotional state words (happy, sad, scared, etc.) were counted along with emotional behavior words (crying, laughing, etc.). Emotions relating to each positive ("I felt good") and negative ("I was very sad") affect were coded and counted for separate analysis.

Narratives were individually coded, one at a time. Word counts (number of emotional words, references to other people, use of personal pronouns, etc.) were determined by a primary coder. A second coder performed a reliability check on each of the pertinent categories in order to make sure that the definitional operations for all answers were met. This study obtained very high inter-rater reliability for all three coding schemas ranging between .85 and 1.0. If there were any disagreements in coding, they were resolved during each coding session through discussion. In addition, any word could be coded into more than one category and was not thought of as exclusive to any one specific category. For example some words were used for both an emotional and detail word count.

After absolute word counts for each of the relevant categories were determined, they were converted to proportions, which reflected the amount for each category and how they related to the length of each of the narratives. For example, for the category of details, the total number of details in each narrative was divided by the total word count for that respective recall. The proportionate numbers were then multiplied by 100. Every dependent variable was converted to proportion except overall theme (autonomous versus social narrative themes), which remained a frequency count, because it was coded on one of two nominal categories (0=autonomous and 1=social).

Results

A two-way ANOVA was performed for each of the dependent variables (narrative theme, narrative structure, and narrative content) between gender identity groups (4: masculine, feminine, androgynous, and undifferentiated) and memory recall modes (2: oral and written).

Narrative Theme

Social-referenced narrative. The present study revealed no significant findings pertaining to narrative social referencing or theme between memory recall mode or gender identity.

No main effects were found for gender identity [$F(3,238) = 1.155$, $p = .328$, $\eta_P^2 = .014$] or memory recall mode [$F(1,238) = .294$, $p = .588$, $\eta_P^2 = .001$]. Participants reported similar referencing to others across all factors. No differences were found between identity groups (feminine, masculine, undifferentiated, and androgynous) or memory recall modes (oral and written), which did not differ significantly from one another. The interaction was also not significant [$F(3,238) = .459$, $p = .711$, $\eta_P^2 = .006$].

Autonomous versus social themed narratives. No main effect of gender identity was found for narrative social theme [$F(3,238) = .415$, $p = .742$, $\eta_P^2 = .005$], nor was the effect of memory recall mode significant [$F(1,238) = 3.031$, $p = .083$, $\eta_P^2 = .013$]. Participants reported similar narrative themes between gender identity groups (feminine, masculine, undifferentiated, and androgynous) as well as memory recall mode (oral and written), which did not differ significantly from one another. The interaction between the factors (written versus oral narratives and gender identity) was not significant [$F(3,238) = .423$, $p = .737$, $\eta_P^2 = .005$].

Narrative Structure

Low detailed versus high detailed narrative. No main effects were found for memory recall mode [$F(1,238) = .304$, $p = .582$, $\eta_P^2 = .001$] or gender identity [$F(3,348) = 1.49$, $p = .218$, $\eta_P^2 = .018$]. Participants expressed the same amount of narrative detail across gender identity (feminine, masculine, undifferentiated, and androgynous) as well as memory recall mode (oral and written), which did not differ significantly from one another. The interaction between these factors was not significant [$F(3,238) = 1.156$, $p = .327$, $\eta_P^2 = .014$].

Narrative content:

Non-emotional versus emotional narrative. The hypothesis regarding emotional expression was partially supported by analysis. This hypothesis was broken down into three components: overall emotionality, positive emotionality and negative emotionality.

Overall emotionality. The two-way analysis of variance conducted between gender identity (feminine, masculine, androgynous, and undifferentiated) and memory recall mode (written vs. oral) revealed no significant differences according to main effect for gender identity [$F(3,238) = .94$, $p = .422$, $\eta_P^2 = .012$]. The interaction between gender identity and memory recall mode was also not significant [$F(3,238) = .303$, $p = .823$, $\eta_P^2 = .004$], but analysis did reveal a main effect for memory recall mode (written versus oral narratives) [$F(1,238) = 4.839$, $p < .05$, $\eta_P^2 = .02$]. Participants in the oral narrative mode expressed more overall emotionality (both positive and negative emotionality together) than their counterparts in the written condition (see Figure 1 for presentation of the Means).

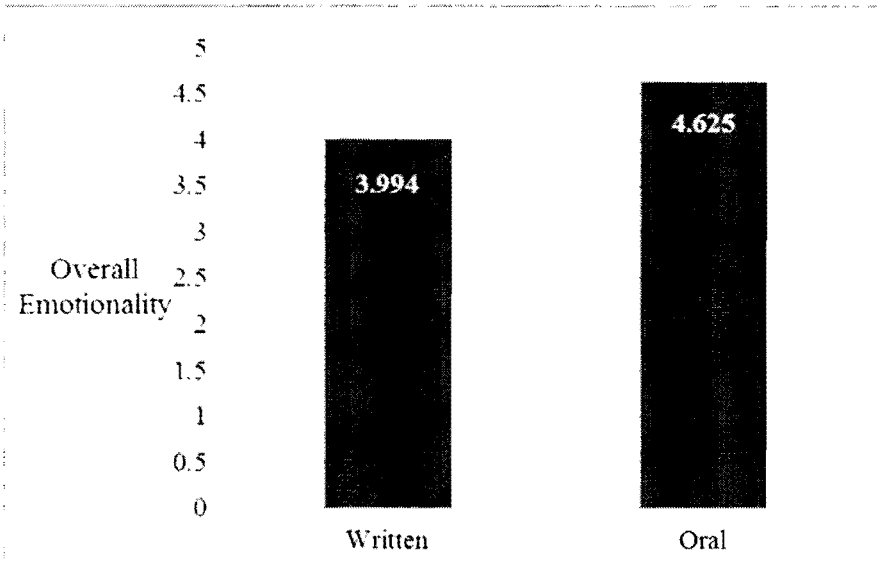

Figure 1. Mean Proportion of Narratives that contained Emotion Words by Memory Recall Mode

Positive emotionality. A two-way analysis of variance was conducted on proportions of positive emotionality words, with gender identity (Feminine, Masculine, Androgynous, and Undifferentiated) and memory recall mode (Written vs. Oral) as between-subjects factors. A main effect for gender identity was not significant, [$F(3,238) = .912, p = .436, \eta_P^2 = .011$]. In addition, an interaction between the factors was not significant, [$F(3,238) = .343, p = .794, \eta_P^2 = .004$]. Results revealed a main effect for memory recall mode (written versus oral) [$F(1,238) = 11.506, p < .001, \eta_P^2 = .046$], whereby participants in the oral recall mode expressed higher positive emotions than participants in the written recall mode (see Figure 2 for presentation of the Means).

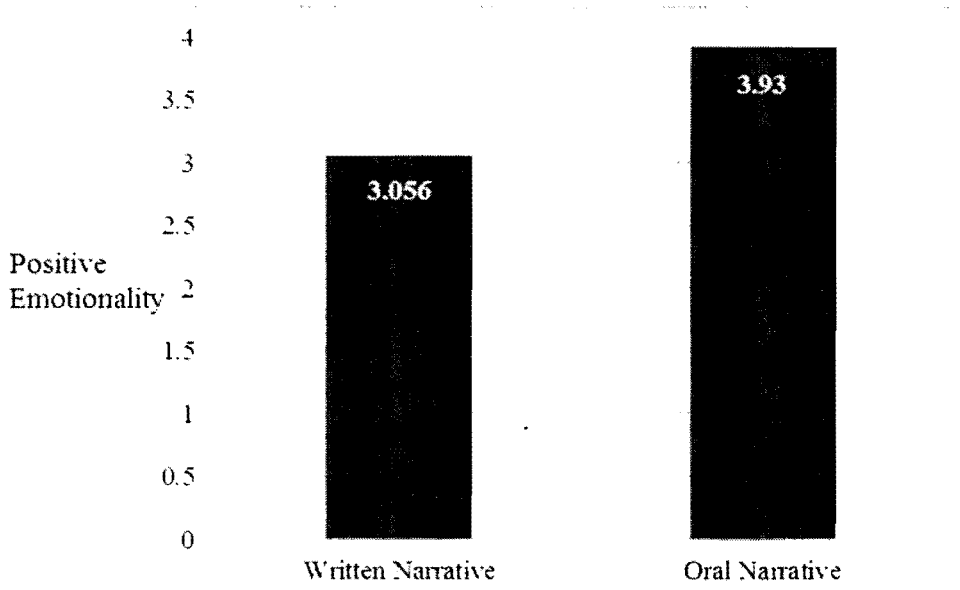

Figure 2: Mean Proportion of Narratives that contained Positive Emotion Words by Narrative Recall Mode

Negative emotionality. A two-way analysis of variance was conducted regarding negative emotionality between gender identity (Feminine, Masculine, Androgynous, and Undifferentiated) and memory recall mode (Written vs. Oral). Analysis revealed a main effect for memory recall mode (written versus oral narratives) [$F(1,238) = 4.328$, $p < .05$, $\eta_P^2 = .02$] as well as an interaction between the factors, which approached significance, [$F(3,238) = 2.535$, $p = .057$, $\eta_P^2 = .031$]. A one-way ANOVA was conducted, as a follow-up analysis, individually for written and oral narratives, between gender identity groups. Analysis revealed no significant difference for gender identity for written narratives [$F(3,120) = 2.184$, $p = .093$, $\eta_P^2 = .052$] or oral narratives [$F(3,118) = .836$, $p = .477$, $\eta_P^2 = .021$] but t-tests conducted for each gender identity (feminine, masculine, androgynous, and undifferentiated) between written and oral narratives revealed that feminine-identified [$t(56) = 2.065$, $p < .05$, $d = .55$] and undifferentiated-identified [$t(74) = 1.995$, $p < .05$, $d = .46$] participants expressed higher amounts of negative

emotionality in the written versus oral narratives. However, masculine-identified [$t(47) = 1.396$, $p = .171$] and androgynous-identified [$t(61) = -1.266$, $p = .212$] participants did not express a significant difference in levels of negative emotionality between written and oral narratives. (see Table 2 and Figure 3 for presentation of the Means).

Table 2. Mean Proportions (and Standard Deviations) of Negative Emotion Words, by Gender Identity and Memory Recall Mode

	Feminine	**Undifferentiated**	**Masculine**	**Androgynous**
Written	1.21* (1.06)	1.06* (.913)	.934 (.986)	.633 (.701)
Oral	.66* (.927)	.64* (.179)	.517 (1.04)	.934 (1.116)

Note: *$p < .05$

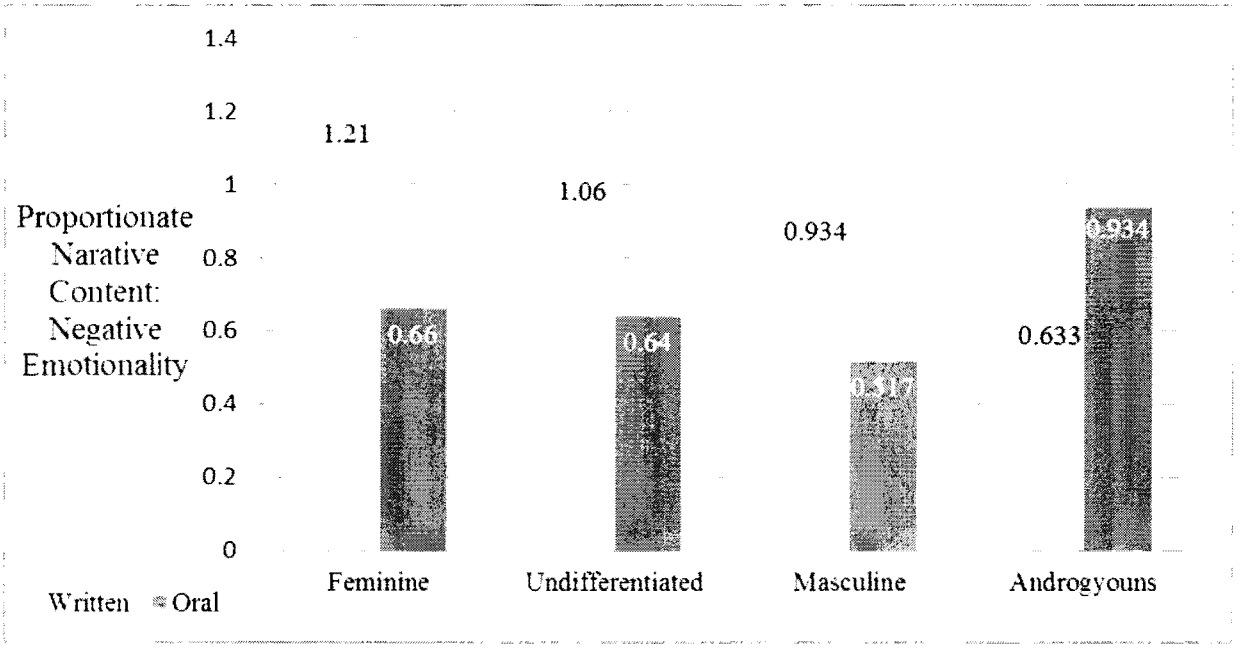

Figure 3: Effect of Gender Identity and Memory Recall Mode on Mean Proportions of Negative Emotion Words

Discussion

The present study sought to explore whether narrative differences exist between gender identity and written or oral collected narratives, in terms of narrative theme, structure (detail), and content (emotionality).

Narrative Theme

Social-referenced narratives and autonomous versus social themed narratives. Gender identity and memory recall mode were not found to effect participants' expression of social aspects of experience as measured by overall theme or use of specific words to mention other people. These findings reveal that gender identity and mode of recall may not have as pervasive an effect on how a person expresses an autobiographical memory as has been purported in the past. However, the present study used a socially-situated memory cue, "Tell me about the day you were accepted into Seton Hall University," which may have elicited a similar amount of social references from all participants, in comparison to another more neutral memory cue. In other words, the events surrounding one's college acceptance is already somewhat of a social experience, which all participants tended to focus on in their reports. Certainly, when a person finds out about such a drastic change for the immediate future, he or she often shares these plans with friends, family, or other members of his or her social support systems, and therefore these individuals become part of the narrative expression of such memories. Further research is required within this area to explore this possibility with more or less social memory prompts.

Narrative Structure

Low detailed versus high detailed narrative. There were no significant differences found among feminine, masculine, androgynous, and undifferentiated-participants across the two modes of recall (written versus oral narratives). These findings could be the result of collecting narratives about a highly emotional memory. Research has revealed that when a person experiences a highly positive or negative emotional experience, the person will experience higher process encoding of this specific memory (Biss & Hasher, 2011; Kensinger, Piguet, Krendl & Corkin, 2005; Steidl, Razik & Anderson, 2011). Thus, highly emotional memories will possess higher details as an aspect of this higher level of encoding, and this could explain why all participants in the present study recalled the same amount of detail for the day they were accepted to Seton Hall University. The day a person finds out his or her life will change dramatically (example: going off to college) will elicit a higher amount of encoding than if the memory cue was of a more neutral event. Further research is required within this area of narrative research to gain a better understanding of how gender and narrative mode may interact with an emotional valence of events recalled in such a way as to lead to similar or different memory narratives.

Narrative content

Non-emotional versus emotional narrative.

Overall emotionality. Analysis did reveal a main effect for recall mode (written versus oral narratives), whereby participants in the oral narrative mode expressed more overall emotionality than the written mode, but gender identity types did not vary from one another significantly. The memory cue used in this study may have elicited more positive emotion which may have resulted in this main effect, across all emotion words. Research (e.g., Esterling, 1994)

has revealed that individuals express positive emotions more through verbal than written communication. The next section will explain these results in more detail.

Positive emotionality. The present study divided overall emotionality into two separate factors: positively-valenced and negatively-valenced words. No effect of gender identity or significant interaction between gender and recall mode was found. However, participants in the oral memory recall mode expressed significantly more positive emotion words than participants in the written recall mode. That is, participants who spoke their narrative/memory to the researcher spent a larger percentage of their story time referring to positive emotions (e.g., "I was so happy," "I laughed," and "I was very excited") relative to individuals who wrote their memory into a computer, on average.

Past research has revealed some insight into these findings. Research by Esterling (1994) revealed that participants who expressed a memory verbally experienced cognitive reevaluation, improved self-esteem and increased adaptive coping strategies. This same study revealed that verbal expression aroused less negative and created more positive affect within the participants when compared to written expressions of memories and the control group, a trivial writing condition. Esterling posits that these findings could result from a cultural preference for and encouragement of positive emotions in social interactions, which translate into non-verbal behaviors as well as speech patterns used to engage with others for the purpose of social acceptance. Certainly, we are praised for expressing happy events and feelings and for keeping negative thoughts to ourselves.

Negative emotionality. Follow up on an interaction between factors revealed that feminine and undifferentiated-identified participants expressed proportionally more negative emotionality in their written memories than in their oral narratives. However, masculine and

androgynous-identified participants did not differ between recall modes. These current findings perhaps can be explained by individuals' preferences to express negative emotions privately through writing rather than via verbal communication. A number of research studies in the professional practice realms (e.g. Frattaroli, Thomas, & Lyubomirsky, 2011; Largo-Marsh & Spates, 2002; Lauer & Goldfield, 1970) exist in support of this idea; certainly therapists and clinicians encourage clients to write about their negative feelings and events as part of a wide range of treatment programs. Moreover, with respect to such cognitive processing, data reported by Esterling (1994) and others (e.g., Pennebaker & Beall, 1986) demonstrate that negative emotions and feelings can, indeed, be attenuated through written expression. In fact, Esterling and colleagues' data (1994) revealed that after participants expressed negative feelings through written communication, they felt freer as well as physically healthier.

Coupled with the preference of expression of negative emotions through writing is the effect of cultural socialization, which could serve to explain in part why only certain gender identity groups wrote differently about the negative aspects of such a positive event in their lives. Recent research (Wong, Pituch & Rochlen, 2006) suggests that femininity may be linked to higher emotional expression due to pressure experienced by feminine types (usually women) to seek and maintain social approval. Moreover, based upon these expectations, from early on in life, girls and women (and those perceived as being feminine types in general) receive greater practice (and thus knowledge) of how to express one's emotions. Males or masculine-typed individuals may be less likely to express these forms of emotions due to societal pressures and expectations to not be as explicit about negative feelings and to not display behaviors associated with them. In fact, Wong and others (2006) pointed out that men in their study showed restrictive

emotionality, difficulty identifying feelings, a high need for social desirability, and difficulty communicating emotions to others.

Hubner and Fredrickson's (1999) research has also revealed that women used significantly higher amounts of negative words such as shame, and anxiety in their narratives than men. On the other hand, past research (Fivush & Buckner, 2003; Newman et al., 2008) has also revealed that men/boys use more terms and expressions than do women/girls in terms of when they expressed and discussed anger. The present study's memory cue, "Please speak/write about the day you found out that you were accepted to Seton Hall University" would not have elicited the type of emotions that men/masculine-identified individuals would be likely to express. Furthermore, this specific memory cue may have only elicited the type of emotion words that women/feminine (not men/masculine) participants are more apt to utilize, such as anxiety and sadness (pertaining to life change). Moreover, the fact that the present data is *proportional* in nature, not just based upon frequency counts, indicates that the feminine-identified and undifferentiated-identified participants focused a larger percentage of their memory reports on these emotions than the other groups of participants.

Limitations and Conclusion

Overall, the current findings did not support the anticipated results. This could be due to a number of limitations the current study experienced. Along with a number of limitations that will be vocalized in this section, there will also be suggestions for future research.

One limitation of the present study is that participants' biological sex was not examined as a factor in the current series of analyses. This might have enabled us to examine if gender identity is equivalent to sex. All of the previous research examined biological sex, which the present study did not which would have been beneficial. A second sample is currently being collected, which will allow analysis of biological sex to be performed in the near future.

The measure used to determine the variable of gender identity may also have inadvertently created another set of possible limitations. The present study utilized a gender identity scale that is over 25 years old. Gender identity definitions have changed over the past 25 years, and it is possible that a more "modern" set of identity markers could have created a different outcome. In support of this suggestion, recent research (Guastello & Guastello, 2011) revealed that the BEM Sex Role Inventory gender roles have changed since its creation 35 years ago. Denise Guastello and Stephen Guastello (2011) revisited this specific inventory and recently revealed 16 of the 20 female traits were still classified as female, whereas only nine of the 20 male traits were still classified as male. The 2010 sample reclassified three of the four female traits (loyal, shy, and yielding) as gender neutral and the last (child-like) as a stereotypical male trait. With regards to the 11 reclassified male traits (acts as a leader, ambitious, analytical, defends beliefs, displays leadership ability, independent, individualistic, strong personality, takes a stand), all were reclassified as being gender neutral. In addition, five of the 20 gender neutral traits (conscientious, moody, secretive, sincere, and theatrical) were reclassified as stereotypical

female traits. The present EPAQ definitions may also be socially obsolete even though it does possess good reliability. The present study could rectify this limitation by searching out a more recently created gender identity scale.

The present study also suggests that the narrative collection process could have been more similar across written and oral memory recall modes. The present study's researchers had two separate protocols during narrative collection. During the verbal narrative collection, the researcher sat with the participant while he or she spoke his or her narrative into the recorder; however, during the written narrative collection, the researcher sat behind the participant while he or she typed his or her memory. Recent examinations of this very effect of "perceived audience" (Cvasa, 2007) revealed that participants expressed different types of memories during the presence or absence of the researcher. This limitation may have allowed more information to be given during the oral narrative that may have or may not have been given during the written or vise versa. To eliminate this possible confounding factor, the present study suggests that the researcher either leave or stay in the room next to the participant during both verbal and written narrative collections.

Lastly, a very interesting future research suggestion would be to alternate the sex of the researcher, who collects the narrative. The present research study used only female researchers whereas previous research (Cvasa, 2007) only used male researchers. Could the gender of the researcher elicit different types of narratives from the participants? Previous research (Clark, 1994) revealed that male participants hold a gender preference for the researcher. Participants expressed that they would feel more comfortable if the researcher who collected their narrative, had been a woman versus a man. Previous research (Cvasa, 2007) also revealed that participants who were in a group recall (more than one participant in each data collection session) with a

male researcher present expressed more general emotion words versus when the participants were in any of the other recall sessions (group/researcher absent, individual/researcher present, individual/researcher absent). In addition, these same findings revealed that participants expressed more general detail and emotion when the male researcher was present versus absent. Further research needs to be conducted in this area. The present study suggests alternating the gender of the researcher to see if, in fact, the participants elicit different memories when in the presence of the same or an opposite gendered researcher.

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Appendices

Appendix A: Oral narrative: Informed Consent Sheet

Appendix B: Oral narrative: Participant's Protocol Packet

Appendix C: Written narrative: Informed Consent Sheet

Appendix D: Written narrative: Participant's Protocol Packet

Appendix E: Oral Narrative: Protocol Packet: Experimenter's Version

Appendix F: Written Narrative: Protocol Packet: Experimenter's Version

Appendix G: Extended Personal Attributes Questionnaire (EPAQ)

Appendix H: Demographic Sheet

Appendix I: Debriefing Sheet

Appendix J: Recruitment Flyer

Appendix K: Narrative Coding

Appendix A

Informed Consent Form (Oral Narrative)

Title of Study: Remembering You!
Before agreeing to participate in this research study, it is important that participants read the following explanation of the study. This informed consent describes the purpose, procedures, benefits, risks, discomforts, and precautions of the study.

Researcher's Affiliation
Annette C. Resenhoeft is a graduate student in the Experimental Psychology program at Seton Hall University and is conducting this study for completion of her master's thesis. This study is under the advisement of Dr. Janine Buckner, Associate Professor and Director of Graduate Studies in the Department of Psychology at Seton Hall University.

Purpose and Duration
The purpose of this study is to investigate differences in how people recall a specific memory. The study will last approximately 20 minutes.

Description of Procedure
In this study, participants will first be asked complete a demographic sheet, which will ask specific questions regarding themselves (e.g. age, year in college, ethnicity, and biological sex).
The participants will then be asked to recall a specific memory, which will be recorded through an audio recording device (GPX AM/FM Stereo Radio Cassette Recorder). The researcher will indicate to the participant when the recording device has been turned on. First the participant will state his or her own unique code, which will be used as identification to keep confidentiality. Then, the participant will begin to verbally give his or her specific recalled memory after the investigator cues him or her. The memory will be recorded for no more than five minutes. The time will be recorded via a stop watch. The researcher will indicated to the participant when the recording segment (5-minutes) has ended.

This research study is collecting memories and once the allocated five minute memory recording segment is over, the participant will not be able to review or change any of his or her recalled memory.

After the memory has been recorded, each participant will complete one questionnaire, where he or she will provide information regarding his or her personality.

Instruments
Participants will be asked to take Spence, Helmreich, and Holahan's Extended Personal Attributes Questionnaire (EPAQ, 1979), which will ask questions regarding his or her personality traits.

Voluntary Nature
Participation in this study is voluntary. If a participant feels discomfort and wishes to discontinue, she may do so at any time by notifying the experimenter. At that time, their participation in the study will end and their information will be discarded. A decision to end the study will not result in any penalty to the participant.

Anonymity
Data will remain anonymous and will only be identified by a unique code that will be selected by the participant. This code will not be associated with the participant's name, so no one will be able to link the data to the participant.

Confidentiality
All data will remain confidential, and will be combined with others' data for analysis, such that each participant's individual data cannot be identified. Audio tapes will be used to record the narratives. These tapes will be stored in a locked, secure physical site in the Human Research Participants Lab in Jubilee Hall until they are transcribed. After the data has been transcribed, the data will be stored on a USB memory key in the same locked, secure physical site in the Human Research Participants Lab in Jubilee Hall. Only the principal
investigator, Annette C. Resenhoeft and her research lab assistants, Warren Scott, Jennifer Noonan, and Sejal Brahmbhatt, will have access to this data. To ensure confidentiality, this informed consent sheet will be held separate from all collected data.

Extent of Confidentiality
No individual data will be reported, and results of this study will also be presented in group form. Access to the data will be restricted to the principal investigator, Annette C. Resenhoeft or her research lab assistants, Warren Scott, Jennifer Noonan, and Sejal Brahmbhatt.

Discomfort and Risks
There are no foreseeable risks or discomforts associated with taking these personality questionnaires or sharing of a personal experience. Participants should not experience any stress.

Benefits
The study will not benefit participants directly; however, data collected from the study will be used to gain a better understanding of how individuals differ within narratives and personality criteria.

Compensation
There is no monetary compensation associated with this study. Participants in this study who are currently enrolled in Introduction to Psychology will receive half of a research credit applied to this class.

Referral
This study is not expected to cause undue stress. If a participant does feel extreme discomfort, it may be helpful to speak to a friend, family member, or professional at a counseling center. The University Counseling Center can be reached at (973) 761-9500. Participants are responsible for all costs of treatment.

Alternates
Participation in this study is voluntary. If a professor offers course credit for participation in this experiment, he or she may also offer a non-experiment alternative for course credit.

Contact Information

Principal Investigator:	Faculty Adviser:	Institutional Review Board:
Annette C. Resenhoeft	Janine Buckner, Ph.D.	Mary F. Ruzicka, Ph.D.
Graduate Student	Associate Professor, Director of Graduate Studies	Presidents Hall Rm 325
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	Janine.Buckner@shu.edu	irb@shu.edu
	400 South Orange Ave	Telephone: (973) 313-6314
	South Orange, NJ 07079	
	Telephone: (973) 275-2708	

Audio and Video-Tapes
This research study will use an audio-recording devise. No portion of this study will be video-taped.

Consent
Participants will receive a signed and dated copy of this form.
By signing this form, participants certify that they have read and understood the above material, and all questions have been answered to their satisfaction. They agree to participate, and realize that they may withdraw this consent at anytime without fear of prejudice or penalty. In addition, they certify that they are at least 18 years old.

_____ _____
Participant: (Print Name and Sign) Date

Appendix B

Code: _____

Choose a secret code number to identify yourself. The code number should be at least 4 numbers long and end with your mothers initials. To avoid numbers that other people might choose, you should not sue your zip code, any part of your phone number, in case other people have similar numbers. Likewise, do not put numbers in a sequence (e.g., 1234, 8642), or use your birth year. After your mother's initials please place the letters "OM".

To give you an example, my mother's initials are CK so I might pick the number 8701CKOM.

Write YOUR Code Number here: _____

PLEASE DO NOT TURN THE PAGE UNTIL I ASK YOU TO DO SO!

Code: _____

Instructions:

I am interested in the study of autobiographical memories, that is, remembered experiences and personal events that occurred in a particular place and time that are ***not of a repeated nature***. I am interested in single memories of ***single*** experiences. These are memories of distinct moments in ***YOUR*** life that you are sure happened at a specific moment in your own personal history – not an event in someone else's life that you did not consciously experience. What I am going to ask you about is a particular experience in your life.

Again, what I am looking for is a memory about ***a specific experience*** – not something you just know about but don't recall experiencing and not memories about something that happened more than once or happened repeated regularly.

Do you have any questions?

PLEASE DO NOT TURN THE PAGE UNTIL I ASK YOU TO DO SO!

Code: _____

Please follow these instructions:

1. Now I want you to speak about a very specific memory:

   THIS SESSION WILL BE RECORDED!!!

2. The researcher will signal you when the memory recall segment of this research study has begun by verbally asking you specific prompt and will verbally signal you again when the session is over.
3. After the session has begun, the researcher will ask you to state your unique code number ID. In addition, after you have been signaled that the time of your memory recall is over, you will be asked again to **say out loud your unique code number ID again**. For instance, I would say my code number was 8701CKOM.
4. Before I ask you to turn the page, I will begin recording this session.

PLEASE DO NOT TURN THE PAGE UNTIL I ASK YOU TO DO SO!

Code: _____

Please follow these instructions:

1. Now I want you to speak about the specific memory stated below:

Please speak about the day you found out that

YOU were accepted to Seton Hall University.

PLEASE DO NOT TURN THE PAGE UNTIL I ASK YOU TO DO SO!

Please complete the next SIX pages of this packet

Appendix B

Informed Consent Form (Written Narrative)

Title of Study: Remembering You!

Before agreeing to participate in this research study, it is important that participants read the following explanation of the study. This informed consent describes the purpose, procedures, benefits, risks, discomforts, and precautions of the study.

Researcher's Affiliation
Annette C. Resenhoeft is a graduate student in the Experimental Psychology program at Seton Hall University and is conducting this study for completion of her master's thesis. This study is under the advisement of Dr. Janine Buckner, Associate Professor and Director of Graduate Studies in the Department of Psychology at Seton Hall University.

Purpose and Duration
The purpose of this study is to investigate differences in how people recall a specific memory. The study will last approximately 20 minutes.

Description of Procedure
In this study, participants will first be asked complete a demographic sheet, which will ask specific questions regarding themselves (e.g. age, year in college, ethnicity, and biological sex).
The participants will then be asked to recall a specific memory, which will be recorded by the participants typing the memory into a provided laptop computer via Microsoft Word for five-minutes. The time will be recorded via a stop watch. First, the participant will type his or her unique code into Microsoft Word, which will be used as identification to keep confidentiality. After the investigator cues the participant, he or she will begin typing the specific recalled memory. The researcher will then indicate to the participant when the recording session (5-minutes) has ended.
Participants do not have to worry about spelling or typing errors in this study. The present study will give the participant 5-minutes to type his or her memory, after which time, the participant will not be able to review or change his or her recorded memory.
After the memory has been recorded, each participant will complete one questionnaire, where he or she will provide information regarding his or her personality.

Instruments
Participants will be asked to take Spence, Helmreich, and Holahan's Extended Personal Attributes Questionnaire (EPAQ, 1979), which will ask questions regarding his or her personality traits.

Voluntary Nature
Participation in this study is voluntary. If a participant feels discomfort and wishes to discontinue, she may do so at any time by notifying the experimenter. At that time, their participation in the study will end and their information will be discarded. A decision to end the study will not result in any penalty to the participant.

Anonymity
Data will remain anonymous and will only be identified by a unique code that will be selected by the participant. This code will not be associated with the participant's name, so no one will be able to link the data to the participant.

Confidentiality
All data will remain confidential, and will be combined with others' data for analysis, such that each participant's individual data cannot be identified. In addition, the data will be stored on a USB memory key in a locked, secure physical site in the Human Research Participants Lab in Jubilee Hall. Only the principal investigator, Annette C. Resenhoeft and her research lab assistants, Warren Scott, Jennifer Noonan, and Sejal Brahmbhatt, will have access to this data. Audio-tapes will be used to record the memory narratives. These tapes will be stored in the same lab in Jubilee Hall, until they are transcribed by Annette C. Resenhoeft and her
research lab assistants, Warren Scott, Jennifer Noonan, and Sejal Brahmbhatt. Again, no identifying information about participants will be notated on these tapes before or after recording. To ensure confidentiality, this informed consent sheet will be held separate from all collected data.

Extent of Confidentiality
No individual data will be reported, and results of this study will also be presented in group form. Access to the data will be restricted to the principal investigator, Annette C. Resenhoeft or her research lab assistants, Warren Scott, Jennifer Noonan, and Sejal Brahmbhatt.

Discomfort and Risks
There are no foreseeable risks or discomforts associated with taking these personality questionnaires or sharing of a personal experience. Participants should not experience any stress.

Benefits
The study will not benefit participants directly; however, data collected from the study will be used to gain a better understanding of how individual differ within narratives and personality criteria.

Compensation
There is no monetary compensation associated with this study. Participants in this study who are currently enrolled in Introduction to Psychology will receive half of a research credit applied to this class.

Referral
This study is not expected to cause undue stress. If a participant does feel extreme discomfort, it may be helpful to speak to a friend, family member, or professional at a counseling center. The University Counseling Center can be reached at (973) 761-9500. Participants are responsible for all costs of treatment.

Alternates
Participation in this study is voluntary. If a professor offers course credit for participation in this experiment, he or she may also offer a non-experiment alternative for course credit.

Contact Information

Principal Investigator:	Faculty Adviser:	Institutional Review Board:
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	400 South Orange Ave	Telephone: (973) 313-6314
	South Orange, NJ 07079	
	Telephone: (973) 275-2708	

Audio and Video-Tapes
No portion of this study will be recorded via an audio- or video-device.

Consent
Participants will receive a signed and dated copy of this form.
By signing this form, participants certify that they have read and understood the above material, and all questions have been answered to their satisfaction. They agree to participate, and realize that they may withdraw this consent at anytime without fear of prejudice or penalty. In addition, they certify that they are at least 18 years old.

_____ _____

Participant: (Print Name and Sign)

Appendix D

Code: _____

Choose a secret code number to identify yourself. The code number should be at least 4 numbers long and end with your mothers initials. To avoid numbers that other people might choose, you should not sue your zip code, any part of your phone number, in case other people have similar numbers. Likewise, do not put numbers in a sequence (e.g., 1234, 8642), or use your birth year. After your mother's initials please place the letters "WM".

To give you an example: my mother's initials are CK so I might pick the number 8701CKWM.

Write YOUR Code Number here: _____

PLEASE DO NOT TURN THE PAGE UNTIL I ASK YOU TO DO SO!

Do you have any questions?

Code: _____

Instructions:

I am interested in the study of autobiographical memories, that is, remembered experiences and personal events that occurred in a particular place and time that are ***not of a repeated nature***. I am interested in single memories of ***single*** experiences. These are memories of distinct moments in ***YOUR*** life that you are sure happened at a specific moment in your own personal history – not an event in someone else's life that you did not consciously experience. What I am going to ask you about is a particular experience in your life.

Again, what I am looking for is a memory about ***a specific experience*** – not something you just know about but don't recall experiencing and not memories about something that happened more than once, repeated regularly.

PLEASE DO NOT TURN THE PAGE UNTIL I ASK YOU TO DO SO!

Do you have any questions?

Code: _____

Please follow these instructions:

1. Please start up the computer if you already haven't done so.
2. Open Microsoft Word
3. At the top of the new Word document, please type:
    - Your code number (and hit enter)
    - Also type: **"SHU MEMORY"** (and hit enter a few more times)

PLEASE DO NOT TURN THE PAGE UNTIL I ASK YOU TO DO SO!

Do you have any questions?

Code: _____

1. Now I want you to write about a very specific memory.
2. **Please use whole words**. Do not use any texting or shorthand language (e.g. BTW, 411, 2G2BT, and ROTFLMAO) while typing this memory:
3. The researcher will signal you when the memory recall segment of this research study is over.

PLEASE DO NOT TURN THE PAGE UNTIL I ASK YOU TO DO SO!

Do you have any questions?

Code: _____

1. Now I want you to write about a very specific memory.

Please write about the day you found out that

YOU were accepted to Seton Hall University.

PLEASE DO NOT TURN THE PAGE UNTIL I ASK YOU TO DO SO!

Code: _____

SHU MEMORY:

1. You have now completed typing your memory. Please save the file by using your code number as the file name with the letters 'WM' after it. For instance, if your code number was 8701CK, you would save the file as 8701CKWM.

2. Once you have completed this memory, please signal to the experimenter who will save the document onto his/her flash drive:

   This step is very important in that it ensures you will receive credit for participating in this experiment for your respective class!

PLEASE DO NOT TURN THE PAGE UNTIL I ASK YOU TO DO SO!

Please complete the next SIX pages of this packet

Appendix E

Experimenter Booklet for Oral Narrative Session

Everything that is Italicized was not spoken to the Participant

Did you bring?

Your Things:

2 pencils (just in case you or the participant needs one)
Laptop
Power Cord
Watch (for timing session)
Flash Drive

From The Memory Lab:

Audio recorder
Batteries
Participant Log

Experimenter:

Have the participant rip off first two pages of consent form (these sheets are for them to keep)

Ask participants, **"keep the second copy of the consent intact: do not rip the following two pages.** *Participants need to sign the last page of the consent sheet for my records.*

DO NOT USE THE RECORDERS IF CELL PHONES ARE ON IN THE ROOM! THEY WILL INTERFER WITH THE RECORDED MEMORY!!

Informed Consent Form

Title of Study: Remembering You!

Before agreeing to participate in this research study, it is important that participants read the following explanation of the study. This informed consent describes the purpose, procedures, benefits, risks, discomforts, and precautions of the study.

Researcher's Affiliation

Annette C. Resenhoeft is a graduate student in the Experimental Psychology program at Seton Hall University and is conducting this study for completion of her master's thesis. This study is under the advisement of Dr. Janine Buckner, Associate Professor and Director of Graduate Studies in the Department of Psychology at Seton Hall University.

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This research study is collecting memories and once the allocated five minute memory recording segment is over, the participant will not be able to review or change any of his or her recalled memory.

After the memory has been recorded, each participant will complete one questionnaire, where he or she will provide information regarding his or her personality.

Instruments

Participants *will be asked to take Spence, Helmreich, and Holahan's Extended Personal Attributes Questionnaire (EPAQ, 1979), which* will ask questions regarding his or her personality traits.

Voluntary Nature

Participation in this study is voluntary. If a participant feels discomfort and wishes to discontinue, she may do so at any time by notifying the experimenter. At that time, their participation in the study will end and their information will be discarded. A decision to end the study will not result in any penalty to the participant.

Anonymity

Data will remain anonymous and will only be identified by a unique code that will be selected by the participant. This code will not be associated with the participant's name, so no one will be able to link the data to the participant.

Confidentiality

All data will remain confidential, and will be combined with others' data for analysis, such that each participant's individual data cannot be identified. Audio tapes will be used to record the narratives. These tapes will be stored in a locked, secure physical site in the Human Research Participants Lab in Jubilee Hall until they are transcribed. After the data has been transcribed, the data will be stored on a USB memory key in the same locked, secure physical site in the Human Research Participants Lab in Jubilee Hall. Only the principal investigator, Annette C. Resenhoeft and her research lab assistants, Warren Scott, Jennifer Noonan, and Sejal Brahmbhatt, will have access to this data. To ensure confidentiality, this informed consent sheet will be held separate from all collected data.

Extent of Confidentiality

No individual data will be reported, and results of this study will also be presented in group form. Access to the data will be restricted to the principal investigator, Annette C. Resenhoeft or her research lab assistants, Warren Scott, Jennifer Noonan, and Sejal Brahmbhatt.

Discomfort and Risks

There are no foreseeable risks or discomforts associated with taking these personality questionnaires or sharing of a personal experience. Participants should not experience any stress.

Benefits

The study will not benefit participants directly; however, data collected from the study will be used to gain a better understanding of how individuals differ within narratives and personality criteria.

Compensation

There is no monetary compensation associated with this study. Participants in this study who are currently enrolled in Introduction to Psychology will receive half of a research credit applied to this class.

Referral

This study is not expected to cause undue stress. If a participant does feel extreme discomfort, it may be helpful to speak to a friend, family member, or professional at a counseling center. The University Counseling Center can be reached at (973) 761-9500. Participants are responsible for all costs of treatment.

Alternates

Participation in this study is voluntary. If a professor offers course credit for participation in this experiment, he or she may also offer a non-experiment alternative for course credit.

Contact Information

Principal Investigator:
Annette C. Resenhoeft
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South Orange, NJ 07079
irb@shu.edu
Telephone: (973) 313-6314

Audio and Video-Tapes

This research study will use an audio-recording devise. No portion of this study will be video-taped.

Consent

Participants will receive a signed and dated copy of this form.

By signing this form, participants certify that they have read and understood the above material, and all questions have been answered to their satisfaction. They agree to participate, and realize that they may withdraw this consent at any time without fear of prejudice or penalty. In addition, they certify that they are at least 18 years old.

_____ _____

Participant:(Print Name and Sign) Date

HAVE THE PARTICIPANT

SIGN THE FIRST

INFORMED CONSENT SHEET AND GIVE

THE SECOND

INORMED CONSENT SHEET

TO THE

PARTICIPANT

TO KEEP!!

State: **"I will be reading all the directions verbatim, so every participant gets the same directions.**

Code: _____

Oral Narrative Protocol (1 of 4 pages)

READ THE FOLLOWING TO THE PARTICIPANT!

Choose a secret code number to identify yourself. The code number should be at least 4 numbers long and end with your mothers initials. To avoid numbers that other people might choose, you should not use your zip code, any part of your phone number, in case other people have similar numbers. Likewise, do not put numbers in a sequence (e.g., 1234, 8642), or use your birth year. After your mother's initials please place the letters "OM".

To give you an example, my mother's initials are CK so I might pick a number like 8701CKOM.

Write YOUR Code Number here: _____

GIVE THE PARTICIPANT A PIECE OF SCRAP PAPER TO WRITE HIS/HER CODE DOWN FOR LATER USE!!

Say: **Please write your unique code on this piece of paper because you will be using again at the end of the research.**

PLEASE DO NOT TURN THE PAGE UNTIL I ASK YOU TO DO SO!
DO YOU HAVE ANY QUESTIONS?

Code: _____

READ THE FOLLOWING TO THE PARTICIPANT:
STATE: **I WILL BE READING THE DIRECTIONS TO YOU, SO ALL PARTICIPANTS GET THE SAME DIRECTIONS!**

Instructions:

I am interested in the study of autobiographical memories, that is, remembered experiences and personal events that occurred in a particular place and time that are ***not of a repeated nature***. I am interested in single memories of ***single*** experiences. These are memories of distinct moments in ***YOUR*** life that you are sure happened at a specific moment in your own personal history – not an event in someone else's life that you did not consciously experience. What I am going to ask you to about is a particular experience in your life.

Again, what I am looking for is a memory about ***a specific experience*** – not something you just know about but don't recall experiencing and not memories about something that happened more than once or happened repeated regularly.

EXAMPLE: **FOR INSTANCE DO YOU REMEMBER A TIME WHEN YOU ATE SOMETHING YOU DID NOT LIKE? WE DO THAT A LOT BUT TELL ME ONE TIME THAT HAPPENED.**

SECOND EXAMPLE: **THIS ONE TIME I ATE AN ONION THAT WAS GIVEN TO ME BY A FRIEND AND IT WAS HORRIBLE… NOT WHENEVER I EAT AN ONION I THINK IT IS DISGUSTING.**

PLEASE DO NOT TURN THE PAGE UNTIL I ASK YOU TO DO SO!

Do you have any questions?

Code: _____

READ THE FOLLOWING TO THE PARTICIPANT!

INSTRUCTIONS:

AGAIN, I WILL BE READING THE DIRECTIONS TO YOU, SO ALL PARTICIPANTS GET THE SAME DIRECTIONS!

1. Now I want you to speak about a very specific memory:

   (THIS SESSION WILL BE RECORDED!!!)

2. The researcher will signal you when the memory recall segment of this research study has begun by verbally asking you specific prompt and will verbally signal you again when the session is over.
3. After the session has begun, the researcher will ask you to state your unique code number ID. In addition, after you have been signaled that the time of your memory recall is over, you will be asked again to **say out loud your unique code number ID again**. For instance, I would say my code number was 8701CKOM.
4. Before I ask you to turn the page, I will begin recording this session.

PLEASE DO NOT TURN OVER PAGE UNTIL I ASK YOU TO DO SO
DO YOU HAVE ANY QUESTIONS?

BEGIN RECORDING then ask the participant, "STATE YOUR CODE and then turn the page."

Code: _____

Please follow these instructions:

1. Now I want you to speak about the specific memory stated below:

Please speak about the day you found out that

YOU were accepted to Seton Hall University.

START TIME On Stop Watch!!!

Only say: **Is there anything else?**

You may smile but do not say anything else!

If the participant continues to with his or her memory keep recording until…

If the participant states he or she is done and there is nothing else, please tell them:

"PLEASE STATE YOUR UNIQUE CODE AGAIN!!! Thank you so much!"

PLEASE DO NOT TURN THE PAGE UNTIL I ASK YOU TO DO SO!

Tell the participant:

Now I will need you to complete the next

SIX pages

of this packet.

I WILL BE LEAVING THE ROOM WHILE YOU COMPLETE THIS AREA, SO PLEASE COME AND GET ME ONCE YOU ARE DONE WITH THE NEXT SIX PAGES.

Please fill in every questions on the following pages because incomplete data will be thrown out and not analyzed in this study.

Thank you very much!

Appendix F

Experimenter Booklet for Written Narrative Session

Everything in Italicized was not spoke to the Participant

Did you bring:
Your Things:

2 pens (just in case you or the participant needs one)
Laptop
Power Cord
Watch (for timing session)
Flash Drive

Participant Log

Experimenter:

Have the participant rip off first two pages of consent form (these sheets are for them to keep)

Ask participants, **"keep the second copy of the consent intact: do not rip the following two pages.** *Participants need to sign the last page of the consent sheet for my records.*

Experimenter: READ THE INFORMED CONSENT SHEET TO THE PARTICIPANT

Informed Consent Form

Title of Study: Remembering You!

Before agreeing to participate in this research study, it is important that participants read the following explanation of the study. This informed consent describes the purpose, procedures, benefits, risks, discomforts, and precautions of the study.

Researcher's Affiliation

Annette C. Resenhoeft is a graduate student in the Experimental Psychology program at Seton Hall University and is conducting this study for completion of her master's thesis. This study is under the advisement of Dr. Janine Buckner, Associate Professor and Director of Graduate Studies in the Department of Psychology at Seton Hall University.

Purpose and Duration

The purpose of this study is to investigate differences in how people recall a specific memory. The study will last approximately 20 minutes.

Description of Procedure

In this study, participants will first be asked complete a demographic sheet, which will ask specific questions regarding themselves (e.g. age, year in college, ethnicity, and biological sex).

The participants will then be asked to recall a specific memory, which will be recorded by the participants typing the memory into a provided laptop computer via Microsoft Word for five-minutes. The time will be recorded via a stop watch. First, the participant will type his or her unique code into Microsoft Word, which will be used as identification to keep confidentiality. After the investigator cues the participant, he or she will begin typing the specific recalled memory. The researcher will then indicate to the participant when the recording session (5-minutes) has ended.

Participants do not have to worry about spelling or typing errors in this study. The present study will give the participant 5-minutes to type his or her memory, after which time, the participant will not be able to review or change his or her recorded memory.

After the memory has been recorded, each participant will complete one questionnaire, where he or she will provide information regarding his or her personality.

Instruments

Participants will be asked to take Spence, Helmreich, and Holahan's Extended Personal Attributes Questionnaire (EPAQ, 1979), which will ask questions regarding his or her personality traits.

Voluntary Nature

Participation in this study is voluntary. If a participant feels discomfort and wishes to discontinue, she may do so at any time by notifying the experimenter. At that time, their participation in the study will end and their information will be discarded. A decision to end the study will not result in any penalty to the participant.

Anonymity

Data will remain anonymous and will only be identified by a unique code that will be selected by the participant. This code will not be associated with the participant's name, so no one will be able to link the data to the participant.

Confidentiality

All data will remain confidential, and will be combined with others' data for analysis, such that each participant's individual data cannot be identified. In addition, the data will be stored on a USB memory key in a locked, secure physical site in the Human Research Participants Lab in Jubilee Hall. Only the principal investigator, Annette C. Resenhoeft and her research lab assistants, Warren Scott, Jennifer Noonan, and Sejal Brahmbhatt, will have access to this data. Audio-tapes will be used to record the memory narratives. These

tapes will be stored in the same lab in Jubilee Hall, until they are transcribed by Annette C. Resenhoeft and her research lab assistants, Warren Scott, Jennifer Noonan, and Sejal Brahmbhatt. Again, no identifying information about participants will be notated on these tapes before or after recording. To ensure confidentiality, this informed consent sheet will be held separate from all collected data.

Extent of Confidentiality

No individual data will be reported, and results of this study will also be presented in group form. Access to the data will be restricted to the principal investigator, Annette C. Resenhoeft or her research lab assistants, Warren Scott, Jennifer Noonan, and Sejal Brahmbhatt.

Discomfort and Risks

There are no foreseeable risks or discomforts associated with taking these personality questionnaires or sharing of a personal experience. Participants should not experience any stress.

Benefits

The study will not benefit participants directly; however, data collected from the study will be used to gain a better understanding of how individual differ within narratives and personality criteria.

Compensation

There is no monetary compensation associated with this study. Participants in this study who are currently enrolled in Introduction to Psychology will receive half of a research credit applied to this class.

Referral

This study is not expected to cause undue stress. If a participant does feel extreme discomfort, it may be helpful to speak to a friend, family member, or professional at a counseling center. The University Counseling Center can be reached at (973) 761-9500. Participants are responsible for all costs of treatment.

Alternates

Participation in this study is voluntary. If a professor offers course credit for participation in this experiment, he or she may also offer a non-experiment alternative for course credit.

Contact Information

Principal Investigator:
Annette C. Resenhoeft
Graduate Student
Experimental Psychology
resenhan@shu.edu

Faculty Adviser:
Janine Buckner, Ph.D.
Associate Professor, Director of Graduate Studies
Department of Psychology
Seton Hall University
Janine.Buckner@shu.edu
400 South Orange Ave
South Orange, NJ 07079
Telephone: (973) 275-2708

Institutional Review Board:
Mary F. Ruzicka, Ph.D.
Presidents Hall Rm 325
400 South Orange Ave
South Orange, NJ 07079
irb@shu.edu
Telephone: (973) 313-6314

Audio and Video-Tapes

No portion of this study will be recorded via an audio- or video-device.

Consent

Participants will receive a signed and dated copy of this form.

By signing this form, participants certify that they have read and understood the above material, and all questions have been answered to their satisfaction. They agree to participate, and realize that they may withdraw this consent at anytime without fear of prejudice or penalty. In addition, they certify that they are at least 18 years old.

_____ _____

Participant: (Print Name and Sign) Date

HAVE THE PARTICIPANT SIGN THE FIRST INFORMED CONSENT SHEET AND GIVE THE SECOND INORMED CONSENT SHEET TO THE PARTICIPANT TO KEEP!!

State: **"I will be reading all the directions verbatim, so every participant gets the same directions**

Written Narrative Protocol (1 of 6 pages)

Choose a secret code number to identify yourself. The code number should be at least 4 numbers long and end with your mothers initials. To avoid numbers that other people might choose, you should not use your zip code, any part of your phone number, in case other people have similar numbers. Likewise, do not put numbers in a sequence (e.g., 1234, 8642), or use your birth year. After your mother's initials please place the letters "WM".

To give you an example, my mother's initials are CK so I might pick the number 8701CKWM.

Write YOUR Code Number here: _____

GIVE THE PARTICIPANT A PIECE OF SCRAP PAPER TO WRITE HIS/HER CODE DOWN FOR LATER USE!!

Say: **Please write your unique code on this piece of paper because you will be using again at the end of the research.**

PLEASE DO NOT TURN THE PAGE UNTIL I ASK YOU TO DO SO!

Do you have any questions?

Instructions:

READ THE FOLLOWING TO THE PARTICIPANT:

STATE: **I WILL BE READING THE DIRECTIONS TO YOU, SO ALL PARTICIPANTS GET THE SAME DIRECTIONS!**

Instructions:

I am interested in the study of autobiographical memories, that is, remembered experiences and personal events that occurred in a particular place and time that are ***not of a repeated nature***. I am interested in single memories of ***single*** experiences. These are memories of distinct moments in ***YOUR*** life that you are sure happened at a specific moment in your own personal history – not an event in someone else's life that you did not consciously experience. What I am going to ask is to recite about a particular experience in your life.

Again, what I am looking for is a memory about ***a specific experience*** – not something you just know about but don't recall experiencing and not memories about something that happened more than once or happened repeated regularly.

EXAMPLE: **FOR INSTANCE DO YOU REMEMBER A TIME WHEN YOU ATE SOMETHING YOU DID NOT LIKE? WE DO THAT A LOT BUT TELL ME ONE TIME THAT HAPPENED.**

SECOND EXAMPLE: **THIS ONE TIME I ATE AN ONION THAT WAS GIVEN TO ME BY A FRIEND AND IT WAS HORRIBLE… NOT WHENEVER I EAT AN ONION I THINK IT IS DISGUSTING.**

PLEASE DO NOT TURN THE PAGE UNTIL I ASK YOU TO DO SO!

Do you have any questions?

READ THE FOLLOWING TO THE PARTICIPANT!
MEMORY INSTRUCTIONS:

STATE: **YET AGAIN, I WILL BE READING THE DIRECTIONS TO YOU, SO ALL PARTICIPANTS GET THE SAME DIRECTIONS!**

1. Please start up the computer if you already haven't done so.
2. Open Microsoft Word
3. At the top of the new Word document, please type:
4. Your code number (and hit enter)
5. **"SHU MEMORY"** (and hit enter a few more times)

PLEASE DO NOT TURN THE PAGE UNTIL I ASK YOU TO DO SO!
Do you have any questions?

SHU MEMORY INSTRUCTIONS:
***STATE:* I AM READING THIS TO YOU AGAIN.**

1. Now I want you to write about a very specific memory.

2. **Please use whole words**. Do not use any texting or shorthand language (e.g. BTW, 411, 2G2BT, and ROTFLMAO) while typing this memory:

3. We are not looking at spelling or sentence structure. You ***do not*** have to go back to correct or change anything you have written.

4. The researcher will signal you when the memory recall segment of this research study is over.

PLEASE DO NOT TURN THE PAGE UNTIL I ASK YOU TO DO SO!

Do you have any questions?

Please follow these instructions:

1. Now I want you to write about a very specific memory.

Please write about the day you found out that

YOU were accepted to Seton Hall University.

State: Please begin writing your memory into the provided computer into Microsoft Word.

START TIME On Stop Watch!!!

Only say: **Is there anything else?**

You may smile but do not say anything else!

If the participant continues to type more of his or her memory keep recording the time until either time runs out or…

If the participant states he or she is done and there is nothing else, please tell them:

Thank you so much!!"

Proceed with to the next page.

PLEASE DO NOT TURN THE PAGE UNTIL I ASK YOU TO DO SO!

SHU MEMORY:

1. You have now completed typing your memory. Please save the file by using your code number as the file name with the letters 'WM' after it. For instance, if your code number was 8701CK, you would save the file as 8701CKWM.

2. Once you have completed this memory, please signal to the experimenter who will save the document onto his/her flash drive:

This step is very important in that it ensures you will receive credit for participating in this experiment for your respective class!

PLEASE DO NOT TURN THE PAGE UNTIL I ASK YOU TO DO SO!

Tell the participant:

Now I will need you to complete the next SIX pages of this packet.

I WILL BE LEAVING THE ROOM WHILE YOU COMPLETE THIS AREA, SO PLEASE COME AND GET ME ONCE YOU ARE DONE WITH THE NEXT SIX PAGES.

Please fill in every questions on the following pages because incomplete data will be thrown out and not analyzed in this study.
Thank you very much!

Appendix G

Code: _____

Spence, Helmreich, & Holahan's (1979)
Extended Personal Attributes Questionnaire (EPAQ)

Following is a list of word pairs and a scale of 1-5 for each pair. Please examine the pairs and circle the number that describes where you fall on the scale. Please do not skip any pairs.

1)	not at all aggressive				very aggressive
	1	2	3	4	5
2)	not at all independent				very independent
	1	2	3	4	5
3)	not at all spineless				very spineless
	1	2	3	4	5
4)	not at all helpful				very helpful
	1	2	3	4	5
5)	not at all dominant				very dominant
	1	2	3	4	5
6)	not at all self-confident				very self-confident
	1	2	3	4	5
7)	not at all servile				very servile
	1	2	3	4	5
8)	not at all warm to others				very warm to others
	1	2	3	4	5
9)	not at all competitive				very competitive
	1	2	3	4	5
10)	does not cry easily				cries very easily
	1	2	3	4	5
11)	not at all gentle				very gentle
	1	2	3	4	5

Proceed to the next page

Code: _____

12)	feelings not easily hurt				feelings easily hurt
	1	2	3	4	5
13)	not at all emotional				very emotional
	1	2	3	4	5
14)	not at all active				very active
	1	2	3	4	5
15)	low need for security				high need for security
	1	2	3	4	5
16)	does not stand up under pressure				stands up under pressure
	1	2	3	4	5
17)	not at all gullible				very gullible
	1	2	3	4	5
18)	does not make decisions easily				makes decisions very easily
	1	2	3	4	5
19)	not at all arrogant				very arrogant
	1	2	3	4	5
20)	not at all devoted to others				very devoted to others
	1	2	3	4	5
21)	does not subordinate self to others				subordinates self to others
	1	2	3	4	5
22)	gives up very easily				never gives up easily
	1	2	3	4	5

Proceed to the next page

Code: _____

23)	not at all boastful				very boastful
	1	2	3	4	5
24)	not at all kind				very kind
	1	2	3	4	5
25)	not at all whiny				very whiny
	1	2	3	4	5
26)	not at all understanding				very understanding
	1	2	3	4	5
27)	not at all egotistical				very egotistical
	1	2	3	4	5
28)	not at all complaining				very complaining
	1	2	3	4	5
29)	not at all greedy				very greedy
	1	2	3	4	5
30)	not at all dictatorial				very dictatorial
	1	2	3	4	5
31)	not at all fussy				very fussy
	1	2	3	4	5
32)	not at all cynical				very cynical
	1	2	3	4	5
33)	not at all nagging				very nagging
	1	2	3	4	5
34)	does not feel superior				feels very superior
	1	2	3	4	5

Proceed to the next page

Code: _____

35)	does not look out only for self				looks out only for self
	1	2	3	4	5
36)	not at all aware of others' feelings				very aware of others' feelings
	1	2	3	4	5
37)	not at all hostile				very hostile
	1	2	3	4	5

Proceed to the next page

Appendix H

Code: _____

Demographics Questionnaire

Please fill in or answer each question below. Your data will remain confidential and will only be identified by your individual participant code.

Information about yourself:

1) Age: _____

2) Year at Seton Hall (circle one): 1st 2nd 3rd 4th Other _____

3) Ethnicity: (please check or indicate)

Asian American: _____

African American: _____

Caucasian: _____

Hispanic/Latino: _____

Native American: _____

Other (indicate): _____

4) Are you a U.S. citizen? If not, what is your country of origin? _____

5) Socio-economic status (please check which best describes your family as you were growing up):

Upper class: _____

Middle-Upper class: _____

Middle class: _____

Lower-Middle class: _____

Lower class: _____

6) Do you have corrected vision? Y or N

If yes, did you remember to bring your glasses/contacts? Y or N

7) Are you currently sick with an illness or taking any medication that affects your vision, level of attention, or other cognitive abilities? Y or N

8) Do you have any speaking difficulties? Y or N

If yes, please explain: _____

_____

9) Do you have a language or learning disability, dyslexia, or any other conditions that may affect your ability to read from a short distance?

Y or N

Proceed to the next page

Code: _____

Please characterize your typing skills below:

1) Circle one: I type... faster than most people average slower than most

2) Circle one: How does your typing compare to your friends: faster slower same

3) Circle which ever you use (circle either Y or N) Do you use:

Facebook?	Y	or	N
Twitter?	Y	or	N
IM?	Y	or	N

4) If yes, how often do you use these programs on the computer in a typical week? _____

5) If yes, do you use a lot of texting and shorthand language or do you type everything out for the most part? _____

6) Are you more comfortable using a computer to type or talking to a person directly?

Type or Talk

7) Why?_____

_____

_____

8) How many hours a week do you use a computer to do school work? _____

9) How many hours in a week do you think you use your computer for games?_____

10) How many hours in a week do you think you use your computer for Facebook/Twitter/IM?_____

_____

You are done! Get the researcher!

Appendix I

Participant Debriefing

Title: Remembering You! Effects of Gender Identity on Autobiographical Narratives

Principal Investigator: Annette C. Resenhoeft
Graduate Student, Experimental Psychology
Seton Hall University
Contact: resenhan@shu.edu

This information is being provided to you because you participated in research involving human participants.

Purpose of the Research

The purpose of this study was to investigate the effects that gender identity (masculinity, femininity, androgenous, and undifferentiated) has on an individual's recall of a specific memory. The present study also investigated the difference between modes of extracting this memory (written versus oral narratives).

Two different groups were used, where one group was told the narrative would be collected via a computer (written) and the second was told their narrative would be collected through an interview style (oral). This design was used to set up different conditions to explore the difference between the two modes of extracting a specific narrative as well as comparison between masculine, feminine, androgynous (high in both masculine and feminine traits), and undifferentiated (low in both feminine and masculine traits) identified individuals. The present study measured narrative differences through three independent variables, which were narrative content (emotionality), narrative structure (detail), and narrative theme (self- versus social-referencing).

The present study is predicting masculine identified participants to express lower narrative content (emotionality), structure (detail), and theme (self v. social referencing) during the interview style (oral) narrative mode versus during the computer typing (written) mode. In addition, feminine identifiers will follow this same pattern, however they will not express a significant difference between narrative modes (oral v. written), which were also based on narrative content (emotionality), structure (detail), and theme (self v. social referencing). Overall, feminine identified participants will express significantly higher amounts of narrative content, structure, and theme than the masculine identifiers during both narrative modes (written and oral).

The androgynous and undifferentiated identified participants will not express a significant difference between narrative modes (written versus oral) of narrative content, structure, and theme. In addition, these same gender identified participants will not significantly differ from both feminine and masculine identified participants.

Materials:

- Extended Personal Attributes Questionnaire (Spence, Helmreich, & Holahan, 1979)

This is a measure that identifies the strength of gender identity by assessing positive and negative masculine and feminine characteristics. Scores were based on each of the scales (positive/negative masculine and positive/negative feminine) were calculated.

If you have any questions about the study or how your data will be used, please contact the principal researcher, Annette C. Resenhoeft, at resenhan@shu.edu

Please do not disclose research procedures and hypotheses to anyone who might participate in this study as this could affect the results of the study. Thank you for your participation in this study.

Appendix J

Recruitment Flyer

Title of Research: Remembering You!
Principal Investigator: Annette C. Resenhoeft (resenhan@shu.edu)
Graduate Student, Experimental Psychology, Seton Hall University
Faculty Adviser: Janine Buckner (Janine.Buckner@shu.edu)
Associate Professor, Director of Graduate Studies, Seton Hall University
Location: Jubilee, Room 368
Number of Credits: .5 credit

Brief Study Description: In this study, how individuals remember past events. This study will ask the participants to recall a specific event. This study should take approximately 20 minutes.

What to Expect: During this experiment, you will complete two questionnaires. The first questionnaire will collect general background information and the second will collect aspects of your personality. To gather the general information a demographic questionnaire will be used. To gather the personality information the Spence, Helmreich, and Holahan's Extended Personal Attributes Questionnaire (EPAQ, 1979) will be used. The researcher will then ask for the participant to recall a specific memory, which will be collected.
Duration: 20 minutes

What will happen to data: All data will be collected. There will be no way of identifying a particular participant within the data

Who is eligible: All undergraduate students are eligible.

Need to cancel an appointment? If you need to cancel your appointment, please e-mail Annette C. Resenhoeft at resenhan@shu.edu.

Appendix K

Narrative Coding (adapted from Buckner & Fivush, 1998)

Narrative structure:

I. Number of off-task words: Off-task words such as "I am not a good writer" or "I really don't like to talk about myself" we not used within each narrative coding counts.

II. Details: Adjectives and adverbs that help produce more detailed narrative descriptions were counted.

Narrative theme:

I. A social narrative is one that involves others in the central experience of the event. Narratives focusing on sharing activities and feelings with other will be coded as social narratives

II. An individual narrative will be one that relates only to the participant's individual experience. The main details of these narratives concern only what the participant will feel, think, or do in the course of the event.

Narrative content:

I. Emotion words: Emotional feeling state words (happy, sad, frightened) will be counted along with emotional behaviors (crying, laughing). Statements about positive and negative effects (I liked it) will also be included in emotional word count. Emotion terms will be coded according to their relationship to the experience.

a. General Emotional Words: Emotional terms that will not necessarily ascribe to any particular person(s), i.e. "it was a good day", "it was beautiful outside", etc.

b. Emotional Words Pertaining to Self: Words that will make references to the writer's or interviewee's own emotional state.