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Personal Narratives as Reflections of Identity and Meaning: A Study of Betrayal, Forgiveness, and Health

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To the Graduate Council:

I am submitting herewith a dissertation written by Laura G. Porter entitled "Personal Narratives as Reflections of Identity and Meaning: A Study of Betrayal, Forgiveness, and Health." I have examined the final electronic copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Psychology.

Robert G. Wahler, Major Professor

We have read this dissertation and recommend its acceptance:

Kristina Coop-Gordon, Schuyler Huck, Deborah Welsh

Accepted for the Council:

Carolyn R. Hodges

Vice Provost and Dean of the Graduate School

(Original signatures are on file with official student records.)

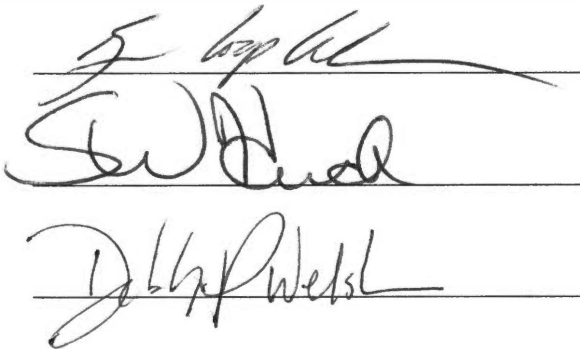
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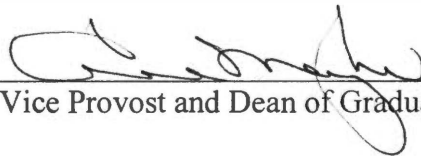


Robert G. Wahler, Major Professor

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and recommend its acceptance:



Acceptance for the Council:



Vice Provost and Dean of Graduate Studies

**Personal Narratives as Reflections of Identity and Meaning:
A Study of Betrayal, Forgiveness, and Health**

**A Dissertation
Presented for the
Doctor of Philosophy Degree
The University of Tennessee, Knoxville**

**Laura G. Porter
August 2003**

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Abstract

As evidence suggesting both emotional and physical benefits from forgiveness continues to mount, scientific interest focuses on the intrapsychic dynamics and interpersonal processes that distinguish forgiving individuals from their nonforgiving counterparts. By studying the transformation of hurt and resentment into understanding and compassion, researchers hope to clarify further the cognitive and affective changes that characterize forgiving hearts and minds. As the nuances of this potentially healthful expansion of perspective become known, clinicians hope to integrate their newfound insights into therapeutic formulations and interventions that target ever-widening populations for whom forgiveness might prove beneficial.

Analysis of the very personal and often lengthy process of forgiveness requires attention to habitual tendencies and situational reactions, general beliefs and specific attitudes. Personal narratives, as reflections of individuals' patterns for integrating their immediate experiences into the stories of their lives, serve as natural maps of the inner workings of forgiveness. Thus, by studying these narrative maps, it may be possible to gain a better understanding of the process of forgiveness and its effect on physical health, while exploring the ways that individuals of all ages story the events of their daily lives into healthy, adaptive identities.

One hundred eight undergraduate students completed self-report measures of state and trait forgiveness and told stories of betrayal experiences while physiological measurements of heart rate and blood pressure were recorded. Their unscaffolded and scaffolded narratives were coded for coherence, richness, conflict formulation, and story-based forgiveness. Four questions were addressed: (1) What is the effect of interviewer scaffolding on narrative characteristics and does forgiveness status alter this general pattern?, (2) What are the relationships between objective self-report measures and the four narrative codes?, (3) How confidently can one predict forgiveness, as both a trait quality and a state-like decision, from the characteristics of personal narrative?, and (4) What are the relationships between narrative characteristics and physiological measures of blood pressure and heart rate?

Results indicate that interviewer scaffolding has significant effects on richness and coherence, though in opposite directions. Neither of these structural variables was meaningfully associated with state or trait forgiveness, but conflict formulation showed a significant correlation with state forgiveness. In addition, conflict formulation and narrative-based forgiveness were positively related, further suggesting that the former tapped a situational perspective rather than a general philosophy. Analysis of the predictive power of narrative qualities relative to forgiveness yielded a significant model for state forgiveness but not for trait forgiveness. Narrative-based forgiveness was the only predictor variable to obtain significance, although the conflict formulation variable evidenced a marginal contribution. Finally, both coherence and richness displayed significant correlations with key physiological measures. Life story coherence was negatively related to resting diastolic blood pressure, while richness was negatively associated with systolic blood pressure levels during active reflection of betrayal episodes.

Results are discussed in light of study limitations and existing research on forgiveness and narrative development.

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I. Introduction and Review of Literature

At the dawn of the 21st century, America is a society where the pressures of time and responsibility propel the daily lives of its citizens at such a fast pace that activities once taken for granted are now viewed as luxuries. We live in an era paradoxically defined not only by its potential for unprecedented development, but also by the significant costs that accompany such progress. This dialectic is perhaps no more apparent than in the sphere of human relatedness. In recent years, advancements in technology, driven by economic competitiveness and demands for convenience, have led to a fundamental shift in the conduct of interpersonal relationships. Having displaced the front porch swing and corner fence-post as the centers of social exchange, cellular telephones, Internet chat rooms, email, and fax machines are now the predominant means of communication and interaction. Despite the symbolic status and comfort these developments provide, the contacts facilitated are often uni-dimensional, flattened exchanges where the powerful emotional nuances expressed in our bodies, whether a slight smile, a grimace, or an imploring glance, are lost. As a consequence, our words – forever the carriers of identity and meaning – are all the more important. Language reigns as the primary vehicle through which personal experiences are consolidated, related, and expressed. In our telling of stories, the discrete episodes of living are integrated in the formation of a narrative of self (McAdams, 1989). As such, the style and substance of this narrative reflect the inner working models of the individual whose history they represent (Baldwin, 1992). From this publicly spoken record of private cognitions and emotions, inferences can be drawn and predictions made about a variety of real-life experiences – including social responsiveness, physiological adaptation, and physical health. Substantial research exists on the associations between narrative and these phenomena (see Furman, 2001; Goin & Wahler, 2001; Leibowitz, Ramos-Marcuse, & Arsenio, 2002; Pennebaker, 1999; Pennebaker & Francis, 1996; Pennebaker & Seagal, 1999), but study of the defining qualities of healthy narratives remains a relatively new area of inquiry (Dimaggio & Semerari, 2001; Goncalves, Korman, & Angus, 2000; Graybeal, Sexton, & Pennebaker, 2002).

The current project is designed to deepen the study of personal narrative by exploring the relationships between autobiographical stories, views of self, and physical health. Certainly, evidence supporting psychotherapy, the ultimate domain for the development of self-stories, for improvement in mental as well as physical health is relevant (Cottraux, 1993; Olbrisch, 1977; Smith, 1982). However, the scope of study on the process and outcome of psychotherapy is so broad as to create more questions than answers. Therefore, this investigation narrows the field to address the relationship between narrative identity and well-being. From the many topics one might select to investigate this relationship, the experience of betrayal – individual descriptions of thoughts and feelings in the wake of disappointment and hurt – seems to be a particularly rich domain for the planned exploration. This focus was chosen, in part, given the importance of this phenomena to the broader process of psychotherapy and the understanding of individual development in social relationships. More important, however, for the decision to focus on betrayal was its position at the intersection of narrative inquiry and burgeoning empirical interest in the process and potential benefits of forgiveness. Particularly as the physiological correlates of forgiving become more clearly defined, understanding the narrative process by which one attains this attitude toward an offender becomes crucial for individuals and mental health professionals alike. Paralleling efforts to articulate the physical concomitants of psychological processes, this study hopes to make an exploratory step on the path of mind-body discovery by examining theoretical and empirical assumptions about what makes a “healthy story.” More specifically, this investigation examines, within the context of interpersonal betrayal, the qualities of personal narrative as related to the narrator’s dispositional and situational forgivingness as well as physiological indicants of well-being.

Prerequisite for this analysis is a firm grasp of what is meant by personal narrative, including the various conceptualizations that identify autobiographical stories as glimpses of an individual’s internalized sense of self. It is from this view that we can identify both adaptive and maladaptive elements of personality or self-concept, perhaps even those related to health behavior and well-being. Thus, our investigation begins with

a review of historical and recent work on narrative as a reflection of identity and meaning.

Personal Narrative: Conceptualization and Function

Our world is a storied one. From the first years of life onward, we create and tell stories to organize and communicate our experiences, emotions, and actions. From a child's recollection of a nightmare to water cooler discussions of office politics, stories are expressions of the narrator's unique voice and are windows into his or her world of meaning. A story focuses those aspects of experience which are most important and organizes them into a cohesive whole that adds to the speaker's personal sense of self by clarifying his or her place in the world (Engel, 1995). Indeed, "*Identity is a life story* - an internalized narrative integration of past, present and anticipated future which provides lives with a sense of unity and purpose" (McAdams, 1989, p. 162).

Narrative, or self-story, might as aptly be referred to as a life map, a topographical chart for understanding and relating constructed by one's pattern of interpreting social roles and interactions. The network of paths and trails, the metaphorical stories of this map, not only represent a record of past experience but also provide a key to the assumptions that guide identity development and interpersonal behaviors. These stories, in their weaving together of discrete events, reveal the lens through which the narrator understands the social world. The overall contours of our narrative map represent the trait-like dispositional patterns that describe, in aggregate, our behaviors and personality. The hills and valleys highlight organizational regularities, consistencies that alone do not allow prediction of specific behaviors, but together shed light on the beliefs and values which form the foundation of the narrator's theory of reality (Diener, 1996; Epstein & O'Brien, 1985).

Narratives of identity do not, however, develop in isolation. Storytelling is indeed an inherently social process, an interactive sport. Embedded in the interpersonal milieu, stories are not merely exchanged in transactions, but are sculpted, around central cores, by and for the relational context with repercussions for all players (Peterson & McCabe, 1992; Vygotsky, 1981). Born of personal experiences and nurtured within the drama of human relationships, narratives are social constructions that weave the multi-colored and

textured threads of life into a tapestry based on the narrator's organizational pattern. As we recount our experiences with words, the emerging stories mold not only the speaker's future actions, but also the stories and actions of those with whom the narrator interacts. In this manner, our stories intertwine in a symbolic reality that dynamically exerts influence over the world of lived experience from which they were created (McAdams, 1993).

The template used to emplot narratives, or to create from the discrete events of daily life a coherent and meaningful stream, is largely a function of the individual's beliefs and experiences about self, others, and relating in the social world. Filtered through the idiosyncratic map which structures our perception of new information and our responses to new experiences, the narrative we create from life, which in turn guides present living, facilitates understanding and directs behavior according to its own biases (Baldwin, 1992). Thus, as each individual, interacting in the ecosystem, develops his or her own theories of reality, their summation into a narrative identity will vary in coherence, richness, and tone just as the personal beliefs and internal models which comprise it differ in style and character (Spence, 1982). Hardly just an internal psychological structure which categorizes stimuli or input, a personal narrative is a living symbol, the creation of which consolidates assumptions, expectations, and generalized patterns into a unique summary of experience which then guides behavior and interpretation in the present (Gergen & Gergen, 1988). From the specific tales highlighted in these historical accounts, we learn about the speaker's sense of meaning and importance. In the flow of moment to moment, we gain insight into the narrator's understanding of causality and responsibility. Authenticity reveals itself through the contextual sensitivity, descriptiveness, and truthfulness of the story (Goncalves, Korman, & Angus, 2000).

Taken together, these attributes paint, with bold strokes, a picture of the narrator's senses of self and other as well as his or her place in the world. As a dynamic summary of experiences and beliefs, the structure and content of personal narrative mutually interact to represent the narrator's patterns for understanding and integrating life's varied situations and circumstances. Whereas structure more closely reveals the organization of

beliefs, narrative content contains the philosophical truths that form the narrator's theory of reality. United, these elements function as a working template or map which charts the speaker's perception of the ecosystem and consequently guides his or her actions in it; "Meanings that live in language and powerfully contribute to our experience of reality are predictive of behaviour" (Gregson, 1994, p. 35).

Nonetheless, this narrative self-concept is a multifaceted and evolving co-creation. Its stability lends some degree of consistency and predictability to individual lives, but precise definition of identity or personality remains elusive (Diener, 1996). Clearly, a substantial body of theoretical and empirical literature supports the use of autobiographical narrative as a public presentation of one's self-definition (see Freeman, 2001; McAdams, 2001). However, defining personality is an intricately complex pursuit that has captivated psychologists for decades. Indeed, it is an exercise akin to that of predicting the weather. The enduring characteristics of personality, like seasonal trends, lend some degree of stability to our expectations of behavior, but our predictive accuracy for any single moment is nonetheless quite limited (Gleick, 1987). However, as personal styles or dispositions are integrated over time with daily occurrences, a dynamic picture emerges that captures the regularity within the chaos (Diener, 1996). In meteorology, the most accurate forecast is a detailed blend of global patterns and more localized events, all set within a context of constant change and variability. Comprehensive models of personality functioning too must devote attention not only to habitual characteristics and contingent behaviors, situational responses or initiations, but also to each individual's unique interweaving of style and substance in the evolving story that provides an identity with coherence and meaning (Diener, 1996). Dan P. McAdams, building upon his work on personal narrative, has outlined such a model for the development of individual identity, a framework composed of three levels defined as, "(1) comparative dispositional traits, (2) contextualized personal constructs, and (3) integrative life stories" (Emmons, 2000, p. 157).

The first level of the model represents those enduring features of an individual's way of being in the world. These traits are useful for describing typical behaviors, but often fail to capture idiosyncratic responses in context-bound circumstances. In short,

“Life is not lived as a trait” and definitions of self derived primarily from this level of analysis fail to capture the liveliness of spontaneous and situational responses (Ryan, 1995, p. 416). The second level of McAdams’ model brings richness to an understanding of personality by accounting for specific goals, strategies, and concerns – the purposefulness that guides daily behavior. While the traits of level one may be described as inherent qualities, the situational objectives and ambitions of level two are their active manifestations. Level three, then, is the summary that reflects each individual’s ongoing attempt to synthesize the “having and doing sides of personality” into a stable, but ever-developing, self (Emmons, 2000, p. 158).

This balance of trait with state, of nature with nurture, makes possible a seemingly unlimited range of emotion and behavior, and it is from this dynamic interaction that we understand when a generally outgoing woman becomes shy and behaves passively or when an impulsive, action-oriented man takes time for love and romance (Diener, 1996). Nonetheless, teasing apart these layers of identity to improve behavioral prediction is a daunting project, one for which narrative analysis has become an essential tool (Hermans, 1997; Pennebaker & King, 1999). In fact, the use of projective instruments in psychological evaluations is based upon the notion that personal narrative – whether prompted or spontaneous in response to structured or abstract stimuli – reveals a bit of the interplay between general tendencies, ephemeral motives, and unspoken desires (Bellak, 1958; Leiter, 1989; Schafer, 1954). So too is built the argument for the examination of personality, self-concept, and meaning-making through integrative life stories of everyday experiences, McAdams’ third level of identity.

Two components speak most clearly about the adaptiveness and sophistication of these narrative summaries: story structure and content (McAdams, 1993). Just as a good theory must be extensive and expansive, with global governing beliefs and a well organized set of specific postulates, a narrative, or self-theory, capable of providing guidance for adaptive responding to a vast array of situations must be constructed around central, integrative values while adequately attending to situational guidelines and accommodating new information (Epstein, 1973). In other words, autobiographical maps constructed to guide life’s journeys must contain information from local, state, federal,

and international levels that is integrated by a clear vision about the relationships between them. Given the complexity of circumstances and the diversity of interpersonal situations that occur within a single day, much less an entire lifetime, successful navigation of our social waters requires a similarly differentiated and detailed map. What is needed is a narrative, or internalized compass, built from an elaborated synthesis of experience and belief that is reality-based and sufficiently contextualized to allow sensitive responding to each of life's encounters (Porter, 1999; Wahler & Castlebury, 2002).

Understanding the processes through which these personal narratives develop has inspired empirical research and theory for a number of years (Howe & Courage, 1993; McAdams, 1993; Peterson & McCabe, 1992; Welch-Ross, 1997). Not only are these symbolic stories of self important expressions in a world where social contact and communication are essential, they are also powerful vehicles for the development of individual identity. Through autobiographical narrative, an individual is permitted to test and integrate different identities, to create a fit in life (Daiute & Buteau, 2002). Indeed, through narrative analysis, researchers studying both parenting and development have identified the facilitating effects that responsive relationships and engaging conversational styles have on the maturation and identity-formation processes (Bretherton, 1992; Oppenheim, Nir, Warren, & Emde, 1997; Priel, Myodovnik, & Rivlin-Beniaminy, 1995; Welch-Ross, 1997). While these bodies of literature continue to grow and illuminate in greater detail the value of narrative for phenomenological understanding of individual and interpersonal processes, four conclusions from the narrative literature form the foundation of our investigation on the relationships between autobiography, forgiveness, and health. First is the general consensus that self-concepts evolve through individualized interpretation of experiences and social interactions. Second, but closely related to the first, is the notion that certain interpretations and experiences seem to be more beneficial than others for the consolidation of an adaptive self-concept. Third, the expression of one's personal life narrative, whether verbally or in written form, facilitates the development of a social and cultural identity. Of final importance is the idea that the most valid and reliable features from which to understand

the dimensions of identity reflected in these stories are related to the tales' organization and content (Fox 1995; van IJzendoorn, 1995; Wahler & Castlebury, 2002).

The Heart of the Matter: Narrative Structure and Content

The structural aspects of personal narrative have gained substantial empirical attention and feature prominently in clinical work as well. For example, a central component of psychiatric mental status examinations is the evaluation of thought processes, the degree to which cognitions are logically ordered, appropriately elaborated, and responsive to reality (Polanski & Hinkle, 2000). In the research literature, structural aspects, defined as coherence and richness, have also been identified as the characteristics most relevant for qualitatively assessing the narrator's ability to maintain a strong sense of personal integration while responding flexibly to the changing social world (Castlebury & Wahler, 1998; Wahler & Castlebury, 2002). Although definition and empirical investigation of the difference "between 'good' and less good life stories" began only recently, strong interest in the concept of autobiographical coherence and the positive effect of narrative integration on mental health has inspired study for a number of years (Baerger & McAdams, 1999, p. 70).

Anton Antonovsky devoted himself, through an extended program of research that began in the 1950s, to understanding the factors that moved human beings along the continua of health and disease. Over time and study, he came to view coherence as the most parsimonious way to account for a panoply of influences and created his salutogenic model of health around it. He proposed that coherence was a generally stable and enduring quality that developed in early experiences and dynamically modified in response to the challenges of life. With luck, adequate resources, and a supportive social environment, among others, coherence begot coherence as a "generalized resistance resource" that facilitated, in a reinforcing manner, adaptive coping and global well-being (Antonovsky, 1979, p. 99). When, however, the trials and tribulations of life presented more than could be integrated into one's dominant identity, coherence fragmented and problems arose (Stewart & Neimeyer, 2001).

Antonovsky ultimately defined a sense of coherence as "a global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of

confidence that one's internal and external environments are predictable and that there is a high probability that things will work out as well as can reasonably be expected" (Antonovsky, 1979, p. 184). Notable in this definition are references to flexibility and optimism with a balanced degree of globality and specificity, features also identified by others as important for an adaptive narrative identity (Diener, 1996; Dimaggio & Semerari, 2001; Goncalves, Korman, & Angus, 2000; Porter, 1999; Wahler & Castlebury, 2002). Indeed, Antonovsky's elaboration of the coherence concept speaks quite clearly of the previously mentioned notions of richness and thematic openness. He wrote:

From the time of birth, or even earlier, we constantly go through situations of challenge and response, stress, tension, and resolution. The more these experiences are characterized by consistency, participation in shaping outcome, and an underload-overload balance of stimuli, the more we begin to see the world as being coherent and predictable. When, however, one's experiences all tend to be predictable, one is inevitably due for unpleasant surprises that cannot be handled, and one's sense of coherence is weakened accordingly. Paradoxically, then, a measure of unpredictable experiences. . . is essential for a strong sense of coherence. One then learns to expect some measure of the unexpected. When there is little or no predictability, there is not much one can do except seek to hide until the storm (of life) is over, hoping not to be noticed. Or else one strikes out blindly and at random until exhaustion sets in. . . If a strong sense of coherence is to develop, one's experiences must be not only by and large predictable but also by and large rewarding, yet with some measure of frustration and punishment. (p. 187)

Resonating with Antonovsky's view of coherence as a fundamental narrative quality in which motivation and emotional richness are differentially integrated, Baerger and McAdams (1999) hypothesized that variations in coherence reflected differences in narrator personality and, by extrapolation, psychological functioning. Their study of the narratives of 50 adults became the first empirical work to link coherence and emotional

well-being. Not only did they find that coherence was reliably coded, they also detected a significant negative correlation between this narrative quality and depression. In addition, strong positive correlations were found between coherence, life satisfaction and happiness (Baerger & McAdams, 1999).

Certainly, these findings strongly support the relevance of coherence for the evaluation and interpretation of personal narrative, but this construct alone does not capture all of the qualities inherent in a “good” story. While coherence refers to the clarity and consistency of the tale, narrative richness refers to the speaker’s commitment to descriptively create the setting or situation and to imbue the story with personal meaning. Alongside the more traditional measure of coherence, richness adds contextual detail as well as the narrator’s subjective sense of the reality being described. Labov and Waletzky in 1967, like others who followed them, spoke of the power of motivation and emotional richness to transform factual accounts into compelling stories that conveyed meaning and value. Without these evaluative, perspective-enhancing comments, stories lack a clear theme for expanding a socially recognized story frame into a captivating account of personal experience. However, elaboration and detail in extreme can cloud the communicative function of narrative, leaving audiences lost from the narrator whose once interesting tale becomes wandering and disjointed (Losh, Bellugi, Reilly, & Anderson, 2000). Together and in balance, coherence and richness indicate the narrator’s ability to adequately perceive and personally synthesize the general themes and momentary contingencies that characterize our social ecosystem into a story that guides functioning at each individual moment (Castlebury & Wahler, 1998; Wahler & Castlebury, 2002).

While structure reveals the organization and detail of the narrator’s beliefs, content reveals the substance of those values (McAdams, 1993). Narratives, as reflections and re-presentations of lived experiences, convey by valence the attitudes the speaker holds about his or her world. Seen as a template that integrates the many facets of one’s journey through life into a communicable self-story, the thematic quality of a personal narrative reveals the narrator’s emotional perspective and sense of reality. On the whole, optimistic narratives convey the narrator’s sense that the world is a predictable

place where intention is meaningful, goals can be realized, and “things work out in the long run” (McAdams, 1989, p. 163). A narrative characterized by a hopeless tone suggests a personal perspective on life that is quite the opposite - that wishes and desires are but foolish whims to be tossed and scattered in the unpredictable winds of life, where unhappy endings are the rule rather than the exception. A hopeful affective tone as the cornerstone of one’s narrative identity bodes well for happiness, life satisfaction and rewarding social relationships, as evidenced by research among the elderly and young alike (Grossbaum & Bates, 2002; Pratt, Norris, van de Hoef, & Arnold, 2001).

What seems most desirable is a narrative that reveals, through an organized and elaborate tale, a perspective that acknowledges the interplay of positive and negative in every waking moment (Antonovsky, 1979; Messer & Winokur, 1980; Schwartz & Garamoni, 1989). This narrative must be detailed and articulate, global in scope but with situational specificity, based in the truth of human existence and balanced with respect to life’s inherent contradictions. It is hypothesized that individuals whose personal maps are built upon philosophies of wholeness will be able to perceive and relate in the social ecosystem most adaptively (Messer & Winokur, 1980; Schwartz & Garamoni, 1989). With vision that simultaneously sees broad patterns and situational dynamics, one gains freedom to be fully present in the moment with the security and stability of narrative continuity to guide objective and sensitive responding (Goncalves, Korman, & Angus, 2000; Gregson, 1994; Ravn, 1988). Similarly, one would expect that individuals who are guided by self-theories that accept the inherent contradictions of life achieve, in the integration of conflicting tensions, greater complexity and richness. In other words, the narrator’s ability to interweave negative themes within a positive context might be associated with more coherent and elaborate stories, which in turn should serve as more comprehensive and articulated maps for guiding actual behavior. By recognizing and accounting for life’s paradoxes in his or her telling of everyday events, this narrator makes respect for complexity and ambiguity a guiding feature of life (Gregson, 1994; Schwartz & Garamoni, 1989). This achievement, from a theoretical perspective that is supported by increasing research evidence, suggests that this individual will enjoy not

only greater mental health but also greater physical well-being (Cassel, 1987; Pennebaker & Seagal, 1999; Schwartz & Garamoni, 1989).

Porter (1999), in the development of a system for analyzing narrative content, presented a theoretical rationale for the evaluation of content based on the expressed relationship with conflict. In short, she posited that a balanced integration of the positive and negative aspects of life, wherein conflict is regarded as an inevitable but instructive element, is both more realistic and more adaptive than perspectives characterized by “happily ever after” fantasies or “doom and gloom” predictions. Personal narratives that reflected this philosophy of experience were expected to serve as better templates for cognitive organization and more effective guides for interpersonal interaction (Gregson, 1994; Schwartz & Garamoni, 1989). Her examination of the narratives of elementary school teachers found that the prevalent themes in the professionals’ stories about life at school accounted for a small but unique percentage of the variance in the prediction of the teachers’ responsiveness with their students (Porter, 1999). Although the study was exploratory in nature, the reported link between thematic balance and behavioral sensitivity lends credence to conceptualizations of narrative as a tool for understanding and predicting individual functioning, while highlighting the relevance of content to these analyses.

However, just as cognitive abilities differ, the degree to which individuals are able to create a coherent and elaborate narrative reflecting a richness of emotional experiences while maintaining an overall perspective of hope also varies (Baerger & McAdams, 1999; Berman, 1988; Tannock, Purvis, & Schachar, 1993). This balanced perspective in content and structure may represent a developmental sophistication that is not easily attained, if at all (Dimaggio & Semerari, 2001; Parry, 1995). Some may construct their lives in seemingly orderly fashions that are nonetheless hopeless or resigned. Others may be more positive about life, but are not able to organize and comprehensively integrate whole experiences into their narratives. In either case, one would expect some distress or discomfort associated with the incomplete integration (Dimaggio & Semerari, 2001; Goncalves, Korman, & Angus, 2000; Haaken, 2002; Hambleton, Russell, & Wandrei, 1996). For example, a young adult may present a logical account of his childhood in a

home with parents in regular conflict. Although his story is clear and accurate, it is limited to his perspective alone; his impressions of the past incorporate nothing about the thoughts and feelings of other family members. The coherence of his narrative suggests an ability to organize his experience such that he might enjoy some positive outcomes. However, limitations in the elaboration of his narrative lead one to expect problems based on restricted perspective. Furthermore, the tone of his story is bitter and entitled. Clearly, this speaker has not achieved a balanced, integrated understanding of his early years. Therefore, we might expect this attitude to manifest in his current relationships, with potentially negative consequences for his happiness.

Contrast these interpretations with those of another story told by a narrator who presents a wildly detailed but wandering story of her life. Rich with information and generally optimistic, even when unpleasant times are mentioned, this tale lacks the focus to unite her experiences in a reasonable continuum. Thus, though her story may be more captivating than the first, her behaviors are likely to be more erratic and misguided.

While content and structure seem inherently interrelated, scientific study of narrative often approaches analysis by separating them, in hopes of eventually understanding the nature and extent of their reciprocity. Separately, but together, coherence, richness, and thematic content are studied to draw conclusions about an individual's beliefs, characteristics, and behaviors, which in turn allow predictions to be made about general functioning, social interactions, and health (Goncalves, Korman, & Angus, 2000). This, indeed, is the task of the present study, to analyze autobiographical stories in hopes of better understanding their power as reflections of meaning, identity, and well-being. Within the context of interpersonal betrayal, however, we expect that these potential relationships might be significantly affected by the speaker's feelings of forgiveness. Thus, analysis will focus on the potential links between narrative selves, objective self-presentations of forgiveness, and physiological selves – with particular emphasis on the relationship between the first and last of these. Before explicitly studying research regarding the link between narrative and health, it is necessary to review existing theory and empirical work on the intermediary variable – forgiveness.

Evolution of Forgiveness

A review of the evolution of forgiveness as a social phenomenon is an important foundation for our current investigation of its process and benefits. Survival value alone was the primary motivation for forgiveness when traced to its purported origin in the Paleolithic era between 15,000 and 40,000 years ago. To survive predation and to successfully gather needed food, “organic extended kinship groups” required cooperation and unity among their members (Luebbert, 1999, p. 174). In this context, individuals and families willingly sacrificed personal gains for the ultimate good of the group, and forgiveness supported basic theories of kinship selection. As social groups grew beyond the extended family, the community became the focus of survival instincts. Family clusters, in a form of reciprocal altruism, banded together to protect themselves from competing tribes and developed primary identifications with the larger social body. Injuries to the group were experienced as injuries to self, and rejection by the community with which identity was so inherently tied evoked personal and lasting shame. As a consequence, betrayal was discouraged, but retaliation against threats to the collective body from within was fierce and the empathic understanding necessary for forgiveness of experienced injuries was limited (Luebbert, 1999).

However strong were these informal tribal alliances, they were inadequate to maintain peace as literacy transformed the nature of society. In the exclusively oral culture, negative events were primarily understood and explained, even if by fantastical means, as interpersonal and inextricably tied to the immediate situation. As language shifted the dynamic to a visual culture, bringing with it clearer separation between I and Thou, objectivity and introspection became more possible. The written word also brought distance between experiences and their reporting, which allowed room for imaginative solutions to problems that were previously more narrowly defined. With literacy, abstract thought blossomed and the collectivist, “all for one,” ethic of preliterate society collapsed. Morality became internalized rather than centered on external pressures, and, as a result, community identifications waned. This fundamental shift in social structure had profound implications for interpersonal functioning. Increased self-reflection and rationality promoted guilt without shame for interpersonal transgressions,

and narcissistically driven vengeance lost its appeal (Luebbert, 1999). Thus, forgiveness evolved from a basis in survival to a consciousness-centered decision that incorporated individual moral codes as well as the greater good.

Neuropsychological and Cultural Foundations of Forgiveness

Paralleling this understanding of the evolutionary development of forgiveness are neuropsychological and cultural interpretations. These perspectives begin with the notion that forgiveness is grounded, to some degree, in the evaluation and judgement of the behavior of others (Newberg, d'Aquili, Newberg, & deMarici, 2000). The capacity to conduct these assessments of "conspecific congruence" comes from the inferior parietal lobe and gains an affective component through the limbic system (Newberg, d'Aquili, Newberg, & deMarici, 2000, p. 94). In preliterate society, where individual identities were fused with the common good, conspecific comparisons focused on the congruence between self (group) and other (competing group). As this parietal lobe capacity evolved, the scope of comparisons extended to self versus world, and execution of these judgements required some semblance of self-concept, memory, and interest in equality. As literacy fundamentally changed the organization of society and individuation within a communal setting became a regular developmental achievement, the brain adapted and evaluations of conspecific congruence altered accordingly. From activity in the posterior superior parietal lobe, self-other distinctions emerged, while links between that cerebellar area and others defined relationships and interpretations of them (Newberg, d'Aquili, Newberg, & deMarici, 2000). Long-term memory consolidated emerging assessments of conspecific congruence and these became the bases of new comparisons aroused by betrayal episodes or hurtful experiences. In the course of daily living when an individual encountered dishonesty or disloyalty, the sensorimotor system activated, and incoming information was compared to that existing in long-term memory. Discrepancies were perceived as threatening, and the sympathetic nervous system was summarily activated in hopes of escaping the potential danger. All the while, the cerebral cortex, working with systems from both hemispheres, attempted to resolve the existing conflicts in conspecific evaluations. If symmetry was realized, discharge from the right hemisphere activated the parasympathetic nervous system, creating those feelings of relief and happiness so often

described as consequences of forgiveness (Newberg, d'Aquili, Newberg, & deMarici, 2000).

Although the neuropsychology of forgiveness proceeds without our explicit awareness, socially, attainment of this symmetry in conspecific congruence requires acknowledgement of a shared reality. Arriving at this perception can be quite difficult when the individuals involved are from different cultures and use discrepant styles of reasoning (Augsburger, 1992). In general, when faced with the stress of betrayal or conflict, individuals typically default to resolution strategies learned early in life – strategies that are often highly influenced by culture and social custom. This cultural influence is particularly complex due to differential emphasis of the psychological controls most figural in the forgiveness process – anxiety, shame, and guilt – throughout the world (Augsburger, 1992). Thus, forgiveness involves not only cognitive changes but emotional and behavioral ones as well, and its attainment becomes increasingly complicated by the multiple interactions of these changes across individuals, situations, and time. As a result, any study of forgiveness per se must consider the many different forms, stages, and influences involved in the reconciliation of our varied hurts.

Forgiveness has many faces. Each culture shapes its understanding of forgiveness from its central values. Harmony calls for a forgiveness of overlooking; justice for a forgiveness of repentance; solidarity for a forgiveness of ostracism; honor for a forgiveness of repayment; dignity for a forgiveness of principled sacrifice. Each group gives forgiveness a face composed of multiple values, framed by its unique history, and formed by its collective ledgers of justice and injustice received and given, harmony and disharmony chosen or imposed, and honor or dignity won or lost. (Augsburger, 1992, p. 262)

Although forgiveness is increasingly touted as “good for what ails you,” many remain skeptical about the universal benefit of the admonition to forgive, citing both cultural and intrapsychic considerations as relevant to their views. Power and politics figure prominently in the minds of those who question the recent emphasis on the virtue of forgiving and wonder whether it can be only coincidental that forgiveness gained

newfound glory just as the oppressed began to claim their voices and rights in ever increasing ways (Haaken, 2002). The feminization of forgiveness, whereby expectations for women to be peacemakers become more entrenched and prohibitions against female anger escalate, is another concern for cultural analysts of forgiveness. Finally, it is argued that creating internal, psychological boundaries between the past and present through forgiveness masks the reality that history brings itself forward to powerfully influence current living. If forgiveness is presented as negotiation that minimizes the existing internal conflict, it may serve a defensive function to deny anxieties rather than productively address them (Haaken, 2002).

Taking Forgiveness into the Laboratory

Notwithstanding the intricacies that culture lends to our understanding of forgiveness, the very definition of the phenomenon has long been a topic of debate in psychological circles. Given the difficulties scientists interested in forgiveness face, the body of empirical literature on this process has been modest in size and scope until very recently (McCullough, Pargament, & Thoresen, 2000). However, efforts have begun to add clarity to our scientific thinking about a decision long referenced only in religious circles and folklore.

In 1964, the first published study of forgiveness appeared, and a link between forgiving and mental health was reported (Emerson). Remarkably, however, the scientific literature spoke little more on this topic for approximately 30 years. Then, in 1993, Hebl and Enright published the first in a series of studies designed to assess the utility of a specific forgiveness intervention for improving mental health (Witvliet, 2001). Since that time, the field has grown significantly, and, as a result, a number of competing theories and conceptualizations have been offered in attempt to capture the full range of forgiving experiences. These reflect ideas about forgiveness as a psychotherapeutic goal or religious requirement and incorporate varying beliefs about the role of time, forgetting and reconciliation in “true” forgiveness. Nonetheless, there appears to be general consensus about some elements in the conceptualization of forgiveness, and these elements form the basis of developing theory and research. Thus, forgiveness seems to be, at this time, best defined as a phenomenon that

involves two people, one of whom has received a deep . . . injury that is either psychological, emotional, physical, or moral in nature. It is an inner process by which the person who has been injured releases him- or herself from the anger, resentment, and fear that are felt and does not wish for revenge. (Denton & Martin, 1998, p. 283)

Despite some level of agreement in scientific understanding of forgiveness, the nuances and competing notions about its definition reflect the field's growing edges and highlight the complexity of fully grasping this process. Furthermore, alternate conceptualizations illustrate the diverse components that must be considered if a more integrated understanding of forgiveness is to emerge. One model divides the process into distinct forms that represent the varying degrees of "truth" in forgiving. The first is "punitive forgiveness," in which forgiveness is granted in order to relieve criticism lodged against the self for inadequately expressing personal wishes and desires. A second formulation of forgiveness is that of "inclusive forgiveness," where an infraction is accepted, rather than forgiven, not for fear of consequences but to avoid ongoing sadness about the loss of love. "Reconciliatory forgiveness" is defined as the truest form of forgiveness in which lasting changes in relationships are made through reciprocity and decentering of the self (Augsburger, 1992, p. 279).

Trainer (1981, as cited in Luebbert, 1999) made similar distinctions in forms of forgiveness through his use of dialectical and intrinsic forgiveness. He argued that individuals displaying the former type, in which defensiveness could hamper the guilt-based motivation to work for the greater good, did not achieve the full integration of affect, behavior, and cognition necessary for authentic change. He stated that one might see this incomplete forgiveness in two forms. The first is role-expected, in which forgiveness is granted automatically in response to expectation. Expedient forgiveness is the second, in which absolution may be offered as a mere means to an end, while subtle plays for power linger. In either case, forgiveness is seen as potentially problematic through its unconsidered pardoning of responsibility and denial of injury (Luebbert, 1999).

Gordon and Baucom (1998) accounted for variations in the experience and effect of “forgiveness” by defining it as a process that individuals may only partially complete. Their model of forgiveness was designed to understand betrayal within the context of marriage and consists of three stages – each defining a phase in recovery, and each including changes in cognition, affect, and behavior. In this way, their stage model untangles the components of Trainer’s intrinsic forgiveness and further delineates the evolution of forgiveness as they become more fully integrated (Gordon & Baucom, 1998).

Based on the work of Robert Enright and the Human Development Study Group (Enright, Gassin, & Wu, 1992), Joanna North (1998) set forth a stage model of forgiveness as well. Her model built upon the four phases of the Enright model (uncovery, decision making, work, and outcome) by more clearly defining their constituent processes. In stage one, the injured party (IP) becomes aware of his or her anger and negative feelings about the event in question. Stage two begins as this individual feels that repayment, apology, and retribution are both deserved and required by the ethics of justice. As these feelings continue over time, the IP recognizes a desire for freedom from these negative emotions and begins to contemplate forgiveness as a means of self-healing. If this desire is supported only by a sense of impersonal benevolence toward the other (i.e., a religious or existential duty), the forgiveness process may stall at stage four; but, if this wish is also motivated by personal reasons, such as familial ties, the push toward forgiveness moves into stage five. Stage six comes when the injured party experiences a genuine desire to forgive, not just a compulsion to do so based on a sense of duty, convenience, or morality. As the IP pursues this wish to move beyond those original feelings of hurt and anger in stage seven, he or she explores more fully the circumstances in which the offense took place and actively seeks to appreciate the perspective of the offender. A public announcement of forgiveness ushers in the next phase of forgiveness, in which the internal forgiveness processes are acknowledged in a more overt manner when possible. For North, the forgiveness process comes to its natural conclusion as ill-will and hurt are completely transformed into positive regard by stage ten (North, 1998).

Forgiveness as Transforming

Regardless of definition or model, ample research exists in which the changes in cognition, affect, and behavior that arise from forgiveness are examined. For the most part, these studies focus on the improvements in mental health and social relationships that occur by virtue of decreased depression, anxiety, or anger and increased hope and self-esteem (see Berry, Worthington, Parrott, O'Connor, & Wade, 2001; Freedman & Enright, 1996; Maltby, Macaskill, & Day, 2001; Witvliet, Ludwig, & Vander Lann, 2001). Although the distinctions between thought, emotion, and action made in existing models of forgiveness may be artificial, they provide three useful windows from which to view the process whereby individuals relinquish "the desire to retaliate against or permanently condemn one's offender by transforming one's hatred through empathetic understanding of the offender's anguish that prompted his or her harmful act(s)" (Doyle, 1999, p. 191).

Study of the cognitive component of forgiveness, described by Gordon and Baucom (1998) and reported in the trauma literature, has enumerated the specific cognitive adaptations that must be made following a significant hurt or betrayal. These include alterations to basic assumptions about the world and interpersonal functioning as well as to perspectives for viewing individual events and experiences. As such, one would expect these cognitive changes to be reflected in the content and structure of autobiographical narratives describing both general philosophies and specific happenings (Goncalves, Korman, & Angus, 2000; McAdams, 2001; Pennebaker & King, 1999).

Immediately following an unpleasant experience of betrayal, one might expect to hear a story focused on the other's selfish nature or violation of shared trust and the victim's wishes to cease all contact but for punitive remarks designed to convey his or her anger. With time and through repeated tellings to different audiences, however, one would hope that the intensity and one-sidedness of this story might gradually modulate to a more moderate position, one in which the narrator was able to see a somewhat broader perspective on the past and the perpetrator. Not only might the general tone of the story become more positive, but the detail provided might grow as additional information is added to explain and make sense of the event. As the narrator undertakes this co-

constructive revision process, the view this individual holds of him- or herself changes too. The new perspective might be manifest in a narrative that speaks not only of the mistake made by the perpetrator and the victim's outrage, but also the history of their relationship and the costs of maintaining enmity. One would expect the content to mention the bad as well as the good and the structure to accommodate additional description in a logical, though expanded, manner (Haaken, 2002).

If forgiveness is indeed a healthful achievement, one might expect it to be associated with the purportedly adaptive changes in self-story just reviewed. Surprisingly, however, this link has yet to be made explicit within the scientific literature. While extensive writing exists on the development of personal narrative and both theoretical and empirical papers review the virtues of forgiveness, these two bodies of work remain separate. Thus, the present study is a pioneering use of narrative analysis as a tool for further study of the process of forgiveness and the integration of its components into a healthy, forgiving story.

While investigating the association between narrative and forgiveness is one important goal, exploring the relationship between narrative and health is another. Relative to the latter, interest lies in those associations between physical well-being and autobiographical stories specifically focused on betrayal or forgiveness as well as narratives in a more general sense. To understand how certain forgiving tales might be more or less associated with health, one must first review the literature addressing the physical effects of forgiveness.

Forgiveness as Medicine?

In 1994, McCullough and Worthington, pioneers in the study of forgiveness, wrote, "There is not enough data to conclude that forgiving has any clear physical or psychological benefits" (p. 5). Similarly, in 2000, Thoresen, Harris, and Luskin described the relationship between forgiveness and health as "an unanswered question," noting the lack of controlled studies demonstrating clear physical effects (p. 254). While the forgiveness-health link continues to inspire substantial empirical attention, the majority of existing research has addressed it only indirectly. One body of work suggests the existence of a strong relationship between forgiving and health based on the study of

physical well-being and characteristics closely associated with forgiveness. Another infers the same relationship from data on the negative health outcomes associated with non-forgiveness. In one of these studies, participants were asked to recall actual offenses to which they responded with and without forgiveness. Heart rate, skin conductance, and facial EMG were all activated during these visualization exercises, and their levels remained significantly more elevated for those participants in the unforgiving group. From these findings, it was suggested that forgiveness may protect health by reducing sympathetic nervous system hyperarousal and cardiovascular reactivity (Witvliet, Ludwig, & Vander Laan, 2001). A second study measured levels of salivary cortisol in individuals from both happy and unhappy romantic relationships while they imagined a typical interaction with their partner. Those from unhappy relationships had significantly higher levels of cortisol, reflecting their heightened experiences of stress. It was presumed that these higher stress levels would, over time, negatively affect cardiac function as well as relationship and emotional stability. Forgiveness, measured as a personality variable, was found to be a direct predictor of mental health and an indirect predictor, through proximal relationship variables, of physical health (Berry & Worthington, 2001).

Despite a sizeable body of empirical literature describing the psychosocial benefits of forgiveness and related work positing a link between forgiveness and health by virtue of reduced allostatic load (see Witvliet, 2001; Witvliet, Ludwig, & Vander Laan, 2001), only within the past three years has there been clear empirical evidence describing a physiological benefit to forgiveness. Few studies have actually documented a positive association between forgiveness and physical health. Most recently, at the University of Tennessee, researchers reported that dispositional forgiveness was significantly associated with lowered blood pressure and heart rate, as compared to individuals without such a characteristic tendency (Lawler et al., 2001). The seemingly clear differences in diastolic blood pressure between forgivers and nonforgivers, however, became clouded as the focus included specific event-related experiences of forgiving as well. Despite consistently higher resting heart rates among nonforgivers relative to trait forgivers, Lawler et al. (2001) found significant physiological differences

between nonforgivers who spoke of a betrayal episode that had not been forgiven versus one that had. This curious finding raised many questions about the interaction of timeless traits and momentary strivings as related to both physical and emotional health. For example, how might an individual with a minimally developed sense of forgiveness construe an experience such that he or she, against the odds, would choose to forgive? To what degree are specific factors and multiple perspectives referenced with temporal sequencing and clarity in the personal narratives of these individuals? Do these nonforgiving nonforgivers understand conflict differently than their forgiving counterparts?

To better understand these intricate relationships, we again turn to personal narratives, McAdams' third level of identity development. Here, we expect to see, expressed through the integration of habitual tendencies and situational goals in themes and in structure, markers of the reorientation of thought and feeling needed to reach a decision to forgive. As already reviewed, the process of forgiveness is one that involves changes in cognition, affect, and behavior, changes that are presumed to occur through a restorying of experience. Indeed, if this reorganization is associated with physical or emotional benefits or both, one would expect to detect their narrative indicators best through analysis of self-story rather than through assessment of either traits or situational characteristics alone.

In fact, McCullough, Sandage, and Worthington (1997) proposed that the true benefits of forgiveness may be realized *only* when change occurs at the narrative level of development, in a retelling that reflects wholeness rather than disintegration, unity rather than fragmentation. Neither traits nor specific behaviors alone are adequate projections of this holistic sense of self. However, personal narrative, as an idiosyncratic summary of an individual's "having and doing," serves as a public reflection of the private workings of the inner mind and its ongoing mediational processes (Emmons, 2000, p. 158). For the purposes of understanding betrayal, in particular, this narrative view appears to be amongst the clearest evidence of an individual's ability and style for rewriting or understanding personal experiences in the interest of growth and cohesion of intent and action. Not only is the structure, or form, of the narrative revealing of the

reconstructive processes that occur as the thoughts and feelings about the hurtful incident are recast, but the general pattern for construing the conflict itself also seems of utmost relevance (McAdams, 1993; Norem & Chang, 2002; Schwartz & Garamoni, 1989). For in the personal narrative lies the seed of experiential truth, a template guiding the extent to which details and perspectives are assimilated, the story-teller's sense of cause and effect, and impressions about the nature of good and evil. Although a narrative summary may develop without the editorial influence of interpersonal dialogue, and may or may not lead to forgiveness, one's personal narrative reveals the general map by which such experiences occur. Thus, narrative can be seen as evidence of the machinations occurring behind the scenes of identity evolution and personal change.

While the narrative product may be viewed as a reflection of one's historied sense of self, and thus may demonstrate numerous associations with well-being, this linguistic "snapshot" says little about the integrative efforts that occurred in its development. Attention to the individual qualities that distinguish one individual's narrative from another further informs us about the internal processes that allow for the making of a coherent identity and map for living. Largely thanks to the research of James W. Pennebaker and associates, a substantial body of literature speaks to the profound health benefits that are seemingly tied to the organizing process of creating and expressing a coherent, rich, and balanced narrative (Esterling, L'Abate, Murray, & Pennebaker, 1999; Pennebaker, 1997; Pennebaker & Francis, 1996; Pennebaker & Seagal, 1999).

From observed changes in writing style over time and increases in the release of negative emotions, it appears that the power of emotional expression lies in its facilitation of the integration of experience into a life story (Booth & Petrie, 2002). Furthermore, it appears that coherence and the ability to make experience meaningful are specifically related to positive health outcomes; "... It is likely that the salutogenic virtues of emotional disclosure... lie in the process of accepting and making sense of the events in terms of the narratives we construct to explain ourselves to ourselves and to discover meaning in negative events" (Booth & Petrie, 2002, p. 169). The healthful consequences of this integration may be mediated, in part, through the immune system. More specifically, it was suggested that the immune system is involved in the translation of

emotional expression to positive health insofar as it functions to ensure “physical ‘self-nonsel’ adaptation to be coherent with the living processes of our psychosocial self” (Booth & Petrie, 2002, p. 169). When bodily and environmental events do not accord, the discontinuity can be repressed psychologically as well as neuroimmunologically. Therefore, an individual’s ability to distinguish self from nonself may be compromised, with negative effects for immune functioning if nonself agents, like germs or infection, are not immediately recognized as such. As a result, this individual may be more vulnerable to infection or disease than others whose narrative stories of self are more fully integrated and functional (Booth & Petrie, 2002).

However, the quantity of disclosure alone does not seem to produce the synthesis of experience needed to reap physical and emotional benefit (Lutgendorf & Ullrich, 2002). Instead, research suggests that cognitive processing and some degree of emotional arousal are together necessary for change to occur. The relationship of these processes to the desired health outcomes seems to be curvilinear. High levels of emotional activation may reflect counterproductive re-experiencing that is not amenable to thoughtful integration, while high levels of cognitive processing may suggest mindless rumination (Lutgendorf & Ullrich, 2002; Suedfeld & Pennebaker, 1997). Moderation, then, in both the depth and degree of expression seems key for facilitating the health benefits of “the writing cure” (Lepore & Smyth, 2002).

Untangling these two components from one another in search of their ideal interaction poses a challenging task, one that Pennebaker and colleagues approached through micro-analytic analyses of narrative tales. For example, Pennebaker and Francis (1996) examined word counts and content to explain the relationship of narrative complexity to changes in physical health. They found that increases in the number of insight-oriented and causal words were associated with improvements in health, as measured by fewer clinic visits. Negative word use was not directly associated with health outcome, but the increasing frequency of positive words did predict improved health. These results were corroborated and refined over the course of additional studies such that three narrative factors were identified as reliable predictors of health: (1) high use of positive emotion words, (2) moderate use of negative emotion words, and (3) an

increase in the use of vocabulary described as causal and insight-oriented over time (Pennebaker, 1997). From these findings, Pennebaker and Seagal (1999) inferred support for the notion that expressing thoughts and feelings in writing, particularly in response to traumatic events, facilitated a reordering of cognition and emotion that reduced the effort required to hold and manage the experienced distress. They hypothesized that, as the objective and personal aspects of the event are coherently captured in words and given meaning, demands for cognitive processing simplify such that stress levels may lower and general health improves (Esterling, L'Abate, Murray, & Pennebaker, 1999).

In further elaboration of this idea, the following were suggested as mechanisms through which to account for the facilitating effect of expressive writing on physical health and well-being: First, moderation of negative emotions might decrease blood pressure levels through the lessening of unexpressed anger. Second, expressive writing, as a mechanism of anger expression and conflict resolution, may indirectly improve social relationships and felt support. Similarly, as emotions, particularly anger, were expressed more effectively, the impact of intrusive or ruminative thoughts may wane, thereby lowering blood pressure. Together, each of these healthful consequences of writing leads to improvements in blood pressure through decreases in chronic autonomic arousal (Davidson, Schwartz, Sheffield, McCord, Lepore, & Gerin, 2002; Lutgendorf & Ullrich, 2002).

Objective and Research Questions

As reviewed, empirical linkages have been established between physiological health and both narrative style and forgiveness. The precise qualities of a forgiving story remain unclear, however, leaving the narrative concomitants of potentially salutogenic forgiveness yet a mystery. The present study, by examining forgiveness through its reflections in the autobiographical tales of individuals recounting experiences of betrayal, seeks new insight into the process through which individuals attain the balance of forgiveness and the health benefits that appear to accompany it. Furthermore, this investigation, through four domains of inquiry, aims to broaden existing research on autobiographical stories by explicitly investigating the relationships between physical

health and those narrative qualities that have been deemed desirable in both theoretical and empirical work.

Verbal stories of interpersonal betrayal were obtained while concurrent measurement of blood pressure and heart rate recorded physiological arousal. Self-report responses about state and trait forgiveness served as the final sources of data in this multi-modal examination of narrative, forgiveness and health. From transcriptions of the live interviews, personal stories of betrayal were coded by a questionnaire-type system to evaluate structure and a categorical system created to analyze the narrator's expressed relationship with conflict.

To begin analysis of these narrative accounts and their possible relationships to physiological health and forgiveness, one must first assess the processes by which the stories were elicited. Each participant was initially invited to spontaneously recount their story, then later prompted by the interviewer to address specific questions. Therefore, our investigation begins by examining this procedure to ascertain whether interviewer questioning and prompts for elaboration differentially affected the style and substance of stories both generally and across our state and trait forgiveness groups.

Following analysis of the narrative procedures themselves, this investigation addresses the association between self-reports of state and trait forgiveness and ratings of forgiveness based on narrative content. Next, the relationships between self-report and narrative-based evaluations of forgiveness and the narrative qualities of richness, coherence, and conflict formulation are assessed.

The third central objective focuses on the power of narrative qualities to predict forgiveness status. Can both state and trait forgiveness be predicted from the qualities of an individual's personal narrative? If so, which narrative characteristics are most salient?

Finally, Lawler et al. (2001) described the physiological blueprint of forgiveness and suggested that specific health benefits arise from this benevolent attitude toward offenders and betrayal. Yet unknown is whether theoretically "healthy" stories, in general, are related to positive physiological functioning. This study, therefore, investigates whether those narrative styles which have been identified as desirable, like high coherence or elaboration, are similarly related to desired health outcomes.

Specifically, are there correlations between narrative content or forgiveness ratings and measures of heart rate or blood pressure? Are there associations between these physiological measurements and coherence or richness?

II. Method

Participants

One hundred eight undergraduate students, primarily enrolled in Introductory Psychology 110 courses at a large, state-funded University in the southeastern United States, participated. Of these individuals, 44 were men and 64 were women; the mean age was 20.44 years (2.95 *SD*) amid a range of 18 to 35 years. Eighty-six percent of the participants were Caucasian; 9% were African-American, and 5% defined themselves as Asian, Hispanic/Latino or Other.

The study was advertised as an investigation of interpersonal relationships in which volunteers would participate in an interview while physiological measurements were made. The time commitment was estimated at one hour and students were offered extra credit in exchange for their willingness to participate. Students made their interest known on a sign-up sheet posted in the Psychology Department. Volunteers were contacted by the primary investigators to schedule a date and time for participation.

Procedure

As volunteer participants appeared at the Health Psychology laboratory, they were provided with an Informed Consent statement (see Appendix A) that all read and signed before beginning their involvement in the study. Next, participants were given an Interview Recall sheet, which explained that:

During the interview, you will be asked to recall a time when you were deeply hurt by someone close to you (close friend, relative, romantic partner). Think of a time now when you were deeply hurt or betrayed by someone close to you. On the following couple of lines, jot down a few words about the incident to remind you during the interview which event you picked to share.

The page continued with a second version of the above description, this time instructing the participant to recall a time when the offender was a “parent or primary caregiver” rather than simply “someone close to you.” Once students completed the Interview Recall sheet, they were taken to a second room where the transducers for physiological recording were applied. Blood pressure was monitored noninvasively with

a Critikon dynamap vital signs monitor 1846, with the cuff placed on the nondominant arm. Before electrodes for heart rate measurement were attached, the skin was cleaned with an alcohol swab to ensure good contact. Self-adhesive electrocardiogram leads were attached with Microlyte electrolyte gel to the upper torso with a ground next to the navel. Heart rate was measured with Lablink 5 from Coulbourn instruments. Following application of the recording devices by an undergraduate research assistant, an advanced graduate researcher preliminarily reviewed blood pressure and heart rate output to ensure the proper functioning of the instrumentation. If measurements did not appear to be within the appropriate ranges (heart rate of 50 to 110 beats per minute, systolic blood pressure between 80 and 150 millimeters Hg, and diastolic blood pressure between 40 and 100 millimeters Hg), the graduate researcher reapplied the electrodes and blood pressure cuff and again monitored output.

Once proper functioning of the recording devices and transducers was confirmed, the participants were left alone for a ten-minute period of rest. To create a relaxing environment conducive to the attainment of true and accurate baseline measures of heart rate and blood pressure, a video recording of tropical fish at play in the ocean was shown to participants. The soothing motion of the video images was accompanied by soft, instrumental music (Piferi, Kline, Younger, & Lawler, 2000).

At the end of the rest period, an advanced graduate researcher entered the room to introduce and conduct the first of two interviews (parent/caregiver or friend/partner/relative). The sequencing of the interviews was counterbalanced across all participants. Interviews were audio- and videotaped, and the video recordings were later transcribed verbatim for use in coding the personal narratives. Throughout the interview process, an undergraduate research assistant continuously monitored physiological output. The graduate researchers conducted the final evaluation and analysis of these measurements.

The parent interview began with the following introduction from the graduate investigator, "In this interview, I would like you to describe a time when a parent or caregiver deeply hurt or betrayed you [with a brief reference to the Interview Recall sheet]. Take a moment to remember the specific event and then describe exactly what

happened in as much detail as you can.” The participant proceeded to provide his or her spontaneous narrative of the episode, a story unscaffolded by questions or prompts from the interviewer. In the next portion of the interview, however, specific details of the event were sought through a small set of follow-up questions (see Appendix B). The questions were designed to elicit information about the participant’s thoughts and feelings during the event, perspective on the quality of the relationship under discussion, and assessment of any reparative acts made or desired. The participant was also asked for his or her impressions of the offender’s understanding of the betrayal event.

At the conclusion of the interview, the participant began a four to seven minute recovery period during which time he or she completed the Acts of Forgiveness (AF) questionnaire (see Appendix C), focusing on the event just described as the referent experience. The second interview began thereafter and was conducted in a manner identical to the first, but with the change in focus from parent/caregiver to friend/partner/relative, or vice versa. Following the interview, the participant again completed the AF questionnaire. Next, transducers were removed and the participant was taken to a separate room in the laboratory to complete a number of additional questionnaires. Of these, the only one relevant to the present study was the Forgiving Personality Inventory (FP), an assessment of trait forgiveness (see Appendix D).

Measures

State forgiveness was assessed through the Acts of Forgiveness scale (AF; Drinnon & Jones, 1999). The AF contains 45 items designed to evaluate the responder’s feelings regarding a specific interpersonal offense and a specific offender. Participants respond to statements, such as “If I forgive the person for what happened, it will just invite them to do it again” and “Even though it hurt me, I think I can relate to what he/she did,” on a 5-point Likert scale, with the scores 1 and 5 representing strong disagreement and strong agreement, respectively. Both the internal reliability ($\alpha = .96$, mean inter-item $r = .37$) and the temporal reliability (test-retest $r = .90$ over three month period) of the scale appeared adequate, and existing research supports the construct and criterion validities of the scale.

In contrast to the participant's feelings regarding the specific episode of betrayal that became the focus of the interview, each individual's more habitual or characterological tendencies toward forgiveness were assessed through the Forgiving Personality Inventory (FP; Drinnon, Jones, & Lawler, 2000). This 33-item measure has demonstrated satisfactory reliability with a coefficient alpha of .93, mean inter-item correlation of .30, and test-retest correlation of .86 over two months.

Narrative Coding System for Content

The categorical system employed to analyze narrative content was a modified version of that developed and described in Porter (1999). Designed to assess a narrator's relationship with conflict through his or her ability to meaningfully weave negative events into a positive context, four distinct categories emerged to represent typical reactions to the struggles inherent in day-to-day life. The ordering of these categories followed from a belief in the functional supremacy of a realistic and balanced approach to life; the original categories, arranged along a continuum from least to most developmentally sophisticated, were Struggling with the Inevitability of Conflict, Resigned to the Inevitability of Conflict (Acceptance without Balance), Conflict Resolution, and Acceptance of Conflict with a Sense of Balance.

Although these categories were retained as originally defined in Porter (1999), a number of revisions were made for the purposes of the current study. First, an additional category was incorporated into the system and the hierarchical arrangement of the categories was altered in light of emergent conceptual thought regarding the sophistication of various modes of relating to conflict. Added as the least sophisticated, or desirable, relationship with conflict was a category termed Dismissive of Conflict. Individuals characterized by this stance toward negative events described intentional decisions not to review, discuss, or otherwise process troubling occurrences, but instead relied on the passage of time to transform upsetting experiences into non-events. Although it was not expected that many narratives would illustrate this theme, its inclusion was prompted by a number of stories in which narrators, reflecting upon their experiences of betrayal and the consequences of those events for their ongoing relationships, spoke as if the conflicts never took place.

The second change to the coding system reversed the ordering of the Struggling and Resigned categories within the developmental continuum to reflect the importance of a proactive rather than a reactive or passive stance. Although narrative tales exemplifying the Resigned category do express some awareness that eradication of life's hurdles is an impossible fantasy, they convey a lethargic tone of inactivity that may be less adaptive than those with more energetic aspirations for realizing personal goals and minimizing less fulfilling or rewarding encounters. To achieve acceptance with balance, one must first struggle with conflict and seek a silver lining. Without such energy, the effortful integration necessary to reach the relationship defined as most adaptive cannot occur – investment notably absent in the narratives of those characterized as Resigned to the Inevitability of Conflict. Therefore, Resigned became the second category of our system with the Struggling category moving to the third position in the chain of five.

Conflict Resolution retained its position as second most desirable in the developmental continuum, in acknowledgement of the benefits of active conflict management. However, Conflict Resolution did not capture the topmost position in our system given the reality that conflict is never truly solved or eradicated. Acceptance of Conflict with a Sense of Balance remained the penultimate perspective for viewing the inevitable conflicts in life – a maturity of integration that recognizes the inherent instability of relationships, but seeks always a medium for constructive growth. Thus, progressing from least to most adaptive, the theoretically based hierarchical arrangement of the five categories, with their numeric designations, was: (0) Dismissive of Conflict, (1) Resigned to the Inevitability of Conflict, (2) Struggling with the Inevitability of Conflict, (3) Conflict Resolution, and (4) Acceptance of Conflict with a Sense of Balance (see Appendix E).

In addition to these conceptual changes to the categorical system for evaluating content, the scoring guidelines used in this study also differed slightly from the original in unit of analysis and summary score derivation. Each participant interview consisted of an unscaffolded introduction and a scaffolded elaboration. Given this procedure for eliciting autobiographical stories of betrayal, each participant, in essence, provided two distinct and codeable stories. The unscaffolded portion, the narrator's response to the

interviewer's general request for information about the specific betrayal episode, first was coded for coherence, richness, conflict formulation, and evidence of forgiveness as a stand-alone tale. The second portion of the narrative added details to the spontaneously offered recollection through a semi-structured set of interviewer questions. The four key narrative variables were coded a second time based on the unscaffolded introduction along with this lengthier elaboration. Although this elaborated tale is hereafter referred to as the scaffolded interview, it is important to note that this use of the term scaffolding varies somewhat from its original definition as a style of narrative elicitation designed to facilitate structural sophistication. Here, interviewer scaffolding focuses primarily on the elaboration of content rather than structural development.

As in Porter (1999), all codeable phrases were scored, but the overall score for any given narrative was that of the modal category. Unlike the narratives from Porter (1999) which were clearly divided into six distinct "chapters," the stories in the present study were elicited in a more impressionistic manner, with an emphasis on story details rather than narrative form. Therefore, summary scores based on frequency rather than magnitude seemed most appropriate. In other words, overall narrative scores for conflict formulation were not based on the single highest rating, but on the "preponderance of evidence." For example, a narrative containing three exemplars of the Struggling category (score two) and one of Conflict Resolution (score three) would receive a summary score of two to reflect the narrator's predominant attitude toward the conflict under discussion.

For the purposes of this study, only those interviews related to betrayal by a parent/caregiver were considered. This decision was based upon the findings of earlier research (see Lawler et al., 2001) in which these data reportedly yielded the most significant relationships. Future researchers are advised to consider the relationships and experiences described in the second set of narrative interviews along similar lines.

Narrative Structure

To analyze story structure, ratings of narrative coherence, a variable assessing the story's order and comprehensibility, and narrative richness, an evaluation of elaboration and complexity, were made. These narrative characteristics were coded according to the

guidelines set forth in Castlebury and Wahler (1997), in which both rating scales demonstrated acceptable psychometric properties. Coherence and richness were coded separately as the sums of the “yes” scores to five criteria questions. Thus, for each narrative, whether unscaffolded or complete, the range of possible scores for these two variables extended from zero to five. Coders responded to the following questions when evaluating narrative coherence: (1) Upon reading the narrative, do you as the listener clearly get the point (or points) made by the narrator?; (2) Are all the ideas or happenings presented by the narrator relevant to the question being asked?; (3) Does the narrator’s response follow a clear progression (beginning, middle, end)?; (4) Is the narrator’s response free of tangential remarks?; (5) Do the parts of the narrator’s response fit together to form a sensible whole? For richness, scores were determined by coders’ answers to these criteria questions: (1) Is at least one idea or happening introduced by the narrator elaborated beyond its initial introduction?; (2) Is at least one specific or concrete event described?; (3) Is the narrator’s response free of vague or ambiguous thought?; (4) Does the narrator support a presented idea or happening with evaluative remarks?; (5) Does the narrator provide information with regard to others?

Narrative-based Forgiveness

Although each participant completed self-report questionnaires addressing state and trait forgiveness following their narrative interviews, the congruence between these measures and the participant’s verbal account of his or her experience had not been considered. Thus, a narrative-based impression of the participant’s forgiveness of the offending party was made. These codes, made separately for the unscaffolded and entire narrative account, were derived exclusively from the content of the interview. Possible codes in this simple evaluation were “Yes, narrator has forgiven;” “No, narrator has not forgiven;” and “It is impossible to make a determination of forgiveness based on this account” (see Appendix E).

III. Results

Reliability

Undergraduate researchers participated in more than 12 months of training and practice with the four narrative coding systems (coherence, richness, conflict formulation, forgiveness) involved in the study. Once 80% reliability was established for practice narratives, formal coding began. A team of three trained assistants coded narrative coherence and richness, while two members of this group provided ratings of conflict formulation and narrative-based impressions of forgiveness. Throughout the independent coding process, periodic meetings were held to review the coding systems in order to prevent “drift” from previously established reliability. During those meetings, group members coded a practice narrative, then discussed all discrepancies in scoring.

For a 25% sample of the narrative data set ($N = 26$), two coders evaluated story characteristics in order to assess the reliability of the coding data. Both measures of narrative structure – coherence and richness – were generally rated reliably. Paired samples t -tests failed to detect significant disagreement in coherence in either the unscaffolded ($p = .574$) or scaffolded ($p = .380$) interviews. Ratings were in similar accord for narrative richness in the unscaffolded interview ($p = .574$), but evaluations based on the entire narrative were substantially more varied ($p = .024$). However, there was no reason to expect marked variation on this measure alone, and the consistency of the remaining three ratings of narrative structure minimized concerns raised by this detection of disagreement. Furthermore, adjusting the alpha level of this analysis according to the Bonferroni formula ($\alpha = .016$) to account for repeated measurement caused the p value to rise above that required for significance.

Regarding evaluations of forgiveness based on the narrative interview, the kappa statistic indicated weak agreement for unscaffolded stories ($K = .198$, $p = .250$) without significant differences between raters (McNemar $p = .375$); for the lengthier recollections, the moderate levels of agreement ($K = .416$, $p < .001$) did include significant differences (McNemar $p = .001$). However, review of individual rating pairs revealed that existing disparities resulted largely from variations in the use of the “cannot determine” code. The author, for example, relied on this code in 21 of 26 unscaffolded

narratives, but only two of 26 for the scaffolded rating. Other raters, however, used this code much more regularly – on 24 and 12 of 26 occasions, for unscaffolded and scaffolded narratives respectively. Since 25 of the 26 unscaffolded narratives earned a “cannot determine” score, reliability estimates could not be meaningfully reported and these narratives were omitted from subsequent analyses. Of the scaffolded interviews, when the 12 subject records with the “cannot determine” code were omitted, leaving 14 for reliability analyses, Kappa indicated very strong agreement ($K = .837, p < .001$); the McNemar test failed to detect significant differences ($p = 1.000$). In fact, of those narratives in which actual determinations of forgiveness were made by both raters, ratings matched in all but one case.

Initial analysis of the reliability with which categorization of narratives based on conflict formulation was made detected overall agreement of a meager 34.6%. The kappa statistic could not be calculated given asymmetry in the range of scores used by the raters. Given the low percentage of rater agreement, the five individual categories were consolidated into two separate groups. The first encompassed the lowest three categories of the developmental continuum (Dismissive, Resigned, and Struggling with the Inevitability of Conflict), while the second incorporated the conflict resolution and balance categories, those theoretically identified as more adaptive relationships with conflict. Based on this restructuring, reliability analyses were conducted a second time. Analysis of the unscaffolded interviews was not pursued since, for the full sample, 94 of 97 codes fell in but one of the conflict categories. For the scaffolded interview, raters achieved 75% agreement in the coding of group one, but only 40% agreement for group two. Although the strength of agreement between raters of the scaffolded interview was weak, $K = .156, p = .420$, the McNemar test failed to detect significant differences between raters ($p = .754$). Thus, it was determined that sufficient reliability had been attained to proceed with planned analyses.

Descriptives

Table 1 presents the means and standard deviations of the core narrative and self-report variables. In general, the sample of undergraduate students produced relatively

Table 1**Descriptive Statistics for Narrative and Self-Report Measures**

	N	Minimum	Maximum	Mean	SD
Narrative coherence	95	0	5	3.4	1.1
Narrative richness	95	1	5	3.2	0.9
Narrative-based forgiveness	60	0	1	0.7	0.4
Conflict formulation	96	0	1	0.3	0.5
Acts of Forgiveness (state)	108	61	219	167	36
Forgiving Personality Inventory (trait)	108	72	164	126	17

coherent and rich narratives. More spoke forgivingly than not about their experiences of betrayal, but the average rating of conflict formulation fell in the lower of our two categories.

Question One

The first analysis of interest addressed the effect of interviewer scaffolding, or co-construction, on the structure and content of narratives. Paired samples *t*-tests were conducted to assess differences in the rating of coherence and richness between unscaffolded and scaffolded interviews. From spontaneous accounts to the more detailed stories elicited by interviewer questioning, the mean coherence score significantly decreased from 3.71 to 3.36 ($t_{94} = 3.88, p < .001$), while the mean richness score significantly increased from 2.61 to 3.20 ($t_{94} = -8.13, p < .001$).

Changes in conflict formulation were assessed through the McNemar test, and a significant difference was detected ($p < .001$). Whereas the ratings of 96.9% of the unscaffolded narratives fell in the lower conflict formulation group, only 68.8% of the scaffolded narratives were rated in this dismissive/resigned/struggling aggregate. Thus, conflict formulation became markedly more balanced through the scaffolding of interviewer questions.

The McNemar test was also conducted to analyze changes in the rating of narrative forgiveness from unscaffolded to scaffolded interview. However, the data available to make this assessment were restricted as it was not possible to derive a definitive rating of forgiveness for the majority of unscaffolded interviews. Therefore, to

meaningfully address the research questions on which this study focused, all analyses involving this variable included only those participant records in which ratings of “Yes” or “No” were made. Specific to the first research question, in only 12 cases were there clear ratings of forgiveness status for both unscaffolded and scaffolded interviews. Based on this limited sample of 12, 26.7% of the unscaffolded narratives were found to express forgiveness while 73.3% of the scaffolded stories indicated that the offender had been forgiven. Although this difference was not statistically significant ($p = .06$), it suggests that meaningful change might be revealed in analysis of a larger sample.

Given the insufficient variance in measurement of key variables in the unscaffolded narrative, more detailed analyses of the effect of interview style on narrative characteristics as a function of forgiveness status were not pursued. Furthermore, all subsequent analyses were based exclusively on the scaffolded narrative.

Question Two

The second question addressed the associations between the four codes derived from personal narrative (coherence, richness, forgiveness, and conflict formulation) and the two self-report measures of forgiveness. Given the nature of these variables, this question was approached through four steps – correlations to assess the relationships between continuous variables, sets of t -tests to analyze those between dichotomous and continuous variables, and Chi-square tests to evaluate the association between dichotomous variables. Table 2 presents the matrix of Pearson correlations among the four continuous variables - coherence, richness, state and trait forgiveness. Neither of the structural (coherence and richness) variables from autobiographical narratives were significantly related to the state or trait measures of forgiveness. In fact, the only significant relationship detected was between state and trait forgiveness ($r = .35, p < .01$).

Table 3 presents the results of independent samples t -tests conducted to assess the relationships between narrative-based forgiveness, conflict formulation (both defined as dichotomous variables) and the two self-report measures of forgiveness. As should be expected, story-based assessments of forgiveness were significantly related to self-reports of both state and trait forgiveness. Between groups of narrative-based forgiveness and non-forgiveness, significant differences in both AF and FP forgiveness scores were

Table 2**Correlational Matrix of Relationships between Narrative and Self-Report Variables**

	Narrative Coherence	Narrative Richness	Acts of Forgiveness (state)	Forgiving Personality (trait)
Narrative coherence	1			
Narrative richness	0.114	1		
Acts of Forgiveness (state)	0.054	0.102	1	
Forgiving Personality (trait)	-0.082	0.001	.352**	1

** $p < .01$

Table 3

Means and *t* Values from Independent Samples *t*-tests with Narrative Characteristics as Grouping Variables

		Acts of Forgiveness (state)	Forgiving Personality (trait)
Conflict formulation	Group 1	161.21	125.32
	Group 2	183.67	129.53
		$t = -3.10^{**}$	$t = -1.10$
Narrative- based forgiveness	Not forgiven	137.19	117.44
	Forgiven	185.64	129.91
		$t = 5.95^{**}$	$t = 2.41^*$

* $p < .05$

** $p < .01$

detected ($p < .001$ and $p = .02$, respectively), although the difference in trait scores was smaller than that obtained for state AF scores. Conflict formulation was also significantly related to state forgiveness ($p = .003$). Those in the upper conflict formulation group had significantly higher scores on the state forgiveness questionnaire than did those in the lower clustering of conflict categories, but there were not similar differences in the measurement of trait forgiveness.

Independent samples t -tests were also used to evaluate the associations between dichotomous (conflict formulation and narrative-based forgiveness) and continuous (coherence and richness) narrative variables. There were no significant differences in coherence or richness as a function of either forgiveness or conflict formulation grouping. Although the numbers of cases upon which these analyses were based were not equal, the similarity of group means suggests that greater equivalence was unlikely to reveal a significant difference.

Finally, Chi-square analyses revealed that our simple narrative-based evaluation of forgiveness was significantly related to conflict formulation, evidence that the latter taps a situational perspective rather than a general philosophy. Of those whose narratives were rated as expressing a lack of forgiveness, 93.8% of their conflict formulation ratings were in the lower of the two groups. However, among narratives seen as forgiving, the rating of conflict formulation was more evenly distributed. 43.2% fell into the lower conflict formulation group, while 58.6% were placed in the upper group, a significant difference ($\chi^2 = 12.22, p < .001$). Thus, it appears that forgiveness is necessary but not sufficient for the attainment of a more adaptive, balanced relationship with conflict.

Question Three

As the investigation focused more explicitly on the link between narrative and forgiveness, the inquiry centered upon the utility of narrative characteristics for discerning and predicting both situational and dispositional forgiving. Simultaneous linear regression analyses were conducted to test the power of these narrative variables to predict self-reported forgiveness. Table 4 presents the results of these statistical models. The first model, predicting state forgiveness, was significant and accounted for 43% of the variance in state forgiveness ($F_{4,55} = 10.23, p < .001$). However, narrative-based

Table 4

Linear Regression Models Assessing Power of Narrative Variables to Predict Self-reports of (A) State Forgiveness and (B) Trait Forgiveness

	Beta	Standard Error	<i>t</i>	<i>p</i>
Narrative coherence	3.04	3.11	0.98	0.33
Narrative richness	0.9	3.98	0.23	0.82
Narrative-based forgiveness	39.76	9.41	4.22	0.001
Conflict formulation	7.19	3.99	1.8	0.08

$F(4, 55) = 10.23, p < .001$

A

	Beta	Standard Error	<i>t</i>	<i>p</i>
Narrative coherence	-1.67	2.03	-0.82	0.41
Narrative richness	2.6	2.59	1	0.32
Narrative-based forgiveness	12	6.14	1.96	0.06
Conflict formulation	-0.14	2.61	-0.52	0.96

$F(4, 55) = 1.77, p = .15$

B

forgiveness was the only one of the four narrative predictor variables included in this model to make a significant contribution. Conflict formulation displayed marginal predictive power, but did not meet statistical significance. When predicting trait forgiveness, the regression model was not significant, indicating that the four narrative variables could not explain the variance observed in the measurement of dispositional forgiving. It should be noted that both regression models were based on sample sizes of 60 given the aforementioned restrictions in the use of the narrative-based forgiveness variable.

Question Four

Regarding tests of the relationships between narrative and physiological measures in which the focus of analysis was the identification of healthy autobiographical stories, little of significance was noted. Independent samples *t*-tests were conducted to assess differences in physiological measures between the two conflict formulation and narrative-based forgiveness groups, while correlational analysis assessed associations with coherence and richness. There were no significant differences between either the conflict formulation or narrative-based forgiveness groups on any of the physiological measures (heart rate, systolic or diastolic blood pressure, or mean arterial pressure) at rest prior to the interview, during the narrative interview, or afterward as participants completed the packet of self-report questionnaires.

Pearson correlation indicated a significant negative relationship between narrative coherence and diastolic blood pressure at rest. More specifically, as narrative coherence decreased, resting diastolic blood pressure increased ($r = -.20, p < .05$). There were no other significant associations between physiological measures and this quality of personal narrative. Identical analyses were conducted with the richness variable and significant correlations were obtained with systolic blood pressure both during and after the narrative interview ($r = -.22, p = .04$, and $r = -.24, p = .02$, respectively). Thus, a trend suggesting that systolic blood pressure decreases as narrative richness improves emerged from these data.

IV. Discussion

This study was fundamentally an investigation of the narrative process, a glimpse into the thoughts and feelings of college undergraduates as they spoke of specific times during which they had been hurt by a parent or caregiver. Focal interest fell not only on the qualities of their stories but also the ways in which the nature of these tales might subtly reveal information about the values and adaptive well-being of these individuals. Existing literature on narrative development and maturity suggests that, through practice and the eliciting prompts of caregivers and educators, over time, individuals become better able to incorporate into their tales the essential information (who, what, when, where, and why) needed to convey meaning (see Peterson & McCabe, 1992).

Given the age and relative education of our college student population, we expected the participants to be skilled in the delivery of rich and coherent narratives of betrayal, and, in general, this was the case. Furthermore, the group was generally forgiving in its attitude about these experiences. However, the average conflict formulation rating fell in the first of our two category clusters, lower than might be expected given relatively high reported rates of forgiveness. The discrepancy between adjustment, as evidenced by forgiveness scores, and conflict formulation scores is somewhat puzzling, but nonetheless consistent with similar differences noted in the original use of the conflict-based narrative rating scale (Porter, 1999). In that study, teachers were generally quite clear and detailed in their stories about life at school and were also highly responsive in their interactions with target students, but were, on average, more resigned to conflict in the school system than one might have imagined based on the other indices of interest.

This similarity in findings may speak to the nature of the conflict formulation scale in general, but may also provide subtle information about the process of attaining authentic balance, responsiveness, or forgiveness. More specifically, the seeming incongruence between conflict formulation and forgiveness or responsiveness scores may suggest that multiple “levels” of the former can manifest in the healthy adjustment of the latter. The contrasting rationale might also be appropriate, in that multiple “phases” of the forgiveness process might be subsumed under only one of the conflict formulation

categories. The results of this study add little to ongoing questions about the meaning of “true” forgiveness and the process that leads to its attainment. However, they hardly contradict the theoretically reasonable supposition that full attainment of the benefits of forgiveness may come only when one’s global, underlying philosophy about the nature of conflict reflects ultimate balance and fully coincides with specific thoughts about the more immediate circumstances.

Question One

Building upon this preliminary analysis of our population’s narrative profile, the first genuine step in our journey toward improved understanding of the narrative process specifically related to interpersonal forgiveness was to evaluate the effects of co-construction on the content and structure of autobiographical narratives of betrayal. Intuition alone suggests that as stories grow their temporal logic and continuity might suffer, while their detail and elaboration increase. This hypothesis was empirically supported in Rogers’ (2000) earlier work on the validation of coherence and richness as relevant factors in narrative analysis, and was again supported in this study. As additional details were elicited, even in a focused or structured manner, the frequency of tangential or irrelevant remarks increased, and the overall coherence of narratives tended to decrease. These details, however tangential or irrelevant they may have been, added color and texture to the stories, and richness consistently improved through the scaffolding assistance of interviewer questioning.

Conflict formulation also evidenced a significant change from unscaffolded to scaffolded interview, one that was consistent with our philosophical framework. Theoretically, movement up the hierarchy of categories in our conflict coding system requires one to take a more active and integrated approach to experience. It appears that the scaffolding questions of the interviewer invited the participants to take somewhat different and larger views of their betrayal experiences, and their stories, overall, took a slightly more balanced tone. Similarly, it appears that the co-constructive efforts of the interviewer facilitated the expression of forgiveness, as evaluated by our narrative-based rating. Although the difference in impressions of forgiveness between unscaffolded and scaffolded interviews was not statistically significant, difficulties in measurement limit

the confidence with which conclusions can be drawn. The nature of our data distribution did not support investigation of the interaction of narrative format and self-reported forgiveness on narrative qualities. Future projects, however, may find this focus interesting given the effects of scaffolding reported here. It may be that the process of co-construction differentially affects, at any moment and over time, the stories of those who define their forgiveness states of mind differently...

Given the difficulties associated with analysis of narratives in the unscaffolded form, subsequent analyses centered on the scaffolded interview. The detected differences in richness, coherence, and conflict formulation between unscaffolded and scaffolded formats were consistent with existing literature and did not contraindicate our focus on the latter for the remainder of the study. However, exclusive use of the scaffolded interview might have clouded discovery of existing relationships between narrative quality and self-report, particularly if the unscaffolded narrative is more reflective of one's internalized, dispositional view than that obtained through interviewer questioning.

Question Two

Having found only those differences in narrative quality that would be expected from the relevant literature, we turned the focus of our study to the relationships between narrative and self-report. Two primary interests motivated this line of inquiry. The first was curiosity about the congruence between objective, "knowable" presentations and the more subtle intrapsychic knowledge, particularly regarding the self and relationships, that emerges from narrative analysis. In many ways, narrative responses to broad, open-ended questions provide projective data about an individual's internal thoughts, beliefs and feelings, just as responses to the Thematic Apperception Test (TAT) and Rorschach Inkblot Test provide glimpses into one's inner experience. Consequently, evaluating the congruence between what might be deemed explicit and implicit reports of self-experience is an intriguing endeavor – particularly for episodes of betrayal, where reports of forgiveness may paradoxically accompany physical violence, emotional distress, or estrangement.

In today's society, where competing needs for self-determination and communal dependence appear to be stronger than ever, it seems all the more important to explore the

contrasts and consistencies between internal and external experiences. Interestingly, in the current study, there were no significant relationships between two of our four narrative variables and those from more objective, self-reports. More specifically, neither coherence nor richness displayed strong associations with these measurements of forgiveness. Similarly, there were no significant relationships between narrative-based forgiveness and the structural aspects of autobiographical narrative. That narrative-based forgiveness status had no effect on the analysis of coherence or richness, even within the scaffolded interview data alone, was somewhat surprising. The work of researchers like James W. Pennebaker, whose program of linguistic analyses noted significant changes in health outcomes based on changes in the use of specific categories of words (Pennebaker & Seagal, 1999), suggests that the narrative-health connection might be reflected differentially between our two forgiveness groups, just as health benefits accrue differently to these categories of individuals. However, this was not the case in the present study. One might speculate, based on the aforementioned research, that we failed to find significant differences in narrative qualities as a function of forgiveness status because our study data came from a single “snapshot” rather than an ongoing cinema-like production in which the process of forgiveness could unfold. Had our narratives tracked the adaptation to betrayal over time and evaluated the formation of a new forgiving story rather than sampled a single description of feelings, we might have been better able to tap the dynamics of forgiveness discussed in the Pennebaker studies. Weakness in the reliable use of our coding systems and the fact that the forgiveness-nonforgiveness distinction was made by a global narrative-based evaluation may have further impaired our ability to detect the narrative differences we hypothesized to exist.

Although neither coherence nor richness displayed strong relationships with objective measures of forgiveness, there was a significant association between conflict formulation and state forgiveness. There were also significant relationships between global impressions of narrative forgiveness and self-reported forgiveness, both state and trait. These associations provided some validation of our impressionistic narrative evaluation and confirmed the already documented positive relationship between state and trait forgiveness. Our narrative-based forgiveness variable was also significantly related

to the conflict formulation variable, but the latter, unlike narrative-based forgiveness, was associated with self-report of situational but not dispositional forgiveness.

The relationships between conflict formulation, narrative-based and state forgiveness suggest that conflict formulation, our focal variable, may represent, contrary to our intent, an event-specific response rather than a holistic perspective. However, one must also consider that the relationships between these variables may be distorted by conceptual overlap. It could be that the conflict-forgiveness relationship is an artifact of the common data source, since both evaluations were derived from the content of the elicited stories. Given that the narrative-based forgiveness variable achieved significant correlations with both state and trait forgiveness measures while conflict formulation did not, one might also suspect that the conflict formulation variable lacks the specificity or robustness needed to establish clear, unique relationships with more enduring individual characteristics.

On the other hand, one might speculate that an individual who attains a sophisticated conflict formulation score should be more inclined toward a forgiving state of mind than one who does not. Perhaps our measurement of dispositional forgivingness taps an indiscriminate, mindless quality that is not an adaptive “big picture” position? If so, the conflict formulation variable, developed as a means for studying this global perspective, might appear to be little more than another situational measure. Although the strong relationships between state and trait measures of forgiveness may argue against this fanciful wondering, the questions raised are important considerations. Perhaps, in fact, the relationship between one-time and general forgiveness is based on forgiveness that is somehow less than genuine or “true” forgiveness, as discussed in recent work on the forgiving process (see Gordon & Baucom, 1998). Similarly, perhaps the conflict formulation variable is a yet unpolished attempt to define the intersection between authentic state and trait forgiveness. These hypotheses, as brainstorm associations to relational patterns between narrative and self-report measures, nonetheless lead us back to an important area of study – the more general analysis of the process of forgiveness – and the growing body of work engaged in this pursuit suggests that others share our interest.

Question Three

Given the results obtained in response to the previous research question, in which there were not significant relationships between coherence or richness and self-reported forgiveness, more detailed analysis of state-by-trait interactions were not indicated. More detailed analysis of these interactions relative to conflict formulation and narrative-based forgiveness were also contraindicated given imbalances in their ratings.

However, the predictive power of our narrative variables relative to state and trait forgiveness remained a viable question. The results suggested that variance in situational forgiveness alone could be accounted for by our narrative variables and that narrative-based forgiveness was the only of these to make a significant predictive contribution. As might have been expected from the previously described analyses, the model for predicting trait forgiveness failed to reach significance, indicating that the narrative characteristics associated with a specific tale of betrayal cannot explain variations in dispositional forgiveness. While these results were not entirely surprising given expected limitations in the prediction of molar qualities from micro-level characteristics, they failed to support existing theory about personal narrative as an idiosyncratic map from which inferences about identity and meaning can be drawn.

Question Four

Our final line of inquiry addressed the relationship between narrative characteristics and physiological measures, in attempt to extend existing research on the healthfulness of forgiving by investigating the links between stories and well-being. For our narrative variables, significant negative relationships with physiological measures were found for both richness and coherence. Diastolic blood pressure was negatively related to coherence at rest, while systolic blood pressure was negatively related to narrative richness both during and after the narrative interview.

Following Antonovsky's theories about narrative coherence and well-being, these data, where the significant association occurred prior to the beginning of the interview, suggest that the orderliness and logic of one's account of life may be associated with global health and well-being. Inasmuch as an individual has created an integrated sense of self through his or her storying of experience, diastolic blood pressure may reflect the

balance of stability and flexibility, order and openness. The elaboration and detail of one's tale of life may reveal their salutogenic powers in more specific ways, as might be inferred by the relationship between systolic blood pressure and the narrative process itself. Building upon Rogers' (2000) research on the validity of the richness variable, it was hypothesized that richness reflected individual motivation rather than an inherent ability or stable style of speaking, as coherence did. Therefore, for the purposes of this study, one might assume that those who were motivated to provide more detail about their experiences of betrayal had reached a higher level of acceptance or tolerance that manifest itself in lower systolic blood pressure. However, this chain of association was not detected by our content measures, as might be expected. In other words, the hierarchical arrangement of our original content categories and their subsequent consolidation into two groups was not supported as desirable or sophisticated on the basis of these physiological measures alone.

Limitations

A number of limitations must be considered when interpreting the paucity of significant results. First among these is the fact that participants provided narratives on a single occasion about an experience that took place at varying times in the past – from days to weeks to even decades previously. In contrast to James Pennebaker's research, where significant changes in content and physiology are detected as participants write or talk about experiences over time, our design may have been inadequate to tap the *process* of forgiveness. Thus, although our objectives focused on narrative reflections of forgiveness and associated physiological states, the nature of the data may not have been appropriate to address these goals.

Secondly, although the self-report measures employed in this study had demonstrated acceptable psychometric properties, they are relatively new and consequently have limited use in forgiveness research. The narrative measures have even less demonstrated use and psychometric stability. The coherence, richness, and conflict formulation rating systems were all developed by members of the author's laboratory and have not been widely used by academic researchers outside this setting. Although the reliability and validity of the coherence and richness systems have been consistently

acceptable in existing studies, reliable coding of conflict formulation has been more difficult to secure. Despite lengthy training practice, the reliability of coding of the original five-category system was insufficient. Thus, our system was consolidated into but two categories. As a result, the overall sensitivity of our content ratings may have been significantly compromised and analyses based upon those evaluations may have failed to reveal existing nuances of tone, logic, and elaboration. Perhaps even more important, weak reliability in the coding of our narrative variables undoubtedly impaired our ability to capture associations between the constructs of interest.

Finally, generalizability of these results is questionable given that our participants were all college students in psychology courses. Relationships with parents in this convenience sample are assumed to be undergoing developmental changes as these young adults gain increasing autonomy and self-direction. As a result, experiences of parental betrayal may be less salient for these students than are offenses by peers or romantic partners. Therefore, the encounters described in this study and the students' reactions to such hurts may not represent meaningful betrayals or the more general forgiveness process. In addition to these developmental issues are the physiological facts that college students are typically quite healthy and unlikely to display marked changes in blood pressure or heart rate. Thus, the age and developmental stages of our participants may have significantly compromised the effectiveness of our method for obtaining a true glimpse at the narrative-health connection.

Taken as a whole, the results of this study have general rather than specific implications for ongoing empirical research efforts and clinical practice. As exploration of the forgiveness process continues, with particular attention to the factors that facilitate this healthful change in attitude toward offending others, future projects can be guided by a number of interesting questions derived from existing literature and the current study. One particularly interesting avenue for exploration might be to track changes in individuals' accounts of forgiveness across the life span, noting correlations not only with self-report but also with environmental conditions and education. Comparing verbal and written accounts throughout this process might also be helpful for distinguishing the core features of forgiving benevolence.

By focusing on variation over time in addition to group differences at specific moments, the nature of change should become clearer. Attention must be paid, however, to the intersection between macro- and micro-level analyses, as these are the figure-ground perspectives that together reflect the process of forgiveness as a whole. While attention to situational and dispositional forgiveness in isolation may be important, integration of the two must be the ultimate goal. Just as integration of positive and negative is an essential component of the forgiveness process, similar synthesis of immediate and long-term seems to be necessary for a comprehensive understanding of forgiveness as a process and outcome.

List of References

List of References

- Antonovsky, A. (1979). *Health, stress, and coping*. San Francisco: Jossey-Bass.
- Augsburger, D. W. (1992). Reconciliation: The many faces of forgiveness. In D. W. Augsburger, *Conflict mediation across cultures: Pathways and patterns* (pp. 259-287). Louisville, KY: Westminster/John Knox Press.
- Baerger, D. R., & McAdams, D. P. (1999). Life story coherence and its relation to psychological well being. *Narrative Inquiry*, 9, 69-96.
- Baldwin, M. W. (1992). Relational schemas and the processing of social information. *Psychological Bulletin*, 112 (3), 461-484.
- Bellak, L. (1958). Psychoanalytic concepts and principles discernible in projective personality tests: II. Psychoanalytical principles discernible in projective testing. *American Journal of Orthopsychiatry*, 28, 42-46.
- Berman, R. A. (1988). On the ability to relate events in narrative. *Discourse Processes*, 11 (4), 469-497.
- Berry, J. W., & Worthington, Jr., E. L. (2001). Forgiveness, relationship quality, stress while imagining relationship events, and physical and mental health. *Journal of Consulting Psychology*, 48 (4), 447-455.
- Berry, J. W., Worthington, Jr., E. L., Parrott, L., O'Connor, L. E., & Wade, N. G. (2001). Dispositional forgiveness: Development and construct validity of the Transgression Narrative Test of Forgiveness (TNTF). *Personality and Social Psychology Bulletin*, 27 (10), 1277-1290.
- Booth, R. J., & Petrie, K. J. (2002). Emotional expression and health changes: Can we identify biological pathways? In S. J. Lepore & J. M. Smyth (Eds.), *The writing cure: How expressive writing promotes health and emotional well-being* (pp.157-175). Washington, DC: American Psychological Association.
- Bretherton, I. (1992). The origins of attachment theory: John Bowlby and Mary Ainsworth. *Developmental Psychology*, 28 (5), 759-775.
- Cassel, R. N. (1987). Six increasingly higher levels of wellness based on holistic principles and risk factor science. *Psychology, A Quarterly Journal of Human Behavior*, 24 (1-2), 46-54.

- Castlebury, F. D., & Wahler, R. G. (1997). *Guidelines in coding the personal narratives of children, parents and teachers*. Unpublished manuscript, University of Tennessee, Knoxville.
- Castlebury, F. D., & Wahler, R. G. (1998). *Personal narratives as maps of the social ecosystem*. Unpublished manuscript, University of Tennessee, Knoxville.
- Cottraux, J. (1993). Behavioral psychotherapy applications in the medically ill. *Psychotherapy & Psychosomatics*, 60 (3-4), 116-128.
- Daiute, C., & Buteau, E. (2002). Writing for their lives: Children's narrative supports for physical and psychological well-being. In S. J. Lepore & J. M. Smyth (Eds.), *The writing cure: How expressive writing promotes health and emotional well-being* (pp.53-73). Washington, DC: American Psychological Association.
- Davidson, K., Schwartz, A. R., Sheffield, D., McCord, R. S., Lepore, S. J., & Gerin, W. (2002). Expressive writing and blood pressure. In S. J. Lepore & J. M. Smyth (Eds.), *The writing cure: How expressive writing promotes health and emotional well-being* (pp. 17-30). Washington, DC: American Psychological Association.
- Denton, R. T., & Martin, M. W. (1998). Defining forgiveness: An empirical exploration of process and role. *The American Journal of Family Therapy*, 26, 281-292.
- Diener, E. (1996). Traits can be powerful, but are not enough: Lessons from subjective well-being. *Journal of Research in Personality*, 30, 389-399.
- Dimaggio, G., & Semerari, A. (2001). Psychopathological narrative forms. *Journal of Constructivist Psychology*, 14 (1), 1-23.
- Doyle, G. (1999). Forgiveness as an intrapsychic process. *Psychotherapy*, 36 (2), 190-198.
- Drinnon, J. R., & Jones, W. H. (1999). *Measuring an act of forgiveness*. Paper presented at Southeastern Psychological Association, Mobile, AL.
- Drinnon, J. R., Jones, W. H., & Lawler, K. A. (2000). *Measurement of forgiveness*. Paper presented at Society of Personality and Social Psychology, Nashville, TN.
- Emerson, J. G. (1964). *Dynamics of forgiveness*. Philadelphia: Westminster Press.

- Emmons, R. A. (2000). Personality and forgiveness. In M. E. McCullough, K. I. Pargament, & C. E. Thoresen (Eds.), *Forgiveness: Theory, Research, and Practice*. (pp. 156-175). New York: Guilford Press.
- Engel, S. (1995). *The stories children tell: Making sense of the narratives of childhood*. New York: W. H. Freeman and Company.
- Enright, R. D., Gassin, E. A., & Wu, C. (1992). Forgiveness: A developmental view. *Journal of Moral Education*, 21 (2), 99-114.
- Epstein, S. (1973). The self-concept revisited: Or a theory of a theory. *American Psychologist*, 28 (5), 404-416.
- Epstein, S., & O'Brien, E. J. (1985). The person-situation debate in historical and current perspective. *Psychological Bulletin*, 98 (3), 513-537.
- Esterling, B. A., L'Abate, L., Murray, E. J., & Pennebaker, J. W. (1999). Empirical foundations for writing in prevention and psychotherapy: Mental and physical health outcomes. *Clinical Psychology Review*, 19 (1), 79-96.
- Fox, N. A. (1995). Of the way we were: Adult memories about attachment experiences and their role in determining infant-parent relationships: A commentary on van IJzendoorn (1995). *Psychological Bulletin*, 117 (3), 404-410.
- Freedman, S. R., & Enright, R. D. (1996). Forgiveness as an intervention: Goal with incest survivors. *Journal of Consulting and Clinical Psychology*, 64 (5), 983-992.
- Freeman, M. (2001). From substance to story: Narrative, identity, and the reconstruction of the self. In J. Brockmeier, & D. Carbaugh, (Eds.), *Narrative and identity: Studies in autobiography, self and culture* (pp. 283-298). Amsterdam, Netherlands: John Benjamins Publishing Company.
- Furman, W. (2001). Working models of friendships. *Journal of Social & Personal Relationships*, 18 (5), 583-602.
- Gergen, K. J., & Gergen, M. M. (1988). Narrative and the self as relationship. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 21, pp. 17-56). San Diego, CA: Academic Press.
- Gleick, J. (1987). *Chaos: Making a new science*. New York: Penguin Books.

- Goin, R., & Wahler, R. G. (2001). Children's personal narratives and their mothers' responsiveness as covariates of the children's compliance. *Journal of Child & Family Studies, 10* (4), 439-447.
- Goncalves, O. F., Korman, Y., & Angus, L. (2000). Constructing psychopathology from a cognitive narrative perspective. In R. A. Neimeyer & J. D. Raskin (Eds.), *Constructions of disorder: Meaning-making frameworks for psychotherapy* (pp. 265-284). Washington, DC: American Psychological Association.
- Gordon, K. C., & Baucom, D. H. (1998). Understanding betrayals in marriage: A synthesized model of forgiveness. *Family Process, 37* (4), 425-449.
- Graybeal, A., Sexton, J. D., & Pennebaker, J. W. (2002). The role of story-making in disclosure writing: The psychometrics of narrative. *Psychology & Health, 17* (5), 571-581.
- Gregson, D. (1994). Normally very abnormal: A perspective on youth at risk. *Journal of Child and Youth Care, 9* (2), 31-41.
- Grossbaum, M. F., & Bates, G. W. (2002). Correlates of psychological well-being at midlife: The role of generativity, agency and communion, and narrative themes. *International Journal of Behavioral Development, 26* (2), 120-127.
- Haaken, J. (2002). The good, the bad, and the ugly: Psychoanalytic and cultural perspectives on forgiveness. In S. Lamb & J. G. Murphy (Eds.), *Beyond forgiving: Cautionary views of forgiveness in psychotherapy* (pp. 172-191). New York: Oxford University Press.
- Hambleton, G., Russell, R. L., & Wandrei, M. L. (1996). Narrative performance predicts psychopathology: A preliminary demonstration. *Journal of Narrative and Life History, 6* (1), 87-105.
- Hebl, J. H., & Enright, R. D. (1993). Forgiveness as a psychotherapeutic goal with elderly females. *Psychotherapy, 30*, 658-667.
- Hermans, H. J. M. (1997). Dialogue shakes narrative: From temporal storyline to spatial juxtaposition. *Journal of Narrative and Life History, 7* (1-4), 387-394.
- Howe, M. L., & Courage, M. L. (1993). On resolving the enigma of infantile amnesia. *Psychological Bulletin, 113* (2), 305-326.

- Labov, W., & Waletzky, J. (1967). Narrative analysis: Oral versions of personal experience. In J. Helm (Ed.), *Essays on the verbal and visual arts* (pp.12-44). Seattle: University of Washington Press.
- Lawler, K. A., Younger, J. W., Piferi, R. A., Billington, E., Jobe, R., Edmondson K., & Jones, W. (2001). *Forgiveness: A psychophysiological analysis*. Manuscript submitted for publication.
- Leibowitz, J., Ramos-Marcuse, F., Arsenio, W. F. (2002). Parent-child emotion communication, attachment, and affective narratives. *Attachment & Human Development*, 4 (1), 55-67.
- Leiter, E. (1989). The role of projective testing. In S. Wetzler & M. M. Katz (Eds.), *Contemporary Approaches to Psychological Assessment. Clinical and Experimental Psychiatry* (Vol. 1, pp. 118-126). Philadelphia: Brunner/Mazel.
- Lepore, S. J., & Smyth, J. M. (Eds.). (2002). *The writing cure: How expressive writing promotes health and emotional well-being*. Washington, DC: American Psychological Association.
- Losh, M., Bellugi, U., Reilly, J., & Anderson, D. (2000). Narrative as a social engagement tool: The excessive use of evaluation in narratives from children with Williams syndrome. *Narrative Inquiry*, 10 (2), 265-290.
- Luebbert, M. C. (1999). The survival value of forgiveness. In D. H. Rosen & M. C. Luebbert (Eds.), *Evolution of the psyche* (pp. 169-187). Westport, CT: Praeger.
- Lutgendorf, S. K., & Ullrich, P. (2002). Cognitive processing, disclosure, and health: Psychological and physiological mechanisms. In S. J. Lepore & J. M. Smyth (Eds.), *The writing cure: How expressive writing promotes health and emotional well-being* (pp. 177-196). Washington, DC: American Psychological Association.
- Maltby, J., Macaskill, A., & Day, L. (2001). Failure to forgive self and others: A replication and extension of the relationship between forgiveness, personality, social desirability and general health. *Personality and Individual Differences*, 30, 881-885.

- McAdams, D. P. (1989). The development of a narrative identity. In D. M. Buss & N. Cantor (Eds.), *Personality psychology: recent trends and emerging directions* (pp. 161-174). New York: Springer-Verlag.
- McAdams, D. P. (1993). *The stories we live by: Personal myths and the making of the self*. New York: William Morrow and Company.
- McAdams, D. P. (2001). The psychology of life stories. *Review of General Psychology* 5 (2), 100-122.
- McCullough, M. E., Pargament, K. I., & Thoresen, C. E. (2000). The psychology of forgiveness. In M. E. McCullough, K. I. Pargament, & C. E. Thoresen (Eds.), *Forgiveness: Theory, Research, and Practice* (pp. 1-14). New York: Guilford Press.
- McCullough, M. E., Sandage, S. J., & Worthington, E. L., Jr. (1997). *To forgive is human: How to put your past in the past*. Downers Grove, IL: Intervarsity Press.
- McCullough, M. E. & Worthington, E. L., Jr. (1994). Encouraging clients to forgive people who have hurt them: Review, critique, and research prospectus. *Journal of Psychology and Theology*, 22 (1), 3-20.
- Messer, S. B., & Winokur, M. (1980). Some limits to the integration of psychoanalytic and behavior therapy. *American Psychologist*, 35 (9), 818-827.
- Newberg, A. W., d'Aquili, E. G., Newberg, S. K., & deMarici, V. (2000). The neuropsychological correlates of forgiveness. In M. E. McCullough, K. I. Pargament, & C. E. Thoresen (Eds.), *Forgiveness: Theory, Research, and Practice* (pp. 91-110). New York: Guilford Press.
- Norem, J. K., & Chang, E. C. (2002). The positive psychology of negative thinking. *Journal of Clinical Psychology*, 58 (9), 993-1001.
- North, J. (1998). The "ideal" of forgiveness: A philosopher's exploration. In R. D. Enright & J. North (Eds.), *Exploring forgiveness* (pp. 15-34). Madison, Wisconsin: University of Wisconsin Press.
- Olbrisch, M. E. (1977). Psychotherapeutic interventions in physical health: Effectiveness and economic efficiency. *American Psychologist*, 32 (9), 761-777.

- Oppenheim, D., Nir, A., Warren, S., & Emde, R. (1997). Emotion regulation in mother-child narrative co-construction: Associations with children's narratives and adaptation. *Developmental Psychology*, 33 (2), 284-294.
- Parry, A. (1995). From self seeking to soul searching: Chaos and complexity in clinical practice. *Journal of Psychological Practice*, 1 (3), 105-123.
- Pennebaker, J. W. (1997). Writing about emotional experiences as a therapeutic process. *Psychological Science*, 8 (3), 162-166.
- Pennebaker, J. W. (1999). The effects of traumatic disclosure on physical and mental health: The values of writing and talking about upsetting events. *International Journal of Emergency Mental Health*, 1(1), 9-18.
- Pennebaker, J. W., & Francis, M. E. (1996). Cognitive, emotional, and language processes in disclosure. *Cognition and Emotion*, 10 (6), 601-626.
- Pennebaker, J. W., & King, L. A. (1999). Linguistic styles: Language use as an individual difference. *Journal of Personality and Social Psychology*, 77 (6), 1296-1312.
- Pennebaker, J. W., & Seagal, J. D. (1999). Forming a story: The health benefits of narrative. *Journal of Clinical Psychology*, 55 (10), 1243-1254.
- Peterson, C., & McCabe, A. (1992). Parental styles of narrative elicitation: Effect on children's narrative structure and content. *First Language*, 12, 299-321.
- Piferi, R. L., Kline, K. A., Younger, J., and Lawler, K. A. (2000). An alternative approach for achieving cardiovascular baseline: Viewing an aquatic video. *International Journal of Psychophysiology*, 37, 207-217.
- Polanski, P. J., & Hinkle, J. S. (2000). The mental status examination: Its use by professional counselors. *Journal of Counseling & Development*, 78 (3), 357-364.
- Porter, L. G. (1999). *Exploring thematic balance as a marker for responsiveness*. Unpublished Master's thesis. University of Tennessee, Knoxville.
- Pratt, M. W., Norris, J. E., van de Hoef, S., & Arnold, M. L. (2001). Stories of hope: Parental optimism in narratives about adolescent children. *Journal of Social & Personal Relationships*, 18 (5), 603-623.

- Priel, B., Myodovnik, E., & Rivlin-Beniaminy, N. (1995). Parental representations among preschool and fourth-grade children: Integrating object relational and cognitive developmental frameworks. *Journal of Personality Assessment*, 65 (2), 372-387.
- Ravn, I. (1988). Holonomy: An ethic of wholeness. *Journal of Humanistic Psychology*, 28 (3), 98-118.
- Rogers, D. T. (2000). *The validity of eliciting and coding personal narratives: Understanding the properties of coherence and richness*. Unpublished Master's thesis. University of Tennessee, Knoxville.
- Ryan, R. M. (1995). Psychological needs and the facilitation of integrative processes. *Journal of Personality*, 63, 397-427.
- Schafer, R. (1954). Some applications of contemporary psychoanalytic theory to projective testing. *Journal of Projective Techniques*, 18, 441-447.
- Schwartz, R. M., & Garamoni, G. L. (1989). Cognitive balance and psychopathology: Evaluation of an information processing model of positive and negative states of mind. *Clinical Psychology Review*, 9, 271-294.
- Smith, M. L. (1982). What research says about the effectiveness of psychotherapy. *Hospital & Community Psychiatry*, 33 (6), 457-461.
- Spence, D. P. (1982). *Narrative truth and historical truth: Meaning and interpretation in psychoanalysis*. New York: W. W. Norton & Company.
- Stewart, A. E., & Neimeyer, R. A. (2001). Emplotting the traumatic self: Narrative revision and the construction of coherence. *Humanistic Psychologist*, 29 (1-3), 8-39.
- Suedfeld, P., & Pennebaker, J. W. (1997). Health outcomes and cognitive aspects of recalled negative life events. *Psychosomatic Medicine*, 59, 172-177.
- Tannock, R., Purvis, K. L., & Schachar, R. J. (1993). Narrative abilities in children with attention deficit hyperactivity disorder and normal peers. *Journal of Abnormal Child Psychology*, 21 (1), 103-117.

- Thoresen, C. E., Harris, A. H. S., & Luskin, F. (2000). Forgiveness and health: An unanswered question. In M. E. McCullough, K. I. Pargament, & C. E. Thoresen (Eds.), *Forgiveness: Theory, Research, and Practice* (pp. 91-110). New York: Guilford Press.
- van IJzendoorn, M. H. (1995). Adult attachment representations, parental responsiveness, and infant attachment: A meta-analysis on the predictive validity of the Adult Attachment Interview. *Psychological Bulletin*, 117 (3), 387-403.
- Vygotsky, L. S. (1981). The genesis of higher mental functions. In J. V. Wertsch (Ed.), *The concept of activity in Soviet psychology* (pp. 144-188). New York: M. E. Sharpe.
- Wahler, R. G., & Castlebury, F. D. (2002). Personal narratives as maps of the social ecosystem. *Clinical Psychology Review*, 22 (2), 297-314.
- Welch-Ross, M. K. (1997). Mother-child participation in conversation about the past: Relationships to preschoolers' theory of mind. *Developmental Psychology*, 33 (4), 618-629.
- Witvliet, C. V. O. (2001). Forgiveness and health: Review and reflections on a matter of faith, feelings, and physiology. *Journal of Psychology and Theology*, 29 (3), 212-224.
- Witvliet, C. V. O., Ludwig, T. E., & Vander Lann, K. L. (2001). Granting forgiveness or harboring grudges: Implications for emotion, physiology, and health. *Psychological Science*, 12 (2), 117-123.

Appendices

Appendix A

Informed Consent

Project: Psychophysiological Assessment of Relationship Conflict

Researcher: Kathleen A. Lawler, Ph.D., Department of Psychology, AP409, 974-8458

This research focuses on the bodily responses people manifest when they rest and remember two conflict-relevant incidents. In this study, we will be measuring your blood pressure, heart rate, skin conductance and facial muscle activity. This will be accomplished by attaching surface electrodes and a blood pressure cuff. During the task you will be asked to remember and describe two times when someone deeply hurt you. In one case, the person is a close friend, relative or romantic partner while in the other it is a parent or primary caregiver. The interview will be video and audio tape-recorded to capture your emotional recollection for future data analysis. Dr. Kathleen A. Lawler will have access to the tapes and they will be kept in a locked filing cabinet in room 409C of the Health Psychology Laboratory in Austin Peay, Room 409. The physiological record and tapes will be identified only by subject number. They will be scored and used for the purpose of this research project within 2 years. After that time, the videotape will be erased. However, the physiological record and audiotape will be kept for 10 years as archival data and may be used in future research projects.

This research is also interested in the stress-illness relationship and the role that psychosocial factors play in that relationship. Thus, after finishing the interview, we will ask you to complete a packet of questionnaires. The recording session lasts about 30 minutes and the questionnaires take about 30 minutes to complete. Allowing for physiological preparation time, and asking/answering questions about the research, you can expect the session to last approximately 60-90 minutes.

Your participation in this research is purely voluntary and you may withdraw from the project at any time by request. In addition, you may request that the video camera be turned off at any time during the interview. No risks of personal injury are possible. From your participation you will gain an accurate reading of your resting blood pressure and heart rate and receive extra credit in your introductory psychology class.

Please feel free to ask any questions about the study. Should you have questions after the session, you may contact Dr. Kathleen A. Lawler, at the address above.

I volunteer to participate in the investigation conducted by Dr. Kathleen A. Lawler, Department of Psychology. I have read the description, I have had all my questions answered, and I agree to participate in this experiment. I also realize that I may turn off the video camera or terminate the experimental session at any time by request without penalty or loss of benefit.

Date _____

Signature _____

Printed name _____

Researcher's signature _____

Appendix B

Semi-structured Interview Protocol for Scaffolded Narrative

Tell me about the event.

What feelings do you remember at the time?

What bothered you the most?

How did you express your feelings?

Why do you think he or she did that?

What was your relationship like before this happened?

How is the relationship now?

Is there anything he or she could do to make it better?

If I talked to her or him, what do you think I'd be told about this event?

Appendix C

Acts of Forgiveness (AF)

Instructions: Now keeping in mind the person who did this to you and their actions, please answer the following items using the scale provided by writing in the appropriate number. For these items, “the person” is the person you wrote about; “the event”, “sequence of events,” or “it” refers to what he/she did to you.

1 = Strongly Disagree 2 = Disagree 3 = Undecided
4 = Agree 5 = Strongly Agree

- | | |
|---|---|
| <p>___ 1. Just thinking about what happened makes me fume.</p> <p>___ 2. My relationship with the person has changed for the worse.</p> <p>___ 3. I can never trust the person again.</p> <p>___ 4. Sometimes I find myself thinking about this for no apparent reason.</p> <p>___ 5. I don't think I can ever fully forgive the person.</p> <p>___ 6. When I think about it I still feel vulnerable.</p> <p>___ 7. The person is as important to me as ever.</p> <p>___ 8. Even though it hurt me, I think I can relate to what he/she did.</p> <p>___ 9. I will never forget what happened as long as I live.</p> <p>___ 10. I hate the person.</p> | <p>___ 11. I have respect for the person.</p> <p>___ 12. I understand why the person did what he/she did.</p> <p>___ 13. I still have an emotional reaction when I think about it.</p> <p>___ 14. When I think about what the person did to me I no longer feel hurt.</p> <p>___ 15. I would not want it to happen again, but I have forgiven the person.</p> <p>___ 16. I have revenge fantasies about the person.</p> <p>___ 17. My relationship with the person has changed for the better.</p> <p>___ 18. Sometimes I find myself “brooding” about it.</p> <p>___ 19. I still hold a grudge against the person.</p> <p>___ 20. I do not resent the person.</p> <p>___ 21. I would trust the person again.</p> <p>___ 22. I have been able to put this event into perspective.</p> |
|---|---|

Acts of Forgiveness (AF)

1 = Strongly Disagree

2 = Disagree

3 = Undecided

4 = Agree

5 = Strongly Agree

___ 23. Given what happened, I am very suspicious of the person.

___ 24. I don't know if I will ever get over it.

___ 25. I will never forgive the person for what happened.

___ 26. I genuinely feel that I have managed "to get past" the event.

___ 27. I don't see how my relationship with the person can ever be restored.

___ 28. I am bitter about what happened.

___ 29. There are no hard feelings between myself and the person.

___ 30. From now on, I will be on my guard with this person.

___ 31. The person will never get a second chance with me.

___ 32. If I forgive the person for what happened, it will just invite them to do it again.

___ 33. I rarely think about this event.

___ 34. I like and respect the person as much as ever.

___ 35. The only sensible thing to do when something like this happens is to talk it out with the other person and get on with life.

___ 36. Even though it bothered me at the time, I am at peace with what happened and the person.

___ 37. I had forgotten all about the event until filling out this questionnaire.

___ 38. I do not trust the person.

___ 39. Although I did not like it, I can accept what happened.

___ 40. I still have some difficulty dealing with the person.

___ 41. I will always expect the worst from the person.

___ 42. I avoid the person as much as I can.

___ 43. Sometimes I complain to others about what the person did to me.

___ 44. I showed compassion to the person.

___ 45. It is obvious to the person that I am still upset about what happened.

Appendix D

Forgiving Personality Inventory (FP)

For each of the following statements, write the number (on the answer sheet) which best describes how you feel about the statement, using the scale below.

1=Strongly disagree

2=Disagree

3=Undecided

4=Agree

5=Strongly agree

1. I believe in the importance of forgiveness.
2. There's a lot of truth in the old expression "revenge is sweet."
3. I believe that people should forgive others who have wronged them.
4. I tend to hold grudges.
5. I have genuinely forgiven people who have wronged me in the past.
6. I have to admit, I harbor more than a bit of anger toward those who have wronged me.
7. Forgiveness is a sign of weakness.
8. I believe that in order to be forgiven, we must first forgive.
9. If someone wrongs me, I tend to hold a grudge.
10. I believe that "revenge is devilish and forgiveness is saintly".
11. I tend to be an unforgiving person.
12. Even if someone wrongs me, I believe it would be wrong for me to seek revenge.
13. Forgiving someone who has wronged you is an invitation for that person to walk all over you.
14. I tend to expect the worst in others.
15. I am quick to forgive.
16. Forgiving someone with whom I am angry is virtually impossible for me to do.
17. If someone wrongs me, sooner or latter I will try to make them pay for it.
18. Forgiving someone who has hurt or harmed you only encourages them to do it again.
19. No matter what has happened with a friend or family member, after thorough discussion, all can be forgiven.
20. I try not to judge others too harshly, no matter what they have done.
21. I don't believe in second chances.
22. I often seethe with anger.
23. I find it difficult to forgive others, even when they apologize.
24. Forgiveness is as beneficial to the person who forgives as it is to the person who is forgiven.
25. I tend to be a pessimistic person.
26. People must face the consequences of their mistakes, but they should also be forgiven.

Forgiving Personality Inventory (FP)

1=Strongly disagree

2=Disagree

3=Undecided

4=Agree

5=Strongly agree

- 27. I am slow to forgive.
- 28. Some misdeeds are so horrible that forgiveness is out of the question.
- 29. If you hurt me a little, I will hurt you a lot.
- 30. Compromise is a sign of weakness.
- 31. I tend to be a forgiving person.
- 32. I remain bitter about the actions of certain people towards me.
- 33. I tend to be an angry person.

Appendix E

Categorical Codes and Narrative Exemplars of Conflict Formulation and Narrative-based Forgiveness Coding Systems

<i>Conflict Formulation Category</i>	<i>Original five category ranking code</i>	<i>Revised two category ranking code</i>	<i>Exemplars</i>
Dismissive of Conflict	0	0	<p>“I hated her right after it. I just told her everything I thought of her and then for two or three days, I avoided her. After that, we just went on and forgot about it.”</p> <p>“I felt somewhat betrayed by that, but, I mean, I just blanked it out.”</p>
Resigned to the Inevitability of Conflict	1	0	<p>“You just take it.”</p> <p>“He apologized and we talked. . . but I will never forget it.”</p> <p>“She’s tried to explain many times, but it has gotten old. I just don’t want to hear about it anymore.”</p>
Struggling with the Inevitability of Conflict	2	0	<p>“I just feel like they’ve treated me wrong.”</p> <p>“I had a lot of hate in my heart.”</p> <p>“I don’t want to talk to them. I have nothing to talk to them about. . . I don’t think them even saying ‘I’m sorry’ would even matter to me.”</p>

Conflict resolution	3	1	<p>“Well, we talked for a while and he promised me he would never try it again. We talked and everything was better.”</p> <p>“We talked about it and I told him I forgave him and he apologized.”</p>
Acceptance of Conflict with Balance	4	1	<p>“I had a lot of anger. . .that caused us to break up for a little while because it was such a serious situation. . . We’ve learned how to be more open and to talk more.”</p> <p>“It’s good. . . they were doing it to benefit us.”</p>

<i>Narrative-based Forgiveness</i>	<i>Ranking code</i>	<i>Exemplars</i>
Narrator has not forgiven.	0	<p>“He never really apologized, he just kept trying to deny it.”</p> <p>“She’s never really expressed regret.”</p> <p>“Maybe if we went to family counseling and he would actually talk about my life instead of his. Maybe he could take lessons from other parents in a parents’ group.”</p>
Narrator has forgiven.	1	<p>“I guess they could have made it better. They are always nice and I am nice to them and we are on good terms.”</p> <p>“I’m really excited because we have a good relationship now. . . He’s always telling me how proud of me he is because I turned it around.”</p>

Vita

Laura Porter was born in Fort Belvoir, Virginia on March 25, 1971. She spent her childhood in Kingsport, Tennessee where she attended public schools and graduated from Dobyns-Bennett High School in June 1989. In August of that year, she matriculated at Rhodes College in Memphis, Tennessee. With a major in International Studies and minors in Japanese and Asian Studies, she received the Bachelor of Arts degree in May 1993.

She entered the Master's Program in Experimental Psychology at the University of Tennessee, Knoxville in the fall of 1996, officially receiving the Master's degree in August 1999. She formally entered the University's doctoral program in Clinical Psychology in August 1998. During her graduate studies in Knoxville, she had practicum experiences with Child and Family Tennessee and as Clinic Coordinator of the departmental Psychology Clinic. She completed her predoctoral internship with Emory School of Medicine at Grady Health System in Atlanta, Georgia.

As of August 2003, she was employed as a full-time psychologist with Cherokee Health System, a community mental health center based in Talbott, Tennessee.