Use of the oral history interview to assess communication and marital satisfaction in later-life couples

Daniel James Harkness
Iowa State University

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Use of the oral history interview to assess communication and marital satisfaction in later-life couples

by

Daniel James Harkness

A dissertation submitted to the graduate faculty
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

Major: Human Development and Family Studies (Marriage and Family Therapy)

Program of Study Committee:
Ronald Werner-Wilson, Major Professor
Carolyn Cutrona
Tahira Hira
Harvey Joanning
Denise Vrchota

Iowa State University
Ames, Iowa
2004
This is to certify that the doctoral dissertation of

Daniel James Harkness

has met the dissertation requirements of Iowa State University

Signature was redacted for privacy.

Major Professor

Signature was redacted for privacy.

For the Major Program
DEDICATION

This dissertation is dedicated to my parents, David and Terry Harkness. Their patience, guidance and encouragement have given me the strength to reach my highest goals. Dad’s determination, perseverance and dedication combined with my mother’s absolute and unconditional love and acceptance as well as her strength as a cancer survivor provided all of the tools necessary to succeed in school, as an individual, a husband and a father. Their 45 year marriage helped me choose marriage and family therapy as a career, wondering not what’s wrong with families, but what’s right.
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ACKNOWLEDGEMENTS

I would first like to thank my family for their love, support and encouragement. I would also like to thank my committee members, Harvey Joanning, Ph.D., Denise Vrchota, Ph.D., Tahira Hira, Ph.D., and Carolyn Cutrona, Ph.D., many of whom have followed and supported me through this process for a long time. I also want to thank Cleveland Shields, Ph.D. for the opportunity to work with and learn from him, and for his willingness to share his research with me. I especially want to thank Ron Werner-Wilson, Ph.D., who took me in and agreed to help when I was in a very down part of my life. He has been incredibly supportive, encouraging and patient as I proceeded toward this goal.

I am indebted to John Harvey, Ph.D., my first mentor and probably the one person, who, through all of this, never ever gave up hope that I would finish. Finally, John, I owe you lunch.

I also thank my friends and coworkers for their support and encouragement, especially Jan Zrostlik, who was always willing to help by typing “an emergency page or two” and proofing this document.

Last but by no means least, for my wife, Kim, and my son, Noah. Words cannot express the joy you have brought to my life. As we always said... Things happen for a reason, just believe.
CHAPTER 1
INTRODUCTION

Statement of the Problem

Storytelling is a natural human activity that serves many functions. People use stories to describe self, others, and events, or facilitate closure. Stories fulfill one’s quest for control and understanding, maintain or enhance self-esteem, and impart wisdom and experience. People in every culture, race and generation use stories for these reasons. Stories illustrate and create connections between people. They are illustrative of personalities and relationships. Stories are a primary source of communication and meaning making within and across cultures. Therefore, stories, and the process of creating them, are critical in understanding people and relationships.

Stories have been used throughout time to create, define and maintain relationships, but they are a relatively new concept to marriage and family theorists and researchers. Family science scholars currently utilize stories in case studies, therapeutic intervention, theoretical orientations and research projects (Divinyi, 1995; Frantz, 1995). Unfortunately, the wide range of uses for stories creates disagreement in how these terms are operationalized, observed and measured. Peacock and Holland (1993) asserted that previous research on stories has failed to achieve its potential contribution because of the large and diverse number of approaches. Often, the methods, goals and findings of these approaches differed, even when they appeared to assess and measure the same constructs. However, while different approaches raised questions of the other, each offered insight into investigating couples and families (Cohler, 1991). Increasing the amount of research in
narrative and storytelling is needed to improve definitions of terms, improve how terms are operationalized, and increase the overall depth and focus of the field.

The unique perspectives offered by examining stories created controversy in research methodology, but many investigators believed that the strengths overshadowed the weaknesses. The strengths included increasing overall understanding of how meaning is constructed, investigating how stories function in peoples’ lives, and how stories inform investigators of the psychological well-being of the storyteller. In that way, Goolishian and Anderson (1987) argued that the various competing positions have more commonalities than differences. Mishler (1986) stated that given the current paucity of research on storytelling and narrative, no approach should be favored over another. Regardless of the approach taken, however, both groups suggested that more studies should focus on how people construct stories of their lives and experiences in order to better understand human cognition and behavior (LaRossa, 1995).

The study of how people construct stories of their lives and experiences is difficult due to the differing goals and methodologies of investigators. The problems are magnified by disagreement in defining terms and concepts. For example, Bruner (1986) suggested that throughout life, people engage in a process of meaning making. They engage in this process to make sense out of lived experience. The meaning making process is the pretext to story development. However, the definition of meaning making, including the process of meaning making, what and who is involved, and how to best investigate it, are examples of the primary areas of disagreement between researchers. The process of making meaning is a personal one and as such is difficult to operationalize and measure. Strengthening research on meaning making requires improved clarification and definition of terms.
The assessment and measurement of constructs such as meaning created more confusion among investigators who attempted to assess meaning making by understanding the process and content of stories and storytelling. Regarding stories and storytelling, one term that is difficult to define is that of a “good” story. While many researchers found that a “good”, complete or more helpful story predicted well-being, harmonious relationships, contentedness, closure, adjustment, or health, they frequently disagreed on characteristics of a “good” story. Broadening the understanding of what comprises a better story is needed to begin to merge the various approaches to narrative study.

Investigating stories involves analysis of both the content of the story as well as the process of storytelling. Stories are at once a linguistic construction and a social exchange and some researchers are more interested in one of these than the other. Some investigators suggested that more attention needs to be paid to structural properties of stories and to the more important question of whether those stories are complete (Veroff, Sutherland, Chadiha & Ortega, 1993; Wigren, 1994). Borden (1992) suggested that clinical research should focus on shifts in narrative content and construction as well as relationships between narratives, coping and levels of functioning. Therefore, a more structured use of narrative is warranted. Other social sciences have utilized jointly told narrative data in quantitative investigations (Gottman, 1979), an approach not often used by others interested in narratives (Veroff et al., 1993).

Although the content and structure of stories can offer significant information, investigating the social, or, communication aspect of storytelling is also important. Some argued for more attention to others involved in the meaning making (Harvey, Weber & Orbuch, 1990). Dixon and Gould (1996) reported that most research on storytelling and
retelling was done individually and focused too much on simply remembering stories told. They asserted that more emphasis was needed on the products and processes of the interactions. Research needs to investigate the extent to which stories are solitary versus joint constructions (LaRossa, 1995). The current study addresses joint construction of stories, specifically, the joint stories of later life couples.

Another problem addressed by the current study is an increased attention to later-life couples. If making meaning is inherent in life, and throughout life people are constantly creating and transforming meaning through communication with others, then the study of aging individuals presents a unique opportunity for narrative study. The majority of past research on stories and joint stories focused on those of younger couples, newlyweds, or a university population. However, the brief length of these relationships limited the depth of the resulting stories and therefore limited the results of the studies. The investigation of joint stories of later-life couples provides the opportunity to study narratives that have been developed and negotiated across many years.

The field of gerontology has a long history of narrative-based approaches to research. One approach to narrative assessment in gerontology is the use of the life review (Butler, 1963). Erikson (1963) suggested that the process of a life review yielded a sense of ego integrity that signified general satisfaction with one’s choices over the life span. However, this introspection can lead to a feeling of deep regret about the way life was lived and the belief that it is too late to choose another course of action (Blieszner, 1988). Future research should examine how historical events impact the development of relationships as well (LaRossa, 1995). Although life review is an accepted and studied process, most often studies focus on the individual narrative, a similar problem to that discussed earlier.
The current project addresses several of these issues in family studies. Specifically, the use of aging couples, marital history narratives and the use of stories in assessment. The project is intended to meet several goals. First, the study examines what content aging couples discuss in stories of their relationship. Second, the study examines whether marital satisfaction can be predicted by examining the content and process of joint storytelling. The final goal of this study is to assess how couples cooperate (or fail to cooperate) in communicating their story. The overall implications of this study include the identification of helpful components of marital stories, the prediction of marital satisfaction from marital history stories and storytelling, and the development of more structured use of narrative in research.

Specific Aims

Aim 1. To examine the content of marital history stories told by later life couples.

Aim 2. To examine the relationship between the marital history storytelling and marital satisfaction of later-life couples.

Aim 3. To examine the communication processes used by later-life couples in telling their marital history stories.
CHAPTER 2
LITERATURE REVIEW

Significance of this Study

The literature on stories and storytelling in social science includes many approaches to operationalizing and analyzing stories and narratives. Researchers discuss the importance of having a complete story in improved meaning-making and overall positive functioning in response to life stressors. Specifically, more complete stories predicted improved healing following negative life events and greater perspective for the future, such as a greater ability to “buffer” self and others from negative events (Harvey et al, 1990). However, most of these studies focused only on individual stories. As discussed earlier, stories told by individuals were often constructed through interaction with others, so attending to the impact of others is an important addition of this research. In addition, past research on stories focused on memory tasks of how people remember the story, versus investigating the life and events described within the story. The current project proposes that a more complete story of a lived experience indicates better relational functioning and satisfaction within the relationship.

The current research offers insight into the observation and measurement of joint stories of later-life couples. It addresses important issues such as marital history stories of aging couples and the use of stories in assessing marital satisfaction and communication. The present study increases knowledge about the nature of stories, communication processes during joint storytelling and the relationship of story characteristics to marital satisfaction.
With this information, one may more able to effectively use jointly told narratives and stories in assessing marital adjustment and satisfaction.

Review of Critical Literature

The literature review for this study is divided into six sections. The first section, Accounts, Narratives and Stories, reviews theory and research on these concepts and describes the account-making model of Harvey, Weber and Orbuch (1990). This section continues with a review of collaborative storytelling, joint stories of older couples, and concludes with a discussion of stories as described in literary theory.

The second part of the literature review is entitled Interaction and Behavioral Coding. This section focuses on the development and description of interaction and behavioral coding processes in research. It begins with the development of observational and behavioral coding from self-report measures. Next, the section discusses important research considerations including task, segmenting interaction, micro and macro coding processes and reliability and validity issues. The section continues with a review of past and current interaction coding systems used to analyze interaction, and a review of statistical strategies used in the analysis of interaction coding.

The final four sections address other important aspects of the current study. The third section of the literature review describes the task in this study, the Oral History Interview. The fourth section is entitled Cognition and specifically addresses cognition in couples (joint cognition). The review of past work on cognition is important because cognition is a core component of meaning making, stories, and the resulting interaction between spouses. The fifth section focuses on a review of the outcome measures in the current study,
Communication and Marital Satisfaction. The sixth and final section reviews literature on the impact of a diagnosis of cancer on relationships and families. This section is important because the sample utilized in the present study is comprised of two groups, a community control group and a group of couples with one partner having a cancer diagnosis. Due to small group sizes, the two groups were combined. Analyses were performed to demonstrate that the two groups did not differ significantly on dependent variables. However, groups may have differed statistically if group sizes were larger. Therefore, it is important to acknowledge the impact that cancer can have on couples.

Stories, Accounts & Narratives

Stories, accounts and narratives are helpful concepts used by researchers and theoreticians to understand various human functions. For example, Schank suggested that all memory is narrative-based and that the capacity to tell a good story can be directly related to intelligence (Schank, 1990). Narrative has been referred to as a root metaphor for interpreting a life, as a story told to describe self, or as a model for determining action (Sarbin, 1986). Others describe narrative as an overt expression of underlying or unconscious scripts (McAdams, 1988). Considering all of the possibilities, Schafer (1992) suggested that whatever is found in any narrative is dependent on what the observer/listener is looking for. Narratives and stories, therefore, can be used in a variety of approaches.

A general theme surrounding the investigation of stories and narratives is that of meaning making. Zimmerman and Dickerson (1994) suggested that both storytelling and narrative expression function to ascribe or create meaning. In general, the methods people use to tell stories about themselves are the ways they invent themselves with others (Penn &
Frankfurt, 1994). Bruner (1986, 1990) asserted that creating stories assist in organizing and interpreting experience and events. Schrieffrin believed that the stories people tell about life are used to construct, interpret and share experiences (Schrieffrin, 1996). On a macro level, Saleebey (1994), suggested that narratives and stories both define and are defined by culture. According to Bruner, narratives typically take two forms in culture: canonical and exceptional. Canonical narratives consider the normative structure of culture, functioning to instruct, chasten and reinforce cultural norms and conventions. In contrast, exceptional narratives account for exception, novelty, and anomaly within culture (Bruner, 1990). Both of these types of narratives function to create and enhance cultural meaning and therefore are equally important. Clearly, stories and narratives are critical in creating and understanding the concept of meaning making between people, relationships and cultures.

There is disagreement between the definitions of stories, narratives and accounts. Accounts have been described as storyline constructs that contain a plot, characters, a time sequence, attributions, and other forms of expression such as affect (Harvey, Orbuch, Weber, Merbach & Alt, 1992). Harvey et al. (1990) hypothesized that accounts are used either in public or private domains for the purpose of influencing others, summarizing actions, and/or controlling present or future. Narratives, in contrast, are defined and typically used only in the public domain (Harvey et al., 1990). Ruard Ganzevoort (1993) identified four fundamental principles of a narrative as plot, setting, character, and tone. Although definitions differ, investigators agree that in either account-making or narrative development, by organizing a spontaneous story, people begin to understand their own sometimes confusing experience, exercise control over their past and thereby provide control over their future lives (Veroff et al., 1993). Therefore, with or without constraints on the story structure
or plot, when people tell stories about their relationships, individuals involved engage in a process of meaning making about their lives including both good and bad events.

**Researching narratives**

There are several important issues to consider when using narratives in research. These issues include the difference between structured and unstructured narratives, factual accuracy of narratives, and the social and relational components of narratives. Investigators must be aware of the impact of these issues on data collection, analysis and conclusions of studies.

The first important issue considers the difference between structured and unstructured tasks. Mishler (1986) described the differences between researching narratives from structured questionnaires and interviews versus unstructured interviews. He stated that direct questions may elicit historical truth but may engage one’s social self-presentation and therefore may be useful only in understanding situations where these self-presentations are particularly important. Similarly, Veroff et al. (1993) reasoned that direct, specific questioning may reflect a person’s self-presentation, but in contrast, narratives are less inhibiting and more consistent with how people organize their experiences. Gergen and Gergen (1987) and Polkinghorne (1988) advocated using narratives in research because in storytelling people reveal the meaning they make of their experience in a way that is different from answering explicit questions about an experience. Others advocated for storytelling in research because in telling a story, individuals reveal conscious or unconscious motivations uncorrelated with motivations they would endorse when asked directly about them (Atkinson, 1958; McClelland, Koestner & Weinberger, 1989; Murray, 1938). Unstructured storytelling may be less inhibiting than direct questions because it is a more natural way for
people to access, express, and organize their experiences. Mishler (1986) advocated the use of narratives in research because of the natural human tendency to override objective protocol in order to tell their stories. In summary, compared to direct approaches, indirect approaches offer different and unique insights into investigating people.

The second important issue regarding narrative research involves the factual accuracy of narratives offered by participants. Neisser (1994) noted that an inherent issue in accessing memories was that people were not necessarily accurate historians of their lives. However, others noted that it is not important or even expected that an account be completely factual (Dixon and Gould, 1996; Veroff et al., 1993). It is only important to have “narrative truth” in establishing coherence, continuity and understanding (Spence, 1982). Other researchers agree that accounts may include stories, myths, and even lies, sometimes without any truth at all (Bahr, 1994). One approach that attempts to integrate both the objective “truth” and the subjective interpretations found in stories is the “life-focused” approach. This approach differs from the “story-focused” approach that focuses expressly on the structure of the story told (Peacock & Holland, 1993). In their review article, Peacock and Holland suggested that each of these two approaches “tap different poles of experience...at one extreme, the narration is only a mirror of reality; at the other, narration is the reality.” (pp. 371). These writers advocate a “process approach” that accounts for both modes of thinking. The issue of factual accuracy is difficult to reconcile in the study of stories, and investigators must be aware of its impact. The best approaches for dealing with factual accuracy may include an acknowledgement of factual accuracy as a methodological limitation or validity checks with participants.
The third important issue in researching narratives is the social nature of meaning making in narrative development. Previous research and theory primarily focused on individual narratives and found that there was clearly considerable complexity in investigating the narratives of individuals. However, still more could be learned from investigating human systems such as couples and families. Investigating the narratives told by more than one person is illustrative not only of the individuals involved, but also offers insight into the relationship. For example, Gergen and Gergen (1987) suggested that narratives are important to research because they are inherently revealing of relationship issues. Harvey, Weber, and Orbuch’s (1990) model considered the accounts and narratives of individuals, but also acknowledged the importance of others in creating the meaning of events. A primary assertion of the model is that the development of accounts is facilitated by the presence of a confidant. Further, the presence of the confiding relationship changes the nature of the resulting account. Understanding the influence that others may have on the development of an account has implications for narrative study of both individuals as well as human systems.

*Harvey, Weber & Orbuch’s model of account making*

Social psychologists investigate how people make sense of events in the form of accounts. The work of Harvey, Weber and Orbuch (1990) led to the development of an account-making model. This body of research focuses mainly on the development of accounts to make sense of traumatic experiences, such as loss of relationships through divorce or death (Harvey, Stein & Scott, 1994), loss of control through rape (Orbuch, Harvey, Davis & Merbach, 1994), and loss of property due to natural disasters (Harvey,
Stein, Olsen & Roberts, 1995). Despite the focus on negative life events, however, the model can be helpful in understanding other life events as well.

The account-making model offers a process by which people search for and find meaning in their lives. The model suggests that throughout life, people construct accounts to give meaning to events in their lives. They form accounts in a quest for control and understanding, self-esteem maintenance and enhancement, emotional purging (catharsis), search for closure, and for an enlightened feeling and enhanced will and hope. They justify and define themselves and others with accounts (Harvey et al., 1990).

As described above, accounts function to describe self and others. However, there is also a social component to the construction and use of accounts. Accounts may be privately formulated and rehearsed then publicly disclosed and negotiated with others. This account-making process is both interpersonal and intrapersonal, that is, we develop our perception of events both within ourselves as well as by communicating with other people. The inclusion of others in account making is a necessary component to this approach. This interaction with others is referred to as confiding and is described later.

*Definition of account.* An account is a story-like construction that people form in the wake of events and dilemmas of living that are either positive or negative (Harvey et al., 1992). Accounts include characterizations of the self and significant others. Accounts are a collection of meanings organized into a structure of story and represent more than the sum of the individual meanings. Accounts are learned in the same way as other social behaviors (i.e., through parents, peers and the media) (Harvey et al., 1990). Accounts are stories of experiences and as such may be capable of evoking positive or negative emotions (or both). Marmar and Horowitz (1988) stated that during account making, people contemplate
memories, experience emotions, and revise distorted meanings and plan for the future.

Every experience a person has in life is compartmentalized into a specific, concrete account and is stored in memory (Barton, 1986). Each account is essentially a short story involving characters, a plot and a beginning and ending. The points of beginning and ending are important as they act as demarcation signs for tellers and listeners alike, allowing them to determine when stories are starting and ending (Gergen & Gergen, 1987). Accounts link together the central events and significant others in life. The end result of continued account making through life is a “master account” that represents the life story.

Accounts can be retrieved from memory and told and re-told. At each telling, the story may change drastically or may remain very close to as when it was last told. As each account is told and re-told, there is movement toward a more “completed” version of the story. Completeness is important because it establishes closure and allows people to move on with their lives. With completeness comes changes in identity and increased effectiveness in dealing with future problems. Since each account is different from others and each person will have a different account of the same experience, some people or some accounts may take a longer or shorter period of time to reach completion.

Completeness. Wigren (1994) suggested that narratives make sense of experience and require a level of completeness in order to be health-enhancing to people. Composing a complete story is a complicated and sometimes imposing undertaking. Even if a story is incomplete and partially a distortion, research and personal testimony suggest that it may be a powerful energizer of health. However, persons should experience the greatest psychological and physical recovery from a major stressful event when they have developed a full account of what happened, why it happened, and have fully expressed their emotions.
relative to the event. In studying several clinical case studies of narrative completion in response to trauma, Wigren found that complete narratives include a character, divide experiences episodically with clear beginnings and endings, connect events causally, elicit and make sense of affect, and consider the consequences of events for characters (Wigren, 1994). However, she concluded that narratives need not be overly complex in order to be complete.

Previous researchers identified several features that are needed for a story to be more complete. Bruner (1986) elaborated on two essential features that must be simultaneously present in the creation of a complete story. First, a story must have a landscape of action, which includes an intention or goal, a situation, an instrument and something that may be referred to as “story grammar.” Second, a story must have a landscape of consciousness, which consists of what those involved in the action know, think, feel or do not know, think or feel. Mary Gergen (1987) suggested that well-formed narratives have 2 features. First, they furnish directionality over time. Directionality implies not just a sequence of events but a sequence that goes in some direction. This sense of direction relies on the establishment of an endpoint or goal state around which the events may be organized. The second feature of a well-formed narrative is that it must provide a sense of coherence or connectedness to the elements of the story. To gain coherence, events are entered into the story in ways that indicate whether the goal is or is not being reached. The coherence and continuity that well-formed narratives provide are seen as critical determinants of mental health (Borden, 1992).

It is important to remember that a person cannot offer a “bad” account. Instead, the account may be judged in terms of its completeness. Sorenson, Russell, Harkness & Harvey, (1993) found that the formation of an account and feeling that one had constructed a
“sufficient” account were critically relevant to psychological well-being. Typically, since those persons who do not form a complete account do not experience a full recovery from the stressor, their account may only be evaluated from the standpoint of what the person is doing that impedes the development of completeness. Sometimes, this may be excessive rumination about the event, intrusive thoughts, or limited closure. Although a person cannot offer a “bad” account, there are consequences for not reaching completeness. Consequences of failing to produce a complete story include psychosomatic responses (hypertension), prolonged grief or anxiety, and maladaptive patterns of responding to future losses or stressors (Borden, 1992; Horowitz, 1986).

Completing a story of an experience, whether positive or negative, is clearly an important process. Completion predicts positive problem-solving and future success in dealing with problems. Completion is only part of the overall process, however. Another powerful predictor of recovery is the ability or willingness to confide in close others who provide an empathic response (Wigren, 1994).

Confiding. How long it takes an individual to develop a relatively complete account depends partly upon the person’s ability to confide parts of the account to close friends or family. Harvey et al. (1990) proposed that when confiding is met with a caring, empathic reaction by others, the confiding behavior will facilitate recovery and movement towards completeness. Many attempts at meaning making are done with others and meaning that is produced both affects, and is affected by relationships with others (Steenbarger, 1991). Pennebaker (1990) found that confiding appears to lead to effective coping. Having a confidant has been found to be an effective part of maintenance of the self as well as recovery from stressful events. Menaghan and Lieberman (1986) studied 1106 adults (aged
18-65 years) for changes in depressive affect between couples who divorced and couples who stayed together. At a follow-up of four years, divorced persons were significantly more depressed when they lacked availability of a close, confiding relationship. Examining gender differences in confiding, Kendig, Coles, Pittlekow, & Wilson (1988) studied 1050 Australian elderly (60+ years) to determine whether confiding occurs with spouses, children, siblings or others. With increasing age, women displayed more confiding behaviors, mostly with spouses, but also with siblings and children (daughters). Confiding is a critically important issue in completeness and account making.

The account-making model of Harvey, Weber, and Orbuch is important in understanding the process of meaning making. The model defines important concepts such as completeness and confiding and describes how these concepts are useful in understanding how and why stories develop. Completeness and confiding are also measurable concepts that investigators can use to assess stories and predict functioning in individuals and couples.

**Collaborative storytelling**

As reported earlier, stories, accounts and narratives are primarily assessed and understood as individual processes. However, it is difficult if not impossible to separate the individual process from the joint process of narrative construction. A variety of approaches have been developed to understand how stories are collaboratively constructed and verbalized. Gergen and Gergen (1987) suggested that individual narratives are typically joint constructions as meanings of events and experiences are developed and communicated in a shared way over time. In addition, as individuals work and rework their accounts over time, couples do the same through their ongoing process of marital communication. Burrell and Fitzpatrick (1990) suggested that partners reshape their individual psychological realities into
a conjoint marital reality. Duck (1991) underscored how critical it is in the study of interpersonal relationships to tap into the shared meaning of interactants. Even in non-related couples, Mishler (1986) demonstrated how much the responses of an interviewee in a standard interview represented the joint interaction of both interviewee and interviewer. Hyman (1994) studied remembered information with 108 undergraduates who talked about a short story with either another participant (dyads) or a researcher (experimenter-tested). Findings were that subjects in a dyadic setting spoke more about their evaluations of the story, included more comments linking the story to a larger knowledge frame, and more often used remembered details to support their positions. Experimenter-tested participants remembered more concrete story details and interpretations. Baldwin (1985) addressed the role of gender on narrative development and found that men and women have been found to play complementary roles in telling the family story.

Joint narratives allow researchers to investigate how a couple's orientation toward the relationship is expressed in the presence of each other and in the presence of a third party. This joint production is likely to reveal more of the shared meaning the couple has about their relationship than what could be learned from individual stories. However, it is important to recognize that the joint account rendered by the couple may not be deeply shared meaning but may result from deference from one partner to the other.

Although much past research focused on individual narratives, there are obvious reasons to believe that narratives are formed in collaboration with others. Different groups of persons collaborate to construct different types of stories, and past research investigated the differences between narratives of various groups. An important aspect of the present study is the focus on the stories of later-life couples.
Joint stories of older couples

The stories of older couples differ somewhat from those told by younger couples. Gould and Dixon (1993) studied the collaborative storytelling of 10 older (M=70.7 years) and 10 younger (M=28.5 years) couples by analyzing narratives of how they described a vacation experienced by both members of the couple. Examining the structure of speech, content of stories, and the collaborative process of telling the story, they found that older couples' stories consisted of fewer references to absolute time, but had more descriptions of persons and places than of exact events. Older couples told more one-sided stories and collaborated less with their spouse as they told their stories than did younger couples. These findings were similar to those of Kemper (1990) who studied diaries of 8 older adults. In Kemper's study, the narratives of older persons included more information about influential people in their past while the themes of diaries of younger persons included more chronicling of daily events. In a different study, Kemper found that narratives of older persons became structurally more complex but somewhat less cohesive as their style of communication changed. She noted that speaking styles of older adults included fewer connectives, fewer long words, shorter sentences, more sentence fragments and fillers (eg., “you know”) and more repetition when talking with other older adults, regardless of the mental status of the listener (Kemper, 1994). Kemper termed this specialized form of speaking “Elderspeak” and called it a special speech register that targets older adults.

Boden and Bielby (1983) found that although younger and older couples produced stories that were similar in structure, the content of the stories differed. Boden and Bielby recorded conversations of three pairs of previously unacquainted elderly persons and compared them to conversations of younger persons’ conversations from a previous study.
Older adults were better able to integrate past and present events, thus using the past as a conversational resource. Overall, older couples had a broader recall of the past in the context of the present that served to provide a shared sense of meaning. Gould, Trevithick and Dixon (1991), in a study of oral recall of texts, also found content differences in stories told by younger (M=24.3 years) versus older (M=67.9 years) persons. Researchers coded interviews based on the number of denotative (comments closely related to text) and annotative (evaluative and interpretive comments) elaborations used in recall of stories. Results showed that there was no difference between groups in denotative elaborations but older persons utilized more annotative elaborations. Further findings were similar to those of Boden and Bielby (1983) in that although both groups included similar amounts of direct information from the text, older dyads added more personally relevant information into stories. Pratt and Robins (1991) compared personal narratives of 20 participants in each of three age ranges of 18-25, 26-55, and 60-87 years. Twenty-six adults rated the quality of each narrative. Raters judged the narratives of the oldest group to be of better quality than those of the youngest group. Further, Pratt and Robins found that, as a group, older adults were more likely to offer narratives structured in a more classic form; that is, stories including a high point, followed by challenges which were followed by a resolution.

In conclusion, the stories of later-life couples differ from younger couples. Older couples appear to use different language and process when telling collaborative stories. The results of past research indicate that the stories of older couples are clearly different from those of other couples and future research needs to account for these differences.
Literary use of story

In a recent review, King (2001) suggested that current methods used in research on narratives are inappropriate. He suggested that coding processes and the use of summary codes for analyses created methodological and theoretical problems that researchers have yet to resolve. He described that these processes are not sufficiently grounded in theory and result in the loss of data and, therefore, meaning. King recommended that other methods need to be developed and utilized in the study of narratives.

Theorists are becoming more interested in literary theory as an approach to understanding lives and experience. For example, Geertz (1980) argued for a replacement of traditional social theory by literary theory. Wexler stated that among the newer forms of academic speech, none is more pervasive than literary language (Wexler, 1987). One researcher suggested that gerontologists are increasingly discovering literature to be a valuable resource for studies in aging, psychology and the life review (White, 1995). Research on the content and process of stories told by individuals and couples can benefit from using literary theory.

Using literary theory, Bly (1990) described stories as composed of two elements. First, concrete aspects of stories include persons, places, times and events. These components are found in any story. The second element includes the unconscious aspects of stories that are evoked through the process of telling the story. These concepts are dynamic, as they may change in each telling of the story. The unconscious element of the story includes hopes, dreams, desires and interpretations. Bly contends that the way in which stories become more useful to people is not only by including the concrete aspects, but rather the familiarity of the interpretation found in the second element. She proposes that human
beings “don’t like what we don’t know.” In this way, stories become more useful as the listener relates to more and more of the content. The storyteller can engage the listener by “widening the periphery”, that is, by including more and more information such that the listener begins to relate to the information being offered.

Literary theory is a helpful approach to be considered in research on narratives. By widening the field of knowledge about stories to include other disciplines such as literary theory, researchers may gain insight into what structural components exist in “good” stories and how these components can assist and augment future research.

Interaction and Behavioral Coding

Prior to the 1970’s and 1980’s, self-report measures dominated the field as the primary choice of relationship assessment. However, researchers increasingly believed that the stage models derived from self-report methods were inadequate for describing the micro-processes of interaction and communication (Baucom & Sayers, 1989). Harre and Secord (1972) observed that self-report methods depended primarily upon the respondent’s ability and willingness to provide accurate, detailed accounts, and it was difficult to control for honesty. Bateson (1972) argued that investigating interaction and specifically sequences of interaction could help to define relationships despite the intentions expressed by participants. King concluded that behavioral observation systems developed as a result of suspicions of the limitations of self-report and the feeling that couples were largely unaware of the patterns of interaction in their marriages (King, 2001). Street (1988) acknowledged a shift from self-report toward more verbal, vocal or kinesic pattern in communication. This movement continued, as Bradbury, Fincham, and Beach (2000) recently reviewed previous work on
marital assessment and found that observational coding progressed further to focus on sequential patterns, followed by greater attention to higher order features of interaction, such as relational patterns (e.g., demand-withdraw). Behavioral observation systems clearly attend to some difficulties identified in self-report measures.

Baucom and Sayers (1989) suggested that interactional coding involved the development of numerous conceptual, methodological and applied advances that better informed research. These advances included the development and validation of observational coding systems, the development of strategies to segment, code, and interpret data, an increased focus on methodological and conceptual issues that arise as well as applied strategies. Specifically, these strategies regarded extracting and isolating communication from partners and sequences in couples that characterized distressed and nondistressed couples. Finally, the development of interaction coding systems emphasized the use of empirically based intervention strategies to alter dysfunctional patterns of interaction. Unfortunately, not all of these developments led to greater agreement in the resulting research. Problems in segmenting, coding, interpreting and analyzing the observed interaction developed and created another basis for debate.

Bradbury et al. (2000) concluded that the variety of codes, coding systems, segmenting strategies and analyses created an increase in breadth, but not depth, of knowledge about interaction. Despite the important issues addressed and improved by interaction coding systems, their development and use created problems that need to be resolved. These problems include type of task to observe, segmenting interaction, micro versus macro coding, and determining the appropriate units of coding and analysis. The strengths and weaknesses of these areas are reviewed below.
Task

One fundamental issue in interaction coding is the task to be observed and coded. Historically, problem-focused tasks were used to assess interaction, communication and behavior and a number of researchers noted this tendency (Baucom & Sayers, 1989; Bradbury et al., 2000; Gottman, 1979; Notarius & Markman, 1989). Markman & Notarius (1987) suggested that tasks needed to focus directly on the most important problem issues for couples. Investigators also noted that differences between distressed and nondistressed couples may become more apparent as the conflict level of the task increases (Gottman, Notarius, Markman, Bank, Yobbi, & Rubin, 1976). Therefore, findings may differ depending on the amount of conflict in the task.

Most previous research utilized problem-focused tasks, mostly due to the nature of the sample studied. Since researchers recruited participants from clinical populations, the level of distress in participants was naturally greater than what other populations would experience. As will be discussed later, investigators also viewed positive interaction and positive codes as less important to investigators. Relatively few studies have used non-problem focused tasks to investigate how couples relate in interaction. Greater attention to this area will enable a broader picture of interaction especially when predicting marital satisfaction.

Segmenting interaction

Segmenting interaction into coding units is an important issue in behavioral and observation research. Investigators must attend to this issue in order to reach reliable and valid results. (Heyman, Eddy, Weiss, & Vivian, 1995). For example, Gottman (1979) found
that using two different coding segments to measure the same behavior reached different results.

Previous research described two processes most often used in segmenting interaction. These two processes are time sampling and event sampling. Floyd (1989) discussed time and event sampling as two types of coding segments that can be used. In time sampling, the researcher breaks coding units into time intervals (e.g., 10 seconds), and codes the material in that segment. In event sampling, the duration of the segment is variable and is determined by some naturally occurring boundary designated by the researcher (Gottman, Markman, & Notarius, 1977). The event may include a dynamic of interest or more simply an utterance, sentence or speech by a participant. Event coding typically coded thought units or speaking turns. A thought unit was defined as “usually a verb phrase, grammatically separated from others by conjunctions, subordinate clause indicators, question marks, or periods” (Markman, VanWidenfelt, Johnson, Dykes, Jamieson & Goldstien, 1991, pp. 3.). Gottman (1979) also used thought units as the unit of analysis. Turn taking has been used in some measures but some have suggested that turn taking can become too structural and the investigator too involved in the process (Weiss, 1989). Barrett, Johnston and Pennypacker (1986) suggested that observational units should be relatively noncomplex and that measurements should be restricted to only the most fundamental and universal dimensions, such as frequency and duration. Investigators should attempt to reduce interactional behaviors to their most elemental units (Floyd, 1989; Kelley, Berscheid, Christensen, Harvey, Huston, Levinger, et al., 1983).

Floyd (1989) offered several conclusions about segmenting interactions. First, there was no clear evidence that coding units of any particular size or level of complexity were
superior for discriminating between functional and dysfunctional based on summary scores for positive and negative behaviors. Second, the coding unit did influence the type of data that was obtained and the picture of interaction that emerged. Finally, Floyd concluded that coders did not need extensive training to make general observations of positive and negative behaviors. The investigator must be careful not only in choosing the method of segmenting interaction, but also in interpreting results. However, investigators rarely report their rationale for choosing one method of segmenting data over another.

*Micro and macro coding*

Another common problem in observational research involves the use of micro versus macro coding systems. Macro, or, global systems focus on selected interactional dimensions (e.g., dominance and withdrawal) and use rating scales to assess only the dimensions relevant for the system. In contrast, micro analytic systems provide a comprehensive, detailed analysis of interaction streams that allows for the development of specific interactional hypotheses about the system being investigated (Markman and Notarius, 1987).

Baucom and Sayers (1989) hypothesized that while micro coding systems obtain specific information, they present difficulties for the investigator. For example, they are more time and labor intensive as the number of observed behaviors increases. This is due to the need for a larger number of codes to capture all behaviors of interest. In addition, identifying dynamics such as disagreement can be difficult to operationalize and more difficult to generalize.

In addition to issues of time and conceptualization, micro coding systems have problems associated with explanation and interpretation. For example, Margolin (1983) warned about taking individual behaviors of each partner and then combining them to
achieve a couple score. Others reported that this process prevented the analysis of gender differences (Baucom and Sayers, 1989). Micro coding systems sometimes result in having some codes that are rarely assigned in the interaction. In this case, the researcher combines codes, creating summary codes to be used in the analyses (Baucom & Sayers, 1989). When researchers must reduce codes by summarizing them, codes that are not conceptually similar are often combined. (Heyman et al., 1995). As noted by King (2001), the decision to combine codes usually does not include rationales other than low occurrence, and as such may be an incorrect or inappropriate method. Researchers must consider issues of interpretation and explanation when discussing findings.

An alternative approach to micro coding is macro, or, global coding systems that are more able to capture patterns of interaction. However, their drawback is that they do not attend to smaller aspects of the communication exchanges. This may create the loss of information that may be important in determining the differences between couples. Hooley and Hahlweg (1989) also suggested that investigators using macro coding systems will encounter problems with generalizing findings because certain patterns of dysfunctional communication may transcend languages, cultures and diagnostic groups. Since these patterns differ across cultures and other groups, it is difficult to make comparisons across studies and subgroups. Despite the problems noted above, macro coding systems continue to be valid, useful tools for assessing behavior and interaction.

In summary, Notarius and Markman (1989) concluded that the field of observational research could best progress by the use of microanalytic strategies that have the potential to reveal complex patterns of interaction that cannot be detected by human judges. Once discovered, these patterns may need to be confirmed by more global systems. Therefore, as
with code segmentation, there are strengths and drawbacks to either approach. Researchers must make their best decision based on the focus of the project and hypothesized results. The choice made by the investigator must, however, be the most reliable and valid method available. The importance of these reliability and validity issues is described below.

**Reliability and validity**

Reliability and validity are among the most important issues to investigators and their critics regarding interaction coding. Validity problems may most often result from inadequate description and coding of interaction features or biases from human observers (Poole, Folger, & Hewes, 1987) while reliability issues include sampling, coder, and coding errors. One of the most important validity concerns in interaction coding is related to collecting data from individuals and then generalizing results to couples. Baxter (1988) suggested that in order to make conclusions about a couple, the couple must be the unit of observation, coding and analysis. She reported that only when a researcher queries a couple about the nature of the relationship or its processes can the researcher make conclusions about the relationship. King (2001) concluded that methodological and linguistic issues were responsible for validity problems. He suggested that such issues included segmenting verbal data, assignment of a coding unit, labeling a code positive or negative, and unclear and inappropriate definitions of summary code terms. For example, King reported that when an investigator assigns a positive or negative valence to a code, the investigator interprets meaning that may differ from what the speaker intended. Regarding summary codes, King suggested that when codes are summarized, there might be inconsistencies between the resulting codes and the meaning of the original code. King suggested that decisions made by investigators to summarize codes are arbitrary and at times inappropriate. However, an
important note regarding King’s intent is that his primary thesis was that behavioral data is not congruent with linguistic systems, a fundamental argument encountered in interaction research as investigators argue over the appropriateness of assigning codes to interaction.

Despite these problems, however, others reported that the validity of marital interaction measures has been strong historically so that variance observed is due only to differences between couples, not to other variables. Recently, Heyman, Chaudhry, Treboux, Crowell, Lord, Vivian, et al. (2001) reported that validity was consistently strong across settings (home vs. clinical), across studies from various countries and between groups such as distressed versus nondistressed couples. Though arguments will persist between theoretical orientations regarding how to maintain the integrity of any interaction and appropriately measure it, the validity of interactional data appears to be strong.

In contrast to validity, reliability has received relatively little attention. Reliability problems can result from observers’ inconsistent application of rules and instructions, ambiguity of those instructions, inattention or fatigue (Folger, Hewes, & Poole, 1984). Reliability can also be two part -- unitized and classificatory. Unitized reliability considers how accurately and consistently an interaction is broken into coding units. Researchers must be careful to unitize interactional data consistently. This is one major attraction to time-dependent segmenting as described earlier. However, consistency can also be achieved in other types of segmenting as long as rules are clear to the transcriptionist. Classificatory reliability is how much consistency exists in coding a behavior the same way over time. This type of reliability most often considers agreement between coders, but this may be erroneous. In fact, researchers tend to use reliability and inter-rater agreement interchangeably, though understanding the overall stability of results may involve more than a simple estimate of
agreement. It is important to remember that overall stability depends upon who is being studied, how frequent the codes of interest occur, and on how long the observations are. Because the first two of these are often the independent and dependent variables, the length of observation is typically chosen as a methodological decision by the investigator (Heyman et al., 2001). As with choosing a coding scheme, reliability and validity are best handled by having clear definitions of observations and codes (Greenberg, 1986).

**Interactional coding systems**

Many interactional and behavioral coding systems were developed in the past 2 decades and several systems became more widely used and respected. Hooley and Hahlweg (1989) reported that during this time, at least 9 different behavioral coding systems were developed but most often investigators selected the Marital Interaction Coding System (MICS), the Couples Interaction Scoring System (CISS), or the Rapid Couples Communication Scoring System (RCISS) (King, 2001). These systems are briefly described below as a general survey of relevant coding systems. It is also important to understand their development and evolution as a preface to knowing the current status and future direction of interactional research.

The MICS (Hops, Wills, Patterson & Weiss, 1972; Weiss & Summers, 1983) used over 30 codes of both verbal and nonverbal behaviors to describe marital interaction processes during a marital conflict task. Each partner took turns speaking and each turn was used as the unit of analysis. The MICS was useful in observing a large number of interactions, but the large number of possible codes created several problems. Critics of the MICS reported that low base rates of many codes created the need to form summary codes.
Using summary codes was not helpful in assessing communication because the codes that were specifically meant to assess communication were often combined into summary codes. To the extent that coding categories failed to capture theoretically meaningful behaviors or combine such behaviors with other types of communication, the connection between marital satisfaction and communication was blurred (Hooley & Hahlweg, 1989). Beginning with a large number of codes and then collapsing them into summary codes also created lengthy coder training processes. Further, coding processes were slow and costly due to learning small discriminations between codes. Finally, reliability was hard to obtain and calculate partly due to infrequency of certain codes. If codes were collapsed into categories, it was the categories for which reliability needed to be calculated, adding a difficult and time-consuming step. Although coding systems such as the MICS allowed investigators great flexibility, comparisons across studies was difficult due to how codes were collapsed (Heyman et al., 1995) or even operationalized. For example, Markman and Notarius (1987) found that the MICS code of spousal negativity had been subjected to at least 15 different operationalizations.

Responding to the challenges regarding the MICS, Heyman and Vivian (1993) created the RMICS from the MICS. The RMICS used speaker turn as the base coding unit and codes were ordered hierarchically based on past research that indicated negative codes, followed by positive, followed by neutral were of decreasing importance in understanding marital conflict (Weiss and Heymann, 1997). Specifically, in declining hierarchical importance, RMICS codes included psychological abuse, distress maintaining attributions, hostility, dysphoric affect, withdrawal, relationship-enhancing attributions, acceptance, self-
disclosure, humor, constructive problem discussion, and other (statements on something other than a personal or relationship topic or tangential information).

Heyman et al. (2001) used the RMICS in their investigation of 197 couples in a clinical sample and 50 high functioning couples and predicted marital satisfaction using the Dyadic Adjustment Scale (Spanier, 1976). As stated above, they used speaking turn as the unit of analysis and then divided the number of codes found by the total number of speeches by each partner to achieve a rate of behavior. They found that 15 minutes was sufficient to witness enough behavior to make reliable estimations of most RMICS code frequencies and accurately predict marital satisfaction. The RMICS demonstrated some important outcomes and takes much less time and effort than the MICS. However, as with other models, it primarily assessed problem-focused communication and interaction and its hierarchy of codes placed less importance on positive codes than negative codes.

The CISS (Gottman, 1979; Notarius & Markman, 1981; Notarius, Markman, & Gottman, 1983) was developed to use with couples over a variety of situations with the purpose of identifying determinants of marital distress. It was based in part on the MICS (Weiss & Summers, 1983), but differed in its separation of content and affect dimensions of interaction. The CISS used thought units as opposed to speaking turns as investigators believed that the micro level of analysis would explain more details of couples’ interactions.

The RCISS was developed from the CISS (Krokoff, Gottman, & Hass, 1989) to accelerate the process of investigating how couples solved their problems. Therefore, the RCISS was generally more oriented toward problem resolution rather than problem discussion. Krokoff et al. (1989) demonstrated that RCISS could discriminate satisfied from
dissatisfied couples. However, researchers also found problems with the CISS and RCISS that limited its applicability.

Several problems have been noted with the CISS and RCISS instruments. First, King (2001) suggested that the CISS coded each thought unit independently and as such denied the importance of the overall context of verbal exchanges. In addition, King objected to calculating rates of codes per coding unit (e.g., thought unit) as previously used in the RMICS. King suggested that this unfairly calculated rates of interaction that may be outside of a couple’s normal process of communication. For example, if one partner told a long, negative narrative, each thought unit would be coded negatively and the resulting sum would reflect more negativity than what would be expected in the couple’s typical interaction. A final problem with the CISS, as noted by King (2001) was that it failed to account for simultaneous speaking. Due to the nature of the coding and transcription, a structure evolved in the speaking exchange that could not account for partners speaking at the same time. Therefore, coders needed to choose which speaker to code, which resulted in either lost data or an inaccurate portrayal of the interaction.

After reviewing these major systems of couple assessment, it seems intuitive that one could conclude that each system has benefits as well as problems and that problems may be inherent in any attempt to code such an intricate exchange as human interaction. The investigator must make careful decisions in segmenting interaction, using an appropriate and reliable coding system, and being attentive to issues such as how and to whom the results can be generalized.
Analysis

In addition to making decisions about observing, segmenting and coding interaction and communication, investigators also need to identify an appropriate method to analyze results. Street (1988) suggested that there were two important issues to consider in choosing an analytic strategy. First, reaching important conclusions about interaction and communication are constrained by the choice of analytic tool. Second, generalizing may be impeded, if not impossible, based on different methods.

Investigators have used a number of analytic strategies in the study of interaction. Correlation, factor analysis, lag sequential and sequence repetition analyses (LSA and SRA, respectively) and regression are several tools briefly discussed below. However, these methods are not inclusive of all possible strategies.

Correlational analysis and factor analysis are common methods chosen by investigators studying interaction, but these methods can yield findings that are inconclusive or inaccurate. Many researchers avoid correlational analysis because it measures only association, not prediction. Gottman (1978) argued that factor analysis was not appropriate for observational data either because codes that covaried were not necessarily functionally equivalent. Therefore, when investigators calculated factors of similar codes, the factors may include codes that are otherwise unrelated but were combined due to statistical similarity. Heyman et al. (1995) also described problems when they attempted to use factor analysis on MICS codes. They reported that, due to low base rates, positive behaviors did not occur enough to become a separate factor. Therefore, according to their analysis, positive behaviors would have no role in the MICS system. Clearly, ignoring the impact of positive behaviors in any interaction dismisses an important, if not large, component of interactional
behavior. Due to the problems identified in correlation and factor analysis, current investigators generally avoid these methods in understanding interaction. Newer approaches such as Lag Sequential Analysis (LSA) and Sequence Repetition Analysis (SRA) developed that allowed researchers to identify patterns in interaction and predict future communication and behavior based on previous communication. Researchers suggested that these processes allowed better identification of problematic interaction and offered improved clinical usefulness.

Perhaps the most widely used methods to analyze patterns of behaviors and communication are LSA and SRA. Gottman (1979, 1994) used LSA and SRA with the CISS and the MICS. Using these methods, researchers identified sequences and exchanges in communication and interaction and could predict future behavior from previous behaviors. However, one limitation of using lags as suggested by Hooley and Hahlweg (1989) was that these processes ignored all behaviors that occurred between data points. In other words, LSA and SRA were effective in finding statistical patterns that emerged in data, but did not account for other behavior that occurred during or between patterns. A related problem is that LSA and SRA are affected by a problem described earlier -- the need to create summary codes. Creating summary codes resulted in an inherent loss of data in order to create sufficiently large codes to observe patterns and sequences. Arliss (1990) reported that focusing on structural redundancies of communication diminished the significance of the participants' monitoring of their own behaviors. Bakeman and Dorval (1989) argued against the use of LSA and SRA from the position of statistical independence. They argued that events were constrained by the sequence which they occurred, so were likely to not be independent. They suggested, however, that if LSA and SRA results are to be considered
valid, readers and critics must assume that coders assign codes independently of one another, an assumption that some may not accept.

Lag Sequential Analysis and Sequence Repetition Analysis are complex, powerful statistical tools used to analyze and predict communication and behavior patterns. They are widely used in interaction research and offer specific suggestions for improving clinical work. However, these methods are complicated and often avoid a great deal of data in order to identify particular patterns. They may be effective tools for analyzing specific, concrete interaction, but may be limited in explaining less concrete variables more common in free-flowing storytelling.

Shapiro, Gottman, & Carrere (2000) recently used regression in a study of marital satisfaction in couples who were new parents. Results were similar to those found using LSA and SRA techniques. Therefore, regression may be used to account for the effects of several interaction variables on an outcome such as marital satisfaction. Unfortunately, too few studies have used regression to analyze stories or interaction, although it may be an important method to consider. The current study will use regression to test several communication and interaction variables against marital satisfaction. The analyses do not include summary or combined variables and the couple is the unit of analysis. This approach allows for attention to story content and communication variables without losing data to summary codes.

Determining the best choice of statistical analysis to use is a critical decision to be made by the investigator. Several methods have been utilized and criticized equally, but it may be that either regression is less susceptible to criticism or has not yet been used enough in the study of storytelling or interaction research to warrant attention. Little previous
research focused on joint narratives, but even fewer studies exist that analyzed joint narratives quantitatively.

In a recent quantitative study of narratives, Veroff et al. (1993) completed a 3-year longitudinal study of narrative-based research with married couples. A major focus of the research was the analysis couples’ construction of their marital reality and if that construction could predict marital well-being. Using a sample of 373 newlywed couples, investigators interviewed couples annually for a period of three years. Interviews were open-ended and interviewers were asked not to direct the story with cues other than the initial story line presented. Marital quality was measured with a five-item scale developed by the primary researcher. Narrative coding consisted of three separate systems: affective coding, interaction coding, and thematic/stylistic coding. Affective coding included direct affective statements or statements of needs. Direct affective statements were identified by mentions of feelings, including attraction, repulsion, general affective states, or indirect “states of being from which affect can be inferred” (e.g., “It was nice, sweet, great, terrible”) (pp.446). Statements of needs included direct statements of wanting, hoping, needing or indirect statements like being determined, committed or serious.

Interaction coding assessed how couples interacted while telling their marital story. Specifically, each shift in talk between partners was coded for which type of interaction it was. Each interaction (shift) was given one code. The six codes possible were collaboration, conflict, confirmation (assent), continuation, non-response or confirmation-collaboration (interrupting and affirming the partner's previous statement, while adding further information). In addition to coding types of interaction, each shift in talk was coded for what part of the story context it occurred (before meeting spouse, courtship, wedding, initial
married life, current married life). Thematic and stylistic coding involved dividing the entire narrative into five substories. The five substories were the courting, wedding, honeymoon, present, and future stories. For each substory, thematic coding assessed whether the couples focused on the relationship versus each partner as an individual, the degree of coherence, tension, degree of collaboration between partners in telling the story, major themes described in the story, and conflict.

Results of the study revealed that if a couple described their courtship experiences in a positive way, their marriages were likely to be happier than couples who did not describe their courtship positively. Also, if a couple described a positively accelerated courtship story (defined by important mini-stories such as being childhood sweethearts, love at first sight or destiny, for example) a positive outcome of marital quality was found. Results also suggested that if a couple described their relationship history with emphasis on relational affects, they experienced a higher quality marriage. A final finding was that certain themes in relationship stories (e.g., religion) were positively associated with higher marital quality, while others (e.g., children or finances) were associated with lower quality. These thematic effects were only found in African-American couples, however.

The study described above considered several important ideas in interaction coding schemes that have developed over time. These themes included affect, interaction, and the importance of chronological order and attention to all stages of the relationship history. It was one of very few studies that did not utilize a broad, pre-existing coding system. The study also integrated ideas from social psychology in its coding, such as completeness of account and positive stories. While the originality of the above coding system allowed the researchers increased flexibility in their approach, their methods have not been widely
validated or replicated. For this reason, many researchers choose to utilize an existing coding system.

The present study incorporated several concepts utilized in Veroff et al. (1993). These concepts included the attention to chronological order, positive stories and collaboration in storytelling. As opposed to Veroff, however, the collaboration component in the present study focused more on communication sequences and dominance in turn taking. The present study also used a semi-structured interview that allowed the story to be formed as much as possible by couples rather than the interviewer.

Cognition

Increased attention to marital interaction coding developed due to an increased interest in marital, or joint cognition between partners in a marriage (Carrere, Buehlman, Gottman, Coan, & Ruckstuhl, 2000). Marital cognitions are thoughts, feelings, and motivations that couples develop over time to help them in understanding and create meaning from events that occur in their marriage. Marital cognitions drive emotional expression and behavioral interactions, and can be used to understand past and present events (Fincham, Bradbury & Scott, 1990). Veroff et al. (1993) described the importance of addressing marital cognition in research. They suggested that the meaning that couples give to their relationship might be diagnostic of how they will function as a couple. Shapiro et al. (2000) found that they way couples conceptualized their marriage predicted how marital satisfaction changes over time. Therefore, investigating the cognitions of married couples offers insight into understanding their shared views of themselves and their relationship. This insight can then be used to increase understanding and prediction of their marital satisfaction.
Recent models have drawn attention to the role of marital partners' cognitions and memories in explaining their reactions to each other (Bradbury and Fincham, 1991). Certain memories may be associated with positive outcomes because they reflect particular experiences and events that promote relationship functioning. Fincham et al. (1990) hypothesized that memory and marital cognitions are related. They found that information is organized and structured in memory on the basis of what is cognitively salient. The more salient and thematically coherent the organization of the memory, the more likely the individual is to retrieve particular events from memory. They concluded that unhappy couples used past unhappy or negative events to understand present interactions and future behaviors. Weiss' (1980) theory of sentiment override suggested that over time, spouses developed a generalized set of feelings and cognitions toward the partner that could override and distort the perceptions of a specific interaction. Weiss suggested that among distressed couples, merely being the focus of the communication might produce an expectancy of being attacked or criticized, thus leading to a negative response from the partner. Weiss' findings clarified the link between cognition and resulting affect displayed by partners. This link is important in understanding the development and display of emotion, both positive and negative, in marital interaction.

Bradbury and Fincham (1987) linked memory and affect and argued that individuals were most likely to retrieve units of memory that were congruent with the present mood they were experiencing. Therefore, distressed couples were more likely to retrieve negative memories than nondistressed couples. However, if partners were invested in feeling that their relationship is worth maintaining, they were more likely to construct memories of the past that allowed them to feel confident about the future (Murray & Holmes, 1997). Ross
and Wilson (1999) found that current motivations should have the greatest impact on memories of those aspects of the past that are most relevant to the current motivations.

Exploring individual and marital cognitions are important concepts in the study of interaction. Increasing knowledge about how and how well marital partners know themselves as well as each other will be helpful in learning about the strengths and vulnerabilities in the marriage, the couples’ interaction and communication. The Oral History Interview is one method used in understanding marital cognition. Understanding how couples know and describe their relationship may improve how researchers investigate and predict interactions and dynamics in the couple.

*Oral History Interview*

An increasingly utilized method of assessing marital cognition and interaction is the Oral History Interview (OHI). The OHI was originally designed by Krokoff (1984) but also reflected an earlier clinical inference of Satir (1964), who suggested that taking a family life chronology and investigating how couples responded to questions of how they met and got married could possibly predict therapeutic outcome. Previous research demonstrated that it is not difficult to get people to recount the history of their intimate relationships (Karney & Frye, 2002) and couples can describe in great detail how they met and decided to get married (Flora & Segrin, 2000; Sternberg, 1995). Carrere et al. (2000) suggested that seeing how a couple interacts is a particular strength of the OHI over self-report questionnaires or more structured interviews. The OHI is an important tool for assessing interaction and eliciting stories from couples.
The OHI is a semi-structured interview that is relatively simple to administer because it involves having a couple talk about themselves and their relationship history, a simple and often enjoyable task for partners (Karney & Frye, 2002). The OHI questions couples about the beginnings of their relationship, their philosophy of marriage, and how their relationship has changed over time (Shapiro et al., 2000). Results are transcribed and segmented into thought units. Thought units are then coded on the basis of how couples described their relationship and emphasize attitude and process over content of the story (Buehlman & Gottman, 1996).

Buehlman et al. (1992) reported that the OHI has high external construct validity because the coding dimensions were similar to observations in problem-solving behavior, affect and physiology during marital interactions. In addition, Shapiro et al. (2000) used intraclass correlations and found the overall reliability of the OHI coding subscales to be .75. Therefore, the OHI appears to be a reliable and valid instrument for assessing interaction and joint storytelling.

The OHI is a multidimensional coding system that addresses several processes of marital interaction that are important to the current study. Therefore, the coding dimensions are described below. It is important for the reader to note that several coding dimensions attend to greater elaboration in responses as a positive indicator of marital functioning.

The dimensions coded in the OHI have remained consistent across studies. These dimensions included: fondness/affection, negativity, expansiveness/withdrawal, we-ness/separateness, gender stereotypy, dealing with conflict, and disappointment/disillusionment (Buehlman, Gottman, & Katz, 1992). Fondness/affection rated couples according to how much they appeared to be in love with each other, such as positive affect, compliments, and
reminiscing about special times in their past. Negativity was coded as the amount of negativity shown toward the spouse, and included vagueness, talking in generalities, disagreement, displays of negative affect, or the extent to which they are critical of the spouse.

Another important coding dimension in the OHI was expansiveness/withdrawal, which rated each spouse on how emotionally expressive they were during the interview. For high functioning couples, expansiveness would appear as how expressive and expansive each partner is during the interview. This dimension illustrated how aware each spouse was about the details of their relationship history and about their spouse's world. It also indexed how the spouse responded to and expanded upon the previous comment by the partner. In contrast, lower functioning marriages typically illustrated this dimension when partners responded to questions with a few short sentences, seemed withdrawn, and did not add to what their partner said. Belsky and Kelly (1994) also used a code related to expansiveness, which they described as the intimate knowledge base of one’s spouse. They described it as important for maintaining good communication as couples became parents. We-ness versus Separateness coded how much a spouse identified himself or herself as part of the couple versus emphasizing independence. This concept was also similar to a concept Belsky and Kelly (1994) referred to as the ability of couples to integrate themselves into “us.” Gender stereotypy was a couple rating that assessed how traditional a couple’s beliefs and values were. Dealing with conflict was also a couple rating that assessed how couples dealt with conflict. Conflict ratings assessed the degree of volatility of the couple, the amount of chaos in the relationship, and the concept of “Glorifying the Struggle” (Buehlman et al., 1992, pp. 299), which is couple discussion of hard times in the relationship and how they succeeded
and felt proud of their accomplishment. Finally, Disappointment/Disillusionment addressed the extent to which couples had given up on their marriage or were not able to express what made the marriage work (Buehlman et al., 1992).

The OHI can be used to evaluate marital processes and feelings as well to predict divorce. Findings from studies that utilized the OHI suggested that how couples remembered their past was associated with their relationship outcomes (Buehlman et al., 1992). Findings of Carrere et al. suggested that the OHI was a better predictor of divorce than the Marital Adjustment Test (MAT, Locke and Wallace, 1959). Shapiro et al. (2000) found that predictors of stability in young marriages included fondness and admiration, amount of expansiveness and awareness of partner’s world, and the amount of unity expressed by each spouse through his or her use of the words “we” and “us.” Predictors of divorce were the amount of criticism or negativity, extent to which couples were disillusioned or disappointed about the marriage, and the extent to which they felt that difficulties in their lives were out of their control or were chaotic. These findings may not be appropriate to be generalized to the current study, however, as the mean age of participants was 25 for wives and 26 for husbands. However, the strength of the OHI in predicting stability versus decline in marital satisfaction for wives over the transition to parenthood may support the hypothesis that it taps relationship buffers and vulnerabilities (Shapiro et al., 2000).

OHI variables can be viewed as dynamic variables that index the underlying marital friendship, a central premise to Gottman’s work. Fondness and admiration and high expansiveness or awareness may act as buffers that protect the relationship through stressful transitions. In contrast, Buehlman et al. (1992) found that husband’s lack of expansiveness correlated significantly with divorce so where husbands were withdrawn, there was a decline
in marital satisfaction. Based on past research, Buehlman et al. (1992) asserted that since most husbands and wives demonstrated significant expansiveness throughout the interview, when husbands do not participate, it may indicate withdrawal. Buehlman et al. also found that husbands who scored low on fondness were unable to show pride in or compliment their partner and were unable to reminisce. Therefore, to the extent that they did not appear to be “in love” with their partner, they were not able to recall significant events or elaborate on their past. The OHI offers insight into the underlying friendship between partners, which Gottman suggested was a critical variable in understanding and predicting satisfaction in the relationship.

The OHI coding system is consistent with Fincham et al.’s (1990) theory presented earlier that individuals were most likely to retrieve units of memory that were congruent with their present perceptions about marriage. However, problems in the interpretation of these perceptions exist that limit generalization. For example, even though Fincham et al. suggested that global perceptions held by couples about their marriage can predict the future course of the marriage, they admitted that generalizability was difficult because couples were sampled at only one time in the life cycle. In addition, Carrere et al. (2000) reasoned that the OHI was inappropriate for newlyweds because their shared perceptions were not yet solidified. Couples have not had enough history together to form perceptions as designed to be measured by dimensions of the OHI. However, the OHI appears to be an assessment system that can augment the overall knowledge base of the relationships of later-life couples.

Several of the dimensions of the OHI were important in the current study. For example, expansiveness described the amount of elaboration couples used in their responses. The coding also included the amount of expansiveness that is reciprocated from one partner
to the other. The current study used a similar code simply called “detail” and also assessed the exchange of detail codes by counting sequences of detailed content. The OHI dimension of fondness/affection was also addressed with the coding in the current study, both by use of detail codes as well as with the positive storytelling code. The codes of detail and positive storytelling in the current study assessed the degree to which couples spoke in detail and remembered important, positive stories from their past that were influential in the development of the relationship.

*Communication and Marital Satisfaction*

Research that investigates interaction, cognition, and storytelling must also address communication. It is through communication that partners not only create a relational identity but also construct a shared reality that is important for the survival of the marriage (Berger & Kellner, 1964). Burrell and Fitzpatrick (1990) stated that marriages are created, maintained and changed through the communication that occurs between partners. Geiss & O’Leary (1981) highlighted the importance of communication in understanding and assisting distressed couples since distressed couples present communication problems as their most frequent complaint in marital therapy.

Previous research assessed communication with observational measures and related negative communication to lower marital satisfaction. Schaap (1984) reviewed 26 studies that compared the interactions of distressed and nondistressed couples in laboratory settings. Behaviors that were most likely to separate distressed and nondistressed groups were primarily negative in nature, such as negative affect, use of negative verbal categories and not stopping negative sequences. Schapp also noted a connection between satisfaction and
responsiveness, particularly with respect to assent and acknowledgment of the partner.

Hooley and Hahlweg (1989) found that distressed couples were more likely than nondistressed couples to initiate and respond more to negative behavior and affect. Another study investigated the relationship between a partner expressing a statement in a subjective or declarative way and partners’ marital satisfaction. Results demonstrated a strong correlation between the subjectivity of husbands’ negative statements about their wives and the wives’ marital satisfaction. Further, there was a negative correlation between subjectivity of wives’ nonnegative statements about husbands and the wives’ marital satisfaction. Thus, the less subjective or more declarative a wife was in her neutral and positive statements about her partner, the more satisfied she was with her marriage. Other results included that a husband’s empathic responding to negative statements about the relationship correlated with both partners’ marital satisfaction. However, wives’ empathic responding to nonnegative husband statements was significantly correlated with husbands’ and wives’ satisfaction (Walsh, Baucom, Tyler, & Sayers, 1993). Clearly, the type of communication and responses that occurred between partners was predictive of their relationship satisfaction.

Gottman (1979) identified patterns of communication difficulties between distressed and nondistressed couples as they attempted to resolve problems. In general, Gottman found that distressed and nondistressed couples could be differentiated from each other by their negative communication but found that the impact of positive communication on marital satisfaction was less clear. Gottman’s Structural Model of Marital Interaction made 4 hypotheses about the communication of unhappy couples. First, unhappy couples were more rigid and inflexible in their communication than satisfied couples. Second, they expressed more negativity in verbal and nonverbal communication. The third hypothesis was that
unhappy couples were more likely than happy couples to reciprocate negative messages. Finally, unhappy marriages were marked by asymmetry in communication -- one spouse dominates the other (Gottman, 1979). Gottman's theory was significant in understanding the connection between negative communication, the reciprocity of negative communication, and marital distress. Gottman's work focused on examining sequences of communication, an important development in the field of interaction research.

Previous research focused on communication sequences in marital interaction as a predictor of marital satisfaction. Walsh et al. (1993) explored sequential communication patterns of distressed couples. They found that when one spouse spoke about the partner or the relationship, the partner was more likely to respond negatively, and wives were more likely to respond negatively than husbands regardless of whether the husband started with a positive or negative statement. Speaker gender, positive/negative valence of message, focus, and skill in delivering the message did not affect the empathetic nature of the partner's response. Although this past research helped clarify rate of occurrence of particular communication sequences, Bakeman and Gottman (1986) suggested that additional data analytic strategies are needed to clarify patterns during interaction.

Gottman used the term negative reciprocity to identify sequences where one spouse would respond negatively to an initial negative comment made by the partner. Gottman's research produced probabilities of negative-negative sequences and found that the occurrence and rate of negative reciprocity was greater in distressed couples (Gottman, 1979; Gottman & Levenson, 1992; Gottman et al., 1976). He also found that distressed couples engaged in more negative and less positive communication than non-distressed couples (Gottman et al., 1977). Positive reciprocity was either comparable or more typical of nondistressed couples.
Although many of the studies described above reported negativity between partners during communication, they all utilized conflict-based tasks. Therefore, the likelihood of negative communication may have been inherently greater. Most studies focused on the communication strategies and sequences of distressed couples utilize a conflict task. However, Baucom and Epstein (1990) suggested that there is more to the study of communication than looking only at problem solving. Bradbury et al. (2000) also addressed the trend to focus on conflict discussions in their recent review. Walsh et al. (1993) used a non-problem focused communication task to assess sequential patterns in 56 distressed couples in their 30s, where the mean length of the relationship was 8.1 years. They analyzed only particular aspects of communication to avoid a problem commonly encountered by lag sequential research, the need to collapse codes to obtain summary variables. In the non-problem focused communication task, Walsh et al. found that negative speaker comments would lead to negative responses by the partner, but they also found that positive speaker comments predicted positive responses by the partner. Regarding gender, findings demonstrated that females were more likely than males to respond negatively, regardless of the valence of the statement to which she was responding. Other research, however, also found problems with males in communication with their spouses. Noller (1984) argued that husbands in distressed marriages seemed to suffer a communication skills deficit, being unable to receive the messages of their spouses correctly and have problems sending clear messages, especially positive ones. However, Noller hypothesized that this problem was actually a performance deficit for men, suggesting that they simply did not attend to the same messages as women.
The finding that more negative reciprocity in communication predicted a decrease in marital satisfaction created problems for some investigators, who found opposing results. For example, Levenson and Gottman (1985) found that less negative reciprocity from husbands of wives’ negative affect predicted a decrease in the wife’s marital satisfaction. However, results also demonstrated that the amount of positive affect by wife predicted a decline in marital satisfaction. Several researchers found no relationship between global negative behavior or negative reciprocity and marital satisfaction (Bradbury and Fincham, 1991; Filsinger & Thoma, 1988).

Global coding of affect is one problem with studies on negative affect reciprocity, as noted by Fitness and Strongman (1991). They suggested coding negative affect (anger, disagreement, sarcasm) in a general manner the same way over time, the researcher could not determine whether the same negative affect was being reciprocated. For example, if anger, disagreement and sarcasm were all coded as negative affect, researchers would not be able to determine if anger evoked anger or a different negative affect. Further, Fitness and Strongman reported that the strategy by which Gottman (1979) validated affect, a ratings dial used by couples to rate the level of their affective response as they viewed a tape of their interaction, collapsed codes into the global dimensions of positive and negative. Collapsing codes into global positive and negative affect further confused the prediction of specific affect. King (2001) also discussed problems related to affect, specifically, that there was no hierarchy of severity related to affect. He reported that the simplified coding of negative affect would group together such behaviors as a frown, kick, or punch into the same negative category, when they clearly differed significantly in their severity. Gottman (1994) recognized the difficulty of recognizing non-verbal behavior and affect but also
acknowledged their importance. Therefore, although previous research found some association between communication and marital satisfaction, other researchers found different results. Perhaps more investigation into nonnegative task, positive affect and reciprocity is needed to create a better overall prediction of marital satisfaction.

_Cancer in Families_

A diagnosis of cancer is a serious issue for the patient, spouse and every member of the family. All family members are directly confronted with the illness experience, as up to 33 percent of adult cancer patients, their spouses, and their children have clinically significant distress and psychosocial function (Lewis, 1990; Northouse & Swain, 1987; Omne-Ponten, Holmberg, Bergstrom, Sjoden, & Burns, 1993). Ell and Nishimoto (1989) proposed that these problems are associated with decreased closeness in family relationships. Clearly, reactions and coping responses of each family member to the diagnosis of cancer resonate through the entire family (Akamatsu, Stephens, Hoblof, & Crowther, 1992; Baider & Kaplan De-Nour, 1993; Manne & Zautra, 1990). These reactions affect the psychosocial adjustment of the individual with cancer.

While social and familial support can take many different forms, perhaps none is as important as the spouse-patient relationship. However, the demands of providing support can create a variety of problems for the caregiver. An estimated 20-30 % of spouse-caregivers suffer from mood disturbance and psychological impairment (Hinds, 1985; Wellisch, Jamison, & Pasnau, 1978). Depression, uncertainty, anxiety, physical symptoms (sleeping or eating disturbance, inability to concentrate), fear of the illness and death, and increased daily life demands are symptoms most often cited by spouses (Chekryn, 1984; Cooper, 1984; Kaye
& Gracely, 1993). Effects of aging also influence distress level in caregivers, as increasing physical problems create difficult problems related to the physical aspects of caregiving (Ell, Nishimoto, Mantell, & Hamovitch, 1988). Problems in these areas can be the result of poor adaptation and may place the caregiver at risk of further deterioration. The marital relationship may also be affected when the caregiver suffers from symptoms described above.

Literature reviews of the consequences of cancer in one family member all reported high levels of distress in the spouse-caregiver (Lewis, 1986; Northouse, 1984). This distress can be partly caused by insufficient social support given to the spouse-caregiver, as Northouse (1988) reported. Distress may be due to spouse-caregivers being unwilling to burden the patient with their own needs, thus depriving themselves of a crucial form of social support (Ell et al., 1988; Lichtman, Taylor, & Wood, 1987). As a result, the emotional well-being of spouses often depends on the emotional distress and psychosocial adjustment of the patient in a mutual and interdependent process (Lewis, 1986; Northouse, 1988).

Distress in the spouse-caregiver has been positively correlated to that of the patient across different phases of the illness (Kaye & Gracely, 1993). In a study of 56 couples with one spouse diagnosed with colon cancer, spouse-caregivers reported significantly more emotional distress and less social support than patients did (Northouse, Mood, Templin, Mellon, & George, 2000). However, this effect can be lessened by the patient’s positive reactions to support from the spouse-caregiver (Hoskins, Baker, Budin, & Ekstrom, 1996). In that study of 121 husbands of women with breast cancer, Hoskins et al. found that the emotional adjustment of the husband could be improved and maintained from the 7-10 day postsurgical period through 6 month and 1 year follow-ups.
The dual role taken by spouse-caregivers sometimes results in relationship problems. Impairment of relationships following a cancer diagnosis occurs mostly in couples with conflicts prior to illness but generally occurs in 10-20% of these relationships (Chekryn, 1984; Cooper, 1984; Krant & Johnson, 1978). Only rarely is the separation of the couples attributed directly to the effects of the cancer (Lichtman et al., 1987; Wellisch et al., 1978). One conclusion is that couples with dissatisfying relationships exhibit higher distress levels in response to the diagnosis. Partners tend to perceive a worse marital quality than the patients themselves, as high marital satisfaction was reported by 69% of patients and slightly less among spouses (56%) (Burman & Margolin, 1992). In a sample of women with breast cancer, diabetes, or fibrocystic breast disease, partners of women with breast cancer experienced better marital adjustment than did partners of other women. Higher levels of marital adjustment were associated with a coping behavior characterized by frequent feedback and reflection and discussion in the family, referred to as familial introspection (Lewis, Woods, Hough, & Bensley, 1989).

Support for both the partner and spouse-caregiver are equally important in maintaining strong relationships in the face of cancer. Primomo, Yates, & Woods (1990) asked 125 chronically ill women about social support they received from partners, family, friends and others. They used the Dyadic Adjustment Scale to analyze marital satisfaction when support was offered from partners and found that support from the family and spouse resulted in less depression, higher marital quality and better family functioning. Another study investigated 22 breast cancer patients and their husbands and found husbands’ coping and ratings of the relationship were the best predictors of the patient’s psychological distress. Researchers concluded that interpersonal variables are equal to, or more important than,
individual variables in the effectiveness of coping (Hannum, Giese-Davis, Harding, & Hatfield, 1991). Marital satisfaction and specifically the use of the Dyadic Adjustment Scale can be used as an indicator and predictor of a patient’s progress and distress over time (Weihs, Enright, Howe, & Simmens, 1999).

*Communication and marital satisfaction in cancer research*

The diagnosis of cancer often creates or exacerbates communication problems between partners and caregivers. The diagnosis and progression of the disease induces avoidance, withdrawal and depression, all of which have an effect on communication. Frequently, partners limit their communication to protect the other from hurt but this may create unresolved conflicts and growing distance between spouses (Krant & Johnson, 1978).

Researchers have analyzed effective as well as ineffective communication strategies in the response to cancer. For example, a greater readiness to talk about the distress in the families of cancer patients is related to positive changes in the partnership and better psychological well-being. Others have found that open communication fostered cohesion, increased marital satisfaction and adjustment and enhanced the entire family's ability to negotiate role demands (Chekryn, 1984; Cooper, 1984). One sample indicated that their secret of success was never to talk about the cancer (Thorne, 1985). Others hypothesized that whether open communication will be adaptive for some and maladaptive for others depended on pre-illness communication patterns (Keller, Henrich, Sellschopp, & Beutel, 1996).

*Gender issues in cancer research*

Analysis of couples dealing with a diagnosis of cancer reveals differences in the ways men and women respond either as patients or caregivers. For women, marital satisfaction
decreased when they became caregivers but not when they were patients. However, different findings reported that women experienced more distress and reported lower marital satisfaction regardless of their role (Northouse et al., 2000). Other researchers agreed that psychological distress in women is greater regardless of whether they are the patient or caregiver (Burman & Margolin, 1992; Ell et al., 1988; Revenson & Majerovitz, 1990). Researchers suggested that lower adjustment levels of women reflect heavy emotional burdens because their own lives and needs constantly compete with their caregiver role (Depner & Ingersoll-Dayton, 1985; Umberson, 1992). Due to this distress, women appear to seek additional social support from outside the marriage. The work of Keller et al. (1996) found that 78% of women reported having a confidant outside of the family, compared to 56% of husbands. More husbands (76%) than wives (56%) rated their patient-spouses supportive. Wives reported giving more social support to their husbands than they felt they received from them. In addition, they also reported giving more social support than their husbands reported giving to them (Vinokur & Vinokur-Kaplan, 1990). Some studies, however, found that wives were more likely than husbands to adjust well and had fewer negative attitudes toward ailing spouses (Stroker, 1983). This finding may be due to men’s reliance on their wives’ support, whereas wives typically initiate a broader range of supportive contacts. The psychological distress of women either as patients or caregivers is significantly influenced by the distress of their husbands, whereas the distress of men, sick or healthy, is only marginally influenced by distress of wives. This may not be a patient-caregiver dynamic, but rather a gender dynamic, with men’s distress being transmitted to women patients but women’s distress not transmitted to the male patient.
Summary

Conceptual Approach

Elements of a Good Story

One aim of the present research is to operationalize the components of a more helpful story told by couples and the effects on couple functioning. I contend that a more complete, more collaborative story includes both content and process components. A more complete story includes detailed information on story character, setting (both in time and place) and action or behavior. A more complete story follows a structured plot, most often along a chronological time line. Throughout the time line, significant events are compartmentalized into sub-stories which act as themes. These themes are integrated properly into the story to add meaning and offer rationale for outcomes of the overall plot. A more complete story includes detailed information that allows listeners to better attend to and understand story events and settings. However, the amount of detailed information must be used efficiently to avoid burdening the story with useless, tangential information.

Content. Crites (1986) proposed that an orderly narrative that gives approximately equal emphasis on past, present and future characterizes a healthy individual. The content of a story includes characters, setting (both time and place) and actions or behaviors. All of the above elements need to be integrated into a narrative before it can be called a story.

Well-formed stories need to attend to chronological ordering and coherence. Bettelheim (1976) asserted that well-ordered narratives may be essential in giving life a sense of meaning and direction. Couples are often asked to tell their marital stories according to a timeline (Veroff et al., 1993). Effective stories are organized in a chronology. In an open ended oral history interview such as we are using, satisfied couples should be able to tell an
organized version of their story by including relevant stages of relationship development. These stages include a first meeting, first date, courtship activities, engagement story and the wedding and married life. While we recognize that the current interview is time-limited, couples are not expected to attend to every stage. However, it is my hypothesis that couples who include discussion of more stages of relationship development have developed a more integrated, complete story and would be more satisfied in their relationship. In contrast, couples who are not able to attend to more than one aspect of their relationship or who skip stages or fail to organize the story in a chronological manner may be blocking out other, less pleasant stages.

It is also important for couples to include parts of their marital relationship that are especially memorable. These may include events such as a first date or an engagement story. These detailed mini-stories are typically brief and indicate a strong memory of the event. Both partners can talk about the event or experience in detail. Couples who can tell at least one positive experience are viewed as the most adjusted and satisfied in their marriages. In contrast, couples who cannot recall at least one positive, jointly shared memory of their relationship will be less satisfied in their marriage.

Process. The process of joint storytelling needs to be collaborative and involve equal participation from both partners. A mastery of facts and ownership of the story depend upon effective communication in telling the story. The storytelling experience should incorporate both partners’ experiences and communication should be similar to a dialogue rather than one partner dominating the process or the content of the storytelling event. The experience should be a shared event. In communicating good stories, couples must also demonstrate flexibility while remaining on the task of telling the story.
During joint storytelling, two or more persons collaborate to describe an event. In joint storytelling, both content and process may be different than if an individual tells the story, yet it is most often the process aspect that will differ most. The reason is that both individuals can agree on people present, times, and places of events, but attempting to give reasons why people acted as they did and the meaning ascribed to events will often differ between individuals.

The effectiveness of joint storytelling can be measured by the amount of detail used in the story. While telling the story, couples include several types of detailed information. This information may include proper names of people or places or unusual word choices (such as describing a person as nice versus delightful, or instead of saying that one “went over to her house” saying instead that he “ran as fast as I could.” Detailed information also includes series of descriptors that alone would be viewed as general (i.e., “he was tall, thin and the best looking man in town”).

In assessing the level of detail, the process of the storytelling is important. How the partner responds to a detailed comment may indicate their emotional investment in the story or in the marriage. I hypothesize that the most satisfied couples will respond to detail with more detail, thereby building the level of intimacy in the story. At the middle range, one spouse uses much detail while the other agrees, consents or responds in a more general sense while remaining on the topic initiated by the partner. Couples who are poor at joint storytelling will either use little or no detail or will respond to detailed comments with general comments to tangential information.
Proposition 1

Respondents who include more detail, more positive storytelling and more chronological reference in marital history interviews will have greater marital satisfaction.

Hypotheses for Proposition 1.

1) If couples have a higher rate of detail, higher rate of positive storytelling and higher rate of chronological reference, then couples will report greater marital satisfaction on the Dyadic Adjustment Scale.

2) If couples have a higher rate of detail, higher rate of positive storytelling and higher rate of chronological reference, then couples will have greater Global Assessment of Relational Functioning (GARF) rating scores.

Proposition 2

Respondents who have more collaborative, detailed communication will have higher marital satisfaction scores given by respondents and higher marital functioning as rated by investigators.

Hypotheses for Proposition 2

1) If couples have more detailed communication sequences and less differences in the number of thought units and speeches, then couples will report greater marital satisfaction on the Dyadic Adjustment Scale and have higher GARF scores from investigators.

2) If marital history stories have more general communication sequences and greater differences in the number of thought units and speeches, then
respondents will have lower marital satisfaction on the Dyadic Adjustment Scale and have lower GARF scores from investigators.
CHAPTER 3

METHODOLOGY

Overview

This study is a primary analysis of data provided by the Department of Rochester (NY) School of Medicine and Dentistry, Department of Family Medicine. I developed and tested an original coding system to examine the content of marital history narratives using codes from the coding system to investigate communication processes used by couples. The story content and communication processes will be used to predict marital satisfaction as reported by participants on the Dyadic Adjustment Scale and as rated by investigators using the Global Assessment of Relational Functioning. The University of Rochester Institutional Review Board approved the original study. The current study was reviewed by the Iowa State University Human Subjects Review Committee and was approved on 4/2/97. The primary data set was collected and administrated by Cleveland G. Shields, Ph.D., under National Institute of Mental Health Grant #1 K07 MH1061-01A1.

Subjects

The marital history stories of fifty-six couples from the primary data set were used in this study. Twenty-two couples were originally recruited as a community control group, while thirty-four couples were originally recruited as a clinical sample. The clinical sample consisted of cancer patients and their spouse-caregivers. The couples in the cancer group were used for this study in order to increase the overall sample size. Cancer patients and their spouses were recruited through their involvement in the oncology clinic at Highland
Hospital in Rochester, NY. Community control couples were recruited through advertisements in local newspapers.

The criteria for inclusion in the study included both general criteria as well as specific criteria for the clinical sample. General criteria included: 1) that subjects were married and were currently living with a spouse; 2) that all subjects needed to be 50 years of age or older and 3) that participants did not have dementia. Cancer patients recruited for the primary study were previously diagnosed, had completed any necessary surgery, and were currently undergoing chemotherapy or radiation treatment for breast or colon cancer. Cancer patients were suffering from the first occurrence of cancer, the cancer was not metastasized, but may have included involvement of local tissues and possibly lymph nodes.

The diagnosis of cancer can have an effect on the physical, emotional and relational functioning of couples that could affect the outcome of the analyses. Therefore, comparisons were computed between the two groups in the current study (community control and cancer) to assure that no differences existed between means on the three outcome variables in this study (Dyadic Adjustment Scale scores for husbands, Dyadic Adjustment Scale scores for wives and GARF scores). The scores of the two groups on the outcome variables, Dyadic Adjustment Scale and Global Assessment of Relational Functioning (GARF) are listed in Table 1. Table 2 illustrates the outcome of t-tests between each group for each outcome variable. Results of the t-tests demonstrate that there were no statistical differences between groups on the outcome variables.
Table 1. Group means of outcome variables

<table>
<thead>
<tr>
<th>Outcome Variable</th>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
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</thead>
<tbody>
<tr>
<td>Dyadic Adjustment</td>
<td>Cancer</td>
<td>34</td>
<td>41.95</td>
<td>5.38</td>
<td>0.94</td>
</tr>
<tr>
<td>Scale- Husband</td>
<td>Community</td>
<td>22</td>
<td>43.31</td>
<td>4.50</td>
<td>0.96</td>
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<tr>
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<td>40.48</td>
<td>6.36</td>
<td>1.11</td>
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<tr>
<td>Scale- Wife</td>
<td>Community</td>
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<td>40.38</td>
<td>5.17</td>
<td>1.10</td>
</tr>
<tr>
<td>Global Assessment of</td>
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</tr>
<tr>
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Table 2. Results of t-tests between group means of outcome variables

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<th>Sig.</th>
<th>Mean Difference</th>
<th>Std. Error Difference</th>
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<td>0.33</td>
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<td>Scale- Husband</td>
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<tr>
<td>Dyadic Adjustment</td>
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<td>Global Assessment of</td>
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</table>

Procedures

Data Collection

Research assistants asked all identified couples to participate in a two to three hour interview process that took place in their choice of their home or the Family Medicine Center of Highland Hospital. The couple was asked to sign consent forms prior to their participation.

The initial interview was held with both spouses and investigators together. This semi-structured interview included several components, including Marital History and Illness History (if applicable) interviews of the couple. All marital interaction tasks were videotaped.
Following the interview, research assistants distributed questionnaires to both members of the couple. Couples were instructed to complete the questionnaires before they returned for further interviews, which were scheduled for two to three weeks later. The questionnaires consisted of self-report measures of physical and emotional health, social support, depression, and marital satisfaction. Upon completion of the initial interviews and questionnaires, the couple was enrolled in a one-year follow-up program. The follow-up consisted of telephone interviews at three, nine, and twelve months. Couples who completed the entire research project were compensated $75 for their time.

**Measurement Instruments**

The current study utilized marital satisfaction and functioning data from two sources, the Dyadic Adjustment Scale (DAS) and the Global Assessment of Relational Functioning (GARF). The DAS is a measure completed by participants while the GARF is an observational assessment measure used by investigators. Olson (1977) reported that differences between self-report and observation in measures such as marital satisfaction are not only expected but should be assumed. However, he proposed that using both forms (self-report and observation) are preferable to only one as greater overall understanding can be obtained using a multimethod approach. Other researchers also utilized this approach, which can make results less susceptible to shared method variance (Shields, Travis & Rousseau, 2000). Obtaining measures of marital satisfaction from both the couple and the interviewers increases the overall validity of the study.
Dyadic Adjustment Scale

The Dyadic Adjustment Scale (DAS) was developed to assess adjustment and quality of relationship for marriages and other relationships (Spanier & Cole, 1974; Spanier & Filsinger, 1983; Spanier & Thompson, 1982). It is the most widely used relationship satisfaction scale available and classifies distressed and nondistressed couples well (Baxter, 1988; Eddy, Heyman & Weiss, 1991). Heyman, Sayers and Bellack (1994) reported that the DAS has high convergent validity with other measures of marital satisfaction and adjustment and has been used in over 1000 studies. There is also historical evidence of content, criterion-related and construct validity of the DAS (Spanier, 1976). Fredman and Sherman (1987) argued that the DAS is a reliable, valid and relevant measure of dyadic relationships. Spanier (1989) reported a range of test-retest reliability from .42 to .90 and internal consistency ranging from .62 to .92 across subscales. Carey, Spector, Latinga, and Krauss (1993) provided further evidence of the internal consistency and stability across all four of the subscales of the DAS. The marital satisfaction subscale used in this study has a reported coefficient alpha of .94 (Spanier, 1989).

The DAS can be divided into four subscales: consensus, cohesion, satisfaction and affectional expression. All husbands and wives completed the full Dyadic Adjustment Scale (DAS), although the current study utilizes only the satisfaction subscale, which consists of 10 items from the full DAS, to measure marital satisfaction. Questions comprising the satisfaction subscale are listed in Appendix D.

Global Assessment of Relational Functioning Scale (GARF)

The Global Assessment of Relational Functioning Scale (GARF) is a tool designed to assess relational functioning. The GARF scale is often used to describe an overall judgement
of functioning of a family or other relationship and is analogous to Axis V, or, the Global Assessment of Functioning (GAF) scale of the Diagnostic and Statistical Manual of Mental Disorders (DSM) that is used to assess individual functioning (American Psychological Association, 1994). The GARF was designed to be easily administered in a variety of settings (Rosen, McCollum, Middleton, Locke, & Bird, 1997). As opposed to the GAF, the GARF is most often used to rate current functioning as opposed to functioning at other times (such as highest level during the past year).

Investigators using the GARF scale rate relationship functioning in 3 areas: problem solving, organization and emotional climate. Problem solving includes assessment of the ability of a relationship to adapt to stress, communication skills and ability to resolve conflict. Organization refers to interpersonal roles, boundaries, coalitions and distribution of power, control and responsibility. Emotional climate includes tone and range of feelings, empathy, quality of caring and mutual affective responsiveness. Raters consider all three of the above areas and assign a score ranging from 1-100 with higher scores indicating better relational functioning. The GARF scale is reproduced in its entirety in Appendix D.

Previous research on the GARF scale has yielded consistent results on the reliability and validity of the scale. Dausch, Miklowitz, and Richards (1996) found that the GARF was applied with high reliability by raters regardless of amount of clinical experience. High reliability across raters was even greater if raters had a formal education in systems theory (Mottarella, Philpot, & Fritzsche, 2001). In one study of 94 client couples, researchers compared GARF ratings offered by 29 therapist interns and 6 American Association for Marriage and Family Therapy clinical supervisors and found a correlation of .54, indicating that agreement between raters can be consistent even across amount of clinical experience.
(Rosen et al., 1997). The Rosen group also found evidence of construct validity of the scale. Ross and Doherty (2001) asked 222 community-based marriage and family therapists to assign pre- and post-therapy GARF ratings to a sample of 395 couple/family cases. They found that GARF change scores were positively correlated with client-reported changes in functioning as well as therapist-reported changes. They also found that GARF scores were positively correlated with client satisfaction. Ross and Doherty concluded that the GARF scale has good construct validity and is an appropriate brief assessment tool for relational functioning.

In this study, 3 coders, Dr. Shields, and myself met weekly and viewed videotapes of each couple’s interactions during the Oral History Interview task. Each rater developed a separate GARF score and the average GARF score was computed based on all 5 observers’ ratings.

**Oral History Interview**

In this study, couple communication and storytelling was assessed using the Oral History Interview (OHI). The OHI required about 10-20 minutes to complete. It included questions utilized in a previous Oral History Interview (Krokoff, 1984) but was not the identical inventory. The OHI task was chosen for this study because it represents a collaborative effort of the couple to describe a mutually experienced event (the development of the relationship) to an observer. The task is also non-threatening, meaning that resistance to comply with the task is minimized. The Oral History Interview has also been reported to have significant therapeutic benefits. Honeycutt (1995) reported the benefits as catharsis, modeling of positive behaviors, ordering of relational events, reflection on meaning of events and identification of themes that characterize the marriage.
The interview begins with investigators asking the general question of "Out of the millions of people in the world, how did the two of you end up together?" The interview is semi-structured and allows the couple to speak openly while maintaining some direction, assuring that the story offered relates to the courtship and marriage of the couple and does not become tangential. The couple may share any part or story of their relationship they choose with little direction from the interviewer except prompts for clarity or for more information. Interviewers may ask other specific questions, such as for the couple to discuss the marriage proposal or parent or family reactions to the relationship. These questions are not scripted but function to prompt respondents to talk more about their relationship, to learn more about the story or prevent the couple from becoming too tangential in their story. All questions utilized in the Oral History Interview are listed in Appendix C.

Coding the Marital History Interview

Coding process

1. All interviews were transcribed as a series of exchanges of speeches by husbands and wives. A speech was defined as each turn taken by either spouse in its entirety. Each speech may consist of a phrase, a sentence, or several sentences linked together. The speech ended when the speaker stopped speaking and the interviewer or partner began speaking. Thus began the next speech. Speeches were divided into thought units as described below.

2. The unit of analysis to be used was called a thought unit. A thought unit is defined as an independent clause. An independent clause is any clause that can stand on its own as a separate sentence.
3. Each thought unit was coded in several ways. All code definitions are found in the Relationship Path Coding System in Appendix A. A coding sheet and coding samples are provided in Appendix B.

   a. Each thought unit may be given up to two content codes, depending upon the amount of information in the unit. Content codes were not used in the analyses.

   b. Based on the content code(s) assigned, each content code was coded Detail or General.

   c. Each thought unit was evaluated for a parallel content code. Only the Positive Storytelling code was used from the list of parallel content codes.

   d. Each thought unit was coded for the Stage of the relationship being discussed.

Transcripts were coded by research assistants and by this investigator using the Relationship Path Coding System (RPCS). The RPCS provides codes for amount of detail in story content, use of positive storytelling (PST) and use of chronological references (Stage codes). The Detail codes assigned to each content code were used to develop the Detail variable. Positive Storytelling was the only parallel content code utilized in the analyses. The number of Stage codes, regardless of which stage discussed, were utilized to develop the Chronological Reference variable.

Using a random sample of 15 couples from within different quartiles of scores on marital satisfaction and caregiver depression inventories, Dr. Shields and I developed the Relationship Path Coding System (RPCS). The RPCS is designed as a measurement
instrument for assessing storytelling content and process in couples' marital narratives. The RPCS involves four types of codes to represent story content and process. These codes are Path Content, Parallel Path, Stage and Miscellaneous codes as outlined and described in the full code book in Appendix A.

*Path content codes*

Path content codes are basic, discrete components of any story including times, places, people and events. Researchers investigating stories and narratives often used these basic components to identify what participants focus on when telling a story (Gould and Dixon, 1993; Veroff et al., 1993). As the coding system was developed, new codes were developed and incorporated into the Content category. Codes were added to this category due to the frequency in which they appeared in stories and the role they appeared to have in the story. A code that can be concretely, discretely attributed to a story character’s appearance, thoughts, actions, or perceptions is considered to be a Content code.

Understandably, the number of Content codes found in any story is large. Therefore, for each coded thought unit, up to two Content codes are allowed. Because they are based only upon grammatical and story structure, Content codes are not questioned for their accuracy. However, in order to establish a measure of detail in stories, Content codes are evaluated to be either “Detailed” or “General” in nature. Criteria for rating Content codes as Detailed or General are described below.

*Coding Detailed or General statements*

Criteria for coding detailed versus general comments was derived from the Present Attachment Coding System (PACS) designed by Shields, Christensen, Young and Anderson,
The criteria for discriminating between a Detailed versus General statement are as follows:

**General:** The behavior/event described is generic and vague. Actions tend to be outcomes; broad brushstrokes rather than sharp and focused. The following are some distinguishing features of general behaviors/thoughts/feelings:

1. No one person is performing the behavior.
2. The passive voice may be used as opposed to the active voice.
3. The subject and verb are likely to be plural.
4. Phrases such as “so on” and “so forth” or words like “sometimes,” or “things.”

**Detail:** The behavior described is distinct and specific and tends to describe process rather than outcome. The following are distinguishing features of specific behaviors/thoughts/feelings:

1. Use of proper nouns (i.e., “Lincoln Park”, “David”).
2. Comments about dialogue between the partners (i.e., “I told him…”).
3. Using more than one descriptor, adjective or other modifier.
4. Unusual words or circumstances (i.e., slang, jargon or era-specific vocabulary).
5. The comment is part of a string of detailed comments.

*Parallel path content coding*

Parallel Path Content coding was developed to capture the process of the interview, as well as less concrete aspects of storytelling. Parallel Path coding was used to capture the unique aspects of a storyteller’s personality, creativity and experience in telling the story.
This type of coding represents an example of what Bly (1990) called “leaving the donnee,” that is, aspects of story that are other than factual information such as who, what, where and when.

The primary rationale for using Parallel Path Content coding was to develop a code to capture short, unique, highly detailed stories that characterized important parts of relationship development. For this reason, the Positive Storytelling (PST) code was developed. The PST code is similar to that of “positively accelerated relationship development” of Veroff et al. (1993) in that it is designed to recognize positive mini-stories that are a subplot of the courtship story. The PST code utilizes some of the criteria of the Positive Storytelling (PST) code from a previous study (Shields, Christensen & Rousseau, 1999). There are two kinds of mini-stories that may be coded as PST:

1. Stories which are about either the partner or the relationship and which show the partner or the relationship in a positive light.

2. Stories which are about something other than the partner or the relationship, in which the partner and spouse are both participants, and which show the relationship in a positive light. These stories may describe the couple interacting with other groups or individuals, but both must clearly be participants.

Stage codes

The Relationship Path Stage Codes are used to identify which part of their relationship history the couple was referring to when telling their marital history story. These codes were developed during preliminary coding of interviews. The codes chosen were repeatedly discussed by participants and reflected the flow of a typical relationship. These codes usually
occur in clusters as the couple first talked about how they met, and then moved on to dating, etc. These clusters may be compartmentalized and are easily discernible by the specific language used by couples. Stage codes were only assigned when there was clear evidence that the couple was referring to the particular stage of the relationship indicated by the code. Stage codes were given when content was clearly related to time, place, and event.

Miscellaneous codes

These codes included both comments made by the interviewer as well as miscellaneous comments and sentence fragments. These comments were coded in the Content code column but were not given a “General” or “Detailed” designation because they were unrelated to story content. They may be related to the storytelling process but were not coded as process codes because of the abrupt nature of their appearance. These codes are listed and described in Appendix A.

Development of Content Codes

Three variables were computed to investigate content in marital storytelling. These variables included: Rate of Detail, Rate of Positive Storytelling and Rate of Chronological Reference. The rate was computed by first obtaining the sum of each couple’s (Husband + Wife) number of each Detail, Positive Storytelling and Chronological Reference codes. Next, the sum was divided by the total number of thought units (Husband + Wife) in the interview. This method accounts for large differences in the number of thought units across the sample couples. It also accounts for couples who talk a longer period of time or are more
talkative than others. For example,

\[ H_{\text{Total Detail}} + W_{\text{Total Detail}} = \frac{\text{Couple Total Detail}}{\text{Rate Detail}} \]

\[ H_{\text{Total Thought Units}} + W_{\text{Total Thought Units}} \]

Development of Communication Codes

Four variables were developed to assess communication processes in marital storytelling. Two variables captured the level of detail in communication exchanges while the other two describe the degree to which the storytelling activity is truly a joint process by observing how large of a discrepancy exists between the amount of communication offered by each partner.

A Detailed sequence is computed by first observing each speech made by each partner. The total number of Detail codes in the Content 1 and Content 2 codes was totaled per speech. If the total was greater than 1, the speech was coded as Detail speech. To have a Detail Sequence, the next speech in the interview must be from the speaker’s spouse, and must also be coded as a Detail speech. When one cycle of Detail-Detail sequence was found, the exchange was coded 1 and the number of these exchanges were totaled for each interview. To develop a General sequence, the same process was followed as with Detail sequences, except that instead of Detail codes and content, the code is computed by using General codes and content.

One potential problem in counting number of detail and general sequences is that some couples talk more than others, interviews take longer, and stories are longer. To account for differences in the length of the story across couples (e.g., some couples talking
more than others), this code will use the percent of Detailed and General sequences rather than the raw number of Detailed and General sequences.

The final two codes in Proposition 2 addressed discrepancies in the number of speeches and thought units offered from husbands and wives. The Thought Unit Difference code is the absolute value of the number of thought units offered by husbands subtracted from the number of thought units offered by wives. The Speech Difference code is the absolute value of the difference between the number of thought units offered by husbands and that number offered by wives.

Data Management and Analysis

Data Management

Data were collected on forms prepared with consultation from Dr. Cox from the Department of Biostatistics. Data was double entered by key puncher in the University of Rochester Computer Center (URCC). The database is being maintained in the Department of Biostatistics.

Transcripts of each couple's dialogue were created from videotapes of each marital history interview. All interaction was divided into thought units. Each speaking event by either spouse was termed a speech and contained at least one thought unit. A speech could contain an unlimited number of thought units and ended when that person stopped speaking. Each thought unit was coded separately and total amounts of each code in each speech were computed. Transcripts were directly coded and data directly entered into a Microsoft Excel spreadsheet from which analyses were run using the SPSS statistical package.
Hypothesis Testing

Regression was used to analyze all hypotheses in this study. Below, each hypothesis is listed with a description of the analysis completed.

Hypotheses for Proposition 1

1. If couples have a higher rate of detail, higher rate of positive storytelling and higher rate of chronological reference, then spouses will report greater marital satisfaction on the Dyadic Adjustment Scale.

Hypothesis 1 was tested using regression. Two regressions were computed, one for husbands and one for wives. Predictor variables include the rate of detail, rate of positive storytelling and rate of chronological reference in marital history stories with the outcome variable of marital satisfaction for each partner as reported on the Dyadic Adjustment Scale.

2. If couples have a higher rate of detail, higher rate of positive storytelling and higher rate of chronological reference, then couples will have greater Global Assessment of Relational Functioning (GARF) rating scores.

Hypothesis 2 was tested using regression. One regression was computed using the rate of detail, rate of positive storytelling and rate of chronological reference as predictor variables and GARF score as the outcome variable.

Hypotheses for Proposition 2

1. If couples have more detailed communication sequences and less differences in the number of thought units and speeches, then couples will report greater marital satisfaction on the Dyadic Adjustment Scale and have higher GARF scores from investigators.

Hypothesis 1 was tested using regression. Three regressions was computed using three different outcome variables of husband DAS, wife DAS and GARF score. The
predictor variables include percent of detailed sequences, ed, one for husbands and one for wives. Predictor variables include the rate of detail, rate of positive storytelling and rate of chronological reference in marital history stories with the outcome variable of marital satisfaction for each partner as reported on the Dyadic Adjustment Scale.

2. If marital history stories have more general communication sequences and greater differences in the number of thought units and speeches, then respondents will have lower marital satisfaction on the Dyadic Adjustment Scale and have lower GARF scores from investigators.

Regression was used to test hypotheses for Propositions 1 and 2. For Proposition 1, one of the regression analyses used rate of story detail, rate of positive storytelling and rate of chronological reference to predict marital satisfaction with Dyadic Adjustment Scale scores as the outcome variable. The second regression used detail, positive storytelling and chronological reference to predict GARF scores as the outcome variable. Hypotheses for Proposition 2 were also tested with multiple regression analyses. The four communication variables were used to predict marital satisfaction as outcome, using both the DAS and GARF scores as outcome variables.

Initial Analyses

Reliability was developed and controlled using a consensus coding process. Prior to beginning the formal coding process, three research team members each coded the same 15 interviews from another population group not used in this study. Team members met weekly to compare coding sheets and further refine the coding system by adding relevant codes or deleting codes with low occurrences. Reliability for the formal coding process was
computed by comparing frequencies of coder agreement and disagreement. For the variables
of Detail, Positive Storytelling, and Chronological Reference, reliability coefficients were
0.87, 0.79 and 0.79, respectively.
CHAPTER 4
RESULTS AND DISCUSSION

Description of the Sample

53 couples met all of the criteria for participation in this study. An additional three couples were added even though one member of the couple was under the age of 50, an original requirement for inclusion into the study. Ages of men in the entire sample ranged from 48-83 years (M=61.4) while ages of women ranged from 47-79 years (M=58.4). Despite efforts to recruit ethnically and racially diverse participants, all of the individuals included in the study were Caucasian.

The illness group consisted of 20 couples dealing with breast cancer and 14 couples with colorectal cancer. Wives were the patients in 24 cases and the spouse-caregiver in the remaining 10 cases.

Table 3 includes descriptive statistics for each group as well as the total sample. Table 4 includes other demographic information and frequencies of each group as well as the entire sample.

<table>
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<th>Table 3. Descriptive statistics of demographic information</th>
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<tr>
<td>Age</td>
</tr>
<tr>
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<tr>
<td>Husband</td>
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<tr>
<td>Years Married-Husband</td>
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<td>Wife</td>
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<td>Years of Education-Husband</td>
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<td>Variable</td>
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<td><strong>Income</strong></td>
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<td>Less than $10,000</td>
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Table 4. (continued)

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Descriptive statistics for marital satisfaction variables, story content variables and communication variables are presented below in Tables 5 and 6.

Table 5. Descriptive statistics for story content variables

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<th>Minimum</th>
<th>Maximum</th>
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<td>0.14</td>
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<td>Rate of Chronological Reference</td>
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<td>0.07</td>
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</table>

Table 6. Descriptive statistics for communication variables

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<th>Maximum</th>
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<td>Speech Difference</td>
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</tr>
<tr>
<td>Percent Detail Sequences</td>
<td>56</td>
<td>1.56</td>
<td>39.39</td>
<td>13.52</td>
<td>8.73</td>
</tr>
<tr>
<td>Percent General Sequences</td>
<td>56</td>
<td>5.66</td>
<td>76.81</td>
<td>32.23</td>
<td>14.63</td>
</tr>
</tbody>
</table>
Results of Hypotheses

Hypotheses for Proposition 1

Proposition 1 stated that marital stories that include higher rates of detail, positive storytelling and chronological reference would predict higher marital satisfaction as reported by respondents. Both hypotheses predicted relationships between detailed story content and marital satisfaction. Results of the analyses are found in Table 7 and Table 8.

Results of the analyses indicate that the rate of story detail was significantly associated with marital satisfaction for husbands but positive storytelling and chronological reference were not significant predictors in the regression. None of the three predictors predicted marital satisfaction in wives. The overall models for both husbands and wives were significant at the .10 level (F= 2.34, p=.07; F=2.47, p=.08 respectively) but explained little variance in the overall model. The model for husbands explained seven percent of the variance, while the model for wives explained only eight percent. Overall, this hypothesis was only partially supported. The amount of explained variance was low, suggesting that other factors may be more responsible for explaining variance. This topic will be discussed further in the discussion section.

The second hypothesis for Proposition 1 stated marital stories that included greater use of detail, positive storytelling and chronological reference would be associated with higher observer ratings on the GARF measure. Results of the regression analysis indicate results similar to those of the self-reported measures. Rate of detail was the best and only significant predictor of marital satisfaction. Therefore, observers may attend to higher use of detail and attribute it to greater couple functioning. The overall model was significant also
(F=3.14, p=.03) though it explained only 11 percent of the total variance. Therefore, this
hypothesis was only partially supported.

Table 7. Regression of story content variables on DAS score

<table>
<thead>
<tr>
<th>Variable</th>
<th>Men</th>
<th></th>
<th></th>
<th>Women</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate of Detail</td>
<td>13.33</td>
<td>6.24</td>
<td>0.328**</td>
<td>10.63</td>
<td>7.21</td>
<td>0.23</td>
</tr>
<tr>
<td>Rate of Positive Storytelling</td>
<td>1.95</td>
<td>10.02</td>
<td>0.03</td>
<td>13.95</td>
<td>11.60</td>
<td>0.19</td>
</tr>
<tr>
<td>Rate of Chronological Reference</td>
<td>1.01</td>
<td>5.17</td>
<td>0.03</td>
<td>-2.02</td>
<td>5.98</td>
<td>-0.05</td>
</tr>
<tr>
<td>Df1/df2</td>
<td>3/52</td>
<td></td>
<td></td>
<td>3/52</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>2.34*</td>
<td></td>
<td></td>
<td>2.47*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.07</td>
<td></td>
<td></td>
<td>0.08</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. *p < .10 **p < .05

Table 8. Regression of story content variables on GARF score

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate of Detail</td>
<td>64.43</td>
<td>26.77</td>
<td>0.362**</td>
</tr>
<tr>
<td>Rate of Positive Storytelling</td>
<td>3.40</td>
<td>43.03</td>
<td>0.01</td>
</tr>
<tr>
<td>Rate of Chronological Reference</td>
<td>20.11</td>
<td>22.20</td>
<td>0.12</td>
</tr>
<tr>
<td>Df</td>
<td>3/52</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>3.14**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.11</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. **p < .05
Hypotheses for Proposition 2

Hypotheses for Proposition 2 analyzed communication variables and suggested relationships between communication processes and styles and marital well-being. The first hypothesis stated that if couples used more detailed sequences and had fewer differences in the number of speaking events (thought units and speeches), they would report greater marital satisfaction and receive higher GARS scores from observers. Results of the analysis are found in Table 9 and Table 10. Data in Table 9 demonstrates that, for husbands, the only significant communication predictor was the percent of detailed sequences. The model for men was not significant (F = 1.47) and explained only 3 percent of the variance. Results for wives also demonstrated a positive relationship between marital satisfaction and greater use of detailed communication sequences. The overall model was significant (F = 2.60, p = .05) and explained 11 percent of the variance. Results of the regression of communication variables on GARS rating are shown in Table 10. Use of detailed sequences significantly predicted better marital functioning. Difference in number of speeches by husbands and wives was negatively related to GARS score. Therefore, when partners had more equality in the amount of time they spent as the speaker, amount of reciprocity between partners was, so the smaller the difference between number of speeches by husbands and wives, or, when husbands and wives talk a similar amount of time, investigators rated GARS scores higher for the couple. The model for the GARS scores was significant (F = 3.93, p = .01) and the model explained 11 percent of the variance.
Table 10. Regression of communication variables on DAS score

<table>
<thead>
<tr>
<th>Variable</th>
<th>Men</th>
<th></th>
<th></th>
<th>Women</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE B</td>
<td>β</td>
<td>B</td>
<td>SE B</td>
<td>β</td>
</tr>
<tr>
<td>Percent Detail Sequences</td>
<td>0.16</td>
<td>0.09</td>
<td>0.27*</td>
<td>0.31</td>
<td>0.10</td>
<td>0.46***</td>
</tr>
<tr>
<td>Percent General Sequences</td>
<td>0.03</td>
<td>0.06</td>
<td>0.08</td>
<td>0.08</td>
<td>0.06</td>
<td>0.19</td>
</tr>
<tr>
<td>Difference- Thought Unit</td>
<td>0.03</td>
<td>0.02</td>
<td>0.19</td>
<td>0.01</td>
<td>0.03</td>
<td>0.06</td>
</tr>
<tr>
<td>Difference- Speech</td>
<td>-0.08</td>
<td>0.08</td>
<td>-0.15</td>
<td>-0.09</td>
<td>0.09</td>
<td>-0.13</td>
</tr>
<tr>
<td>Df1/df2</td>
<td>4/50</td>
<td></td>
<td></td>
<td>4/50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>1.47</td>
<td></td>
<td></td>
<td>2.60**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.03</td>
<td></td>
<td></td>
<td>0.11</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. *p < .10  **p< .05  ***p< .01

Table 11. Regression of communication variables on GARF score

<table>
<thead>
<tr>
<th>Variable</th>
<th>Men</th>
<th></th>
<th></th>
<th>Women</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE B</td>
<td>β</td>
<td>B</td>
<td>SE B</td>
<td>β</td>
</tr>
<tr>
<td>Percent Detail Sequences</td>
<td>1.25</td>
<td>0.35</td>
<td>0.50***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent General Sequences</td>
<td>0.29</td>
<td>0.22</td>
<td>0.19</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difference- Thought Unit</td>
<td>0.06</td>
<td>0.09</td>
<td>0.09</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difference- Speech</td>
<td>-0.67</td>
<td>0.33</td>
<td>-0.27**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Df1/df2</td>
<td>4/50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>3.93***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. **p< .05  ***p< .01
Discussion

This study provides data about the content of marital history stories and storytelling processes used by later life couples. Specifically, the study investigated the relationships between storytelling content and process and marital satisfaction as reported by couples and as rated by investigators. The results of this investigation described the importance of detailed story content and detailed communication in relation to marital satisfaction, both as reported by couples and as observed by investigators. There is some evidence that the marital satisfaction reported by husbands is related to the use of detail in communication with their partners. This relationship occurred both when considering the overall use of detail as well as in communication sequences and also occurred in the perceptions of observers. These findings are discussed below, according to the story content and process.

Story Content

The present study lends some empirical support to the notion of Harvey et al. (1990) that more complete and detailed stories predict better overall functioning. Specifically, men who are content or satisfied in their relationships may be more attentive to details of situations in their discussions of past events. This finding appears to be divergent from past studies that referred to women as more oriented toward relationship details and assuming the role of relationship historian (Harvey et al., 1990; Holtzworth-Monroe & Jacobsen, 1985).

The results on the GARF measure demonstrated that raters may have attended more to the use of detail in stories than to other story content variables such as positive storytelling or chronological reference. One possibility for this finding could be that observers were not attuned to the task of analyzing issues relevant to the GARF and the relationship, such as problem-solving, organization and emotional climate but to the story itself, and more
specifically the amount of detail in the story. These findings also suggest that the use of chronologically organized stories and short, positive mini stories are not necessarily important variables for investigators to use when assessing the relationship between the marital history story and satisfaction.

The current study also extends previous research that examined couples’ patterns of disclosure and exchange of detailed and general statements (Shields et al., 1999). Though Shields did not hypothesize that more detail was better than less in predicting marital satisfaction, the current study found that, especially for men, greater use of detail may indeed be better in terms of predicting marital satisfaction.

**Communication**

The data on communication extends research by Shields et al. (1999) where detailed communication sequences predicted higher couple functioning. More detailed sequences were viewed as greater on-task behavior in that when one partner used detail, the other was more likely to respond with detail, thus staying on the same topic or pattern of thought. In addition, Shields et al. found that to the extent to which husbands and wives negatively appraised each other, they used more monologue communication and less dialogue communication.

An interesting result of the analyses was that similar variables predicted both self-report marital satisfaction scores as well as satisfaction as determined by investigators using the GARF rating. A possible explanation for this is that, in observing communication, perhaps it is natural or easier to hear details in stories. In addition, there may be a tendency for raters to think that a relationship is better when couples talk in greater detail.
Difference in number of thought units and number of speeches in couples’ communication did not predict their self-reported marital satisfaction. However, when investigators observed the interaction, couples who used more equal turn taking were rated higher in marital satisfaction. These findings suggest that raters were not as concerned with how much or how long a spouse talks each time, but couples who used more equal turn taking in their communication may be viewed as more satisfied than couples who do not utilize turn taking. Raters may interpret turn taking as positive demonstration of the GARF categories problem solving, organization and emotional climate. Difference in thought units or speeches between spouses did not predict marital satisfaction for either husbands or wives. This finding did not replicate previous research of Shields et al. (1999). Couples who had one speaker more dominant in terms of telling the story did not have significantly lower marital satisfaction.

Implications

The results of this study have important implications for investigating later-life couples, communication and later-life marriage and also clinical implications for therapists.

Theoretical Implications

Few theorists and researchers have investigated joint storytelling processes in later-life couples, focusing instead on individual constructs such as generativity or the life review. Cohler and Cole (1996) even reported that there has been little systematic and detailed consideration of issues related to the study of aging and the life history. However, as interest continues to grow in the area of meaning making, it will be important to better understand how couples understand themselves as they age. Other theory has focused on the
development of meaning and personal language that develops in couples as they are together longer and how these developments affect their communication and interaction, but little research has been completed with the aging population.

Communication research on later-life couples is rare altogether. Newlyweds and young marriages are a central focus of current marital study on communication and satisfaction, and even these researchers acknowledge the need to address marriages across the life cycle (Bradbury, 1998; Carrere et al., 2000; Weiss, 1989). As described above, couples develop a shared and understood communication pattern over time that may be more elusive than simply studying macro patterns in communication such as the demand-withdraw dynamic. Regarding communication patterns, Gottman’s (1979) finding that negative reciprocity occurs more in distressed marriages has been both refuted and replicated, but little attention has been given to positive reciprocity and even neutral exchanges between couples.

The theory of account making suggests that people construct stories to understand, attribute meaning to, and find closure to events and situations and that this process occurs throughout life. Historically, this process was investigated by examining individual stories. However, people do not live in isolation and as such need to be investigated in the larger systems in which they live. As previous researchers have noted, one cannot simply investigate two individuals in a couple and then add scores together to achieve a couple score. Only by using the couple as the unit of analysis can the research be generalized to the couple population.

Past research on stories and storytelling focused on the importance of complete stories in predicting healthy functioning. The concept of completeness has been previously defined and operationalized in several ways. One characteristic of complete stories is a
chronological ordering and the inclusion of a beginning and ending. The current study hypothesized that couples who referred to their relationship chronology would have better marital adjustment and satisfaction. This prediction was not confirmed by the results.

Another concept hypothesized to be important in stories of more satisfied couples was the use of a highly detailed, positive mini-story that highlighted an important aspect of the relationship, such as when the couple knew they were in love. This concept, coded as positive storytelling, was not a significant predictor of marital satisfaction.

There are important human factors that must be considered when investigating interaction with a semi-structured interview such as the OHI as well as a rating system based on observation. There were three opportunities in the current study where human factors could have biased results. The first opportunity was the interviewer, who used a semi-structured interview with couples. In this case, the interviewer could unconsciously drive the interview by attending to certain responses of the couple while ignoring others. For example, if the interviewer was interested in a response offered by a couple, she could prompt for more detail, which could incorrectly amplify the amount of detail in the speech. Second, transcriptionists and coders could bias the results by segmenting interaction differently across cases or assign codes incorrectly but according to their own interests. Although analyses demonstrated overall reliability in the coding system across coders, the system could always be more reliable. A final human factor to consider is considered in the GARF ratings given to couples. Although raters seemed to score couples consistently with how couples rated themselves, coders may have attended to aspects of the story and the interaction that were different from the original intentions of the GARF measure.
Clinical Implications

The current investigation has several implications for the clinical field. The clinical implications include couple assessment, use of narrative in therapy, and the teaching and training of therapists.

The current study has implications for the assessment of couples in therapy. First, the study used a non-threatening task (Oral History Interview) which encouraged couples to speak openly about their past together. Use of a semi-structured, non-threatening interview script allows the clinician to observe general or even positive communication behaviors rather than problem-oriented communication typical in the presentation for marital therapy.

The current study also found that the GARF measure was an effective tool used to assess couples presenting for therapy. However, as previously described, the GARF measure must be carefully used so that raters score their observations based on the critical components of the measure (organization, problem solving, & emotional climate) rather than only on the amount of detail used by couples. The GARF may be too easily manipulated by raters who attend more to interesting details in the story and less to the structured concepts of organization, problem solving and emotional climate. However, prediction of a higher GARF score was facilitated by more equal turn taking between spouses, so clinicians also need to be continually aware of the insight offered by couples who share talk time in conjoint therapy sessions.

Another clinical implication of the current study concerns the recent movement in family therapy toward therapeutic models based on stories and storytelling (White, 1995; White & Epston, 1990). The current research strengthens the position that unstructured stories can be used in therapy, and concrete aspects of the stories told by couples can be
observed and rated quantitatively to evaluate a couple’s progress. As a result of this study, increased attention can be given to the role of detail in stories told by couples in therapy. Findings in the current project suggest that the greater use of detail in couples’ stories can predict marital satisfaction for husbands, and greater reciprocity of detail by partners predicted marital satisfaction for both husbands and wives.

Though the story-based approaches to therapy are popular, they remain relatively resistant to quantitative evaluation. The current study may provide initial evidence for development of a quantitative marital assessment tool based on the couples’ marital history story and the amount of detail therein. This has important consequences to the training and education of beginning therapists who may understand theory behind story-based approaches, but do not understand how to differentiate between an unhelpful, unhealthy story and a more health-enhancing story. Previous investigators described the importance of more research that will directly inform intervention, because more applied research will, in return, better focus and sharpen future research (Bradbury et al., 2000; Shapiro et al., 2000).

Asking couples to tell their marital history story could become a non-threatening part of the marital assessment and is also an effective joining tool for therapists to learn about the couple and engage clients who are quiet, resistant or angry. Therapists can identify family members’ roles, determine coalitions between members and assess relationships and intimacy in the couple family simply by eliciting a story. Couples and families may also find that such a storytelling task is a fun way to talk about their history.

The current research offers insight into several important areas. First, it analyzed the storytelling, communication patterns, and interactions of later-life couples. In addition, this study offered unique developments to research in terms of task, coding design, and analysis.
The study can be used to improve understanding of cognition, shared cognition and account-making as well. Finally, the current study suggests that further elaboration on story-based models in family therapy is needed to improve theory, assessment, training and research.
CHAPTER 5
CONCLUSIONS

Summary

This study was designed to examine the relationship between the stories and storytelling processes of later life couples and marital satisfaction, both as self-reported and as rated by investigators. Fifty-six later-life couples participated in the study. The Oral History Interview was used to elicit relationship stories and the Relationship Path Coding System was developed to code transcripts. Regression analyses were used to assess the relationship between story content and storytelling processes of couples to their marital satisfaction and the observed level of functioning by investigators. The findings of this study suggest that the use of detail in stories and the reciprocity of detail in couple communication were both predictors of higher self-reported marital satisfaction in men. Observers who rated couples’ marital functioning gave higher ratings to couples who used more detail and had more equal participation in their communication. In the following sections, I describe the limitations of this study and my recommendations for future research.

Limitations

The results of this study provide new information on marital communication and marital conjoint storytelling content and process. There are, however, limitations to this study that warrant attention. First, the sample size of the study limits the ability to examine smaller group differences with a great amount of reliability. Similarly, the group sizes of the illness and control groups are too small to make comparisons.
A second limitation to the current study involves the sampling method. Previous marital research focused primarily on distressed couples and negative communication between partners. Studies either used clinical populations, populations recruited through newspapers or university students. All of these populations present problems for the study of interaction, as samples are respectively biased toward increased symptomatology or age, as even recruiting through newspapers may create a vulnerable sample because this population tends to score higher on neuroticism and depression (Karney, Davila, Cohan, Sullivan, Johnson, & Bradbury, 1995).

A third limitation to the study is the use of a secondary data set. The use of secondary data precludes the possibility of making changes to interview questions, data collection strategies or validating meaning of responses made by respondents. Similarly, the study provides only a cross-sectional view of couple’s interaction patterns. Since basic assumptions of storytelling and cognition is that meaning and stories change over time, a more longitudinal approach would allow for comparing changes in memories or perceptions. Since the study addressed stories, memories and perceptions, there was no way to assure factual accuracy of the accounts. The interviewer must trust that the information that couples discuss is accurate and truthful. The presence of the spouse in the interview does provide, however, one source of credibility and reliability.

An issue related to the reliability of data was the potential impact that the interviewer, coders and raters had on the data. Bias by the interviewers could affect the content and process of the interview, transcriptionists and coders could bias the results of coding, and raters could bias scores when observing and rating couples with the GARF measure. I attempted to control the impact of bias by using few members (3) in the research team, to
control for human variability. However, it would be difficult to quantify and control bias due to the subjective nature of human interaction.

A fourth limitation to the study is that it did not assess body language, non-verbal interaction or vocal intonation changes. Investigating the impact of additional verbal cues as well as non-verbal communication could add further detail to the analysis.

Fifth, there was no investigation of the role of the interviewer in the storytelling process. The interviewer can consciously or unconsciously drive the direction or content of the storytelling process by choosing certain questions over others or spending more time talking with one spouse over another. When interviewing couples who do not speak as freely, the interviewer can play a significant role in determining what is discussed and in what detail discussion is held.

There were cultural and other demographic limitations to this study. First, despite attempts to recruit couples from different cultural and ethnic groups, all couples included in the sample were Caucasian. The sample was comprised of middle-class couples, as 29 couples reported income over $40,000, and only 6 couples reported income under $25,000. In addition, couples in the sample were well educated, as wives averaged almost 14 years of education (13.79) and husbands averaged almost 15 years (14.76). In conclusion, the overall sample appears to research sample does not adequately address and thus cannot be generalized to other racial, ethnic or cultural groups.

Another limitation in the current study is that it addressed only the storytelling content and process of long-term married couples. Therefore, findings should not be generalized to younger couples or couples who have been married for shorter periods of time.

A final limitation to the current project is that the Marital History Storytelling coding
system is a new coding system designed for this study by this author and Dr. Cleveland Shields. It needs further usage to prove its utility in coding marital stories and communication.

Recommendations for Future Research

The current research is important in that it addressed free-flowing marital history storytelling process as well as content in later-life couples. Few studies have investigated the content of accounts and life stories and even fewer have addressed the process of storytelling. Previous studies using couples have typically used interviews with each spouse and then later compared content. Similarly, marital communication and satisfaction are concepts that are typically measured with self-report instruments. These problems were addressed earlier. Further research needs to continue to blend stories, meaning and interaction.

Future research needs to better integrate qualitative and quantitative methods to better explore and explain couple’s perceptions and memories (Olson, 1977). Qualitative methods would also allow further exploration of the richness of detail that couples include in their stories. In addition, qualitative exploration would address the limitation described earlier, including the interviewer in the investigation. It is difficult to control for the impact of the interviewer, so future research would be well served by including the role of the interviewer in the analysis.

This study used a non-threatening marital task of marital history storytelling, though many past studies deny or diminished the importance of positive interaction and communication, which are more likely to be observed in non-conflictual tasks. The results of comparing a non-threatening marital interaction task with a more threatening one would
allow investigators to make further observations about couple communication and even satisfaction.

Previous research investigated how younger and older couples remembered their recent vacations (Gould & Dixon, 1993). To discover more about how marriages change and evolve over time, one could compare differences and similarities in storytelling content and process of different ages of spouses/marriages. In addition, since older and younger couples speak and understand differently, tasks may need to be changed to account for these differences. For example, Carstensen, Gottman, & Levenson (1995) found that older couples were neither as conflict-oriented nor as likely to exchange negative affect as younger couples. This means that an alternative approach to studying older couples is warranted. The Oral History Interview may be an excellent fit for studying older couples.

Future storytelling research on couples from different racial, cultural and ethnic groups is needed to understand how different couples communicate. Since cultural norms can dictate communication patterns, investigating different populations would be helpful in understanding differences in storytelling process and content. This can be improved by either focusing on recruiting a more diverse sample or by investigating only different cultural groups.

An important development in the conceptualization and measurement of marital satisfaction is the notion that satisfaction is appropriately conceptualized not simply as a judgement made by spouses at one point in time but as a trajectory that reflects fluctuations in marital evaluations over time. Use of this trajectory-based view of marital satisfaction is increasing and has shown promise in testing refined models of marital change (Cox, Paley, Burchinal, & Payne, 1999; Karney & Bradbury, 1997; Karney & Frye, 2002). An interesting
approach based on this new theory would be study of the development of stories over time, thus also accomplishing the task of addressing development of satisfaction over the life cycle requested by King (2001).

Future research should include conclusions and suggestions for using storytelling as intervention. Entire schools of therapy exist that suggest the importance of stories in therapy. However, they rarely describe concrete observations that can be made about stories that would aid in either assessment or intervention in conjoint or marital therapy.

Though the current study included couples in illness as well as community control groups, small group sizes prohibited comparisons between groups. Larger sample sizes that include subgroups of couples struggling with trauma, depression, anxiety or other problems would allow for greater group comparison.

Increasing the attention paid to the structure and content of stories rather than an emphasis on communication may be another direction for future research. As discussed earlier, significant past studies focused on

The impact of the interviewer is another important direction for future study. There is an interesting dichotomy with the interviewer role in interaction research. First, studies that encourage stories to be told with minimal direction from the interviewer, can offer insight into understanding what topics couples choose to discuss and attending to differences in content given by groups from different ages, cultures, and situations (i.e., illness) groups. However, as described earlier, the interviewer role can bias results so adequate controls must be implemented.

Future studies that attend to the role of the interviewer in semi-structured or unstructured storytelling tasks should attempt to limit bias as much as possible. For example,
the interviewer affects the content, process, direction, and outcome of the story whenever he or she adds prompts, asks different questions of different couples, or follows his or her own curiosities by focusing on certain areas of the interview. Further examination of the interviewer role is critical because of the resulting impact on the outcome of the task, regardless of efforts to control for it. Further studies could emphasize more structure in storytelling interviews by the use of storyboards (Veroff et al., 1993) to assure that all interviewers ask the same questions of every couple.
APPENDIX A

RELATIONSHIP PATH CODING SYSTEM (RPCS)
LIST OF CODES

Path Content Codes

PDN  Physical Description
IBH  Individual Behavior
JBH  Joint Behavior
PLC  Place/Location
TIM  Time
IMO  Important Others
PEO  Peripheral Others
PER  Personality
ITH  Individual Thoughts
JTH  Joint Thoughts

Parallel Content Codes

PST  Positive Storytelling
RBK  Road Blocks
ATT  Attribution
MET  Metaphor
JOK  Joke/Laughter
DIA  Dialogue
DIS  Disagreeing
**Codes for Interviewers**

STR  Structuring  
JOI  Joining  

**Codes for Miscellaneous Comments**

A__  Acknowledgement  
TNG  Tangent  
QRT  Questioning/Rejecting Task  
DNK  Do Not Know  
SOL  Soliciting  
ISO  Soliciting Interviewer  
FRG  Thought Fragment  
PRO  Process  

**Relationship Path Stage Codes**

PMT  Pre-meeting  
FMT  1st meeting  
DAT  1st date  
CRT  Courtship  
ENG  Engagement  
WED  Wedding  
MAR  Marriage  
TRN  Transitions
Details for Prioritizing Codes

There are times when more than one content code applies to an individual thought unit. In order to determine which code is assigned first, path content codes are prioritized according to their importance to the story. Codes are assigned higher priority when they contribute more detail to the story. It is hypothesized that more detailed marital stories are predictive of better coping skills and better marital quality.

By assigning priorities to codes, greater reliability can be assured across coders and there is a greater chance that content that adds to the story is coded at a higher priority than extraneous information.

Each content code is ranked below:

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**PATH CONTENT CODES**

**PHYSICAL DESCRIPTION (PDN):**

*Description/Criteria:*

Statements are coded PDN when:

- The speaker gives a physical observation or description of the partner or the speaker.

- The content is specific, distinct, and clearly attributed to a physical attribute of a member of the couple, and not to any important others involved (see code for Important Others).

- This description may include, but is not limited to, age, hair, eyes, clothing, height or weight. When discussing age, the speaker must
make direct reference to the chronological age (i.e., a number must be given) of self or other. This does not include school grade levels.

- This code will utilize a D or G indicating whether the statement was detailed or general. Detailed comments include eye or hair color, hair length or specific style. Detailed comments will also include references to height or weight in comparison to another person or given specifically in feet, inches or pounds. General comments include a reference to hair, eyes, height, weight or other attributes that have no specific detail.

Examples:

- I thought he was handsome. (Coded PDN-G)
- She had long straight black hair. (Coded PDN-D)
- He was tall and had very broad shoulders like my grandfather did. (PDN-D)

INDIVIDUAL BEHAVIOR (IBH):

Description/Criteria

Statements are coded IBH when

- The speaker makes an observation or gives a description of an activity of either the speaker or the partner, but not both as a couple.

- The IBH code is meant to assess actions. Therefore, when a speaker uses actions in comments, an IBH code is used. The speaker’s use of verbs in thought units may best indicate an IBH code.
• This description may include activities such as dancing, drinking, smoking, walking or talking. This code is limited to actions of either the partner or the speaker.

• This code will utilize a D or G indicating whether the statement was detailed or general. Detailed comments would include a specific reference to objects or types of action and are coded IBHD. General comments do not include specific reference to objects or types of actions and are coded IBH-G.

Examples:

• I just couldn't get off the road so I just drove up, opened the door, and she went to step on the running board, which wasn't there. (IBH-D)

• The scarf was there so I took the scarf and I said, “Is this your scarf?” (IBH-D)

• I picked up one of those tabloid papers and read an ad. (IBH-G)

• She drove to my house. (IBH-G)

JOINT BEHAVIOR (JBH):

Description/Criteria

Statements are coded JBH when

• The speaker makes a reference to an activity in which the couple was engaged. The code of JBH would be given, for example, when the speaker is describing destinations, vacations, honeymoons, courting (dates), or others. This code includes all activities in which the couple was engaged together.
• This code will utilize a D or G indicating whether the statement was detailed or general.

Examples:

• We used to go up north a lot. We visited a lot of the caves and a lot of museums. (JBHG)

• We were laughing and having a good time...We were arguing about the price and she’s telling me what she can pay. (Three thought units: 1. We were laughing (JBHG) 2. We were arguing about the price. (JBHG) 3. She’s telling me what she can pay. (IBHG because was an action only of the wife)

• We did a lot of things together--we went dancing.

Two thought units: 1. We did a lot of things. (JBHG) 2. We went dancing. (JBHG)

Note: When a detailed comment such as “We were dancing the twist at the Starlight Ballroom” is given, a JBHD can be given (for dancing the twist) and another content code of PLCD (for the Starlight Ballroom) can be given. When codes are mixed, such as that above, (JBHD-dancing and PLCD-ballroom) see coding priority list on pp.1 to determine which code is listed first.

PLACE/LOCATION (PLC):

Description/Criteria

Statements are coded PLC when

• The speaker mentions the physical location of an event. This would include a specific home, school, restaurant, classroom, hallway, etc.

This code also includes details of equipment or setting of the event.
This code will utilize a D or G indicating whether the statement was detailed or general. A general code of PLC would be given to thought units where general descriptors such as big or small are used. General codes are also given to non-specific locations.

Examples:

- We were both at the German Club up on Gregory Street. (PLC-D)
- And sometimes we walked to the Williamsburg Lodge and they always had soup, a wonderful bowl of homemade soup that you could get there. (PLC-D)
- I saw her at the school bus stop one day. (PLC-G)
- We were sleeping in a roadside rest going down. (PLC-G)

TIME (TIM):

Description/Criteria

Statements are coded TIM when

- The speaker refers to time of day, or duration or length of events or relationship stages, etc. Examples include reference to length of courtship, length of specific meetings or length of engagement.
- This code does not include age of speaker or spouse. However, this would include thought units such as twenty years ago, we... as it indicates a span of time.
- This code will utilize a D or G indicating whether the statement was detailed or general. Detailed thought units are given a detail TIM code when these thought units make specific reference to time of day,
duration of an event, etc. General comments are coded TIM when these comments are not specific to time of day, or length of event.

Examples:

- It was 12 noon when you proposed to me. (TIM-D)
- We were engaged for 8 months, and 7 days. (TIM-D)
- When you proposed, it was dark. (TIM-G)
- We dated for a while before we got engaged. (TIM-G)

IMPORTANT OTHERS (IMO):

Description/Criteria

Statements are coded IMO when

- The speaker gives a description of important others present during an event. This description may include the other person’s name, a description of the physical attributes of the other, behavior of the other, or their role in bringing the couple together, enhancing their relationship, or, conversely, the role of the other in impeding the development of the relationship.

- This code also includes thoughts of the important other (for example, when the speaker talks about what the other was thinking or may have been thinking). Statements are given an IMO code if the subject of the thought is indicated by the speaker as having an impact in creating or developing the relationship, or in deterring the development of the relationship.
• This code will utilize a D or G indicating whether the statement was detailed or general.

• When considering whether to assign a PEO or an IMO code, the same person can be a PEO, then with more information can be designated an IMO. However, once designated an IMO, the person will be coded as such for the remainder of the interview.

Examples

• And he (father) worked, happened to work with his family, with a lawyer that was connected to your mum, with her work at the Republican Club. (IMOD)

• Somehow your mother had something to do with it. (IMOG)

• But uh, we met really, through your sister. (IMOG)

PERIPHERAL OTHERS (PEO):

Description/Criteria:

Statements are coded PEO when

• The speaker makes a comment about a person besides self or partner. The subject of the comment is someone who would not be otherwise coded as an IMO, someone who does not have a direct impact on the relationship. A person coded PEO can become IMO if the speaker later makes explicit statements about that person's impact on the relationship. But once a person is coded IMO, that person will always be coded IMO.

• Criteria for separating an IMO code from a PEO code includes the speaker offering less detail about the other person.
• This code can be either detailed or general, but will most often be
general, as the speaker mentions what a peripheral other does, thinks or
feels.

*Examples:*

• There was one fella that worked at Sibley's, I forgot where, oh Barbie was
working at the Jewish Home and Infirmary, Carol Sue was working for this
refrigerated warehouse, Judy I think was working for Rowe Electric as their
receptionist and so there were folks that worked everywhere and we all had
dinner together. So this was how I met the folks that I first became friends with
when I came to Rochester and of course that's how Judy and I met. (PEO-D)

• He and one of the other guys that we grew up with came over to the house and
he just started hanging out all the time. (PEO-G)

PERSONALITY (PER):

*Description/Criteria*

Statements are coded PER when:

• The speaker makes a reference to the personality or a characteristic trait
  of self or partner. These statements also include idiosyncrasies of the
  partner.

• This code includes attitudes, beliefs, values and social status (i.e.,
  religion, political views, socioeconomic status). This code also includes
  statements of the speakers’ or the partner’s identity.
The PER code is used when the speaker’s comment refers to an attribute which cannot otherwise be coded as a Physical Description (PDN) or Behavior (IBH).

This code will utilize a D or G indicating whether the statement was detailed or general.

Examples:

- I was a confident son of a pup. (PER-D)
- Judy was the kind of person that, I think the one thing that really stands, the one quality about Judy that really stands out in my mind is that she’s the kind of person that always finds the good in people and never really sees their weaknesses.
- ...I’m a little bit more suspicious and cynical. (PER-G)
- Oh, I thought she was a card (PER-G)
- He’s a devil’s advocate (PER-G)
- She wasn’t a Christian girl (PER-G)

INDIVIDUAL THOUGHTS (ITH):

Description/Criteria

Statements are coded as ITH when:

- The speaker mentions what he/she was thinking or imagining at a specific time. This code may also include a speaker’s perceptions of what the other (i.e., partner) was thinking. The code may include thoughts of speaker about speaker, speaker about partner, speaker about another, or also what the speaker thought the other was thinking.
This code will utilize a D or G indicating whether the statement was detailed or general. General codes are coded as ITH when the speaker offers little detail about the subject or object of the thought, or goes into minimal detail about the thought. The detailed code of ITH is given to comments where the speaker gives thoughts and also includes details about the thoughts.

Examples:

- I didn’t have a great relationship with her dad. (ITH-G)
- I guess she knew my name. (ITH-G)
- I didn’t know that I had a blind date. (ITH-G)
- I thought she was gonna kill me the way she drove. (ITH-D)
- I thought, “Wow, she is so gorgeous.” (ITH-D)

**JOINT THOUGHTS (JTH):**

**Description/Criteria**

A code of JTH is given when:

- The speaker states that the partners were thinking in a similar way about an event. This code is intended to find unity in the couple’s thoughts. Even though only one person makes the comment, if the comment is “we believe” in something or “we think” something, this would be given a JTH comment.

- Differential coding of segments between thought and behavior is defined as follows: In a statement such as “We liked boating” this segment is given a JTH code as it represents a feeling about boating, not
the act or behavior of boating. Similarly, the statement “We would go boating” describes an activity and would be given a JBH code.

- This code will utilize a D or G indicating whether the statement was detailed or general. The general code of JTH is given to statements that include both members of the couple, but do not give much information or specifics regarding the nature or subject of the thought.

Examples:

- We thought that he’d never come back home. (JTH-G)
- We thought that it was about the right time. (JTH-G)
- We really felt strongly about that. (JTH-G)
- We thought that her sister didn’t care because she didn’t come to the Christening. (JTH-D)
- We felt that because of how we met, we knew would be a good way to start a good relationship. (JTH-D)

PARALLEL PATH CONTENT CODES

POSITIVE STORYTELLING (PST):

Description/Criteria:

A person may be describing a setting, a behavior, or may embed physical descriptions or important others in a longer, more detailed description that usually offers a sign that this event was when the emotional bond between the partners was formed.
This code may be given retroactively. That is, if, while coding, the coder believes that a significant event has occurred, s/he may go back to the beginning of the event and code PST if appropriate.

To best code an PST, upon realizing that the positive story occurs across several thought units, go back to the beginning of the speech and code PST in each related thought unit until the speaker discontinues speaking about that situation.

To qualify as a Positive Story, the following elements are necessary:

A. The content describes a discrete event, a specific episode in time, or a series of linked episodes occurring between an identifiable starting and ending time. If, in a series of linked episodes, an episode includes enough detail to be considered a story in its own right, it should be given a separate PST. However, if individual episodes are not detailed enough to stand on their own, consider linking them in order to code PST.

B. A starting and ending time are discernable from the interviewee’s statement. Examples include the following: “One night…,” “I remember the time that…,” “And so that’s how it started,” “That was when I first knew that we would be together.”

C. The segment describes the who, what, where, and when of the episode.

Description/Criteria

Statements are coded PST when:
The speaker describes an event that was perceived to bring the couple together.

This code may be viewed as a specific event where the couple connected and knew that they would be a couple.

*Examples:*

- We met over a flea. (The conversation continues in long segments with much detail about the flea problem and each partner's role in alleviating the problem and how the incident created the space for the beginning of the relationship.)
- (Describing a blind, double date, and the other couple was boring) They did not not want to do anything so he and I just ended up together and that's the way it's been ever since.

**ROAD BLOCKS (RBK):**

*Description/Criteria:*

Statements are coded RBK when:

- The speaker gives an observation/description of discrete events that transpired to inhibit or stall the development of the relationship. This code also applies to general relationship stumbling points. These stumbling points were events that challenged the relationship. The couple acknowledges that they were challenged and they discuss how they dealt with the problems.
- This description may include, but is not limited to, family/parental conflicts, race differences, religious differences or living apart. Road
blocks may include family members such as parents, acting to inhibit the relationship.

* A specific person acts to inhibit the development of the relationship such as an ex-husband or extra-relationship partner, this would best be coded as the content code Important Others (IMO). The RBK code is applicable to the events rather than the people that transpired to prevent the development of the relationship.

* This code is frequently observed when the couple is talking about transitions in their lives, such as moves, job changes or schooling.

* This is a code similar to PST in that it will typically include several comments taken together. When a road block is described, all comments associated with the road block will be coded RBK until the end of discussion of the event. An exception to this is if a parallel code is included in the road block. In this case, code the parallel code instead of the road block, returning to coding RBK until the string ends.

* The code of RBK includes more information about the problem, possibly including attributions (perceptions of why they were kept apart) or details about how the couple was kept apart. In the case of an attribution, this may be given a parallel code of ATT (see code for Attribution below)

Examples:

* Well, we lost contact for a while because my family moved.

* My parents wouldn’t let us see each other.
• They just felt like he was far too old for me and that I was making a wrong move and that this was never going to last.

• My parents wouldn’t let us go out because he was a Presbyterian and we were Catholic.

• ...so it really was pretty dramatic...threw a wrench in a lot of things, including education, which took a little longer than usual...

• ...we were miserable separated. She was living in a nursing me and I was living in part of an apartment with a, a friend... we were spending so much time on buses trying to get together...

ATTRIBUTION (ATT):

Description/Criteria:

Statements are coded ATT when:

• The speaker describes types of events such as behaviors, feelings, personality traits or needs.

• The speaker describes a reason, rationale or a possible reason for an event, activity, or behavior. For this code, note only those events, behaviors, etc. that led to the further development of the relationship.

• ATT statements are intended to identify a causal connection made by the speaker.

• Ideally, the ATT code is used when the speaker begins statements with “Because.” Other significant introductions to attribution statements include “Why did you do that?” or “Is it because...?” At these times, the speaker is making an attributional search; a search for meaning.
Attribution statements might also begin with “Maybe...” “Could be that...” “I guess...” “Seems to me that...”

- The code of ATT will be given as a parallel code because typically the attribution will accompany another code, such as PD or PE.

Examples:

- He wanted me to marry him because he was lonely. (Code as 2 thought units-one is he wanted me to marry him- coded ITG and because he was lonely which is given PEG and ATT)

METAPHOR (MET):

Description/Criteria:

- The speaker makes a reference to self, partner, or relationship that abstracts the relationship. The statement relates speaker and/or partner to the context of the conversation.
- Relevant comments are made in the context of the discussion.

MET codes are likely to be observed in conjunction with a thought code, due to the cognitive nature of metaphorical comments. That is, they are thoughts, either past or present, of one or both partners

Examples:

- We fell in love spinning around. (Event occurred on an amusement park ride)
- Roses have always been symbolic of our love.
JOKE/LAUGHTER (JOK):

Description/Criteria:

Statements are coded JOK when:

- The statement elicits laughter from interviewer, speaker or partner. This is usually apparent because the laughter is noted in the transcript.

- This code is not to be given unless laughter is noted in the transcript or observed upon watching the tape of the interview. In other words, the code is not to be given when the coder thinks a joke was told, rather, only when the couple indicates by their behavior that the comment was a joke or humorous.

DIALOGUE (DIA)

Description/Criteria:

Statements are coded DIA when:

- The speaker restates actual comments from an event. Though the comments may not always be completely accurate, more significant is that the speaker is remembering a specific conversation. This code should only be given when the statement relates to the relationship of the couple. This code is easily discernable, as the comment usually includes the following: “And then I told her...” or “I said to him...”

- Since the DIA code is a parallel code, content codes can be utilized as well to assess content of the dialogue.
Examples:

- He called me and said that he wanted me to marry him and I told him that I’d have to ask my parents.
- He wanted to charge me $95 for the whole house. I says, it’s no bigger than $25, and I told him I wasn’t going to pay $95 but I needed the whole house sprayed and he didn’t give me a price after that. (Only the 2nd sentence includes a DIA code)

DISAGREEING (DIS)

Description/Criteria:

Statements are coded DIS when:

- Partners disagree about an event or a particular aspect of an event. This code is given when partners correct each other, but not the interviewer.

Examples:

- No, it didn’t happen that way.
- (Correcting husband) Actually, we were engaged for just over 8 months.

MISCELLANEOUS CODES

CODES FOR INTERVIEWERS

Miscellaneous codes (including codes for interviewers) are not given Detail or General designations. In the column following the content code (which in this case would be one of the miscellaneous codes below), an X will be given to designate the lack of a code.
STRUCTURING (STR)

Description/Criteria

A statement is coded STR when:

- The interviewer makes a comment which serves to keep speakers on task. These statements include direct questions or comments about the current conversations.

Examples:

- How did the two of you meet?
- Did your parents like him?

JOINING (JOI)

Description/Criteria

A statement is coded JOI when:

- The interviewer makes a comment which indicates that the interviewer is attempting to join with the family. These statements include jokes, comments about the environment of the interview or the weather. This code would also be given to a comment such as “uh huh” or “umm hmm” which prompt the speaker to go on.

Examples:

- I can sense that.
- That’s hysterical
- Wow, that’s neat.
CODES FOR MISCELLANEOUS COMMENTS

ACKNOWLEDGMENT (A_)

In using the A__ code, the final two letters of the code are the first two letters of the acknowledged comment code (the code of the previous comment).

Description/Criteria

A statement is coded A__ when:

- The statement is an acknowledgment of the last speaker’s comment. Instances where the speaker echoes or repeats part or all of the last speaker’s statements are also coded A__.
- The comment includes self-acknowledgment, or, repetition. This code also includes acknowledgment of the interviewer but may also be a disagreement or redirect to the interviewer.

Example

- Speaker 1 says, “She had nice hair.” In responding, Speaker 2 answers “Yes, I did.” This is an acknowledgment of a physical description. The code for the partner’s response is APD.

TANGENT (TNG)

Description/Criteria

A statement is coded TNG when:

- Speaker discusses unrelated issues or episodes for more than two sentences and does not relate them back to the partner, or does not answer the question, or diverges from it. Code TNG only once for each prompt.
QUESTIONING/REJECTING TASK (QRT)

Description/Criteria
A statement is coded QRT when:

- Speaker refuses to answer or evades question, or turns the question back to the interviewer.

Examples
- Why are you asking me that question?
- Well, what do you think?

DO NOT KNOW (DNK)

Description/Criteria
A statement is coded DNK when:

- The speaker states that he/she cannot remember the details of an event.

Examples
- Don’t remember, can’t remember.
- I can’t put my finger on anything. Note: Overt additions to “I don’t know,” either at the beginning or the end of the statement, usually marked by words like “but” or “except” can negate a DNK. Example: “I don’t know of any real highlights except for the birth of our children.”

SOLICITING (SOL)

Description/Criteria
Statements are coded SOL when:

- Speaker begins response with a question directed toward the partner.

The statement may be tangential such as “Will you get the phone?” and
would be coded TNG. If the question concerns the marital story or the
current interview, it will be coded SOL regardless of the content, such
as questions of places, times, or activities.

- This code includes the act of encouraging the other to speak.

*Example:*

- Why don’t you tell them how I proposed?

**SOLICITING THE INTERVIEWER (ISO)**

*Description/Criteria*

Statements are coded ISO when:

- The speaker asks a question of the interviewer. The question could be a
request for repetition of the question or could be a personal question
asked of the interviewer.

*Examples:*

- Well, what would you say?
- What did you say?

**THOUGHT FRAGMENT (FRG)**

*Description/Criteria*

Statements are coded FRG when:

- The speaker trails off (vocal volume decreases to an inaudible level) or
is interrupted by another speaker.
- The inability of the transcriptionist to interpret the content of the
comment is affected.
• If there is a complete thought unit, even though a second thought unit may be incomplete, do not code FRG. Do not use detail or general descriptors with FRG codes.

PROCESS (PRO)

Description/Criteria

Statements are coded PRO when

• Statements are made that reflect discussion of the current situation, of being in the interview.

• When meta-talk between partners about the storytelling process is occurring.

RELATIONSHIP PATH STAGE CODES

Typical marital history interviews have a definite flow or process. The Relationship Path Codes are used to identify which part of the relationship history the couple is referring to. These codes usually occur in clusters as the couple first talks about how they met, and then move on to dating, etc. These clusters may be compartmentalized and easily discernible by the couple's use of Transition (TRN). Path Stage codes are given when content is clearly related to time, place, and event.

Example:

...three weeks later he told me we were going to Florida and get married

(This indicates that the couple is moving toward discussing another stage of their relationship)
PRE-MEETING (PMT)

Description/Criteria

Statements are coded as PMT when:

- The speaker describes an event, activity, etc. which occurred during prior to meeting the partner. This may include discussions of growing up near each other, going to prep school together, etc. but must not include any direct contact or communication with the future partner.

- Statements are made that include descriptions of prior relationships.

1st MEETING (FMT)

Description/Criteria

Statements are coded as FMT when:

- The speaker describes an event, activity, etc. which occurred during the first meeting of the couple. In order to be coded as FMT, it must be clear that there is actual contact/exchange with the other.

- Physical descriptions of when the partners saw one another for the first time, or may also include thoughts of the speaker or partner about the meeting. Activities, behaviors, times, places, etc. may all be included.

1st DATE (DAT)

Description/Criteria

Statements are coded as DAT when:

- The speaker describes an event, activity, etc. which occurred on the first date of the couple. This may include first dates, blind dates or double
dates but will always relate to the first time the partners were together in a planned engagement.

**COURTSHIP (CRT):**

*Description/Criteria*

Statements are coded as CRT when:

- The speaker describes an event, activity, etc. which occurred after the first date, but before they were engaged.

**ENGAGEMENT (ENG):**

*Description/Criteria*

Statements are coded as ENG when:

- The speaker describes an event(s), activity, etc. which occurred following the marriage proposal but before they were actually married.
- ENG statements can also include details surrounding the marriage proposal such as places or times.

**WEDDING (WED):**

*Description/Criteria*

Statements are coded WED when:

- The speaker describes an event, activity, etc. which occurred on the couple’s wedding day. This code may only be used in reference to the actual wedding day.
MARRIAGE (MAR):

Description/ Criteria

Statements are coded MAR when:

- The speaker describes events, activities, etc. that have occurred since the wedding day. This code includes all events from the first full day the couple was married until the present.

TRANSITION (TRN):

Description/ Criteria

Statements are coded as TRN when:

- The speaker describes an event, activity, etc. which acted to move them from one relationship stage into another.
- Statements are made that describe relocations, job changes or going to school (college).

UNKNOWN (UNK):

Description/ Criteria

Statements are coded UNK when:

- There is some specific time-, place-, or event-related content indicating that the talk is about the relationship, but it is not possible to know which stage.
- There is some content indicating that the talk is about the relationship at some stage, but it is not possible to know which stage.
NOT APPLICABLE (XXX):

Description/Criteria

Statements are coded XXX when:

- The content is not related to the relationship between the couple. The only exception to this is when fragmented statements or tangential statements are made in the context of a string of stage related thoughts/statements.
APPENDIX B

TRANSCRIPT SAMPLE AND CODE SHEET
Who  To Whom

A    Z    What we'd like you to do is have you tell us the story of how the two of you met and how you got together. Out of all the billions of people in the world, how the two of you ended up together.

W    Z    Oh...

H    W    You talk. I told Lara a little bit.

W    H    Did you? Ok. We'll see if we jive. Right?

H    W    You can't go wrong.

W    Z    All right. Well how we met was unique because he was from Binghamton and he was a junior at the U of R. And I was in Irondequoit and I was going to Irondequoit High School and I was a senior at Irondequoit high. And he belonged to a fraternity and I belonged to a sorority. Well my sorority sister had a brother who was in Ruckett's fraternity and he, they were having a dance and he was trying to sell tickets to the dance.

W    Z    It was a sock hop.

W    Z    Yeah.

H    Z    For the X's to raise funds.

W    Z    And they said are you going Murph? And he said well I don't know. Oh I'll get you somebody. So Art called his sister in Irondequoit and said can you get some of your sorority sisters to come up here for a dance. So he said OK. So she asked, I think there were four of us maybe.

H    A    He was able to sell thirteen tickets and a good think because it was a very snowy night and not many tickets were bought at the door.

W    Z    Yeah. And of course we were thrilled to go to a college dance.

W    A    Yeah. An Art's, and Sally's brother, Art, was going to drive us and bring us home. And so anyway, we went to the basketball, we got up there and I met him and then my girlfriend went with his brother Bob and we were dancing. Well we went to the basketball game. He never wore a coat.
You never wore a coat, did you?/34

No./35

Or a hat./36 And it was winter./37 You know, anyway, but I loved him, I liked him that night because he told a lot of jokes so it was really easy you know./38 I was kind of shy then./39 And then we went to the basketball game and he cheered and he always said positive things./40 And was always upbeat and encouraged everybody and I thought, that's really unique./41 You know, I liked it./42 And he wasn’t fresh./43 I really liked that./44 And so anyway, then we went to the sock hop and then we went, we went to the basketball game and then over to the sock hop, and then we went home./45 Then the next week was the Sigma Phi dance and so he called and.../46
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Question 1. Why don’t we start from the beginning. Tell me how the two of you met and got together.

Do you remember the time you met for the first time? Tell me about it.
Was there anything about (spouse’s name) that made him/her stand out.
What were your first impressions of each other?

Question 2. When you think back to the time you were dating, before you got married, what do you remember? What stands out?
How long did you know each other before you got married? What do you remember of this period? What were some of the highlights? Some of the tensions? What types of things did you do together?

Question 3. Tell me about how you decided to get married.
Of all the people in the world, what led you to decide that this was the person you wanted to marry? Was it an easy decision? Was it a difficult decision? (Were they ever in love?)

Question 4. Do you remember your wedding? Tell me about your wedding. Did you have a honeymoon? What do you remember about it?

Question 5. When you think back to the first year you were married, what do you remember? Were there any adjustments to being married?
What about the transition to being parents? Tell me about this period of your marriage. What was it like for the two of you?

Question 6. Looking back over the years, what moments stand out as the really good times in your marriage? What were the really happy times? (What is a good time like for this couple?)

Question 7. Many of the couples we’ve talked to say that their relationships go through periods of ups and downs. Would you say that this is true of your marriage?

Question 8. Looking back over the years, what moments stand out as the really hard times in your marriage? Why do you think you’ve stayed together? How did you get through these difficult times?

Question 9. How would you say your marriage is different from when you first got married?
APPENDIX D

MEASURES: DYADIC ADJUSTMENT SCALE (DAS) &
GLOBAL ASSESSMENT OF RELATIONAL FUNCTIONING (GARF)
DYADIC ADJUSTMENT SCALE
(DAS)

DESCRIPTION
The DAS is a 32-item instrument designed to assess the quality of the relationship as perceived by married or cohabitation couples. It can be used as a general measure of satisfaction in an intimate relationship by using total scores. Factor analysis indicates that the instrument measures four aspects of the relationship: dyadic satisfaction (DS), dyadic cohesion (DCoh), dyadic consensus (DCon), and affectional expression (AE). The instrument may be adapted for use in interviews. The current study used only the dyadic satisfaction subscale.

SCORING
Three different types of rating scales are used with the DAS. Total scores are the sum of all items. The questions used in the factor of dyadic assessment subscale are as follows: 16, 17, 18, 19, 20, 21, 22, 23, 31, 32. Higher scores reflect a better relationship.

Dyadic Satisfaction
Raw Score: \([\text{das}16] + \text{das}17 + (5 - \text{das}18) + (5 - \text{das}19) + \text{das}20 + \text{das}21 + \text{das}22 + \text{das}23 + \text{das}31 + \text{das}32\)

Z-Score: \((\text{Raw Score} - 40.5) / 7.2\)
T-Score: \((\text{Z-Score} \times 10) + 50\)

INTERPRETATION
The Dyadic Satisfaction subscale measures the amount of tension in the relationship as well as the extent to which the individual has considered ending the relationship.

RELIABILITY
As a total score, the DAS has impressive internal consistency, with alpha of .96. The Dyadic Satisfaction subscale has excellent internal consistency of .94.

VALIDITY
The instrument was first checked with logical content validity procedures. The DAS also has shown known-groups validity by discriminating between married and divorced couples on each item. The instrument also has evidence of concurrent validity, correlating with the Locke-Wallace Marital Adjustment Scale.

All ten questions used in the Dyadic Satisfaction subscale are listed below.
The following questions have different answers. Please read the questions and answers carefully. Now, please indicate below approximately how often the following items occur between you and your partner based on this scale:

0 = All the time
1 = Most of the time
2 = More often than not
3 = Occasionally
4 = Rarely
5 = Never

16. How often do you discuss or have you considered divorce, separation or terminating your relationship?

17. How often do you or your partner leave the house after a fight?

18. In general, how often do you think that things between you and your partner are going well?

19. Do you confide in your mate?

20. Do you ever regret that you married (or lived together)?

21. How often do you and your partner quarrel?

22. How often do you and your partner "get on each other's nerves"?

How often would you say the following events occur between you and your partner?

23. How often do you kiss your mate? (Circle your response)
   0 = Never
   1 = Rarely
   2 = Occasionally
   3 = Almost Every Day
   4 = Every Day

31. The numbers on the following line represent different degrees of happiness in your relationship. The middle point, "happy," represents the degree of happiness of most relationships. Please circle the number which best describes the degree of happiness, all things considered, of your relationship.

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32. Which of the following statements best describes how you feel about the future of your relationship?
   5. I want desperately for my relationship to succeed, and would go to almost any length to see that it does.
4  I want very much for my relationship to succeed, and will do all I can to see that it does.
3  I want very much for my relationship to succeed, and will do my fair share to see that it does.
2  It would be nice if my relationship succeeded, but I can't do much more than I am doing now to help it succeed.
1  It would be nice if it succeeded, but I refuse to do any more than I am doing now to keep the relationship going.
0  My relationship can never succeed, and there is no more that I can do to keep the relationship going.
Global Assessment of Relational Functioning (GARF) Scale

The GARF Scale can be used to indicate an overall judgment of the functioning of a family or other ongoing relationship on a hypothetical continuum ranging from competent, optimal relational functioning to a disrupted, dysfunctional relationship. It is analogous to Axis V (Global Assessment of Functioning Scale) provided for individuals in DSM-IV. The GARF Scale permits the clinician to rate the degree to which a family or other ongoing relational unit meets the affective or instrumental needs of its members in the following areas:

A. **Problem Solving** – skills in negotiating goals, rules, and routines; adaptability to stress; Communication skills; ability to resolve conflict

B. **Organization** – maintenance of interpersonal roles and subsystem boundaries; hierarchical functioning; coalitions and distribution of power, control, and responsibility

C. **Emotional climate** – tone and range of feelings; quality of caring, empathy, involvement, and attachment/commitment; sharing of values; mutual affective responsiveness, respect, and regard; quality of sexual functioning

In most instances, the GARF Scale should be used to rate functioning during the current period (i.e., the level of relational functioning at the time of the evaluation). In some settings, the GARF Scale may also be used to rate functioning for other time periods (i.e., the highest level of relational functioning for at least a few months during the past year).

**Note:** Use specific, intermediate codes when possible, for example, 45, 68, 72. If detailed information is not adequate to make specific ratings, use midpoints of the five ranges, that is 90, 70, 50, 30, or 10.

**81 – 100 Overall:** Relational unit is functioning satisfactorily from self-report of participants and from perspectives of observers.

Agreed-on patterns or routines exist that help meet the usual needs of each family/couple member; there is flexibility for change in response to unusual demands or events; and occasional conflicts and stressful transitions are resolved through problem-solving communication and negotiation.

There is a shared understanding and agreement about roles and appropriate tasks, decision making is established for each functional area, and there is recognition of the unique characteristics and merit of each subsystem (e.g., parents/spouses, siblings, and individuals.

There is a situationally appropriate, optimistic atmosphere in the family; a wide range of feelings is freely expressed and managed within the family; and there is a general atmosphere of warmth, caring, and sharing of values among all family members. Sexual relations of adult members are satisfactory.
Overall: Functioning of relational unit is somewhat unsatisfactory. Over a period of time, many but not all difficulties are resolved without complaints.

Daily routines are present but there is some pain and difficulty in responding to the usual. Some conflicts remain unresolved, but do not disrupt family functioning.

Decision making is usually competent, but efforts at control of one another quite often are greater than necessary or are ineffective. Individuals and relationships are clearly demarcated but sometimes a specific subsystem is depreciated or scapegoated.

A range of feelings is expressed, but instances of emotional blocking or tension are evident. Warmth and caring are present but are marred by a family member’s irritability and frustrations. Sexual activity of adult members may be reduced or problematic.

Overall: Relational unit has occasional times of satisfying and competent functioning together, but clearly dysfunctional, unsatisfying relationships tend to predominate.

Communication is frequently inhibited by unresolved conflicts that often interfere with daily routines, there is significant difficulty in adapting to family stress and transitional change.

Decision making is only intermittently competent and effective; either excessive rigidity or significant lack of structure is evident at these times. Individual needs are quite often submerged by a partner or coalition.

Pain or ineffective anger or emotional deadness interfere with family enjoyment. Although there is some warmth and support for members, it is usually unequally distributed. Troublesome sexual difficulties between adults are often present.

Overall: Relational unit is obviously and seriously dysfunctional; forms and time periods of satisfactory relating are rare.

Family/couple routines do not meet the needs of members; they are grimly adhered to or blithely ignored. Life cycle changes, such as departures or entries into a relational unit, generate painful conflict and obviously frustrating failures of problem solving.

Decision making is tyrannical or quite ineffective. The unique characteristics of individuals are unappreciated or ignored by either rigid or confusingly fluid coalitions.

There are infrequent periods of enjoyment of life together; frequent distancing or open hostility reflect significant conflicts that remain unresolved and quite painful. Sexual dysfunction among adult members is commonplace.

Overall: Relational unit has become too dysfunctional to retain continuity of contact and attachment.

Family/couple routines are negligible (e.g., no mealtime, sleeping, or waking schedule); family members often do not know where others are or when they will be in or out; there is a little effective communication among family members.

Family/couple members are not organized in such a way that personal or generational responsibilities are recognized. Boundaries or relational unit as a whole
and subsystems cannot be identified or agreed on. Family members are physically endangered or injured or sexually attacked.

Despair and cynicism are pervasive; there is little attention to the emotional needs of others; there is almost no sense of attachment, commitment, or concern about one another’s welfare.

0 Inadequate information.

(American Psychological Association, 1994, pp. 758-759)
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Barton, B. (1986). *Tell me another: Storytelling and reading aloud at home, at school and in the community.* Markham, OH: Pembroke.


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