POSTTRAUMATIC GROWTH IN THE LIVES OF YOUNG ADULT TRAUMA SURVIVORS: RELATIONSHIPS WITH CUMULATIVE ADVERSITY, NARRATIVE RECONSTRUCTION, AND SURVIVOR MISSIONS

by

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To my parents, Jim Jirek and Lindy Jirek.

I would never have made it this far without your love and support.

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Early in the dissertation process, I realized that completing a dissertation is very similar to one of my passions: training for and running marathons. Both experiences require significant commitment, entail a long and exhausting process, require slow and steady effort, have harder and easier "miles," and, eventually, reward hard work. The metaphor falls short, however, when it comes to understanding others' contributions to my academic success. Yes, when running past marathons, there have often been family members or friends who have cheered me on from the sidelines during a few brief (but greatly appreciated) moments of the race. However, it *is* possible, albeit more lonely, to train for and finish a marathon without the assistance of others. In this regard, completing a dissertation and completing a marathon are quite different from one another.

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TABLE OF CONTENTS

LIST OF TABLES

TABLE

LIST OF APPENDICES

APPENDIX

ABSTRACT

An important shift in the literature on post-trauma outcomes has occurred as researchers have begun to investigate positive life changes or posttraumatic growth (PTG). However, most existing research on PTG is overly psychological and overlooks important factors—related to social context, intersectional identities, structural systems of privilege and oppression, and cumulative adversity—that impact the development of growth.

This mixed-methods dissertation draws upon data from 46 life story interviews and six survey instruments. The quantitative data include measures of posttraumatic growth, trauma, major (sub-trauma) life events, chronic stressors, sexual harassment, and discrimination, as well as demographic information. The sample consists of students and recent graduates of a large university, who have experienced trauma and who self-identify as having grown from the adversity in their lives.

This dissertation follows a three-article format. The first article is a quantitative examination of various correlates of posttraumatic growth—particularly, cumulative adversity, trauma type, and narrative coherence. As hypothesized, narrative coherence is positively associated with PTG. However, contrary to expectations, cumulative adversity has a linear—not curvilinear—relationship with posttraumatic growth. I demonstrate that members of less privileged social groups experience higher levels of cumulative adversity, which is, in turn, positively correlated with PTG.

In the second article, I distinguish between three categories of trauma survivors, based upon their levels of narrative coherence and posttraumatic growth, and I present an exemplar from each category. Using inferential statistics, I investigate differences between each category, and I qualitatively examine numerous factors that facilitate the narrative reconstruction processes of trauma survivors.

Finally, in the third article, I use grounded theory techniques to explore one understudied form of posttraumatic growth: the development of a survivor mission. I demonstrate that there are numerous forms of, and motives for, survivor missions, that survivor helpers believe that they have specialized knowledge and skills to use on behalf of other trauma survivors, and that survivor helpers benefit from their survivor missions.

Together, these three articles make numerous methodological, sociological, and social work contributions to the sub-fields of narrative coherence, trauma recovery, resilience, empowerment, identity, cumulative adversity, social inequality, social change, and posttraumatic growth.

CHAPTER 1

INTRODUCTION

> We must never forget that we may also find meaning in life even when confronted with a hopeless situation, when facing a fate that cannot be changed. For what then matters is to bear witness to the uniquely human potential at its best, which is to transform a personal tragedy into a triumph, to turn one's predicament into a human achievement. When we are no longer able to change a situation…we are challenged to change ourselves.
>
> —Viktor Frankl, Holocaust survivor (1959, p. 112)

BACKGROUND

Traumatic experiences have a significant impact on individuals' lives. Events ranging from natural disasters to suicides, from child physical abuse to date rape, and from severe motor vehicle accidents to gang shootings affect survivors' lives in myriad ways. Within the past three decades alone, researchers in a variety of fields have published thousands of studies documenting and exploring the vast array of negative outcomes that may result from trauma (e.g., Cox, Kenardy, & Hendrikz, 2008; Figley, 1985; Green, 1994; Horowitz, 1997; van der Kolk, McFarlane, & Weisaeth, 1996).

The negative sequelae of traumatic events include a broad range of dysfunctions. These negative outcomes include posttraumatic stress disorder (PTSD) (e.g., Cox et al., 2008; Dutton et al., 2005; Saunders, 1994), depression (e.g., Anderson, Saunders, Yoshihama, Bybee, & Sullivan, 2003), generalized anxiety disorder or anxiety sensitivity (e.g., Brown, Fulton, Wilkeson, & Petty, 2000), and complex PTSD (e.g., Herman, 1992a; van der Kolk, Roth, Pelcovitz, Sunday, & Spinazzola, 2005), to name only a few.

Other commonly reported negative effects of trauma include lower self-esteem, reduced interpersonal trust, poorer physical health, and an increased sense of vulnerability (e.g., de Vries, Davis, Wortman, & Lehman, 1997; Gluhoski & Wortman, 1996; Kessler, Davis, & Kendler, 1997; Lehman, Wortman, & Williams, 1987; Norris & Kaniasty, 1991; Turner & Lloyd, 1995). In addition, trauma may lead to "significant abnormalities in neurobiological systems and cognitive processes" (Vasterling & Brewin, 2005, p. ix; see also, Southwick et al., 2006), dissociative phenomena (DePrince & Freyd, 2007), and memory impairment (van der Kolk & Fisler, 1995). Some traumatic experiences, particularly in childhood, are also associated with the development of an aggressive personality style (Ferguson et al., 2008), negative parenting behaviors (Cohen, Hien, & Batchelder, 2008), and the perpetration of violent crime (Ferguson et al., 2008; Smith & Thornberry, 1995; Widom, 1989; Zingraff et al., 1993).

Although research in such disciplines as psychology, sociology, medicine, and even social work has tended to focus upon the negative sequelae of traumatic events, there is, nonetheless, another, less frequently explored, side to the story of trauma: that of the positive outcomes that may result from negative life experiences. The general theme of good emerging from the midst of tragedy or evil is timeless (Bowker, 1970; Krook, 1969; Little, 1989; Raphael, 1960; Tedeschi & Calhoun, 1995, 2004). Nonetheless, with few exceptions (Caplan, 1961, 1964; Dohrenwend, 1978; Ebersole, 1970; Finkel, 1974, 1975; Frankl, 1959, 1961; Hamera & Shontz, 1978; Jaffe, 1985; Kessler, 1987; Sanford, 1977; Taylor, 1977), it is only in the past twenty years or so that systematic efforts have been made to explore the positive changes that may result from negative life events.

Posttraumatic Growth: An Overview

Posttraumatic growth (PTG) is a construct first proposed by Tedeschi and Calhoun (1996) that has undergone conceptual refinements over the past decade (e.g., Calhoun & Tedeschi, 2004, 2006; Tedeschi & Calhoun, 1996, 2004; Tedeschi, Park, & Calhoun, 1998). Tedeschi and Calhoun (2004) define posttraumatic growth as the "positive psychological change experienced as a result of the struggle with highly challenging life circumstances" (p. 1). Posttraumatic growth may refer to both the process and outcome of positive change following a traumatic life experience (Tedeschi, Park, & Calhoun, 1998). Often co-existing with elements of distress (Janoff-Bulman & Berger, 2000; Tedeschi & Calhoun, 2004), posttraumatic growth involves both the development of individuals beyond their "previous level of adaptation, psychological functioning, or life awareness" and a fundamental change in the individual as a whole (Tedeschi, Park, & Calhoun, 1998, p. 3; Calhoun & Tedeschi, 2006).

As the firsthand accounts of and literature on PTG repeatedly document, posttraumatic growth is a paradoxical phenomenon (Calhoun & Tedeschi, 1998, 2004; Tedeschi & Calhoun, 2004; Tedeschi, Park, & Calhoun, 1998). The central paradox of this field is that from the depths of loss and pain, growth and gain may emerge. Survivors of trauma often report a sense of increased vulnerability, a magnified awareness of their own mortality, and a heightened sense of the fragility of life (Janoff-Bulman, 1992), while also describing a greater sense of personal strength and self-competence (Tedeschi & Calhoun, 1995; Tedeschi, Park, & Calhoun, 1998).

Researchers have developed several different categorizations regarding the types of growth outcomes that may manifest in the lives of trauma survivors. It is important to

note that individual survivors may exhibit some of these forms of posttraumatic growth but not others, while other individuals may not exhibit positive post-trauma outcomes at all (Calhoun & Tedeschi, 1998, 1999; Park, 1998; Wortman, 2004).

In their early work, based upon qualitative data, Tedeschi and Calhoun (1995) divided posttraumatic growth into three general domains: changes in the perception of self, changes in interpersonal relationships, and changes in philosophy of life. In an effort to quantify the experience of growth following adversity, Tedeschi and Calhoun (1996) developed the Posttraumatic Growth Inventory (PTGI), a 21-item scale that measures different areas of posttraumatic growth. There are five major domains of growth identified in this instrument, via factor analysis: 1) greater appreciation of life and changed sense of priorities; 2) warmer, more intimate relationships with others; 3) a greater sense of personal strength; 4) recognition of new possibilities or paths for one's life; and 5) spiritual development.

Several other researchers have identified other dimensions of growth outcomes, including improved cognitive and behavioral coping skills (e.g., positive reappraisal, problem-solving, ability to regulate affect) (Schaefer & Moos, 1992), increased personal and social resources (Schaefer & Moos, 1992), greater political awareness (Burt & Katz, 1987), increased assertiveness, independence, and autonomy (Burt & Katz, 1987), "psychological preparedness" (i.e., for future stressful life events) (Janoff-Bulman, 2006), maturational effects (Aldwin, Levenson, & Spiro, 1994; Richards, 2001), and increased self-understanding (Burt & Katz, 1987; Nerken, 1993; O'Leary & Ickovics, 1995).

Although the terminology, definitions, categorization, and methodologies have varied widely across studies, posttraumatic growth has been reported in diverse

populations, ranging from survivors of child physical and/or sexual abuse (Draucker, 1992; McMillen, Zuravin, & Rideout, 1995) to individuals facing severe medical conditions (Affleck, Tennen, Croog, & Levine, 1987; Andrykowski, Brady, & Hunt, 1993; Schwartzberg, 1993; Stanton, Bower, & Low, 2006), and from survivors of natural disasters (Karanci & Acarturk, 2005) to survivors of the Holocaust (Lev-Wiesel & Amir, 2006).

In sum, the study of positive, post-trauma outcomes is a relatively recent addition to the area of trauma research. Although researchers differ in their terminology and definitions, as well as in their depiction of the various types of potential growth outcomes, the paradoxical phenomenon of posttraumatic growth has been documented in a wide variety of population groups.

Gaps and Limitations in Past Research on Posttraumatic Growth

While substantial progress has been made in investigating the prevalence, dimensions, and predictors of positive, post-trauma life changes, there are several important gaps or limitations in past research on posttraumatic growth.

First, due, in large part, to the almost exclusively psychological conceptualization and operationalization of posttraumatic growth (Blankenship, 1998), most current theories of positive, post-trauma outcomes lack a sociological analysis of the ubiquitous role of sociocultural factors—including gender, race, and class—in influencing post-trauma outcomes. Feminist theory has drawn attention to the complex and multiplicative interconnections between gender, race, and class, to structural systems of domination and oppression, and to the ways in which these factors are foundational in organizing social

life, in general, and women's lives, in particular (e.g., Andersen & Collins, 1995; Collins, 1990; King, 1988; West & Fenstermaker, 1995). However, the most prominent and comprehensive model of posttraumatic growth, proposed by Tedeschi and Calhoun (1995, 2004; Calhoun & Tedeschi, 1998, 2006), pays little attention to issues of race, class, and gender inequality, to social structures of power, or to the ramifications of individuals' locations in the social hierarchy.

Second, many aspects of Tedeschi and Calhoun's model of posttraumatic growth have not been empirically tested. For example, cognitive processing, rumination (both automatic and deliberate), self-disclosure, and narrative development are theorized to facilitate posttraumatic growth, but further research is needed to examine the possible relationships between these activities or processes and positive, post-trauma outcomes.

Third, the majority of published studies on posttraumatic growth focus upon a single traumatic event or experience (e.g., a motor vehicle accident, having cancer) and then examine the level of posttraumatic growth experienced by research participants (along with several possible, study-specific, correlates or predictors of PTG). The problem with much of this research is that these studies overlook several important aspects of individuals' varying life experiences before, during, and after their trauma(s). Specifically, past research has not investigated the impact of (sub-trauma) major life events, chronic stress, sexual harassment, or discrimination upon individuals' development of posttraumatic growth. Similarly, researchers have not differentiated between chronic traumas (e.g., child abuse) and one-time events (e.g., being car-jacked), and between survivors of multiple traumas versus a single trauma. In short, past research

on posttraumatic growth has not taken into account the vastly differing levels of cumulative adversity experienced by trauma survivors.

Fourth, the majority of published studies on posttraumatic growth use one of two quantitative instruments—either the Posttraumatic Growth Inventory (PTGI; Tedeschi & Calhoun, 1996) or the Stress-Related Growth Scale (SRGS; Park et al., 1996)—to measure positive, post-trauma outcomes. However, these instruments do not query research participants regarding several important forms of growth, including the cessation of certain negative behaviors (e.g., bad habits), the beneficial loss of specific beliefs (e.g., of personal invulnerability), or the desire to use one's traumatic experiences to help other trauma survivors (i.e., the development of a "survivor mission" [Herman, 1992b]). Research that relies solely upon quantitative assessments of pre-determined categories of positive post-trauma chance likely overlooks important forms of posttraumatic growth.

Finally, empirical studies of posttraumatic growth tend to be *either* quantitative or qualitative in their approach, and both methodologies have their limitations. For example, quantitative studies are not able to document previously unrecognized types of growth, and they cannot assess whether or not the reported life changes are perceived as meaningful or significant to the trauma survivors themselves. Qualitative studies, likewise, are not able to determine if group-based differences in posttraumatic growth (and other variables) are statistically significant, and they have greater constraints (e.g., during an interview of reasonable length) with regard to the amount of background information that can be gathered from each research participant. Combined, however, qualitative and quantitative approaches together yield a more complete "picture" regarding individuals' experiences with trauma and posttraumatic growth.

This dissertation, which utilizes a mixed-methods design, addresses several of these gaps in the current literature on posttraumatic growth. The overall goal of this dissertation is to explore the construct of posttraumatic growth, using both qualitative and quantitative research methods, among a group of young adults who might be considered the "success stories" of trauma recovery.

DATA AND METHODS

This dissertation has two primary sources of data: qualitative data gathered via interviews and quantitative data collected via a demographics questionnaire and six survey instruments. The secondary sources of data are the detailed fieldnotes I wrote following each interview.

The sample was recruited from among the undergraduate and graduate students, as well as very recent graduates, of a large, prestigious, public university in the Midwest United States. There were three major reasons for choosing to study this population: 1) It allowed me to loosely control for respondents' life stage (i.e., young or emerging adulthood) and current social context, so as to facilitate comparisons among research participants; 2) It assisted me in limiting my sample to those individuals who might be considered the "success stories" of trauma recovery—that is, persons who had coped with their traumatic experience(s) effectively enough to be able to pursue an undergraduate or graduate degree at an elite institution; and 3) I had relatively easy access to this population.

Recruitment, Screening, and Data Collection

Potential research participants were contacted through several means: posted fliers throughout campus, emails to targeted campus-based groups, and a listing on a university website for medical and social science studies seeking volunteers. More than 300 individuals expressed an interest in participating in this study. After initial contact, I emailed potential participants more information about the study's purpose and procedures. For those individuals who continued to be interested in the project, I conducted a short (i.e., usually 10-15 minutes) screening interview by telephone to determine their eligibility for participation in this study. To be eligible to participate, individuals had to be current students or recent graduates of the university, be eighteen to thirty years of age, have experienced or witnessed one or more traumatic events that have ended, feel that they had grown personally or benefited from their traumatic experience(s), and feel that they were ready to discuss their traumatic experience(s) and the impact of trauma on their lives. Forty-six individuals were enrolled in the project and all 46 completed both the quantitative and qualitative components of the study. All data were collected between June 2009 and March 2010.

For the purpose of this project, I defined trauma as a one-time event, series of events, or repeated experience (either firsthand or witnessed) that: a) involved serious threat, injury, or harm; b) provoked intense fear, helplessness, or horror; *or* c) was an experience that the individual defined as being a significant personal trauma.

I met with each research participant, in-person, on two separate occasions. The purpose of the first meeting was to build rapport with the individual, obtain her/his

informed consent, and administer the survey instruments.[1] This meeting averaged slightly less than one hour in duration. The second meeting, which typically occurred within one week of the first, consisted of an in-depth, life story interview. The interviews lasted an average of 2 hours and 7 minutes. All meetings occurred at an on-campus location that was quiet, private, and convenient for research participants. With respondents' permission, all interviews were digitally recorded and subsequently transcribed. In addition, detailed fieldnotes were written, following each interview, to document any aspects of the interviews not adequately captured on the audio recording. Research participants were compensated $30 for their participation in the entire study.

In order to minimize the risks to research participants while also maximizing the potential benefits that individuals might experience through their participation in this project, I incorporated numerous specific recommendations and best practices, described in the current literature on ethical and benefit-enhancing research with trauma survivors, into my research design (see Griffin et al., 2003; Jorm et al., 2007; Newman & Kaloupek, 2004). Overall, the interviews went very smoothly, none of the research participants reported having regretted their involvement with the study, and more than half of the interviewees stated that they found their participation in the project to be helpful or beneficial in some way. For additional details regarding the steps I took to ensure the well-being of research participants, as well as the benefits (resulting from research participation) reported by interviewees, see Appendix A. All of the instruments,

[1] "Administering" the surveys means that I explained the purpose of each measure, gave instructions for completing each instrument, and answered individuals' questions. I did not, however, go through each survey, item-by-item, with the respondents.

methods, and procedures used in this study were approved by the University's Institutional Review Board (IRB).

Because many of the issues raised in this study were sensitive, emotionally-charged, potentially stigmatizing, and highly personal, certain precautions were taken—throughout various stages of the project—to protect the confidentiality of research participants. Although research participants were informed—both orally and in writing—that "information from the interview and the survey questionnaires [might] appear in research papers, articles, books, or lectures," these individuals were assured that their names and information that could be used to identify them would be kept confidential (Jirek, Informed Consent Form, 2009).

While the measures described in Appendix A helped to ensure the emotional and psychological well-being of participants during the data collection process, additional steps were also taken during the analysis and writing phases to protect research participants' confidentiality. First, all names appearing in this dissertation—including those of research participants, members of their families, friends, and other significant people in their lives—are pseudonyms. Second, to prevent the reader from piecing together information about any given research participant over the course of the three articles, I have (usually) changed the pseudonyms between, and, occasionally, even within, each chapter. Finally, I have minimized the amount of personal, potentially-identifiable details revealed about any particular research participant and, have, at times, deliberately obscured or even changed personal details that were immaterial to the analyses at hand. Together, these measures help to ensure the anonymity of research

participants while still allowing their life stories—and the lessons we might learn from them—to be shared.

Quantitative Instruments

Six survey instruments were utilized in this study, in addition to a demographics questionnaire: the Posttraumatic Growth Inventory (PTGI; Tedeschi & Calhoun, 1996), the Stressful Life Events Screening Questionnaire (Goodman, Corcoran, Turner, Yuan, & Green, 1998), the Life Events Checklist, the Chronic Stress Survey, the Sexual Harassment Survey (Hill & Silva, 2005), and the Major and Everyday Discrimination Questionnaire (Williams, Yu, Jackson, & Anderson, 1997). The PTGI, the instrument most commonly used to measure positive post-trauma outcomes, was utilized in this research project in order to facilitate comparisons with other studies of posttraumatic growth. The latter five measures were chosen or developed in order to thoroughly assess research participants' levels of cumulative adversity—including types of stressors not previously included in research on posttraumatic growth. For detailed descriptions, sample items, and internal reliability analyses of each survey instrument, see Chapter 2.

Qualitative, Life Story Interviews

The interview format was qualitative and semi-structured. Although I used an interview schedule to guide each interview, I was also flexible in adapting the order, wording, and nature of questions to match the personal style of each interviewee and the content of the interview. The interview schedule drew upon several questions from McAdams' (1993) Life Story Interview, while also querying research participants

regarding their traumatic experience(s), posttraumatic growth, social support, coping strategies, internal resources, external resources, and use of social services (see Interview Protocol, Appendix B).

Interviews generally consisted of four sections: 1) An overview of the interviewee's life story and major life events; 2) Questions regarding the interviewee's traumatic experience(s), the impact of the trauma(s), and how she/he coped with the trauma(s); 3) An exploration of the interviewee's posttraumatic growth; and 4) A wrap-up section that included questions regarding the interviewee's future goals and plans, clarification questions regarding her/his answers on the quantitative surveys, and debriefing questions regarding the interviewee's experience of participating in the study. I also explored any additional topics that an interviewee said was relevant to her/his experience post-trauma.

During the third section of the interview, I first asked interviewees to describe, in their own words, the positive, post-trauma life changes, or posttraumatic growth, they had experienced. Then, I handed them the Posttraumatic Growth Inventory survey that they had previously filled out, and I requested that they go through the items, one-by-one, and discuss those that they had marked as having experienced to a "moderate," "great," or "very great" degree.[2] I asked interviewees to summarize what each of those items meant to them and to give an example of what that change "looked like" in their lives. This two-part process yielded in-depth descriptions of posttraumatic growth that exceeded that gleaned via either the PTGI or open-ended, qualitative questions alone.

[2] I developed this process during the first ten interviews and then used it with every interviewee thereafter.

Management of Quantitative Data

All of the survey data were entered into a statistical software program by two different research assistants (i.e., double-entry). Then, Stata software was used to identify the discrepancies between the two datasets. Once the mismatches were identified, I looked at the original survey data, chose the best or correct value, and inputted it into the combined dataset. All discrepancies between the two initial datasets were resolved in this manner.

Overall, this dataset had very few missing values, due to the research design of having two separate meetings with each research participant. If I noticed any missing data in the surveys following our first meeting, I asked the individual to fill in the information at our second meeting. Nonetheless, a few survey questions remained unanswered. Specifically, out of the approximately 350 survey questions that were used as data for this dissertation (multiplied by 46 respondents), only 13 values were missing. With one exception, no single survey question was missed by more than one person and, again, with one exception, the respondents with missing data only had one missing value each.[3]

The relatively small size of the sample, however, necessitated the imputation of the missing values. Two primary strategies were employed to do this. First, wherever possible, information from the interview was used to infer the answer to the survey question; this method provided likely values in three cases. Second, if a likely value could not be inferred from the interview, I calculated two (or, where possible, three)

[3] The one exception was a research participant who did not answer either the frequency or stressfulness component of one item on the Sexual Harassment Survey. Based upon the individual's answers to the other items on this survey (i.e., not having experienced many other sexual harassment stressors nor finding them very stressful), it was determined that mean imputation was an appropriate strategy to use in this case.

possible imputed values and chose the best one. For example, a missing value on the PTGI could be imputed via mean imputation of the other 45 values for that item, by taking the mean of that one person's other 20 scores on the survey, or by taking the mean of that one person's other scores on that particular factor of posttraumatic growth. If these three possible values were very similar, I used mean imputation. If these values differed significantly, I used the individual's average for that factor (in the case of the PTGI) or for the other items on her/his particular survey (for the CSS, SHS, and MEDQ).

Data Analysis

I began analyzing the qualitative data by first listening to all of the interviews, while reading each transcript, to get a sense of the interviews as a whole. After reviewing each individual interview in this manner, I also read my fieldnotes for that interview. During this process, I took notes on major themes that appeared repeatedly in the data. I also wrote numerous initial memos regarding these themes, as well as memos regarding theoretically interesting, particularly compelling, or substantively unusual quotations.

I next generated a list of coding categories—based upon the themes that emerged during my first read-through of the data, as well as topics gleaned from the existing literature on posttraumatic growth. I coded every interview transcript and all of my fieldnotes using a combination of open and focused coding, using both deductive and inductive analytical techniques (Emerson, Fretz, & Shaw, 1995).

The two (primarily) qualitative chapters in this dissertation were created using additional, article-specific methods of analysis, which are described in more depth in Chapters 3 and 4.

With regard to the quantitative data, I used a variety of inferential statistical methods, including t-tests, Pearson product-moment correlations, OLS multiple regressions, and hierarchical regressions to investigate numerous possible correlates and predictors of posttraumatic growth. For details regarding the quantitative analyses, see Chapter 2.

A Note Regarding Reflexivity

Before describing the contours of this dissertation, it is important to note that I do not pretend that this (or any other) research process was "objective," or that I, as a researcher, approached this topic or this project devoid of assumptions, values, or experiences that might impact the research process. Rather, I am convinced that conducting research inevitably involves many elements of subjectivity, interpretation, the (co-)construction of meaning, and other complexities throughout *every* phase of the research process—from project design, through data collection and data analysis, to the writing-up of findings. I will highlight two such examples here.

First, my own identity as a trauma survivor was a significant motivating factor in designing this type of project, and my background undoubtedly shaped the types of research questions that most intrigued me. Moreover, during various interviews, certain aspects of my identity and experiences became particularly salient—as many research participants asked me about the origins of my interest in the topic, as well as about my own trauma history, trauma recovery, and overall life story. Following their interviews, several research participants thanked me for telling them a bit about myself, and they commented that those moments of self-disclosure helped them to feel more comfortable

sharing their own stories—"humanizing" what might otherwise have been an awkward and impersonal data collection process.

Second, the nature and structure of this (and any other) interview likely shaped the story that was told. In this project, I used a semi-structured, life-story interview format that encouraged interviewees to emphasize their *positive* post-trauma changes, increases in personal strength, gains in wisdom and perspective, trauma recovery, and posttraumatic growth. Through this process, research participants may have re-framed their prior life stories in more positive, linear, coherent, and future-oriented ways. Indeed, several research participants commented, after their interviews, that they felt better about themselves and about their lives after the interview.

I highlight these two examples to make this point: the research process is shaped by myriad personal, interpersonal, cultural, political, experiential, and other factors. While these dynamics and other complexities in the research process are, perhaps, more evident in projects such as this, they are, nonetheless, present in all research. In sum, the researcher, and the socio-cultural-political environment in which she or he is embedded, is *always* a part of the research process.

THIS DISSERTATION

This dissertation is comprised of three distinct, empirical chapters, each illuminating a different aspect of the phenomenon of posttraumatic growth. The first article is a quantitative examination of various correlates and predictors of posttraumatic growth. In it, I address the following four research questions: 1) What is the relationship, if any, between the type of trauma experienced and the total level of posttraumatic

growth?; 2) What is the relationship, if any, between narrative coherence and posttraumatic growth?; 3) What is the relationship, if any, between cumulative adversity and posttraumatic growth?; and 4) Which components of cumulative adversity have the greatest impact upon total levels of posttraumatic growth?

The second and third articles are primarily qualitative in nature. In the second article, I draw upon narrative-constructivist and assumptive world theoretical frameworks to examine the relationship between post-trauma narrative reconstruction and posttraumatic growth. Specifically, I describe three categories of trauma survivors, based upon their level of narrative coherence and their (qualitatively assessed) level of posttraumatic growth, and I use case studies to illustrate the characteristics of each category. I also discuss the role of the discursive environment in shaping survivors' post-trauma narratives, and I quantitatively analyze group-based differences between the three categories.

The third article uses grounded theory techniques to examine one heretofore unidentified form of posttraumatic growth: the development of a survivor mission. Trauma survivors with a survivor mission—whom I refer to as "survivor helpers"—seek to use their past experiences with trauma to better the lives of other trauma survivors (Herman, 1992b). In this article, I explore different types of survivor missions, what survivor helpers believe that they have to offer other trauma survivors, the motives of survivor helpers, and the benefits survivor helpers themselves reap from their survivor missions. Drawing upon the literatures on professionally-led mutual aid groups, Twelve Step programs, empowerment, and research on other programs using the helper therapy principle, I discussed both the benefits and possible risks associated with becoming a

survivor helper, as well as the possible role of helping professionals in empowering trauma survivors.

In the concluding chapter of the dissertation, I highlight the major themes running through the three empirical articles, synthesizing the quantitative and qualitative findings. I also discuss the methodological, sociological, and social work contributions and implications of this dissertation. I conclude with recommendations for future research on posttraumatic growth.

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CHAPTER 2

CUMULATIVE ADVERSITY AND OTHER CORRELATES AND PREDICTORS OF POSTTRAUMATIC GROWTH

> I think a lot of people just focus on the negative, and that's one thing that my experiences [have] taught me not to do. I realized that I can kind of, like, twist it to be a positive. For instance, my mother passing away is devastating…. But [I] think about the values that my mother instilled on me and I'm just inspired…. Like everything that she has done for me and how selfless she was, is, like, what I want to be, is like what I want to do…. That gives me hopes, and gives me, like, dreams to be able to change somebody's life the way she changed my life.
>
> —Janelle, survivor of multiple traumas

> It was a sad thing to go through, and I'm not going to be the same person, but there's only room to grow, you know? So, now I'm in the mindset to where I see it as something that happened in my life that was negative, but I can only grow from it and use that to make me become a better person and go in the directions that I want to go with. I can utilize that to make a difference. So that's kind of the mindset I am in now.
>
> —Dave, survivor of a traumatic death

INTRODUCTION

Posttraumatic growth, or the positive changes that individuals may experience in the aftermath of traumatic events, has been documented among a diverse group of populations, in response to a variety of stressors. Survivors of sexual assault (Burt & Katz, 1987), incest and sexual abuse (Draucker, 1992), intimate partner violence (Cobb, Tedeschi, Calhoun, & Cann, 2006), parental domestic violence (Anderson, Danis, & Havig, 2011), and child abuse (McMillen, Zuravin, & Rideout, 1995), the bereaved (Cadell, Regehr, & Hemsworth, 2003), refugees (Rosner & Poswell, 2006), Holocaust survivors (Lev-Wiesel & Amir, 2006), persons with cancer (Stanton, Bower, & Low, 2006), and survivors of military combat and captivity (Erbes et al., 2005), severe motor

vehicle accidents (Rabe, Zöllner, Maercker, & Karl, 2006), and earthquakes (Karanci & Acarturk, 2005), to name only a few, have all demonstrated that personal growth, strength, compassion, and wisdom may arise from the depths of suffering and sorrow.

Dozens of studies have investigated a wide range of variables that are either correlated with, or are predictors of, posttraumatic growth (PTG).[4,5] In general, higher levels of PTG have been reported among women (Curbow et al., 1993; Park, Cohen, & Murch, 1996; Tedeschi & Calhoun, 1996), and this finding was confirmed by a recent meta-analysis of 70 studies (Vishnevsky, Cann, Calhoun, Tedeschi, & Demakis, 2010). However, Vishnevsky et al. found that gender differences in posttraumatic growth decrease along with the age of the sample. Higher levels of posttraumatic growth have also been reported among younger adults (Bower et al., 2005; Lechner et al., 2003; Widows, Jacobsen, Booth-Jones, & Fields, 2005), individuals with the personality traits of optimism (Antoni et al., 2001; Bellizzi & Blank, 2006; Tennen et al., 1992; Updegraff & Marshall, 2005) and extraversion (Evers et al., 2001; Sheikh, 2004; Tedeschi & Calhoun, 1996), persons receiving greater social support (McMillen et al., 1997; Schulz & Mohamed, 2004), individuals who rely upon approach-oriented coping strategies (Collins et al., 1990; Koenig et al., 1998; Sears et al., 2003; Widows et al., 2005), and survivors of traumas involving greater threat, stress, or harm (Aldwin et al., 1994; Armeli

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[4] In this chapter, as in many empirical studies of posttraumatic growth, the term "predictor" is being used to refer to correlates of growth that temporally precede the development of post-trauma growth. The term is *not* being used here to (necessarily) refer to a direct, causal relationship between variables. This study, with its cross-sectional design, cannot determine causal relationships.

[5] For review articles regarding the correlates and predictors of posttraumatic growth, see Aldwin (2007) and Linley and Joseph (2004). For reviews of studies involving PTG and cancer, see Stanton, Bower, and Low (2006) and Sawyer, Ayers, and Field (2010); the latter is a meta-analysis that also includes studies involving HIV/AIDS. For a meta-analysis of PTG and physical and psychological health outcomes, see Helgeson, Reynolds, and Tomich (2006). And for a review of the relationships between posttraumatic growth, cognitive processing factors, and various mental health outcomes, see Zoellner and Maercker (2006).

et al., 2001; Bower et al., 2005; Cordova et al., 2001; Fromm et al., 1996, McMillen et al., 1997; Stanton et al., 2006). With regard to the latter, a handful of studies have found a curvilinear relationship between trauma severity and posttraumatic growth (Fontana & Rosenheck, 1998; Lechner et al., 2003; Schnurr et al., 1993).

Tedeschi and Calhoun (1995), the researchers who first coined the term "posttraumatic growth," proposed a detailed model depicting how this growth might occur, which they subsequently revised and expanded (Calhoun & Tedeschi, 1998, 2006; Tedeschi & Calhoun, 2004). Calhoun and Tedeschi's (2006) model is transactional in nature, such that various factors or variables in the model reciprocally interact with one another via feedback loops. The key elements of this model, which impact the development of posttraumatic growth, include the characteristics of the person pre-trauma, the characteristics of the "seismic event" (i.e., the trauma), management of emotional distress, fundamental schemas, beliefs, and goals, rumination (both automatic and deliberate), self-disclosure, distal and proximate sociocultural influences, narrative development, and wisdom. Many aspects of this model, however, have not been empirically tested.

While an in-depth discussion of the intricacies of this model is beyond the scope of this chapter, a summary of three of the model's components is warranted. First, the characteristics of the "seismic," traumatic event play an important role. According to Tedeschi and Calhoun (1995), in order to initiate the growth potentiality of the situation, the trauma must be of sufficient magnitude to cause significant emotional distress, as well as to challenge the individual's higher-order beliefs and goals, existing life narrative, and fundamental schemas.

Second, according to Tedeschi and Calhoun, a variety of individual characteristics may influence the degree to which the struggle with the aftermath of the trauma produces positive outcomes, most notably: 1) how a person perceives a traumatic event, and 2) how she/he responds to the challenges the situation poses (Calhoun & Tedeschi, 1998). These individual characteristics include extraversion, openness to experience, self-efficacy, locus of control, hardiness, optimism, sense of hope, flexibility, and creativity (Tedeschi & Calhoun, 1995, 1996; Tennen & Affleck, 1998; Schaefer & Moos, 1998).

Finally, according to the model, the early stages of responding to the trauma are characterized by cognitive processing (i.e., rumination) that is largely automatic and intrusive (Calhoun & Tedeschi, 1998). During this phase of the process, the individual struggles to reduce emotional distress, manage the intrusive thoughts and images, and, eventually, disengage from previous goals and assumptions in light of the altered circumstances. Over time, however, if growth is to occur, the individual engages in deliberate rumination—changing schemas that have been invalidated by the crisis, and restructuring her/his life narrative to incorporate the traumatic event (Calhoun & Tedeschi, 1998; Tedeschi & Calhoun, 2004). Cognitive processing, it is hypothesized, assists individuals in revising their life narrative in ways that accommodate the traumatic experience into a viable storyline, while also facilitating posttraumatic growth (Tedeschi & Calhoun, 2004).

Although Tedeschi and Calhoun have constructed the most comprehensive model of the process of posttraumatic growth to date, it is limited in at least two important ways. First, Tedeschi and Calhoun, along with most other PTG researchers, tend to use phrases such as “seismic event,” and “negative life event” to refer to the growth-producing

trauma(s), as though all traumatic experiences are relatively circumscribed—occurring at a single point in time, having a short duration, and being marked by their extraordinary quality. However, for survivors of multiple or chronic traumas (e.g., those who have experienced child abuse or domestic violence), this is an inaccurate depiction of their experience.

Second, the model is overly psychological in nature, particularly with its emphasis upon individual personality characteristics as the only pre-trauma factors of interest. Inadequate attention is paid to the fact that individuals may have had *widely* varying life experiences prior to their traumatic victimization(s)—including both chronic and acute stressors caused by socially structured inequalities related to their gender, race/ethnicity, socioeconomic status, sexual orientation, and other social statuses—and that these differences may impact the process and development of posttraumatic growth.

In this regard, posttraumatic growth scholars could glean important insights from the existing research on the impact of multiple traumas and cumulative adversity upon psychological well-being. Cumulative adversity has been defined as the total number of chronic stressors, major (but not traumatic) life events, and lifetime traumas that an individual has experienced throughout her or his lifetime (Turner, Wheaton, & Lloyd, 1995). Research on the impact of cumulative adversity upon trauma survivors acknowledges that survivors are not a unified group differentiated only by their pre-trauma personality characteristics. Rather, individuals' post-trauma well-being is significantly impacted by the structural contexts of their lives.

With regard to the impact of multiple traumas, in their study of 20 life traumas (e.g., major injury or illness, physical or sexual abuse, or death of a loved one), Turner

and Lloyd (1995) found a significant relationship between the number of lifetime traumas experienced and the occurrence of psychiatric and substance abuse disorders. Similarly, in a study of women's experiences of interpersonal violence, Follette, Polusny, Bechtle, and Naugle (1996) found that the number of different types of victimization experiences (e.g., child sexual abuse, adult sexual assault, domestic violence) was significantly and positively related to the level of post-trauma symptomatology (e.g., anxiety, depression, dissociation)—demonstrating the cumulative impact of trauma.

Trauma, however, is not the only type of stressor that impacts individuals' post-trauma well-being. Turner and Lloyd (1995) discovered that individuals who had experienced high levels of cumulative trauma tended to have high levels of chronic stress as well (e.g., problems with their finances, work, significant relationships, and physical health). Aldwin (2007) asserts that there may be a cascade effect between different levels of stressors (i.e., traumas, life events, role strains, and hassles), such that a life event (e.g., a lay-off) may lead to role strain (e.g., a low-paid, repetitive job) and hassles (e.g., a long commute). Similarly, Pearlin, Aneshensel, and LeBlanc (1997), coined the term "stress proliferation" to refer to the tendency for a primary stressor (e.g., caring for a terminally ill loved one) to generate additional secondary stressors (e.g., social isolation or financial problems).

Chronic, non-traumatic stress affects individuals' physiological response to trauma and general post-trauma well-being. After reviewing studies of the physiological effects of stress in early life, Aldwin and Sutton (1998) conclude that "chronic stress, especially in the absence of resources which allow adequate recovery, may suppress growth hormones, enhance tumor growth, and hasten senescence" (Aldwin & Sutton,

1998, p. 48). Turner, Wheaton, and Lloyd (1995) likewise found that differences in exposure to stress explain between 23 and 50 percent of observed gender, marital status, and socioeconomic status differences in mental health.

With regard to cumulative adversity, Pimlott-Kubiak (2005) conducted a study with 79 low-income and drug-convicted women to assess the impact of trauma, chronic stress (which she termed "difficult life circumstances"), and employment discrimination upon the probability of being diagnosed with posttraumatic stress disorder (PTSD). Pimlott-Kubiak found that every additional trauma increased the women's odds of having a PTSD diagnosis by 38%. Chronic stressors likewise were associated with an exponential increase in the odds of diagnosis. The full model of cumulative adversity—comprised of all three predictors—explained fully one-third of the variance in PTSD diagnosis among these socially disadvantaged women.

However, past research on cumulative adversity has two important limitations. First, the trauma component of cumulative adversity is typically measured via a checklist of trauma types (i.e., with yes/no responses) that does not take into account the chronicity, frequency, severity, or duration of any type of trauma (e.g., Turner, Wheaton, & Lloyd, 1995; Pimlott-Kubiak, 2005). And second, the instruments used to measure chronic stress, usually based upon the work of Wheaton (1996, 1997) primarily include stressors most common in the dominant (i.e., white, male, heterosexual, middle class) culture. This operationalization of chronic stress may underestimate the unique stressors faced by women, persons of color, members of sexual minority groups, individuals with disabilities, and other oppressed and marginalized social groups. Pimlott-Kubiak's (2005) work included an assessment of several chronic stressors common among low-

income respondents, as well as of employment discrimination based upon gender, race, or conviction status; but even these improved measures likely omit important aspects of cumulative adversity among the most disadvantaged members of society.

In short, as a result of racial, class, gender, and other inequalities, different trauma survivors may have experienced vastly differing amounts of cumulative adversity. This cumulative adversity may, in turn, affect individuals' coping strategies, social support, use of social services, access to institutional and other external resources, post-trauma well-being, and, ultimately, the amount of posttraumatic growth they experience.

In sum, while there have been substantial developments in our knowledge of posttraumatic growth during the past 15 years or so, many avenues of inquiry remain unexplored. First, because most research on posttraumatic growth has focused upon survivors of one particular type of trauma (e.g., sexual assault), few studies have explicitly investigated the impact of trauma type upon PTG. Second, although Tedeschi and Calhoun theorize that post-trauma narrative development is an important factor in experiencing posttraumatic growth, this relationship has not been empirically tested. Finally, past research has not simultaneously examined the impact of multiple traumas, chronic traumas, sub-trauma stressors, and cumulative adversity on individuals' experiences of posttraumatic growth. This study will begin to address these gaps in our understanding of the positive life changes that trauma survivors may experience.

Research Questions and Hypotheses

This chapter addresses the following four research questions: 1) What is the relationship, if any, between the type of trauma (i.e., sexual trauma, traumatic death,

chronic trauma, interpersonal violence, and/or domestic, dating, or family violence) experienced and the level of posttraumatic growth?; 2) What is the relationship, if any, between narrative coherence and posttraumatic growth?; 3) What is the relationship, if any, between cumulative adversity and posttraumatic growth?; and 4) Which components of cumulative adversity (i.e., the number of trauma types, total trauma frequency, number of major life event stressors, total life events stress, number of chronic stressors, total chronic stress, number of sexual harassment stressors, total sexual harassment stress, number of discrimination stressors, and total discrimination stress) have the greatest impact upon total levels of posttraumatic growth?

Due to the exploratory nature of these analyses, only two hypotheses were set forth: 1) Narrative coherence will be positively associated with posttraumatic growth (in accordance with Tedeschi and Calhoun's [2006] conceptual model, as well as empirical studies on narrative development in therapy); and 2) Cumulative adversity will have a curvilinear relationship with posttraumatic growth, such that individuals with moderate levels of cumulative adversity will experience a greater degree of posttraumatic growth than individuals with either low or high levels of cumulative adversity. I did not hypothesize that women would experience more growth than men among the young adults in this study because of the results of Vishnevsky et al.'s (2010) meta-analysis (in which gender differences in PTG decrease along with the average age of the sample).

METHODS

This article is one part of a larger project that examines the trauma recovery and posttraumatic growth among 46 young adults who might be considered the "success

stories" of trauma recovery. The sample was recruited from among the undergraduate and graduate students (and some recent graduates), of a large, public university in the Midwest United States. Additional information regarding the recruitment and screening of research participants, the data collection procedures, the management of the quantitative data, the handling of missing data, and the measures I took to protect the well-being and confidentiality of research participants may be found in Chapter 1.

The primary data for this chapter were collected via a demographics questionnaire and six, self-report, survey instruments that queried the research participants regarding their trauma histories, major (sub-trauma) life events, chronic stressors, experiences with sexual harassment, experiences with discrimination, and posttraumatic growth. The secondary sources of data are qualitative, life story interviews, which were conducted with each research participant.

Measures and Variables

Demographics Questionnaire

The demographics questionnaire queried research participants regarding such basic information as their age, gender, sexual orientation, ethnicity/race, marital/relationship status, level of education, religious involvement, paid employment, volunteer activities, household income, and parents' education (see Appendix C). Respondents were also asked if they consider themselves to be financially independent of their parent(s) or legal guardian.

Family household income refers to the current income of respondents' parent(s) or guardian. Occasionally, respondents differentiated between the separate incomes of

their divorced, separated, or never-married parents; in these cases, I took the average of the parents' current incomes.

In calculating socioeconomic status (SES), I differentiated between people who were or were not financially dependent upon their parent(s) or guardian, and between people who did or did not have a legal guardian. All education level and income variables were coded as ordinal, categorical variables with a range of 0 to 6. For people who were financially dependent upon their parent(s), none of whom had a guardian, I summed the average of both parents' educational levels and the family household income. For people who were financially independent of their parent(s) and who did not have a guardian, I summed the average of the mother's, father's and respondent's levels of education and the average of the family's and respondent's household incomes. For people who did have a guardian and who were financially independent of their parent(s)/guardian, I summed the average of the mother's, father's, guardian's, and respondent's levels of education and the average of the guardian's and respondent's household incomes. For the one respondent who only met her father once, had a deceased adoptive mother, had a guardian, and was financially independent of her guardian, I summed the average of the adoptive mother's, guardian's, and respondent's levels of education and the average of the guardian's and respondent's household incomes. And for the one respondent who did not know his father and who was financially independent of his mother, I summed the average of the mother's and respondent's levels of education and the average of the mother's and respondent's household incomes. These calculations yielded total SES scores ranging from 1 to 11.

Due to small cell sizes, the race/ethnicity variable was collapsed to create a binary variable differentiating Caucasian respondents from non-Caucasian respondents.

Posttraumatic Growth

The Posttraumatic Growth Inventory (PTGI; Tedeschi & Calhoun, 1996) is a 21-item survey that assesses trauma survivors' experiences of posttraumatic growth in different areas of their lives. This survey is the most commonly used instrument to assess positive life changes in the aftermath of traumatic life events. Items include such statements as "I established a new path for my life," "I discovered that I'm stronger than I thought I was," and "I'm more appreciative of each day." Respondents indicate the degree to which each positive change occurred in their lives as a result of their traumatic experience(s) on a 6-point Likert scale ranging from 0 ("I did not experience this change") to 5 ("I experienced this change to a very great degree").

Tedeschi and Calhoun (1996) identified five major domains of growth, which are reflected in the subscales of this instrument: 1) greater appreciation of life and changed sense of priorities; 2) warmer, more intimate relationships with others; 3) a greater sense of personal strength; 4) recognition of new possibilities or paths for one's life; and 5) spiritual development. Although the PTGI yields both a total score and five subscale scores, this chapter uses only the total posttraumatic growth score as the dependent variable of interest.[6] In the current study, the internal consistency (α) of the PTGI total

[6] Exploratory factor analysis, with this sample, did not produce the same five factors found by Tedeschi and Calhoun (1996). This information, combined with low internal reliability coefficients within two of the factors, led to the decision to not use the subscale scores (and, thus, to focus solely upon the total PTGI score).

score was .90, which is equal to that reported by Tedeschi and Calhoun (1996) with their undergraduate student sample.

Trauma History

The Stressful Life Events Screening Questionnaire (SLESQ) is a 13-item trauma history screening measure, developed by Goodman, Corcoran, Turner, Yuan, and Green (1998), that is designed to assess lifetime trauma exposure. The SLESQ is a self-report measure, created for use with non-treatment seeking samples, whose psychometric properties have been successfully tested with college students (Goodman et al., 1998). The SLESQ contains a cluster of questions regarding twelve specific types of traumas (e.g., a life-threatening accident, forced sex, being threatened with a weapon), along with two additional questions that give respondents the opportunity to describe other traumatic experiences not already covered in the survey, as well as traumas that they have experienced more than once. After querying respondents regarding whether or not they have experienced a particular form of trauma, the survey contains trauma-specific follow-up questions, such as the respondent's age at the time of trauma, the number of perpetrators, the duration of the trauma, the number of times the trauma occurred, injuries received, and brief descriptions of the trauma. Because this survey resembles a checklist of potential traumas, it is not possible to calculate the internal consistency of the instrument.

Information regarding research participants' trauma histories was also obtained from the life story interviews. After listening to each interview audio file, I completed a trauma coding rubric (see Appendix G) that lists 20 types of traumatic events and has

spaces to write-in additional types of trauma. Using this rubric with each interviewee, I recorded each type of trauma experienced, the age at which each trauma began, the age at which each trauma ended (if applicable), and the frequency of each trauma. At the end of the rubric, I summed the number of different types of traumatic events the participant experienced, along with the total frequency of trauma (i.e., the sum of the frequency of each trauma type). I also calculated the number of months that had passed between the end of the most recent trauma and the time of the interview.

The use of mixed methods in establishing research participants' trauma histories proved important because individuals frequently described traumatic experiences during their interviews that were not listed on their SLESQ surveys. On occasion, research participants' SLESQ responses likewise provided information lacking in their interviews. For example, when interviewing the individuals with the highest trauma frequencies, there was often not enough time to ask detailed questions regarding every traumatic event that they had experienced. Thus, together, the SLESQ and the interviews provided a more complete "picture" regarding research participants' trauma histories than either method alone.

Five, binary variables were created in order to examine the effect of trauma type upon total posttraumatic growth. These variables do not cover every possible type of trauma but, instead, were chosen to explore important theoretical questions regarding the impact of sexual traumas, traumatic deaths, chronic traumas, violence perpetrated by a loved one, and any form of interpersonal violence. The five type of trauma variables are not mutually exclusive.

The sexual trauma variable categorizes respondents regarding whether or not they have experienced one or more types of sexual trauma—including child sexual abuse, unwanted sexual touching, and attempted or completed forced sex. The traumatic death variable categorizes respondents regarding whether or not their traumatic experience(s) involved one or more deaths.[7] The chronic trauma variable differentiates respondents who have or have not experienced one or more traumas that involved a relatively consistent exposure to harm or threat of harm for a period of time greater than one month. The dating/domestic/family violence (DV/FV) variable categorizes respondents regarding whether or not they have experienced or witnessed one or more forms of violence perpetrated by a family member or intimate partner. This category includes individuals who, as children, witnessed domestic violence between their parents or who experienced child physical and/or sexual abuse (perpetrated by a family member), as well as individuals who experienced dating violence as adolescents or as adults. The interpersonal violence variable differentiates respondents who have or have not experienced, witnessed, or been closely impacted by one or more forms of physical or sexual violence, by any perpetrator. This category includes all forms of DV/FV, while also incorporating violence perpetrated by acquaintances and strangers (e.g., muggings, car-jackings, gang shootings, etc.).

Major (Sub-Trauma) Life Event Stressors

The Life Events Checklist (LEC) is an inventory of 42 major, but not usually traumatic, life events (see Appendix D). I constructed this measure, drawing upon items

[7] With rare exception, the deaths of grandparents were not counted as traumas because these deaths were typically anticipated, preceded by long periods of decline, and not caused by accident, suicide, or homicide.

from the Life Events section of Turner, Wheaton, and Lloyd's (1995) Social Stress Indicators, Taylor and Turner's (2002) Measures of Stress Exposure, Sarason, Johnson, and Siegel's (1978) Life Experiences Survey, Holmes and Rahe's (1967) Social Readjustment Rating Scale, McCubbin, Patterson, and Wilson's (1982) Family Inventory of Life Events and Changes, and Grochowsky and McCubbin's (1987) Young Adult Family Inventory of Life Events and Changes. I adapted items, as needed, to make them applicable in, and relevant to, the lives of undergraduate and graduate students.

Respondents are queried about having experienced such life events as a "divorce or legal separation," a "major change of residence," "receiving welfare or other form of public assistance," and being the "victim of a non-violent crime" at any point during their lives. Respondents specify if the event happened to them or to someone close to them (i.e., "to you, to a close family member, or to a close friend or romantic partner"), and they are asked to indicate on a 5-point Likert scale how stressful this event was for them (0 = "Not at all stressful"; 4 = "Extremely stressful"). Because this survey is a checklist of potential life events, it is not possible to calculate the internal consistency of the instrument.

In order to reduce collinearity with, and double-counting between, life event and traumatic stressors, I discarded two items on the Life Events Checklist: the question asking if the respondent had personally experienced an abortion or miscarriage (i.e., item #19), and the question asking if the respondent had personally been the victim of a violent crime (i.e., item #25). In addition, item number 23 ("Involved in injury-causing accident") was discarded due to its redundancy with item number 9 ("Major illness or injury"). I decided to keep the question (i.e., #27) that asks respondents regarding the

death of a close family member, romantic partner, or close friend because many deaths in respondents' lives were not considered traumatic and would not be reported in response to any other survey item; however, some double-counting, regarding traumatic deaths, undoubtedly occurred.

The number of life events variable refers to the number of different life events on the survey that respondents identified as having happened to themselves, to a close family member, or to a close friend or romantic partner (while they were in a relationship with them). The total life events stress variable refers to the sum of the stressfulness ratings for each life event the respondent experienced.

Chronic Stressors

The Chronic Stress Survey (CSS) is a 41-item measure of ongoing or recurring sources of non-traumatic stress that individuals may experience in a variety of life domains (see Appendix E). Chronic stress is defined as stressors that have either occurred for six or more months or on six or more occasions during the respondent's lifetime.

I constructed this measure, drawing upon items from the Chronic Stress section of Turner, Wheaton, and Lloyd's (1995) Social Stress Indicators, Towbes and Cohen's (1996) College Chronic Life Stress Survey, Kohn, Lafreniere, and Gurevich's (1990) Inventory of College Students' Recent Life Experiences, DeLongis, Folkman, and Lazarus' (1988) Hassles and Uplifts Scale, Crandall, Preisler, and Aussprung's (1992) Undergraduate Stress Questionnaire, and Seidman et al.'s (1995) Social Support

Microsystem Scale. I adapted items, as needed, to make them applicable in, and relevant to, the lives of undergraduate and graduate students.

Sample items of the Chronic Stress Survey include: "Your housing or neighborhood is/was noisy, dirty, polluted, or overcrowded," "You have/had difficulties associated with your sexual orientation," and "You have/had conflict or a poor relationship with your parent(s) or other family member(s)." For each chronic stressor experienced, respondents are asked to rate, on a 5-point Likert scale, how stressful this experience was for them, ranging from 1 ("I experienced this situation, but it was not at all stressful for me") to 5 ("This situation was extremely stressful for me"). The internal consistency (α) of the Chronic Stress Survey total score was .81.

The number of chronic stressors variable refers to the number of different chronic stressors on the survey that a respondent experienced for six or more months or on six or more occasions. The total chronic stress variable is the sum of the stressfulness ratings of each stressor the respondent experienced.

Sexual Harassment Stressors

The Sexual Harassment Survey (SHS) is a slightly modified version of the measure developed by the American Association of University Women (Hill & Silva, 2005) for use during their recent national survey of undergraduate students. This 15-item measure queries respondents regarding how often they have experienced various forms of unwanted and unwelcome sexual behavior (i.e., "Never," "Once," "2-3 times," "4-9 times" or "10 or more times" [numerically coded as 0, 1, 2.5, 6.5, and 10, respectively]), and how stressful each experience was for them (i.e., "Not at all stressful," "Somewhat

stressful," "Moderately stressful," "Very stressful," or "Extremely stressful" [numerically coded as 0, 1, 2, 3, and 4, respectively]). Sample items include: "[Someone] showed, gave, or left me sexual pictures, photographs, web pages, illustrations, messages, or notes," and "[Someone] touched, grabbed, or pinched me in a sexual way." In this sample, the internal consistency (α) of the total frequency subscale was .70, while the total stressfulness subscale had an internal consistency of .71.

In order to reduce collinearity with, and double-counting between, sexual harassment and traumatic stressors, I discarded one item on this survey: the question asking respondents if anyone has ever "Forced [them] to do something sexual, other than kissing" (i.e., #15).

The number of sexual harassment stressors variable refers to the number of different types of sexual harassment stressors that respondents had experienced. The total amount of sexual harassment stress was calculated by multiplying the frequency of each stressor by the stressfulness of each stressor; the product of each item was then summed.

Discrimination Stressors

The Major and Everyday Discrimination Questionnaire is a slightly modified version of the measure developed by Williams, Yu, Jackson, and Anderson (MEDQ; 1997).[8] This 20-item measure queries respondents regarding the unique challenges and assorted forms of discrimination that individuals may have experienced as a result of various aspects of their social identities. Sample items regarding major discrimination

[8] See also the Appendix in Krieger et al. (2005) for a copy of the full Williams et al. (1997) measure.

and everyday discrimination, respectively, include: "You were unfairly stopped, searched, questioned, physically threatened, or abused by the police," and "You have been treated with less respect, in your day-to-day life, than other people." This survey asks respondents how often they have experienced various forms of "unfair treatment" (i.e., "Never," "Once," "2-3 times," "4-9 times" or "10 or more times" [numerically coded as 0, 1, 2.5, 6.5, and 10, respectively]), has them indicate what they believe to be the main reason for each of these unfair experiences (e.g., their gender, race/ethnicity, age, religion, height or weight, shade of skin color, sexual orientation, education or income level, physical disability, or "other"), and then asks respondents to rate the stressfulness of each of these forms of discrimination (i.e., "Not at all stressful," "Somewhat stressful," "Moderately stressful," "Very stressful," or "Extremely stressful" [numerically coded as 0, 1, 2, 3, and 4, respectively]). This measure has been psychometrically validated among both African American and White respondents (Barnes et al., 2004). In this sample, the internal consistencies (α) of the MEDQ total frequency subscale and total stressfulness subscale were .72 and .70, respectively.

The number of discrimination stressors variable refers to the number of different types of discrimination stressors that respondents had experienced. The total amount of discrimination stress was calculated by multiplying the frequency of each stressor by the stressfulness of each stressor; the product of each item was then summed.

Narrative Coherence

The second in-person meeting with each research participant involved an in-depth, semi-structured, life story interview. The interview schedule drew upon several

questions from McAdams' (1993) Life Story Interview, while also querying research participants regarding their traumatic experience(s), posttraumatic growth, social support, coping strategies, internal resources, external resources, and use of social services (see Interview Protocol, Appendix B).

In order to investigate the relationship between post-trauma narrative development and posttraumatic growth, I created a variable that depicts interviewees' total narrative coherence. To do this, I rated each trauma survivor's narrative on a 5-point Likert scale (ranging from 1 to 5) regarding the following five dimensions of narrative coherence: 1) The narrator articulates a continuous and detailed storyline, without constant prompting, regarding her/his life before, during, and after the trauma(s); 2) The narrator's life story is intelligible, organized, and makes logical sense; 3) The narrator articulates a clear sense of self before and after the trauma(s)—aware of both the continuity and change of the self; 4) The narrator has incorporated the trauma(s) into her/his worldview or belief system; and 5) The narrator has incorporated the trauma(s) into her/his vision of the future (see Narrative Coherence Coding Rubric, Appendix H). This resulted in total scores ranging from 5 to 25. (For more information regarding the construction of the narrative coherence variable, see Chapter 3.)

Survivor Mission

I also used the interview transcripts to categorize interviewees regarding the current presence or absence of a survivor mission in their lives. Herman (1992) coined the term "survivor mission" to describe the attitudes and behaviors of trauma survivors who "transform the meaning of their personal tragedy by making it the basis for social

action" (p. 207). Individuals with a survivor mission strive to use their traumatic experiences to help others facing similar circumstances. Interviewees were categorized as having a survivor mission if they discussed either of the following: 1) their current involvement in activities aimed at helping—directly or indirectly—other trauma survivors; or 2) their desire, intentions, or future plans to help—directly or indirectly—other trauma survivors. (For more information regarding the construction of the survivor mission variable, see Chapter 4.)

Cumulative Adversity

I calculated cumulative adversity using two different methods in order to compare the results. The first cumulative adversity variable, which I refer to as the "simple counts" variable, was calculated by summing the standardized scores (i.e., z-scores) of the following five variables: the number of trauma types, the number of life event stressors, the number of chronic stressors, the number of sexual harassment stressors, and the number of discrimination stressors. Standardized scores were used in order to give equal weight to the five different components of cumulative adversity.

The second cumulative adversity variable, which I refer to as the "stress-frequency" variable, was calculated by summing the standardized scores of the following five variables: the total trauma frequency, the total life events stress, the total chronic stress, the total amount of sexual harassment stress, and the total amount of discrimination stress. Once again, standardized scores were used in order to give equal weight to the five different components of cumulative adversity.

Two additional variables were created in order to examine the impact of sub-trauma cumulative adversity: sub-trauma adversity ("simple counts") and sub-trauma adversity ("stress-frequency"). These two variables were calculated using the same methods as their cumulative adversity counterparts, except that these variables do not include the trauma component and, thus, have only four, equally-weighted components.

Statistical Analyses

Bivariate correlations of all variables of interest in this chapter were analyzed by using Pearson product-moment correlations (see Appendix F). Independent-sample, two-tailed t-tests (for samples with equal variances) were used to examine the relationships between posttraumatic growth and the binary independent variables. Bivariate analyses (i.e., regressions and Pearson product-moment correlations), t-tests, and multivariate analyses (including hierarchical regressions) were conducted to explore the relationships between posttraumatic growth and the demographic variables, type of trauma variables, time-related variables, receiving trauma-related therapy, the level of narrative coherence, having a survivor mission, the sub-trauma adversity variables, the cumulative adversity components, and the composite cumulative adversity variables. Multiple regression analyses, using quadratic equations, were also used to test for curvilinear relationships between posttraumatic growth and the cumulative adversity components and the composite cumulative adversity variables. Finally, hierarchical regression models were utilized to investigate the relative importance of the various components of cumulative adversity (i.e., the number of trauma types, total trauma frequency, number of major life event stressors, total life events stress, number of chronic stressors, total chronic stress,

number of sexual harassment stressors, total sexual harassment stress, number of discrimination stressors, and total discrimination stress) and to examine the unique contribution of each of the four most important components of cumulative adversity.

RESULTS

Participant Characteristics

Of the forty-six research participants, there were 28 women (61%) and 18 men (39%). Twenty-eight individuals (61%) identified as non-Hispanic white, six (13%) as African American or Black, five (11%) as Asian or Asian American, five (11%) as bi- or multi-racial, one (2%) as Hispanic, and one (2%) as "Other." Participants ranged from 18 to 30 years of age (M = 21.48, SD = 2.41). Seven individuals (15%) were undergraduate freshman or sophomores, 21 (46%) were undergraduate juniors or seniors, nine (20%) had recently graduated from college, eight (17%) were in graduate school, and one (2%) had recently graduated from a master's program.

There was economic diversity among research participants. Five (11%) respondents came from families with current, annual household incomes less than $25,000, eight (18%) had household incomes between $25,000 and $50,000, sixteen (35%) had household incomes between $50,000 and $100,000, thirteen (28%) had household incomes between $100,000 and $200,000, and four (9%) had household incomes greater than $200,000 per year. Table 2.1 describes these and other demographic characteristics of the sample.

As shown in Table 2.2, approximately one-fourth of the research participants experienced their first (or only) traumatic event at five years of age or younger, and over

half of the sample (52%) experienced one or more traumas before their eleventh birthdays. Only six research participants (13%) reached adulthood prior to experiencing their first trauma.

Approximately one-fifth of the sample had experienced one type of trauma (e.g., child physical abuse, natural disaster), approximately one-fourth had experienced two trauma types, and 52% had experienced three or more different types of trauma. The average number of trauma types experienced by this sample was 3.26 (*SD* = 2.11). More than one-third of research participants (37%) had experienced one or more sexual traumas (e.g., child sexual abuse, rape), half had experienced one or more traumatic deaths (e.g., through suicide, accident, homicide), 59% had experienced one or more chronic traumas, nearly half (48%) had experienced one or more forms of dating, domestic, and/or family violence, and 65% experienced one or more traumas involving interpersonal violence.

With regard to trauma frequency, 17% of the sample had experienced one traumatic incident (i.e., the total frequency of all traumas) and 22% had experienced two or three traumatic incidents; on the other end of the spectrum, a full 22% of research participants had experienced more than 20 separate incidents of trauma. The average total trauma frequency experienced by this sample was 12.14 (*SD* = 12.98).

The majority of the sample (67%) had not experienced a traumatic event within the year prior to their participation in the study, and 20% of the sample had not experienced a trauma within the past five years. More than half of the research participants (59%) had received at least one session of trauma-related therapy with a

social worker, psychologist, psychiatrist, or other therapist during their childhood and/or adulthood.

Overall, as shown in Table 2.3, the research participants had experienced substantial numbers of major life event stressors, chronic stressors, sexual harassment stressors, and discrimination stressors. The average number of major life event stressors experienced by the sample was 18.48 (*SD* = 7.86), the average number of chronic stressors was 18.76 (*SD* = 4.97), the average number of sexual harassment stressors was 4.96 (*SD* = 2.91), and the average number of discrimination stressors was 5.85 (*SD* = 3.37). Over half of the sample had moderate levels of narrative coherence (54%), and the average narrative coherence score was 17.24 (*SD* = 4.37). A sizeable minority of the research participants (41%) had a survivor mission.

Characteristics of Posttraumatic Growth

The average total score on the Posttraumatic Growth Inventory (PTGI) was 57.49 (*SD* = 20.83), and scores ranged from a low of 12 to a high of 105. The distribution of scores was approximately normal, unimodal, and not skewed. Of the twenty-one items on the PTGI, the five items with the highest scores across the sample were "I am more certain that I can handle difficulties" (*M* = 4.00, *SD* = 1.19), "My priorities about what is important in life changed" (*M* = 3.72, *SD* = 1.11), "I discovered that I'm stronger than I thought I was" (*M* = 3.61, *SD* = 1.45), "I have an increased appreciation for the value of my own life" (*M* = 3.48, *SD* = 1.38), and "I have a greater feeling of self-reliance" (*M* = 3.39, *SD* = 1.74). The two items on the PTGI that respondents least identified with, on average, were "I have a stronger religious faith" (*M* = 1.48, *SD* = 1.97) and "New

opportunities are available to me which wouldn't have been otherwise" (M = 1.85, SD = 1.87).

Relation of Demographic, Trauma Type, and Time-Related Variables to Posttraumatic Growth

Analyses were conducted to examine the relationships between posttraumatic growth and demographic, trauma type, and time-related variables. As shown in Tables 2.4 and 2.5, the demographic variables did not have a statistically significant impact upon total posttraumatic growth scores in this sample. Gender, race/ethnicity, socioeconomic status, relationship status, being religious/spiritual, and age were not found to have a statistically significant relationship with posttraumatic growth.[9]

With regard to the type of trauma, individuals who experienced a sexual trauma reported higher levels of posttraumatic growth than those who did not, $t(44) = 1.73$, and this difference approached statistical significance ($p = .09$, two-tailed test; $r = .25$). There was no statistically significant relationship between posttraumatic growth and experiencing a traumatic death, chronic trauma, or dating, domestic, and/or family violence. When the total trauma frequency was held constant, individuals who experienced or witnessed interpersonal violence reported significantly lower levels of posttraumatic growth than participants who did not experience any form of interpersonal violence ($b = -14.05$, $t(43) = -2.03$, $p = .05$).

There was a significant relationship between posttraumatic growth and survivors' age at the time of their first traumatic experience, with individuals who experienced

[9] However, when the oldest individual (i.e., age = 30 years) in the sample was removed from the analyses, age became significant ($b = 3.42$, $t(43) = 2.36$, $p = .02$).

trauma at younger ages reporting higher levels of posttraumatic growth (r = -.34, p = .02); this relationship became statistically insignificant, however, when total trauma frequency or cumulative adversity were held constant. The number of months that had passed since participants' most recent trauma ended was a significant predictor of posttraumatic growth, once cumulative adversity was held constant (b = 0.18, $t(43)$ = 2.02, p = .05).

Relation of Trauma-Related Therapy, Narrative Coherence, and Survivor Missions to Posttraumatic Growth

Analyses were conducted to examine the relationships between posttraumatic growth and receiving trauma-related therapy, total narrative coherence, and having a survivor mission. As shown in Tables 2.4 and 2.5, individuals who had a survivor mission reported significantly higher levels of posttraumatic growth, $t(44) = 3.66$, $p <$ .001 (r = .48), and this association remained significant when controlling, separately, for demographic variables, time-related variables, the type of trauma, and cumulative adversity. Trauma survivors who received trauma-related therapy and those who did not receive such therapy did not experience significantly different levels of posttraumatic growth.

As hypothesized, narrative coherence was positively associated with posttraumatic growth (r = .42, p = .004). This positive association remained significant when controlling, separately, for demographic variables, time-related variables, the type of trauma, and cumulative adversity.

Relation of Demographic Variables to Cumulative Adversity

Pearson product-moment correlations were used to examine the relationship between the demographic variables and the (stress-frequency) cumulative adversity variable (see Appendix F). Women experienced significantly more cumulative adversity than men, $r = -.37$, $p = .01$. Non-Caucasian respondents also experienced more cumulative adversity than Caucasians, and this association approached statistical significance, $r = -.25$, $p = .09$. Socioeconomic status (SES) did not have a statistically significant relationship with cumulative adversity. However, SES was moderately and significantly associated with experiencing a chronic trauma ($r = -.49$, $p = .001$), experiencing dating, domestic, and/or family violence (DV/FV; $r = -.41$, $p = .005$), and the age at first trauma ($r = .43$, $p = .003$). Specifically, individuals with lower SES were more likely to experience a chronic trauma and more likely to experience DV/FV, and they experienced their first trauma at younger ages.

These variables (i.e., experiencing a chronic trauma, experiencing DV/FV, and age at first trauma), in turn, were significantly associated with the (stress-frequency) cumulative adversity variable. Individuals who experienced a chronic trauma experienced significantly more cumulative adversity than respondents who did not experience a chronic trauma, $r = .54$, $p < .001$. Individuals who experienced dating, domestic, and/or family violence experienced more cumulative adversity than respondents who did not experience DV/FV, $r = .60$, $p < .001$.[10] And respondents' age at

[10] To determine if the two prior correlations (i.e., between cumulative adversity and chronic trauma and between cumulative adversity and DV/FV) were merely a function of the trauma component of cumulative adversity, I did additional correlational analyses using the "sub-trauma adversity" composite variable (which does *not* contain a trauma component). Individuals who experienced a chronic trauma experienced significantly more sub-trauma adversity than respondents who did not experience a chronic trauma, $r = .44$, $p = .002$. Similarly, individuals who experienced dating, domestic, and/or family violence experienced more sub-trauma adversity than respondents who did not experience DV/FV, $r = .51$, $p < .001$. Sub-trauma adversity is significantly correlated with posttraumatic growth, $r = .50$, $p < .001$.

first trauma was negatively correlated with cumulative adversity, $r = -.65$, $p < .001$, such that individuals who experienced their first trauma at younger ages experienced more cumulative adversity.

Relation of Cumulative Adversity Components and Composite Variables to Posttraumatic Growth

Analyses were conducted to test the hypothesis that there is a curvilinear relationship between cumulative adversity and posttraumatic growth, such that individuals with moderate levels of cumulative adversity experience higher levels of growth than either individuals with the lowest or the highest levels of cumulative adversity. This hypothesis was not supported. As shown in Table 2.5, cumulative adversity (and each of its components) was positively associated with posttraumatic growth and this relationship was linear. Multivariate regression analyses, using quadratic equations, testing for a curvilinear relationship between each of the components of cumulative adversity (i.e., the number of trauma types, the total trauma frequency, the number of life event stressors, the amount of life event stress, the number of chronic stressors, the amount of chronic stress, the number of sexual harassment stressors, the amount of sexual harassment stress, the number of discrimination stressors, and the amount of discrimination stress) and posttraumatic growth , and between the two composite cumulative adversity variables (i.e., the "simple counts" and "stress-frequency" measures) and posttraumatic growth, did not yield support for a curvilinear relationship.

With regard to trauma, both the number of trauma types and the total trauma frequency significantly predicted levels of posttraumatic growth, with individuals who

experienced greater numbers of trauma types ($r = .29$, $p = .05$) and greater total trauma frequency ($r = .33$, $p = .02$) experiencing more growth. The positive association between posttraumatic growth and total trauma frequency (but not between PTG and the number of trauma types) remained significant when controlling, separately, for demographic variables, most type of trauma variables, the time since the most recent trauma, and receiving trauma-related therapy. The positive association between posttraumatic growth and total trauma frequency became statistically insignificant when controlling for age at first trauma or for individuals having experienced a sexual trauma.

The number of life events stressors was not significantly related to posttraumatic growth, but total life events stress was positively associated with higher posttraumatic growth, and this relationship approached statistical significance ($p = .08$).

With regard to chronic stress, both the number of chronic stressors and the total amount of chronic stress significantly predicted levels of posttraumatic growth, with individuals who experienced greater numbers of chronic stressors ($r = .43$, $p = .003$) and greater total chronic stress ($r = .50$, $p < .001$) experiencing more growth. These positive associations remained significant when controlling, separately, for demographic variables, time-related variables, and the type of trauma.

The number of sexual harassment stressors was not significantly related to growth. However, the total amount of sexual harassment stress was positively associated with posttraumatic growth ($r = .44$, $p = .002$), and this relationship remained significant when controlling, separately, for demographic variables, time-related variables, and the type of trauma.

With regard to major and everyday discrimination, the number of discrimination stressors was not significantly related to growth. However, the total amount of discrimination stress was positively associated with higher posttraumatic growth, and this relationship approached statistical significance ($r = .28$, $p = .06$).

As discussed earlier in this chapter, two composite cumulative adversity variables were used in these analyses—the "simple counts" variable and the "stress-frequency" variable. During bivariate analysis, both composite cumulative adversity variables significantly predicted levels of posttraumatic growth, with individuals who experienced higher counts of the cumulative adversity components ($r = .30$, $p = .04$) and greater amounts of stress/frequency within the cumulative adversity components ($r = .50$, $p < .001$) reporting higher levels of posttraumatic growth. However, the association between posttraumatic growth and the "simple counts" cumulative adversity variable weakened when gender, age, receiving therapy, or several type of trauma variables were held constant, and the relationship became statistically insignificant when controlling for age at first trauma or having experienced a sexual trauma. This contrasts with the association between posttraumatic growth and the "stress-frequency" cumulative adversity variable, which remained significant when separately controlling for the demographic, time-related, and type of trauma variables.

The Relative Importance of the Various Components of Cumulative Adversity

Two series of nested regression models, using hierarchical regressions, were used to examine the relative importance of each of the five components of both composite cumulative adversity variables in explaining posttraumatic growth. Specifically, one

series of five nested models explored whether or not a model containing all five of the "simple count" components of cumulative adversity explained significant additional information about total posttraumatic growth beyond that which was explained by the other four "simple count" components of cumulative adversity (rotating which of the five components was omitted from the reduced model). A second series of five nested models investigated whether or not a model containing all five of the "stress-frequency" components of cumulative adversity explained significant additional information about total posttraumatic growth beyond that which was explained by the other four "stress-frequency" components of cumulative adversity (again rotating which of the five components was omitted from the reduced model).[11]

As shown in Table 2.6, the full "simple counts" model did not represent a statistically significant improvement over the reduced models that omitted the number of trauma types, the number of life event stressors, or the number of sexual harassment stressors. However, when comparing the reduced model that omitted the number of chronic stressors with the full model, the full model did explain significant additional information about total posttraumatic growth, $F(1, 40) = 9.08$, $p = .005$. Similarly, when comparing the reduced model that omitted the number of discrimination stressors with the full model, the full model did explain significant additional information about total PTG, and this contribution approached statistical significance, $F(1, 40) = 3.03$, $p = .09$.

[11] It is important to note that the F tests conducted with these nested models are the same statistical tests that would determine if the increases in R-squared (between the reduced and full models) were statistically significant. However, due to the risk of over-fitting the models (and, thus, inflating the R-squared values) when five to six parameters were included in the hierarchical regressions (Harrell, 2001), I have not reported the changes in R-squared.

As shown in Table 2.7, the full "stress-frequency" model did not represent a statistically significant improvement over the reduced models that omitted the total trauma frequency, the total life events stress, or the total discrimination stress. However, when comparing the reduced model that omitted the total chronic stress with the full model, the full model did explain significant additional information about total posttraumatic growth, $F(1, 40) = 6.92$, $p = .01$. Similarly, when comparing the reduced model that omitted the total sexual harassment stress with the full model, the full model contributed important additional information about total PTG, and this contribution approached statistical significance, $F(1, 40) = 3.65$, $p = .06$.

Hierarchical regression was used to examine the unique contribution (i.e., unique variance or semi-partial R^2) of each of the four most important components of cumulative adversity (i.e., the number of chronic stressors, the amount of chronic stress, the amount of sexual harassment stress, and the number of discrimination stressors).[12] Since the number of chronic stressors and the amount of chronic stress could not be included in the same regression model due to collinearity ($r = .84$), two sets of hierarchical regressions were used: one that included the number of chronic stressors variable and one that included the amount of chronic stress variable.

Tables 2.8, 2.9, and 2.10 show the proportion of variance in total posttraumatic growth that was explained by the number of discrimination stressors, the amount of sexual harassment stress, and the number of chronic stressors, respectively, when controlling for the other two variables. By rotating which of the variables was entered in the final step of the analysis, it was determined that the number of discrimination

[12] These were the variables that were statistically significant (or almost significant) in the nested F test analyses performed earlier in this section.

stressors accounted for 6% of the variance in total posttraumatic growth, $F(1, 42) = 3.62$, $p = .06$, the amount of sexual harassment stress accounted for 12% of the variance, $F(1, 42) = 7.72$, $p = .01$, and the number of chronic stressors accounted for 17% of the variance, $F(1, 42) = 10.98$, $p = .002$. Together, these three variables accounted for 36% of the total variance in posttraumatic growth.

Similar analyses were conducted to investigate the proportion of variance in total posttraumatic growth that was explained by the number of discrimination stressors, the amount of sexual harassment stress, and the total amount of chronic stress, when controlling for the other two variables (not shown). By rotating which of the variables was entered in the final step of the analysis, it was determined that the number of discrimination stressors accounted for 3% of the variance in total posttraumatic growth, $F(1, 42) = 2.07$, $p = .16$, the amount of sexual harassment stress accounted for 6% of the variance, $F(1, 42) = 4.09$, $p = .05$, and the total chronic stress accounted for 16% of the variance, $F(1, 42) = 10.58$, $p = .002$. Together, these three variables accounted for 35% of the total variance in posttraumatic growth.

Because of the relatively small sample size in this study, it was not advisable to control for additional variables in these analyses, due to the risk of over-fitting the models (Harrell, 2001).

DISCUSSION

This sample of highly educated young adults experienced substantial amounts of trauma (both in terms of numbers of trauma types and total trauma frequency), as well as sub-trauma adversity. Likewise, these trauma survivors also experienced a significant

amount of posttraumatic growth in many areas of their lives. Comparison with prior research reveals that the average total PTGI score in the present study of 57.49 is well within the range of commonly reported scores (Linley & Joseph, 2004), but is lower than that found in some student samples (e.g., Tedeschi & Calhoun, 1996).

Demographic variables were not significant predictors of total posttraumatic growth in this sample, which is consistent with the findings of many other empirical studies (Linley & Joseph, 2004; Stanton, Bower, & Low, 2006). Although several prior studies have found greater levels of posttraumatic growth among women (Curbow, Legro, et al., 1993; Park, Cohen, & Murch, 1996; Tedeschi & Calhoun, 1996) and among younger individuals (Bower et al., 2005; Lechner et al., 2003; Widows et al., 2005), the relationships between PTG and gender, and between PTG and age, were not statistically significant in this sample. The lack of a relationship between gender and posttraumatic growth among this sample of young adults is not surprising in light of the results of a recent meta-analysis demonstrating that gender differences (with women experiencing more PTG) increase with the average age of the sample (Vishnevsky et al., 2010). Thus, the limited (and young) age range of respondents, along with the relatively small sample size, may have contributed to the lack of statistically significant findings in this study.

With regard to the type of trauma, research participants who experienced one or more sexual traumas reported higher levels of posttraumatic growth than those whose traumatic experiences were not sexual in nature. Individuals who experienced or witnessed interpersonal violence reported lower levels of posttraumatic growth than persons whose traumas did not involve interpersonal violence, once the total trauma frequency was held constant; however, this finding should be interpreted cautiously.

Although few empirical studies have compared the levels of growth among different types of trauma survivors, past research suggests that greater levels of perceived stressfulness, threat, and harm are associated with higher levels of posttraumatic growth (Armeli et al., 2001; Bower et al., 2005; Cordova et al., 2001; Fontana & Rosenheck, 1998; Fromm et al., 1996, Lechner et al., 2003; McMillen et al., 1997). Further research is needed to clarify the relationship between the type of trauma and the subsequent level of posttraumatic growth.

Time-related variables were significant predictors of posttraumatic growth in this sample. Individuals who experienced their first trauma at younger ages reported higher levels of growth, but this relationship may be explained by their greater total trauma frequencies. There was also a positive correlation between the amount of time that had passed since respondents' most recent trauma ended and their level of posttraumatic growth, once the level of cumulative adversity was held constant. Although researchers in past studies of PTG have recruited respondents as soon as a few weeks (e.g., Salter & Stallard, 2004) and as late as several decades (e.g., Holgersen, Boe, & Holen, 2010) after the traumas occurred, no consistent relationship has emerged regarding the timing of the development of posttraumatic growth. It makes intuitive sense, however, that some amount of time and distance from the trauma is necessary in order for survivors to be able to reflect back upon their experiences and how their identities, beliefs, values, and relationships have been changed in the aftermath.

Having a survivor mission was positively correlated with posttraumatic growth. However, as I argue in Chapter 4, developing a survivor mission may be a form of posttraumatic growth, despite its not being explicitly measured by the PTGI. Although

there may be some amount of conceptual overlap between these two variables, it is, nonetheless, interesting to note that individuals who had a survivor mission reported total levels of posttraumatic growth that averaged a full 20 points higher (on the 105-point PTGI scale) than those reported by respondents who did not want or intend to use their traumatic experiences to help other trauma survivors ($r = .48$, $p < .001$).

As hypothesized, narrative coherence was also positively associated with posttraumatic growth. Although this study is, to my knowledge, the first to empirically examine the relationship between these two variables, this finding is consistent with Calhoun and Tedeschi's (2006) conceptual model of how posttraumatic growth occurs. Specifically, Calhoun and Tedeschi hypothesize that posttraumatic growth is facilitated by many factors, including rumination about the trauma and its aftermath, self-disclosure, schema change, and narrative development. It also makes intuitive sense that individuals who are able to tell a coherent story about their lives pre-, during, and post-trauma are in a better position to recognize the positive ways in which their selves and their lives have been changed as a result of their traumatic experience(s). While the temporal ordering of narrative reconstruction and the development of posttraumatic growth cannot be established using these cross-sectional data, I argue in Chapter 3 that the relationship between them is likely co-constitutive. Further analyses of the relationship between narrative coherence and posttraumatic growth, drawing largely upon the qualitative data, can be found in Chapter 3.

In this sample, women and non-Caucasians experienced significantly more cumulative adversity than men and Caucasians. Moreover, individuals with lower socioeconomic status experienced significantly more chronic trauma and dating,

domestic, and/or family violence, and they experienced their first traumas at younger ages; these variables, in turn, were associated with higher levels of cumulative adversity. Cumulative adversity, in turn, was positively and significantly correlated with posttraumatic growth (r = .50). To be clear, this study did *not* include analyses of possible moderating or indirect (i.e., mediational) effects that might link these demographic variables with PTG. Further research, with larger sample sizes, is needed to clarify these relationships. What *is* clear in these findings is that cumulative adversity was not randomly distributed throughout this sample but, rather, was disproportionately experienced by members of disadvantaged groups in society.

The data in this study do not support the hypothesis that there is a curvilinear relationship between posttraumatic growth and any of the various components of cumulative adversity or between posttraumatic growth and either composite measure of cumulative adversity. Instead, these data indicate a positive, linear relationship between posttraumatic growth and most of these variables. There are at least four possible explanations for this null finding: 1) There is a curvilinear relationship between at least some of these variables and PTG but this sample is simply too small for this to become apparent; 2) There is a curvilinear relationship between at least some of these variables and PTG but the screening criteria used in this study (i.e., that individuals be current students or recent graduates of a prestigious university, and that they self-identify as having grown or benefited from their traumatic experiences) largely excluded individuals who had both high levels of cumulative adversity and low levels of posttraumatic growth; 3) That the relationship between cumulative adversity and PTG, in the greater population of trauma survivors, is not curvilinear; or 4) That the measures used in this study may not

have the validity or reliability needed to detect a curvilinear relationship. Further research is clearly needed in this area.

With regard to the specific components of cumulative adversity, both the number of trauma types and the total trauma frequency were positively associated with posttraumatic growth. This is consistent with the work of several other researchers (Aldwin et al., 1994; Armeli et al., 2001; Bower et al., 2005; Cordova et al., 2001; Fromm et al., 1996, McMillen et al., 1997; Stanton et al., 2006), who have found that greater trauma severity is a significant predictor of higher levels of growth. Most of the other components of cumulative adversity measured in this study were also significantly (at least at the $p < .10$ level) and positively correlated with posttraumatic growth, including the total life events stress, the number of chronic stressors, the total amount of chronic stress, the total amount of sexual harassment stress, and the total amount of discrimination stress. The number of chronic stressors, the total amount of chronic stress, and the total amount of sexual harassment stress had especially high correlations with posttraumatic growth ($r = .43$, $r = .50$, and $r = .44$, respectively). In addition, both composite cumulative adversity variables were positively associated with posttraumatic growth.

There were differences, however, between the two composite cumulative adversity variables. In the bivariate analyses, the "stress-frequency" variable was more strongly correlated with posttraumatic growth than the "simple counts" variable ($r = .50$ and $r = .30$, respectively), and the "stress-frequency" variable accounted for far more of the variance in total posttraumatic growth scores than the "simple counts" variable ($R^2 = .25$ and $R^2 = .09$, respectively). In the multivariate analyses, when separately controlling

for demographic, time-related, and type of trauma variables, the "stress-frequency" variable—but not the "simple counts" variable—continued to be significantly associated with posttraumatic growth. This indicates that although several researchers (e.g., Turner, Wheaton, & Lloyd, 1995; Pimlott-Kubiak, 2005) have operationalized cumulative adversity as consisting of the combination of several "simple count" components (e.g., counts of trauma types, life events, and chronic stressors), it is important to examine the frequency and stressfulness of the various components of cumulative adversity. The "stress-frequency" method of calculating cumulative adversity is a significant improvement over "simple count" methods because it acknowledges that some forms of trauma and sub-trauma adversity may be repeatedly experienced, longer in duration, and/or more stressful or severe than others.

Finally, analyses regarding the relative importance of the various components of cumulative adversity revealed that it may not be necessary, in future research, to measure all of the components that were investigated in this study. Indeed, only four of the ten components made a significant ($p < .10$), unique contribution to the cumulative adversity models (listed in descending order of strength): the number of chronic stressors, the total amount of chronic stress, the total amount of sexual harassment stress, and the number of discrimination stressors. The total chronic stress component, in particular, appears to explain much (but not all) of the same variance in total posttraumatic growth as the number of discrimination stressors and the total sexual harassment variables.[13] It is also noteworthy that neither trauma variable (i.e., the number of trauma types and the total

[13] This was indicated by the decreased unique variances of the number of discrimination stressors and the total amount of sexual harassment stress variables when the total chronic stress variable was substituted for the number of chronic stressors variable in the hierarchical regressions depicted in Tables 2.8, 2.9, and 2.10.

trauma frequency) made a statistically significant contribution to the models, once the other components of cumulative adversity were held constant. This indicates that among a sample of individuals who have *all* experienced one or more traumas, sub-trauma components of cumulative adversity are more important predictors of total posttraumatic growth than the number of trauma types or the total trauma frequency.

There are several key points and implications that can be drawn from this study. First and foremost, cumulative adversity is a significant correlate of posttraumatic growth, with greater adversity—of various types and in assorted domains of life—being associated with more PTG. This statement should not, however, be read as an endorsement of trauma, adversity, and oppression. Indeed, as many researchers have documented, posttraumatic growth appears to be a phenomenon largely independent of various indices of psychological well-being (Antoni et al., 2001; Bower et al., 2005; Cordova et al., 2001; Curbow et al., 1993; Fromm et al., 1996; Sears et al., 2003; Schulz & Mohamed, 2004; Tomich & Helgeson, 2002; Widows et al., 2005). That is to say, the development of posttraumatic growth does not diminish the pain, loss, and psychological toll inflicted by traumatic events, and PTG may, in fact, co-exist with substantial distress. What this study does, however, highlight is the incredible resilience, resourcefulness, strength, and hard-won wisdom exhibited by many trauma survivors who, often as a result of their membership in oppressed groups in society, have faced a lot of adversity.

Second, with regard to the other end of the adversity spectrum, this study lends support to the idea that there may, indeed, be such a thing as too little adversity in an individual's life. In her article titled "The 'curse' of too good a childhood," Rando (2002) argues that individuals with an "overly positive" pre-trauma history may have

unique vulnerabilities, compared to their less-sheltered peers, and may subsequently experience profound disillusionment in the wake of traumatic events. Indeed, in this study, the trauma survivors who tended to experience the lowest levels of posttraumatic growth were those individuals who experienced the least amount of chronic stress, life event stressors, discrimination stressors, sexual harassment stressors, and overall cumulative adversity. As might be expected, the demographic groups of trauma survivors who had lower levels of cumulative adversity, compared to their peers, were the more privileged groups: men, Caucasians, and persons with higher socioeconomic status. Again, I am not lauding the virtues of gender, racial, economic, or sexual oppression. Rather, the message here is that privilege, combined with a relative absence of adversity, may leave individuals quite vulnerable to, and unprepared for, the full impact of trauma. As Janoff-Bulman (1985) asserts, "To the extent that particular assumptions [about the self, others, and the world] are held with extreme confidence and have not been challenged, they are more likely to be utterly shattered, with devastating results for the victim" (p. 23). In such cases, as this study demonstrates, individuals are unlikely to experience much posttraumatic growth.

Finally, although the experience of trauma is, by definition, a prerequisite for posttraumatic growth, sub-trauma adversity—such as chronic stress, experiences of discrimination, and experiences of sexual harassment—play a larger role than the number of trauma types or trauma frequency in the development of posttraumatic growth. In addition, as this study demonstrates, it is important to measure the frequency, severity, and stressfulness of the many components of cumulative adversity.

Limitations

There are a few methodological limitations of this study which should be considered when interpreting these results. First, the sample size in this study is relatively small. As a result, it was not possible (without over-fitting the models) to control for more than a few independent variables in any given regression. Moreover, the small size of the sample may also account for some of the non-statistically significant findings in the study. Subsequently, the null findings reported here should not necessarily be interpreted as a "real" lack of relationship between variables in the general population of trauma survivors.

Second, because this dissertation project was explicitly designed to explore the phenomenon of posttraumatic growth among a sample of young adults who, because of their educational accomplishments and self-identification of personal growth, might be considered the "success stories" of trauma recovery and posttraumatic growth, this sample is not necessarily representative of the larger population of trauma survivors. Future research is needed to determine whether or not the findings of this study may be generalized to populations of trauma survivors that are older, less privileged, less educated, and/or lower functioning.

Third, this study is subject to all of the limitations of research conducted with cross-sectional data. As discussed previously, the temporal ordering of certain variables—and, subsequently, causal relationships—cannot be determined using these data.

Fourth, as with any survey-based study, there are limitations based upon the instruments used to measure various variables. Specifically, the survey instruments on

posttraumatic growth, trauma, major (sub-trauma) life events, chronic stress, sexual harassment, and discrimination may fail to capture certain forms of stress or growth, or they may "double-count" certain stressors (despite my efforts to eliminate redundant items). In addition, the validity of the Life Events Checklist and the Chronic Stress Survey has not been established (although their reliability coefficients were acceptable).

Finally, there is a trade-off involved in taking into account the repeated and chronic nature of certain types of traumatic experiences (e.g., child physical abuse, domestic violence) when creating variables such as the "total trauma frequency." On the one hand, this is an improvement over "simple count" methods of using a checklist format for each trauma type because it acknowledges that there are differences in duration and severity between types of trauma and between individuals who have experienced the "same" type of trauma. For example, an individual who was physically abused on "only" one occasion is differentiated from an individual who suffered severe and pervasive abuse throughout her/his childhood. On the other hand, this calculation method gives greater weight to chronic traumas than to one-time traumatic events. Such weighting may or may not be justified. For example, should the individual who experienced physical dating violence on four occasions be counted as having experienced "more trauma" than the individual whose mother was killed in a car accident? In short, different calculation methods reflect implicit value judgments regarding which experiences should be counted and *how* they should be counted. There is simply no clear-cut, "best" method to quantify experiences of trauma.

Future Directions

Limitations notwithstanding, the findings of this study suggest several potentially fruitful areas for future research. First, researchers with larger and more representative samples of adult trauma survivors should investigate if there is a linear or curvilinear relationship between cumulative adversity (and all of its various components) and posttraumatic growth. Second, interesting questions remain regarding the impact of the type of trauma upon the development of posttraumatic growth. To best address these questions, researchers should consider designing studies that explicitly recruit and compare survivors of several different types of traumas (e.g., child abuse, domestic violence, life-threatening illness, natural disaster, life-threatening accident, etc.) who have *only* experienced that one type of trauma. Third, longitudinal research is needed to examine when and how posttraumatic growth develops, as well as whether it changes or even fades over time. Finally, in light of this study's finding that individuals with greater cumulative adversity experience higher levels of posttraumatic growth, more research is needed regarding how pre-trauma adversity may either serve to buffer individuals from the full brunt of trauma's effects or enable them to make more positive life changes in the aftermath. Moreover, it is unclear how much adversity is "enough" to foster resilience, and whether or not there are other means (e.g., through volunteer work or international travel) through which privileged individuals can obtain this type of resilience. Future research will undoubtedly yield valuable insights regarding these and other questions.

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Table 2.1: Demographic Characteristics of Research Participants

Variable	*n*	%
Gender		
Female	28	61
Male	18	39
Race/Ethnicity		
Caucasian	28	61
African American	6	13
Asian	5	11
Hispanic	1	2
Bi/Multi-Racial	5	11
Other	1	2
Family Household Income		
Less than $25,000	5	11
$25,000 - $49,999	8	17
$50,000 - $74,999	10	22
$75,000 - $99,999	6	13
$100,000 - $149,999	6	13
$150,000 - $199,999	7	15
$200,000 or More	4	9
Financially Independent		
Yes	20	43
No	26	57
Age		
18-20	16	35
21-23	23	50
24-26	6	13
27-30	1	2
Education Level		
Freshman or Sophomore	7	15
Junior or Senior	21	46
Recent College Graduate	9	20
In Graduate School	8	17
Recent Grad. School Graduate	1	2
Sexual Orientation		
Heterosexual	41	89
Lesbian, Gay, or Bisexual	5	11
Relationship Status		
Single	27	59
Dating/Engaged	19	41
Religious/Spiritual		
Yes	33	72
No	13	28
Currently Employed		
Yes	23	50
No	23	50
Currently Volunteer		
Yes	27	59
No	19	41

Table 2.2: Growth- and Trauma-Related Characteristics of Research Participants

Variable	*n*	%
Total Posttraumatic Growth		
0 - 34	7	15
35 - 70	26	57
71 - 105	13	28
Age at First Trauma		
0 - 5	12	26
6 - 10	12	26
11 - 17	16	35
18 or Older	6	13
Time Since (Most Recent) Trauma		
2 - 6 Months	7	15
6.5 - 11 Months	8	17
12 - 24 Months	13	28
More Than 2 Yrs, Less Than 5 Yrs	9	20
5 or More Years	9	20
# of Trauma Types Experienced		
1	10	22
2	12	26
3 - 4	13	28
5 or more	11	24
Total Trauma Frequency		
1	8	17
2 - 3	10	22
4 - 9	6	13
10 - 20	12	26
More Than 20	10	22
Experienced a Sexual Trauma		
Yes	17	37
No	29	63
Experienced a Traumatic Death		
Yes	23	50
No	23	50
Experienced a Chronic Trauma		
Yes	27	59
No	19	41
Experienced DV/Family Violence		
Yes	22	48
No	24	52
Experienced Interpersonal Violence		
Yes	30	65
No	16	35
Received Trauma-Related Therapy		
Yes	27	59
No	19	41

Table 2.3: Sub-Trauma Adversity, Narrative Coherence, and Survivor Missions of Research Participants

Variable	*n*	%
# of Major Life Event Stressors		
8 - 12	10	22
13 - 20	21	46
More Than 20	15	33
# of Chronic Stressors		
8 - 15	11	24
16 - 20	15	33
More Than 20	20	43
# of Sexual Harassment Stressors		
0 - 2	10	22
3 - 6	22	48
7 or More	14	30
# of Discrimination Stressors		
0 - 3	12	26
4 - 6	16	35
7 or More	18	39
Narrative Coherence		
6 - 11	5	11
12 - 18	25	54
19 - 25	16	35
Survivor Mission		
Yes	19	41
No	27	59

Table 2.4: Comparisons on Level of Posttraumatic Growth (PTGI) for Demographics, Trauma Type, and Survivor Mission

Variable	*n*	Mean	*SD*	| *t* |
Gender:				
Men	18	55.0	21.7	
Women	28	59.1	20.5	0.6
Caucasian:				
Yes	28	56.6	20.1	
No	18	58.9	21.1	0.4
In a Relationship:				
Yes	19	56.6	19.5	
No	27	58.1	22.0	0.3
Religious/Spiritual:				
Yes	33	57.2	20.0	
No	13	58.3	23.7	0.2
Received Therapy:				
Yes	27	59.9	19.4	
No	19	54.0	22.8	0.9
Survivor Mission:				
Yes	19	69.4	15.5	
No	27	49.1	20.2	3.7**
Sexual Trauma:				
Yes	17	64.3	18.5	
No	29	53.5	21.4	1.7*
Death Trauma:				
Yes	23	53.7	22.9	
No	23	61.3	18.3	1.2
Chronic Trauma:				
Yes	27	61.0	20.9	
No	19	52.5	20.2	1.4
DV and/or FV:				
Yes	22	60.6	20.4	
No	24	54.6	21.3	1
IPV:				
Yes	30	56.4	21.8	
No	16	59.5	19.5	0.5

Note. DV = domestic or dating violence; FV = family violence; IPV = interpersonal violence; *p < .10; ** p < .05; two-tailed.

Table 2.5: OLS Bivariate Regression Coefficients Predicting Total Level of Posttraumatic Growth

Variable	Constant	*b*	S.E.	β	*t*	*p*	R^2
Male (Gender)	59.07	-4.03	6.34	-0.10	-0.64	0.53	0.01
Caucasian (Race)	58.93	-2.35	6.35	-0.06	-0.37	0.71	0.00
Age	21.04	1.70	1.28	0.20	1.33	0.19	0.04
Socioeconomic Status	59.59	-0.35	1.14	-0.05	-0.31	0.76	0.00
In a Romantic Relationship	58.14	-1.56	6.30	-0.04	-0.25	0.81	0.00
Is Religious/Spiritual	58.28	-1.10	6.90	-0.02	-0.16	0.87	0.00
Has a Survivor Mission	49.14	20.23	5.52	0.48	3.66	0.001	0.23
Narrative Coherence	23.16	1.99	0.65	0.42	3.05	0.004	0.17
Received Therapy	54.04	5.89	6.25	0.14	0.94	0.35	0.02
Experienced a Sexual Trauma	53.51	10.79	6.23	0.25	1.73	0.09	0.06
Experienced a Traumatic Death	61.25	-7.51	6.11	-0.18	-1.23	0.23	0.03
Experienced a Chronic Trauma	52.46	8.58	6.17	0.21	1.39	0.17	0.04
Experienced DV/FV	54.61	6.03	6.15	0.15	0.98	0.33	0.02
Experienced IPV	59.48	-3.05	6.51	-0.07	-0.05	0.64	0.01
Age at First Trauma	71.28	-1.29	0.54	-0.34	-2.41	0.02	0.12
Months Since Trauma Ended	54.63	0.10	0.10	0.14	0.95	0.35	0.02
# of Trauma Types	48.13	2.87	1.42	0.29	2.02	0.05	0.08
Total Trauma Frequency	50.99	0.54	0.23	0.33	2.35	0.02	0.11
# of Life Events	50.99	0.35	0.40	0.13	0.89	0.38	0.02
Total Life Events Stress	46.42	0.28	0.16	0.26	1.78	0.08	0.07
# of Chronic Stressors	24.04	1.78	0.57	0.43	3.12	0.003	0.18
Total Chronic Stress	30.39	0.49	0.13	0.50	3.85	0.000	0.25
# of Sex. Harass. Stressors	48.86	1.74	1.05	0.24	1.66	0.10	0.06
Total Sex. Harass. Stress	49.99	0.22	0.07	0.44	3.23	0.002	0.19
# of Discrim. Stressors	56.07	0.24	0.93	0.04	0.26	0.80	0.00
Total Discrim. Stress	51.94	0.11	0.05	0.28	1.94	0.06	0.08
Cum. Adver. -- Simple Counts	57.49	1.70	0.80	0.30	2.12	0.04	0.09
Cum. Adver. -- Stress-Freq.	57.49	2.89	0.75	0.50	3.85	0.000	0.25
Note: These results are from separate bivariate regressions, not multivariate regressions;							
DV = Domestic or dating violence; FV = Family Violence; IPV = Interpersonal Violence							

Table 2.6: F-Tests With Nested Models: Simple Count Components of Cumulative Adversity

	Full Model Compared With Reduced Model				
	# Trauma Types	# Life Events	# Chronic Stressors	# Sex. Har. Stressors	# Discrim. Stressors
F	0.97	0.82	9.08	0.61	3.03
p	0.33	0.37	0.005	0.44	0.09
Note: "Full Model" contains all 5 components of cumulative adversity (without other controls); "Reduced Model" subtracts one component; df = 1, 40					

Table 2.7: F-Tests With Nested Models: Stress-Frequency Components of Cumulative Adversity

	Full Model Compared With Reduced Model				
	Total Trauma Freq.	Life Events Stress	Chronic Stress	Sex. Har. Stress	Discrim. Stress
F	0.01	0.79	6.92	3.65	0.15
p	0.94	0.38	0.01	0.06	0.70
Note: "Full Model" contains all 5 components of cumulative adversity (without other controls); "Reduced Model" subtracts one component; df = 1, 40					

Table 2.8: Hierarchical Regression Analyses of Most Important Components of Cumulative Adversity: Unique Variance of the Number of Discrimination Stressors

Variable	β	Cumulative R-squared	ΔR-squared	p
Step 1				
# of Chronic Stressors	0.51	0.18	0.18	0.003
Step 2				
Total Amount of Sex. Har. Stress	0.35	0.30	0.12	0.009
Step 3				
# of Discrimination Stressors	-0.29	0.36	0.06	0.064

Note: $N = 46$; β is the standardized coefficient in the full model; p-value is for ΔR-squared

Table 2.9: Hierarchical Regression Analyses of Most Important Components of Cumulative Adversity: Unique Variance of the Total Amount of Sexual Harassment Stress

Variable	β	Cumulative R-squared	ΔR-squared	p
Step 1				
# of Discrimination Stressors	-0.29	0.00	0.00	0.795
Step 2				
# of Chronic Stressors	0.51	0.24	0.24	0.001
Step 3				
Total Amount of Sex. Har. Stress	0.35	0.36	0.12	0.008

Note: $N = 46$; β is the standardized coefficient in the full model; p-value is for ΔR-squared

Table 2.10: Hierarchical Regression Analyses of Most Important Components of Cumulative Adversity: Unique Variance of the Number of Chronic Stressors

Variable	β	Cumulative R-squared	ΔR-squared	p
Step 1				
Total Amount of Sex. Har. Stress	0.35	0.19	0.19	0.002
Step 2				
# of Discrimination Stressors	-0.29	0.19	0.00	0.965
Step 3				
# of Chronic Stressors	0.51	0.36	0.17	0.002

Note: $N = 46$; β is the standardized coefficient in the full model; p-value is for ΔR-squared

CHAPTER 3

NARRATIVE RECONSTRUCTION AND TRAUMA SURVIVORS' DEVELOPMENT OF POSTTRAUMATIC GROWTH

> A man [*sic*] is always a teller of tales, he lives surrounded by his stories and the stories of others, he sees everything that happens to him through them; and he tries to live his own life as if he were telling a story.
>
> —Jean-Paul Sartre (1938/2007, p. 39)

> Oppressed people resist by identifying themselves as subjects, by defining their reality, shaping their new identity, naming their history, telling their story.
>
> —bell hooks (1989, p. 43)

BACKGROUND

A Narrative-Constructivist Framework for Understanding the Impact of Trauma

Unique among all species on earth, human beings are storytellers. In fact, many researchers argue that the creation of narrative is a fundamental characteristic of being human (Howard, 1989; Landau, 1984; Sarbin, 1986), and that individual identity is formed through the telling, re-telling, enacting, and re-formulating of stories (McAdams, 1985, 1993; Neimeyer, 2001; Polkinghorne, 1988). There are individual, group, cultural, and societal narratives, and every known human culture has included storytelling as a central component (McAdams, 1993).

A constructivist epistemology posits that individuals do not merely internalize an objective external reality, but rather subjectively construct meaning from the "raw material" of their experiences (Neimeyer, 2001). More than a merely individual process, the core structures of our sense-making apparatuses are themselves shaped by the

interplay of a plethora of biological, physiological, developmental, interpersonal, cultural, societal, and experiential variables.

Contemporary narrative theorists build upon this constructivist epistemology by asserting that narrative, or "the distinctively human penchant for storytelling" is one "powerful ordering scheme" (Neimeyer, 2001, p. 263) through which our minds make sense of "raw" sensory data (Bruner, 1986; Polkinghorne, 1988). According to this theoretical perspective, human beings make sense of—or create meaning from—their lives by constructing a credible, coherent account of the key experiences and events they encounter. This grand narrative of an individual's life is referred to as a "personal myth" (McAdams, 1993) or a "master narrative" (Neimeyer, 2001), and the creation of this grand narrative is theorized to be at the core of humans' identity-making processes (McAdams, 1993). In the words of Romanoff (2001, p. 247), "We know ourselves and our world through the stories we tell."

The autonomy of the individual in constructing her or his life narrative should not, however, be overstated. As Neimeyer (2001) points out, "Any narrative, to be intelligible to its author or its audience, must draw on a discursive framework of pre-established meanings that provides a socially sanctioned system for symbolizing events" (p. 264). That is, individuals do not have unfettered access to all possible symbols and narrative forms, but rather draw selectively from a range of discourses that have been validated by their families, social groups, communities, and cultures. Thus, individuals' identities and life stories are perpetually shaped (although not determined) by myriad social forces.

In daily life, the individual continuously encounters new events and situations, which have the potential to re-shape the story (and thus the self) and which either confirm

or challenge the existing grand narrative (Polkinghorne, 1988). In most instances, new experiences are smoothly incorporated into the individual's life story with minimal plot revision and little or no disruption to the master narrative as a whole (Neimeyer, 2001).

Some experiences, however, cannot be easily accommodated into the individual's existing narrative. Unanticipated, incongruous events—including various forms of trauma or crises—may challenge the individual's ability to create a meaningful account of life events and may be extremely difficult for the individual to integrate into her or his master narrative (Neimeyer, 2001). If one's sense of personal identity is largely based upon creating an intelligible story of one's past experiences, present situation, and future goals (McAdams, 1996), then the disorienting impact of trauma upon the individual is easy to comprehend. In addition, many types of trauma indelibly change or even destroy important relationships in our lives—relationships which were foundational to our sense of identity and our social roles (Neimeyer, 2001).

Numerous researchers have documented that people coping with a wide variety of negative life events seem compelled to make sense of the incident or find some sort of meaning in their experience. Whether reacting to the trauma of incest (Silver, Boon, & Stones, 1983), bereavement (Cleiren, 1993; Davis, Nolen-Hoeksema, & Larson, 1998; Davis, Wortman, Lehman, & Silver, 2000; McIntosh, Silver, & Wortman, 1993; Neimeyer, 2000; Parkes & Weiss, 1983), cancer (Taylor, Lichtman, & Wood, 1984), the illness of one's child (Chodoff, Friedman, & Hamburg, 1964), natural disaster (Erikson, 1976), stroke (Thompson, 1991), severe burns (Kiecolt-Glaser & Williams, 1987), rape (Burgess & Holmstrom, 1979), or spinal cord injury (Janoff-Bulman & Wortman, 1977), victims of a wide array of personal crises search for meaning in response to negative life

events. Following his experience in several Nazi concentration camps, Viktor Frankl (1959) asserted that the need for meaning is a fundamental motivation for human beings; he argued that, in order to survive atrocities such as the Holocaust, individuals must be able to find some sort of meaning and purpose in their suffering. Neimeyer (2001) uses a narrative-constructivist metaphor to explain why trauma survivors search for meaning in their experiences: "Like a novel that loses a central character in the middle chapters, the life story disrupted by loss must be…rewritten, to find a new strand of continuity that bridges the past with the future in an intelligible fashion" (Neimeyer, 2001, p. 264).

An Assumptive World Framework for Understanding the Impact of Trauma

In a similar vein, Janoff-Bulman (1985, 1992) uses the metaphor of "shattered assumptions" as a way of explaining the devastating impact of traumatic loss upon the individual. Building upon Epstein's (1973, 1979, 1980) conceptualization of "theories of reality," Bowlby's (1969) "working models," Marris' (1975) "structures of meaning," and, most directly, Parkes' (1971, 1975) "assumptive world," Janoff-Bulman bases her theory of psychological trauma on the notion that human beings have core cognitive structures, or schemas, that are challenged or even destroyed by traumatic experiences. Specifically, Janoff-Bulman (1985, 1992) asserts that human beings have three core assumptions that are most affected by trauma: 1) the belief that the world is meaningful and comprehensible; 2) the belief that the world is benevolent; and 3) the belief that the self is worthy and competent.

In the wake of these shattered assumptions, according to Janoff-Bulman (1985, 1992), the key coping task of trauma survivors is to rebuild their assumptive worlds.

There is a continuum regarding the ways in which trauma survivors may do this. On one extreme, the individual may retain her or his pre-trauma assumptions; however, these schemas have been invalidated by the traumatic event and are inadequate to account for the survivor's experience. On the other extreme, the individual may fully adopt the new, negative assumptions (i.e., of a malevolent, meaningless world and an unworthy self) that the traumatic event seems to imply; however, these schemas promote great anxiety and are "emotionally uncomfortable and intensely threatening as a basis for day-to-day living" (Janoff-Bulman, 2006, p. 86). Subsequently, the necessary task for the survivor is to rebuild a viable assumptive world that can account for her/his victimization and yet offer a non-threatening, relatively positive view of the self and the world (Janoff-Bulman, 1992, 2006). In the words of Janoff-Bulman (1992, p. 174), trauma survivors who successfully cope with their experience:

> Reestablish positive, yet less absolutely positive, core assumptions….They know that they are not entirely safe and protected, yet they don't see the entire world as dangerous….The world is benevolent, but not absolutely; events that happen make sense, but not always; the self can be counted on to be decent and competent, but helplessness is at times a reality.

In sum, trauma survivors tend to rebuild a more structurally complex, nuanced, and less absolutist assumptive world (Janoff-Bulman, 1985, 1992, 2006; Janoff-Bulman & Berger, 2000).

To summarize the above discussions of a narrative-constructivist and an assumptive world framework for understanding the impact of trauma, a traumatic event throws a significant "plot twist" into the story of one's life, threatens the narrative coherence of that story, challenges one's sense of identity, initiates a "crisis of meanings" (Hagman, 2001), and may shatter existing assumptions about how the world works and

one's place within it. Trauma survivors must thus come to terms, in some way, with their disrupted life narratives.

Paradoxically, traumatic life events also provide individuals with an opportunity to revise their life narratives in positive ways (McAdams, 1993; Neimeyer, 2001), redefine their identities and social roles (Hagman, 2001; Harvey et al., 2001; Neimeyer, 2001), develop more realistic and less shatter-prone schemas about the world (Janoff-Bulman, 1992, 2004), and experience personal transformation and posttraumatic growth (Tedeschi & Calhoun 1995, 2004; Calhoun & Tedeschi, 2006; Tedeschi, Park, & Calhoun, 1998). As Tedeschi and Calhoun theorized in their theoretical model of posttraumatic growth, if growth is to occur post-trauma, the survivor must engage in deliberate rumination—changing the cognitive schemas that have been invalidated by the crisis, and restructuring her or his life narrative to incorporate the traumatic event[14] (Calhoun & Tedeschi, 1998; Tedeschi & Calhoun, 2004).

The relationship between trauma survivors' development or reconstruction of a coherent life narrative and their development of posttraumatic growth has not previously been explored through empirical research. However, the above theories suggest that reconstructing a coherent life narrative, in the aftermath of trauma, may be connected in some way to the development of posttraumatic growth. This chapter explores this hypothesis.

METHODS

This article is one part of a larger project that examines the trauma recovery and posttraumatic growth among 46 young adults who might be considered the "success

[14] See Ch. 2 for further details on Tedeschi and Calhoun's model of posttraumatic growth.

stories" of trauma recovery. The sample was recruited from among the undergraduate and graduate students (and some recent graduates), of a large, prestigious, public university in the Midwest United States. Additional information regarding the recruitment and screening of research participants, the data collection procedures, and the measures I took to protect the well-being and confidentiality of research participants may be found in Chapter 1.

Although both quantitative and qualitative data were gathered for this study, this article relies primarily upon the qualitative data. Subsequently, I will describe the qualitative methods in more detail here. For detailed descriptions, sample items, and internal reliability analyses of each survey instrument, see Chapter 2.

The qualitative data included an in-depth, semi-structured interview with each research participant, as well as the detailed fieldnotes I took following each interview. Although I used an interview schedule to guide each interview, I was also flexible in adapting the order, wording, and nature of questions to match the personal style of each interviewee and the content of the interview. The interview schedule drew upon several questions from McAdams' (1993) Life Story Interview. The interviews generally consisted of four sections: 1) An overview of the interviewee's life story and major life events; 2) Questions regarding the interviewee's traumatic experience(s), the impact of the trauma(s), and how she/he coped with the trauma(s); 3) An exploration of the interviewee's posttraumatic growth; and 4) A wrap-up section that included questions regarding the interviewee's future goals and plans, clarification questions regarding her/his answers on the quantitative surveys, and debriefing questions regarding the interviewee's experience of participating in the study. (See Appendix B for a copy of the

interview protocol.) I also explored any additional topics that an interviewee said was relevant to her/his experience post-trauma.

I began the process of qualitative data analysis by listening to all of the interviews, reading each transcript, reading all of my fieldnotes, and taking notes on the major themes that I observed. I also wrote numerous initial memos regarding these themes and, later, integrative memos that tied together multiple themes and connected them with other research and with various theoretical literatures (Charmaz, 2006; Emerson, Fretz, & Shaw, 1995).

One of the major themes that emerged through this process was that, when sharing their life stories, the individuals in this sample seemed to have both widely varying levels of narrative coherence and dramatically different degrees of posttraumatic growth. I further noticed that those survivors who had accomplished the greatest amounts of post-trauma narrative reconstruction seemed to be among those who had experienced the greatest levels of posttraumatic growth.

In order to systematically examine the relationship between trauma survivors' (re-)construction of coherent life narratives and their development of posttraumatic growth, I categorized each research participant with regard to the coherence of their post-trauma narrative and the level of their posttraumatic growth. (See Appendix H for a copy of my narrative coherence coding rubric and Appendix I for a copy of my posttraumatic growth coding rubric.)

First, based upon the research literature on life stories and an in-depth analysis of exemplars in my data, I identified five major components of highly coherent post-trauma narratives: 1) The narrator articulates a continuous and detailed storyline, without

constant prompting, regarding her/his life before, during, and after the trauma(s); 2) The narrator's life story is intelligible, organized, and makes logical sense; 3) The narrator articulates a clear sense of self before and after the trauma(s)—aware of both the continuity and change of the self; 4) The narrator has incorporated the trauma(s) into her/his worldview or belief system; and 5) The narrator has incorporated the trauma(s) into her/his vision of the future.

Based upon the interview audio files, transcripts, and my post-interview fieldnotes, I rated each trauma survivor's narrative on a 5-point Likert scale regarding each of these five dimensions of narrative coherence. This resulted in total scores ranging from 5 to 25. I then categorized life stories as having low narrative coherence (scores of 5-11), moderate narrative coherence (scores of 12-18), or high narrative coherence (scores of 19-25). It is important to note that in this coding scheme, reconstructed narratives can potentially be both highly coherent and negative in tone (e.g., having a cynical view of the self, the world, and one's future).

I then assessed research participants' level of posttraumatic growth. Based upon the research literature on posttraumatic growth and an in-depth analysis of exemplars in my data, I identified three major characteristics of trauma survivors who have experienced very high levels of posttraumatic growth: 1) The individual has experienced positive, post-trauma life changes across a vast breadth of life domains; 2) The individual has experienced positive, post-trauma life changes to a great depth or degree in those life domains; and 3) The individual perceives the positive, post-trauma life changes that

she/he has experienced as being significant, transformative, and meaningful in her/his life.[15]

Based upon the interview audio file, transcript, my post-interview fieldnotes, and the participant's completed PTGI survey, I rated each trauma survivor's posttraumatic growth on a 5-point Likert scale regarding each of these three dimensions. This resulted in total scores ranging from 3 to 15. I then categorized research participants as experiencing low posttraumatic growth (scores of 3-6), moderate posttraumatic growth (scores of 7-11), or high posttraumatic growth (scores of 12-15).

Although both narrative coherence and posttraumatic growth occur on a continuum, I divided the trauma survivors in this sample into three primary categories or levels, which I describe in-depth in the next section.

I also used a variety of inferential statistics to determine if there were statistically significant demographic and trauma-related differences between the trauma survivors in the three categories. Specifically, I used Fisher's exact tests to investigate the relationships between the three levels and the categorical, independent variables (e.g., gender, race/ethnicity, etc.)[16], and I used Kruskal Wallis tests (i.e., non-parametric ANOVA tests) to examine the relationships between the three levels and the continuous, independent variables (e.g., age, total trauma frequency, etc.). Where appropriate, I ran post-hoc tests, using t-tests, and adjusted the p-values using the Bonferonni correction method.

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[15] I did not rely upon research participants' scores on the Posttraumatic Growth Inventory (PTGI) in this article because I found several instances, within my sample, in which the PTGI seemed to either underestimate or overestimate individuals' experiences of growth.

[16] I did not use chi-square tests, due to the small numbers (i.e., fewer than five) of cases in certain cells.

RESULTS

Narrative Coherence and Posttraumatic Growth: Three Categories of Trauma Survivors

My primary finding is that developing a coherent life narrative is positively associated with posttraumatic growth. To demonstrate this relationship, I have divided the individuals in this sample into (primarily) three categories: Level I includes those survivors who have high narrative coherence and high posttraumatic growth; Level II includes survivors who have moderate narrative coherence and moderate posttraumatic growth; and Level III includes survivors who have low narrative coherence and low posttraumatic growth. The vast majority of the research participants in this study fit into one of these three categories.

Within my sample, approximately one-third of the trauma survivors are best categorized as Level I (high coherence/growth), one-half as Level II (moderate coherence/growth), and 11% as Level III (low coherence/growth); 7% of my sample does not fit neatly into any of these three categories. These percentages are not generalizable to the greater population of trauma survivors, however, because my research design and sampling methods likely attracted more Level I individuals, while also "weeding out" many individuals who would have been categorized as Level III. See Table 3.1 for a summary of trauma survivors' demographic and selected trauma-related variables by level.

To illustrate the characteristics of each level, I present a case study of one individual from each category and share their story in-depth, paying particular attention to the aspects of their case that are representative of the level as a whole. I am showcasing these exemplars for the sake of clarity, as the lives of my research

participants are very complex. Each of these three individuals, however, represents many other trauma survivors in my sample who share numerous key characteristics, even if the particular details of their stories differ. To preserve the anonymity of these research participants, I have removed, obscured, or, occasionally, changed certain potentially-identifiable details about their life stories. However, none of these omissions or alterations impact the key characteristics that are being analyzed in this chapter.

Level I—Individuals with High Narrative Coherence and High Posttraumatic Growth: Jennifer's Story

Jennifer is a 23-year-old woman whose life has been filled with many types of adversity. Her family moved frequently—across several continents—as a result of her father's job. These geographical transitions were difficult for Jennifer, as they often involved leaving her extended family, friends, or a familiar culture behind. In addition, Jennifer, her mom, and her sister have been robbed and car-jacked at gunpoint. Jennifer has also experienced two separate incidents of inappropriate sexual touching, as well as significant corporal punishment at the hands of her father.

When Jennifer was twelve years old, her mother had a stroke that left her like "a vegetable"—unconscious and unresponsive—for several weeks. Contrary to her doctors' predictions, Jennifer's mother slowly recovered many parts of her functioning, although she remains partially paralyzed. Jennifer's father initially shouldered most of the burden of caring for her mother. However, only a few short months after her mother's stroke, Jennifer's father had a major heart attack that almost killed him.

With the sudden incapacitation of both of her parents within the span of a few months, Jennifer's life changed dramatically. Not yet a teenager, Jennifer became the

primary caregiver to her mother, father, and sister. She became "less of a kid" from then on—more responsible, serious, mature, and focused. Jennifer's father had to teach her everything about running a household, and she soon learned how to handle the family's banking, insurance, mortgage, and healthcare issues, in addition to the innumerable ordinary tasks of keeping a household afloat. Not wanting her sister to feel that she lacked a mother, Jennifer took on this role as well. By necessity, Jennifer became "the backbone" or strong one in the family, and she constantly feared that if her parents experienced too much stress, they might have another stroke or heart attack.

The most recent trauma that Jennifer and her family experienced was a home invasion and armed robbery. Less than one year after her parents' medical crises, two armed men entered their home, made the family wait in one room at gunpoint, and forced Jennifer to walk around the house with them to help them find all of the family's valuables. At one point, the men put a kitchen knife up to Jennifer's father's throat, demanding to know where the family's money was kept. After they had obtained everything of monetary value, the robbers locked the family in their bathroom, cut the telephone lines, and left.

During her teen years, Jennifer and her family moved to the United States. Jennifer struggled to learn English, work several part-time jobs to help support her family, and continue caring for her parents while also attending high school. Although she did not realize it at the time, Jennifer was nearing the limits regarding all of the stress her body could handle. During her senior year of high school, she experienced severe dizziness for sixteen hours, almost got into a car accident, "started breaking down," and

went to the hospital's emergency room. A psychologist soon identified her as being over-worked and suffering from depression and anxiety.

Although her college years thus far have involved significant struggle, Jennifer is moving forward with her life. She found a counselor who has helped her to reduce her work responsibilities, focus more of her time on school work, and take better care of herself.

When I asked her about the most positive experiences in her life, Jennifer replied "I have a lot of cool things, actually!" She described the sense of accomplishment she feels as a result of speaking multiple languages fluently, the "miracle" of her obtaining acceptance to and funding for the University's undergraduate program, the "huge miracle" of her mother being able to walk and talk again post-stoke—despite doctors' predictions that it would not happen, and her experiences traveling around the world.

As a direct result of her difficult life experiences, Jennifer feels that she has experienced substantial posttraumatic growth. Specifically, Jennifer has a greater appreciation for each day and does not take her own or others' lives for granted. This is evident in her increased closeness with her family, her enjoyment of the little moments in life, her regular expressions of love toward those closest to her, and her efforts to be kind to everyone around her. Recognizing that she can never know what the future might bring, Jennifer tries to live each day with purpose and to interact with others in such a way that she will not have regrets. Additionally, Jennifer notes that her priorities in life—promoting good health and being there for her family—have been shaped by her traumatic experiences. Furthermore, Jennifer's experiences have taught her that she is able to handle much more than she might have otherwise thought possible. She knows

that she is capable of successfully starting over and moving on after upheaval, and that she can learn new tasks and balance numerous competing demands when the situation requires that she do so. The difficulties she has faced have also increased Jennifer's compassion for others and her desire to make a positive difference in the world.

In addition, Jennifer's experiences with trauma and adversity have helped her to develop a clear vision of her calling in life. After completing her education, Jennifer plans to become a medical missionary—working on international public health issues, helping the underprivileged, teaching the Word of God, and giving people hope. She also dreams of building nursing schools in underdeveloped countries and providing them with medical equipment, in order to educate the next generation of healthcare professionals. Although she is still facing many challenges stemming from her negative experiences, Jennifer nonetheless feels happy and hopeful about her future.

Overall, during her interview, Jennifer told a continuous story about her life—tracing the development of her identity, personal growth, and life's calling over time. Her narrative was organized and devoid of significant gaps, and it included several interconnected and consistent themes that define her sense of self and her life.

One of the most prominent themes in Jennifer's life story is her relationship with God and her Christian belief system. When asked how she made it through the adversity in her life, Jennifer points to her spiritual life as making the biggest difference.

> I know that God loves me no matter what I'm going through, and that He's gonna be always there for me, that He's gonna be my strength. That just helped me greatly…Just being able to pray or just [reading the] Bible…I think that was the greatest support for my life.

Jennifer's faith has helped her to feel loved and supported during the roughest times in her life. Christianity has also served another role for Jennifer: it has provided

her with a means to make sense out of the traumatic events of her life. Jennifer believes that there is a divine purpose for the suffering she has experienced. Specifically, she believes that God has a plan for her life and that God is using the traumatic events she has been through in order to strengthen her and prepare her to help others.

> I always…[thought] maybe there's something that I can take out of this, and maybe He's preparing me to be a…stronger person for other people. Or, you know, all the experiences that I've had, maybe I can use [them] to help others, to understand other people, you know? 'Cause when I was there experiencing this I needed someone to understand me, someone to listen to me or someone to tell me something, but I didn't have that. So maybe because I went through this and I understand better, I can help others and I can be there for them, you know? So…I just thought…God [is] making me stronger, and just probably He has something great in store for me because I went through so many things.

Jennifer looks for something positive that she can take from her experiences, believing that God allowed her to go through these things for a reason. Her belief system provides her with a way to make sense of the traumatic events that she has experienced, to construct a life narrative for herself that can incorporate these incidents into a coherent story, and to find a meaningful purpose for her life post-trauma. In sum, Jennifer's Christian faith helps her to form a cohesive master narrative for her life.

Level I Characteristics

To summarize, Level I trauma survivors, like Jennifer, have a highly coherent life narrative. They know who they were prior to the trauma, how the trauma changed them positively and negatively, and who they are after the trauma. The individual's identity before and after the trauma has continuity in many ways, and is different in other ways. These trauma survivors know what they have gained and what they have lost. They appreciate the gains, grieve the losses, and move forward with their life. They have adjusted their worldview, as necessary, to accommodate their new understanding about

the world—a worldview that is neither naïve nor depressingly cynical, yet can incorporate traumatic events. They have a hopeful vision for their future, a sense of direction, and their future plans often are tied, in some way, to the trauma. Frequently, they develop what Judith Herman terms a "survivor mission," (1992) where they choose to devote their lives to helping other people who have been through similar experiences. Level I trauma survivors experience high levels of posttraumatic growth—positive changes that they perceive as being meaningful and transformative—throughout many areas of their lives.

On the other end of the spectrum are Level III trauma survivors.

Level III—Individuals with Low Narrative Coherence and Low Posttraumatic Growth: Mike's Story

Mike is an 18-year-old young man, born and raised on the West Coast, and the youngest of five children. Mike has experienced a moderate level of adversity, and his life story has low narrative coherence. During his interview, Mike told a disjointed story about his life that I struggled to reconstruct, here, in a coherent fashion. Mike gave few details about his life without continuous prompts, he frequently seemed at a loss for words, and his narrative had major gaps in it. He had great difficulty answering questions about his sense of self, he was unsure how his experiences with trauma have impacted him (positively or negatively), and he was unable to trace his personal development over time.

Mike states that he had a "normal" relationship with his parents during his growing up years. During high school, however, Mike describes his family life as "erratic." Mike's father's personality changed after he had a major bout with cancer—

always seeming to be angry and drinking quite a bit. His father frequently worked night shifts, slept during the day, and was often harshly critical of him. When asked about the most positive experiences in his life thus far, Mike describes his sports tournaments and accomplishments, his acceptance to the University, and his relationship with his girlfriend.

The major trauma in Mike's life occurred during high school. One of his sisters went missing after she attended a sailboat race. Several days later, her body was found in the water. When Mike heard the news that his sister's body had been identified, he fell down on the kitchen floor and cried. To this day, the details surrounding his sister's death remain unclear, despite his efforts to get more information. Mike imagines that she may have fallen off a boat accidentally and drowned, but he also has suspicions that she may have been murdered by a man she was hanging out with at the time. Mike's parents never discuss his sister's death, and Mike is resigned to there simply being a lot of unanswered questions surrounding this tragic event.

In the two years since his sister's death, Mike has struggled to cope with his emotions. Although he never used to be aggressive, Mike now experiences a lot of anger. Usually involved in multiple sports, Mike injured himself and was unable to play sports until he had received and recovered from surgery. Blocked from his usual emotional outlets, Mike turned to physical aggression. He has punched a hole in a wall, punched dents in a metal door, punched through his car mirror, broken his center console, and snapped the television remote in half.

Mike has never seen a helping professional, despite his mother's frequent urging that he address his anger issues. Mike does not think that he needs help dealing with his

sister's death, and he feels that he is strong enough to handle his problems on his own. Subsequently, Mike has also not sought emotional support from his family or friends. In fact, Mike avoids talking about his deceased sister and resists others' efforts to make him do so.

> [My girlfriend] tries to get me to…talk to her about stuff. I usually don't. I've said a few things to her…which she's always glad to listen about. But…it's usually me helping her with…her own life.

> I guess the person…who brings her [his deceased sister] up the most is Tammy [his remaining sister]…Whenever I'm alone with Tammy….she always has something to say about her and it just surprises me that she always wants to talk about it or [is] able to talk about it. I just feel like I'm the one who wants nothing to say about it, talk about it, forget about it.

These quotes demonstrate that Mike neither feels the need nor desire to talk about his loss. He holds his pain inside, does not give it voice, and does not seek to find meaning in these events. He has, subsequently, not formed a narrative about his sister's death. In my fieldnotes, written immediately after interviewing Mike, I noted the following observations regarding this interview:

> It just was so awkward. He just so clearly is still in the middle of it and has not dealt with things very directly at all.… He's still trying to figure things out and I felt like I was 'pulling teeth' to make him talk….He just struggled for words. He clearly didn't know how to talk about these things….Really awkward, difficult interview. [Jirek, Fieldnotes, July 9, 2009]

As a result of not forming a coherent narrative about his life, including the death of his sister, Mike's trauma remains nearly as raw and unprocessed today as it was two years ago.

Despite volunteering to participate in a study on posttraumatic growth, Mike acknowledges that he has not grown to a "great degree" in any area of his life thus far, and he notes that he's "sure there's still a lot more growing to do." Nonetheless, Mike believes that he has made progress in learning to express his emotions, even if his

primary emotion is anger. He also asserts that he has "greater understanding" about his relationships with others, which has led him to form "fewer relationships, but stronger" ones. Finally, Mike believes that one of the most important aspects of his personal growth so far is the fact that he has "handled" the difficult experiences in his life. He states: "I mean I'm still moving on, continuing on, so I'd say it's made it clear that [I] can keep truckin'."

When asked how he has managed to just keep on going, to the degree that he has, with his life, Mike responded:

> Really just not stopping long enough to give myself too much time to think about it. I feel like…it happened, [I] had that week to get all my thoughts…out…Yeah, going on with regular life was, I guess, the best way to make sure you just stay on track.

Mike may still be "truckin'" and "on-track" with parts of his life (namely, his educational goals), but his worldview has become one of cynical resignation, summed up by his declaration: "life does suck." When asked how he would ideally like to have handled this traumatic experience, Mike replied:

> I'd have to understand that that's the way life works, I guess. Um, basically try to get over it. Suppress it, I guess. That doesn't seem very healthy. I don't know. There's nothing I can do about it, so…

As the above quotes demonstrate, Mike's basic philosophy on moving on after trauma is that one must adjust their thinking to incorporate the facts that "life does suck" and that that's "the way life works," try to suppress one's feelings so that one can "try to get over it," and then keep "going on with regular life" so that one does not have "too much time to think about it." Yet even as he articulates this formula, Mike does not seem convinced that it will work (hence one has to "try" to get over it) or that this approach is

"very healthy"—perhaps recognizing that these strategies have fallen short in his own life thus far.

When questioned whether his past experience handling trauma has given him confidence in the face of future adversity, Mike was doubtful regarding his own resilience. He stated that "just 'cause you've already been through it, doesn't make the second time around [any] easier." Then, with his voice nearly breaking with emotion, Mike concluded, "I don't know how much [more] someone can take."

In sum, Mike does not have a well-formed narrative, philosophy, or belief system about his life, the trauma he has experienced, his future, or the world at large. With the exception of our interview together, he not only avoids talking about his sister's death, but he also keeps himself too busy to even think about this painful experience. What little narrative he does have includes his belief that he is handling his sister's death worse than other people would cope with a similar event, that he would be unlikely to deal with future adversity well, that "life does suck," and that all that is left for him to do is to simply keep going about his day-to-day activities as best he can.

Level III Characteristics

To summarize, Level III trauma survivors, like Mike, have not developed a coherent life narrative. They may know who they were before the trauma, but they frequently do not know who they are after the trauma. They have difficulty articulating what, exactly, happened to them and to their lives, or how it changed them positively and negatively. They usually realize that they have lost something big, but they do not recognize what they have gained through the experience. They have difficulty grieving

their losses and moving forward with their life. They sound and appear stuck, immobile, and at a loss for words. They are left with a worldview that is either depressingly cynical or completely in shambles. They may not know what to believe about the world, themselves, and others. They have a bleak or unformed vision of their future, little sense of direction, and few future plans. They are often simply trying to survive their current, day-to-day life. They have difficulty investing in others' lives because they do not have extra emotional energy to give to others. They exhibit very little posttraumatic growth in any area of their life. In sum, they seem lost.

Finally, in the middle of the spectrum are Level II trauma survivors.

Level II—Individuals with Moderate Narrative Coherence and Moderate Posttraumatic Growth: Keanna's Story

Keanna is a 23-year-old graduate student, with close family relationships and a large extended family. Keanna was born and raised in the inner-city of a large urban area in the South, and she has experienced significant amounts of adversity and trauma.

Keanna told a continuous and detailed—albeit disorganized—story about her life, and her narrative "skipped" back and forth between various time periods. Subsequently, for the sake of clarity, I have imposed a degree of linearity, here, that was absent in her actual interview.

Keanna's long list of traumatic experiences includes childhood sexual abuse, a sexual assault, two major car accidents, the near-death of her best friend in a drunk-driving accident, and the murder of one of her closest friends.

After completing her undergraduate studies, Keanna moved out-of-state to attend graduate school in a helping profession. During her first year of graduate school (and

only nine months prior to being interviewed), Keanna experienced another traumatic loss when one of her cousins was murdered. Her cousin's killers have not been caught. Keanna was devastated by the news of his death, and she cried a lot while sharing this part of her story.

When asked how she has coped with the traumas and adversity she has faced, Keanna explained that she prays a lot, has "really good people" in her life as a support system, and that she tells herself that "it could be worse." However, regarding the sexual abuse she experienced, Keanna stated, "I don't think I dealt with it," and she described the area of sexuality in her life as still being "a huge complicated mess."

Keanna further explained other important aspects of her coping strategies:

> Making new memories is a big deal. Just being able to like travel and to hang out with my friends and people who care about me and stuff like that is good. 'Cause…eventually, the bad memories will get like smooshed to the back 'cause of all the fun stuff.

In addition, Keanna notes that both her mother and her aunt have experienced a lot of trauma in their lives and that their example helps her to cope. She explains: "I have these people who…I guess I can look at them and I can say if they made it through it…I can do it. You know, like, if they can do it, I can do it."

Most recently, Keanna dealt with the death of her cousin primarily by resuming her daily routine, putting her energy into her schoolwork, and trying to keep herself busy. Despite training to be a helping professional herself, Keanna has never sought any form of counseling to assist her in coping with the painful experiences in her life.

When asked about the best experiences in her life, Keanna replied: "I think I've had a lot of good things…I feel like it's kinda balanced." Specifically, she points to doing sports in high school, traveling a lot within the U.S., and having "really, really good friends that are really supportive."

Keanna has experienced moderate levels of posttraumatic growth in several areas of her life. Her traumatic experiences have taught her that "life is short," and that she must subsequently "just live it" fully now and not postpone activities that are important to her. In the wake of her best friend's near-fatal accident, Keanna made an important behavioral change: she no longer drinks and drives. Keanna is also more grateful for the little things in life. Here, she describes the sense of gratitude she feels each day:

> Every morning I wake up and I just…[say] 'thank you, Lord.' I'm awoke [*sic*]. I can see, I can walk, I can talk, I can hear. I'm getting in my car and my car started. I have a house [and] it didn't burn down. Like, you know, just every little thing… I mean, 'cause you never know.

She also believes that the adversity she has been through has made her more compassionate toward others—particularly child sexual abuse and sexual assault survivors—and has shaped her desire to make a positive difference in others' lives.

While she does not have many concrete plans for the future, Keanna thinks that she will likely work with adolescents—perhaps doing pregnancy, adoption, or guidance counseling. She also hopes to get married and adopt a child of her own someday.

Keanna struggles to make sense of her traumatic experiences, and she vacillates between two somewhat contradictory ways of thinking about her experiences. As she explains:

> Some days, I…look at other people and I'm like, it's just not fair! Like, you live in this huge house in like [a wealthy, neighboring county]. Your parents are married. Like, your dad is a pediatrician; your mom is a lawyer. Like, you're fine. You never wanted or needed for anything. You don't have this, you know, sexual abuse past. Like, all your friends are fine. You guys have yachts and boats and you're living and you're happy…You have people who don't realize that [other] people are struggling outside of their bubble. You know? And…sometimes I'm like why was I born into this family that I was born into?

Even though Keanna sometimes questions why she suffers from a disproportionate amount of life's inequalities, she also believes that there is a divine purpose for adversity. Keanna describes her philosophy as follows:

> I view myself…as a part of something bigger… Like God has a plan for everybody. And so whatever His plan for me is, it means that I had to go through everything that I went through to be the person that I am now. And it's gonna help shape whoever I am in the future.

As I discussed earlier in this section, Keanna's narrative was relatively disorganized in the telling of it. It felt, during the interview, as though she had never before formulated or shared her full life story or knew how to organize the different "chapters." In fact, Keanna states that she "didn't tell a lot of people" about "a lot of stuff" she has been through, and that she had "never listed stuff out" prior to participating in this research project. That is to say, Keanna has never fully formulated her life narrative orally, in writing, or even just in her own head. Rather, Keanna has strived to make new and positive replacement memories in an effort to "smoosh" the bad memories "to the back" of her mind. While this coping strategy has served her well in some ways, it has also stunted her ability to form a fully coherent life narrative and has likely prevented her from fully grieving and dealing with the many painful experiences in her life.

Level II Characteristics

To summarize, Level II trauma survivors, like Keanna, fall somewhere in the middle of both the narrative coherence and posttraumatic growth continuums. In general, trauma survivors in the Level II category are in the process of forming a coherent life narrative, but they have not fully accomplished this. They may struggle with

understanding who they are after the trauma and where their life is going now. They may have difficulty grieving their losses, or recognizing what they have gained. Their worldview may not yet make much sense, or they may be still working through their questions about their belief system. They usually recognize that they are moving forward, but they readily acknowledge that they are in the midst of a process of life change. They may oscillate between feeling strong and focused, and feeling vulnerable, confused, and rudderless. Frequently, Level II trauma survivors score relatively high on some components of narrative coherence (e.g., Keanna's ability to tell a continuous and detailed story of her life and to integrate the traumas into her belief system), while scoring lower in other areas (e.g., Keanna's struggle to organize her life's story in a coherent fashion or to identify how the traumas have changed her). Level II survivors experience a moderate level of posttraumatic growth in several areas of their lives. In sum, their stories are complex, partially unformed, frequently contradictory, and definitely a work in progress.

Group-Based Differences Across Levels

As is evidenced in Table 3.1, there were some interesting demographic and trauma-related differences between the trauma survivors in Levels I, II, and III.[17] As mentioned previously, I used Fisher's exact tests, Kruskal Wallis tests, and, where appropriate, post-hoc t-tests (adjusting the p-values using the Bonferonni correction method) in order to determine if the group-based differences between the levels were statistically significant.

[17] See Chapter 2 for additional information regarding how various constructs (e.g., socioeconomic status) were operationalized and regarding how the quantitative variables were created, calculated, and coded.

The relationship between the Level (i.e., Levels I, II, and III) and race/ethnicity was initially not significant. However, when the race/ethnicity variable was collapsed into a binary (Caucasian and non-Caucasian) variable, and when only looking at Levels I and II, the association approached statistical significance ($p = .10$). Forty-three percent of the Caucasian research participants were Level I, compared with only 17% of non-Caucasian research participants. Conversely, 61% of non-Caucasian individuals were Level II, compared with only 43% of Caucasian individuals.

Regarding household income, there was a statistically significant association with Levels I and II ($p = .04$). Fifty-four percent of research participants with family household incomes less than $50,000 per year and 41% of research participants with family household incomes greater than $100,000 were categorized as Level I, compared with only 8% of research participants with family household incomes between $50,000 and $100,000 per year. Conversely, 77% of research participants from the middle family household income bracket were categorized as Level II, compared with 38% of individuals from the lowest income bracket and 47% of individuals from the highest income bracket.

There was an association between the three Levels and whether or not research participants identified themselves as being spiritual and/or religious, and this relationship approached statistical significance ($p = .08$). Forty-six percent of the non-spiritual/religious respondents were categorized as Level I, compared with only 27% of the spiritual/religious respondents. The majority (58%) of the spiritual/religious research participants were Level II, compared with only 31% of the non-spiritual/religious.

Almost one-quarter (23%) of the non-spiritual/religious respondents were Level III, compared with only 6% of the religious/spiritual respondents.

There was a statistically significant relationship between being financially independent of one's parent(s) or guardian and Levels I and II ($p = .05$). One-half of the financially independent respondents were categorized as Level I, compared to only 19% of respondents who were still financially dependent upon their parent(s)/guardian. Conversely, 62% of financially dependent research participants were categorized as Level II, compared to only 35% of the financially independent research participants.

With regard to the number of trauma types, the association with the Levels approached statistical significance, $\chi^2(2, N = 43) = 4.79, p = .09$. Post-hoc pair-wise comparisons revealed that the differences between the mean number of trauma types in respondents categorized as Levels I and III approached statistical significance, $t(18) = 1.84, p = .08$, as did the difference between respondents categorized as Levels I and II, $t(36) = 1.97, p = .06$. However, after adjusting the p-values via the Bonferonni correction method, neither difference approached statistical significance.

The relationship between total trauma frequency and the Levels approached statistical significance, $\chi^2(2, N = 43) = 4.23, p = .12$. Post-hoc pair-wise comparisons, however, revealed that none of the differences between any two of the total trauma frequency means were statistically significant.

There were no statistically significant associations between the Levels and gender, age, education level, socioeconomic status, having received trauma-related therapy, the age at first trauma, or the time since the (most recent) trauma.

DISCUSSION

A Co-Constitutive Relationship

Due to the limitations of cross-sectional data, this study cannot establish the temporal relationship between narrative reconstruction and posttraumatic growth, nor can it determine whether or not a causal relationship exists between these variables. It is thus possible that people who develop posttraumatic growth subsequently develop a coherent account of their lives that can explain the growth that they have experienced; that is to say, trauma survivors may engage in a retrospective account-making process after posttraumatic growth has occurred. While this study cannot definitively rule this out, there is some evidence that would argue against this interpretation. First, many of the individuals in my sample, particularly those in Level II of the categorization scheme, seem to be in the midst of developing both a coherent post-trauma narrative and posttraumatic growth. Second, several interviewees (e.g., see Joshua's quotation, below), described a period of time following their traumatic experience(s) where they reflected in-depth upon their lives. According to these research participants, they emerged from this intense phase of reflection and cognitive processing (wherein they began reconstructing their life narrative) having experienced posttraumatic growth.

While my data cannot provide a definitive answer regarding issues of temporality and causation, I nonetheless theorize that there is an interactive, co-constitutive relationship between narrative reconstruction and the development of posttraumatic growth. Like the strands of DNA, I suspect that these two processes are intricately intertwined—co-occurring and interacting. In other words, I theorize that narrative reconstruction facilitates the process of posttraumatic growth, while the development of

posttraumatic growth prompts more narrative reconstruction. The two processes are thus mutually reinforcing.

The Role of Trauma-Related Therapy in Trauma Survivors' Narrative Reconstruction Processes

There is one area where the qualitative and quantitative findings of this chapter are at odds with one another: regarding the role of trauma-related therapy in trauma survivors' narrative reconstruction processes. The quantitative analyses reveal no statistically significant relationship between the Levels and receiving trauma-related therapy, as well as only a modest, non-statistically significant correlation between having received trauma-related therapy and narrative coherence ($r = .15$). However, several research participants spoke at length during their interviews regarding the important roles that helping professionals have played in their processes of trauma recovery, cognitive and emotional processing, and, arguably, their development of a coherent, post-trauma, life narrative.

Here, Hannah, a Level I graduate student, whose father was alcoholic, drug-addicted, and emotionally abusive, discusses her brief but helpful experience with therapy:

> When I came to [the University]…I went over to [the counseling center]…and I did like 3 appointments with a psychologist there. And that…was, like, really good. I mean there was lots of crying. It was the first time, though, that I'd ever talked about anything and then gotten anything out. And I just felt like there was a lot of, you know, release in that.

Derek, a Level I trauma survivor whose mother passed away, likewise describes his own experience with therapy as follows:

> I went to [the University counseling center] three times and saw a psychologist there. It was just nice to have somebody that I could tell things to who I knew wouldn't tell anybody and just didn't care if it was negative things. 'Cause that was in the beginning of my first year at college when I felt extremely alone. I had to talk to somebody…about what I was going through, because it was

> just driving me nuts and I had to figure out if what I was thinking in my mind made any sense….just to kind of help me work through things. But it was a good experience for the most part. Like I was just glad to have somebody that I could tell that stuff to, 'cause I didn't have my mom.

A substantial body of theoretical work on narrative and meaning-making processes postulates that assisting clients in the process of reconstructing their personal narrative in the aftermath of trauma is a crucial step in helping survivors to integrate the traumatic experience into their identities and life story (Gilbert, 1997; Hagman, 2001; Harvey et al., 2004; Meichenbaum, 2006; Moos & Schaefer, 1986; Neimeyer, 1993; 1998, 2001, 2004; Pals & McAdams, 2004; Sewell, 1997, 2005; Tedeschi & Calhoun, 2006).

Particularly in the past two decades, numerous therapeutic modalities have been developed (and, in some cases, empirically tested) that emphasize and strive to facilitate the meaning-making and narrative reconstruction efforts of trauma survivors. These approaches include cognitive processing therapy (Resick & Schnicke, 1992, 1993), logotherapy (Frankl, 1959, 1961; Guttmann, 1996; see also, Southwick, Gilmartin, McDonough, & Morrissey, 2006), constructivist trauma psychotherapy (Sewell, 2005), coherence therapy (Ecker & Hulley, 2008), various forms of feminist therapy (e.g., Brown, 1994, 2004), psychotherapy based upon Constructivist Self Development Theory (McCann & Pearlman, 1990; Saakvitne, Tennen, & Affleck, 1998), narrative therapy (White & Epston, 1990; see also, Freedman & Combs, 1996), and other self-help and professionally-assisted narrative-constructivist methods (e.g., Monk, Winslade, Crocket, & Epston, 1997; Neimeyer, 1995, 2001, 2006).

In general, empirical research has documented that trauma-focused therapy is associated with increases in narrative coherence (Briere & Scott, 2006). Narrative

coherence, in turn, is associated with decreases in symptoms of posttraumatic stress (Amir, Stafford, Freshman, & Foa, 1998), positive trauma recovery (Pennebaker, 1993), and increases in general well-being (Meichenbaum & Fong, 1993; Stanton et al., 2002).

In addition, several well-controlled studies (e.g., Pennebaker, 1997; Smyth, 1998) have demonstrated that therapeutic journal-writing—in which participants are encouraged to write deeply about their most painful life experiences—helps people to find meaning in adversity and leads to enhanced physical and psychological health. Moreover, Ullrich and Lutgendorf (2002) found that participants who wrote about both the emotional and cognitive aspects of their traumatic experience—as opposed to writing only about the emotional component—experienced significant increases in posttraumatic growth, as measured by the Posttraumatic Growth Inventory. Although Ullrich and Lutgendorf do not examine narrative coherence, per se, their work provides support for Tedeschi and Calhoun's (2004) assertion that the cognitive processing of trauma facilitates growth outcomes, and their findings are consistent with my research as well.

The lack of a statistically significant relationship, in this study, between research participants' categorized Level and their having received trauma-related therapy might be explained by any number of factors—including the small size of the sample (particularly the small number of Level III survivors), the lack of data regarding the length or type of therapeutic treatment, and the lack of data regarding the temporal order of the therapy vis-à-vis other experiences of trauma and sub-trauma adversity.

In short, definitive conclusions regarding the relationships between trauma-related therapy, narrative reconstruction, and posttraumatic growth cannot be drawn from this study. However, in light of other research documenting that certain therapeutic

modalities promote narrative coherence, combined with my own findings (in Chapter 2) demonstrating the positive association between narrative coherence and posttraumatic growth (as measured via the PTGI, $r = .42$, $p = .004$), there is at least some evidence suggesting that receiving (some types of) trauma-focused therapeutic assistance from a helping professional may promote both narrative reconstruction and posttraumatic growth in the lives of trauma survivors.

The Roles of Writing, Informal Conversations, and Self-Reflection in Trauma Survivors' Narrative Reconstruction Processes

Although several trauma survivors in my sample echo Derek's reflections on the important role of therapy in helping them to "work through things" post-trauma, therapy is not the only means through which a coherent, post-trauma life narrative may be formed. In fact, one-third of Level I survivors and 39% of Level II survivors have developed at least moderately coherent life narratives and moderate levels of posttraumatic growth without the support of helping professionals.

Some research participants reconstruct their life narratives, in part, through writing about their experiences. Tracy, a Level I survivor of multiple traumas explains how she began to cognitively process the most difficult time of her life:

> I just went home and I spent like a week at least sitting around outside, and playing with my dog, and journaling a whole lot, and talking with my family, and crying all the time. But I felt really safe there.

Similarly, Kristen, a Level II trauma survivor, who attempted suicide during her mid-teen years, describes how she uses writing in her own life:

> Rather than getting worked up about it [difficulties in life] right away…I write. It's kind of like I journal and write like free-form, free-verse poetry…Actually, writing helps me a lot with that.

Like Tracy, many research participants also reconstruct their post-trauma narratives, at least in part, through conversations with family members, friends, or romantic partners. Lisa, a Level I graduate student who has experienced multiple traumas, notes that "I've talked with enough people about it [the trauma] that it's not new to have this conversation."

Still other trauma survivors may simply think about their life in solitude or talk to themselves. Joshua, a Level II research participant who survived a brutal murder attempt, explains the process through which he made important realizations about his life:

> For the next month [after the assault]…I sat in my basement every day…Didn't do anything. Didn't contact anyone. Went to work; came home. Watched movies and was in seclusion for about a month. That incident probably had the most positive effects on my life of any incident…Just made me such a stronger, better person….It really took that incident to really wake me up and say, this is what you're gonna do for the rest of your life. You know? You're gonna go to college. You're gonna get good grades. You're gonna work hard. You're gonna be honest…You're not gonna drink. You're not gonna do drugs. You're gonna live a positive life from here on out.

Despite Joshua's unusual experience of dramatic transformation "in seclusion," most trauma survivors draw upon some combination of several of the aforementioned strategies in order to process the major events in their lives. Regardless of the means, the common thread amongst Level I (and, to a lesser extent, Level II) trauma survivors is that they put their trauma(s) into words. They articulate what happened to them, who they were before and after the traumatic event(s), the continuity and differences between those two iterations of the self, and what has been lost and gained through the experience(s). Their life narratives evolve and change over time, as new experiences are incorporated into them and new understandings are reached regarding the self and their past. The crucial component is that a coherent, reconstructed, post-trauma narrative is developed, placing the narrator within a life story that continues on.

Given the moderate to strong correlation between the reconstruction of a coherent, post-trauma life narrative and the development of posttraumatic growth, there are clear implications for sociological and social work practice. My findings support therapeutic strategies with trauma survivors that aim to help these individuals to formulate their (post-)trauma narratives, whether orally or in writing. These findings also suggest that therapists need to (continue to) guide trauma survivors in articulating their identity before and after the trauma, and assist them in identifying the continuity and differences between those iterations of the self. Furthermore, these findings support therapeutic methods that help trauma survivors to identify what has been lost and gained through the trauma—guiding survivors to grieve the losses and commemorate the positive outcomes. Wherever possible, trauma survivors should be assisted in finding or creating meaning in the traumatic experience(s).

Cultural Narratives, Collective Traumas, and the Discursive Environment

Here in the twenty-first century U.S., we live in a society filled with pre-existing narratives that are widely available and readily understood (Plummer, 1995). That is to say, in the current "discursive environment" (Frankenberg, 1993), there are numerous types of extant discourses, or cultural narratives, that individuals can draw upon when constructing their own identities and life stories. Individual narratives that are based upon the same cultural narrative (e.g., the coming-out narrative) share numerous characteristics—including major characters, story arc, tone, themes, and resolution (McAdams, 2006; Plummer, 1995).

Some trauma survivors are able to connect their experiences of adversity to a larger, cultural narrative. For example, Jennifer (and, to a lesser extent, Keanna) draws heavily upon a widely available cultural narrative: Christianity. The cultural narrative of Christianity, shared by millions of people across the globe, provides Jennifer with a positive philosophy of life, comfort and confidence in times of difficulty, a framework within which to understand and give meaning to her experiences, and a ready-made script with regard to how she should respond to the trauma and suffering in her life. In sum, this cultural narrative simultaneously buffers Jennifer from the ontological threat of having her pre-trauma assumptions about the world completely shattered, while also providing her with a "short-cut" of sorts in her process of reconstructing a coherent, post-trauma narrative for her life.

Religious narratives are but one of the many cultural narratives that individuals in my sample have woven into their personal life stories. Other common examples include the narrative of the rape survivor and the secular philosophies of "that which doesn't kill you makes you stronger" and "everything happens for a reason."

Some types of traumatic events (e.g., major natural disasters, acts of terrorism) are experienced collectively, at least to some degree, by an entire society. Immediately after these events, there is no extant cultural narrative upon which individual trauma survivors can initially draw. However, a cultural narrative about a specific tragedy quickly evolves within the society, due, in part, to the extensive media coverage such events receive. Two of the interviewees in this study experienced this type of national, collective trauma (i.e., the terrorist attacks of September 11, 2001 and Hurricane Katrina). For example, Carrie, a Level II survivor whose middle school was located one block away from the

World Trade Center, narrates her story of the September 11th attacks from three perspectives—her own, her mother's, and her grandmother's—switching back and forth between their various experiences and also incorporating facts, sensory components (i.e., sights, sounds, and smells), and experiences that she later learned through the media's coverage of that tragic day and its aftermath. In the days and weeks following September 11th, Carrie compared her personal experiences, feelings, and interpretations regarding that day with those of other survivors in her social network, as well as with the media's coverage of the event. Through these activities, Carrie's own post-trauma narrative was both aided and shaped by the evolving collective narrative. In sum, the cultural narratives that emerge from large-scale, collective traumas assist individual survivors in their efforts to reconstruct a coherent post-trauma narrative of their lives.

In a similar vein, some types of traumatic events are experienced collectively, on a smaller scale, by a family, group, or community. These events, too, often prompt the development of a collective narrative. For example, several interviewees in this study experienced the death of a friend, most frequently during their high school years, as a result of an accident, suicide, or murder. Here, Aubrey, a woman who has experienced multiple traumas (including the murders of two boyfriends) describes the period of time, during her sophomore year of high school, shortly after her first boyfriend was killed:

> The school was really impacted. He [the murdered boyfriend] knew a lot of people, you know, and a lot of people knew him. And they even had like a big lounge at school the next day for people to just go if they needed time to reflect or, you know, talk about it. And I was, of course, a mess. You know, I cried that whole night….So that was rough, the first time something like that happened….[But] it didn't take as long to heal from that [compared to the attempted rape] because…*I was experiencing it collectively*, you know, with a lot of friends who knew him as well and *we kind of coped together*….And the funeral was, you know, a couple of days later….I mean, it was tough, but like I said *we kind of healed together*, you know. Everyone was kind of impacted, so *it wasn't like I was dealing with it alone*, you know? There were people I could talk to about it, people that I could reminisce about him with, because they knew him too.

As illustrated in Aubrey's account, traumatic events that are experienced as a group often spark collective coping activities—such as talking about the trauma, expressing emotions, and grieving together. Such activities may also promote the development of a collective narrative about the event and individuals' efforts to form a coherent post-trauma narrative. While not necessarily tied to a cultural narrative in the larger society, smaller-scale collective traumas, nonetheless, frequently give rise to what we might call "sub-cultural narratives," or group narratives within a given context.

Although there is an array of readily available cultural narratives within the discursive environment upon which individuals may draw in creating their identities and life stories, not all narratives are equally valued or encouraged in a society. In fact, some stories (e.g., narratives regarding child sexual abuse, regretting one's abortion, one's own suicide attempt, or male rape victims) do not have an accepted place in the discursive environment, are not validated, or are strongly discouraged. Moreover, not every member of a society has equal access to all of the available cultural narratives or discourses. Rather, the presence or absence of narratives in the discursive environment, the reception these stories receive within the society, and the access that individuals have to these narratives is influenced by the historical moment, social norms, politics, power, privilege, and individuals' locations in the social structure (Plummer, 1995). In sum, trauma survivors' narrative reconstruction efforts are social actions, that play a social role, and which occur within a social context.

The social context has real-life implications for trauma survivors and their efforts to overcome traumatic events and reconstruct a coherent life narrative. Mike, for example, does not have a readily accessible cultural narrative upon which to base his

post-trauma life story. As a member of several socially-privileged groups, Mike has been socialized into the norms of hegemonic masculinity (Connell, 1995), in which men are taught to not express vulnerability, exhibit few emotions other than anger, and handle all of their own problems without the assistance of others. Moreover, the sudden death of a sibling, particularly during one's adolescence, is a relatively uncommon form of trauma and such stories do not have a prominent place in our society's current discursive environment. There is thus no extant cultural narrative—complete with story arc, philosophy of life, and norms regarding how to live one's life going forward—for Mike to adopt as his own. Mike also does not subscribe to the tenets of any particular religion or philosophical creed that might facilitate his efforts to find meaning in his sister's death. Subsequently, to a large extent, Mike is on his own with regard to making sense out of his traumatic loss and reconstructing his life narrative. So far, he has been largely unsuccessful in doing so.

In sum, individuals who are able to connect their life story or trauma narrative with some sort of larger cultural, "sub-cultural," or collective narrative are better able to reconstruct a coherent, post-trauma narrative. Extant or collectively-emerging discourses, in effect, provide these trauma survivors with narrative "short-cuts" in their efforts to make sense of their experiences and reconstruct their life stories. Conversely, individuals who—due to some combination of socio-historical-political and personal factors—are not able to draw upon a larger, cultural, "sub-cultural," or collective narrative have a more challenging task ahead of them when striving to construct a coherent, post-trauma narrative. This difficulty arises because these individuals are

forced to work largely "from scratch" in reconstructing their life stories and making sense of their experiences.

Outliers

There are relatively few cases in my sample (i.e., 3) that do not fit into one of the three categories that I have presented in this chapter. Although small in number, these outliers nonetheless serve two important roles: first, they highlight circumstances in which narrative reconstruction and posttraumatic growth do not develop in tandem with one another; and second, they serve as evidence that narrative coherence is independent of posttraumatic growth.

Aubrey, quoted earlier in this chapter, is a good example of an outlier case. The major traumas in Aubrey's life include the murders of two of her boyfriends, as well as being attacked by a stranger who attempted to rape her. The two violent deaths occurred during her teenage years, while the attempted rape occurred about eleven months prior to her participation in this research project.

Aubrey has a highly coherent narrative about her life, scoring 23 out of 25 points on my coding rubric, and her life story seamlessly incorporates the various traumas she has experienced. Her high narrative coherence score accurately reflects the many activities in which she has engaged that likely promoted her narrative reconstruction efforts—including talking about the incidents with friends, thinking through these events on her own, prayer, developing her life's motto that "everything happens for a reason," and testifying in court against her attacker. Given this high narrative coherence, I would have expected her to have experienced high levels of posttraumatic growth. However,

my scoring of her posttraumatic growth, based largely upon her interview, places her in the moderate growth category. In sum, Aubrey simply does not fit neatly into any of the three categories (i.e., Level I, II, or III) outlined above.

There are many possible explanations for this outlier case. Since the attempted rape was relatively recent, perhaps Aubrey is still in the process of growing from this event? Or, perhaps, Aubrey had previously experienced a higher level of posttraumatic growth following the murders of her boyfriends, and the attempted rape caused her to "regress" to a lower level of posttraumatic growth? Whatever the reason(s), Aubrey is an example of someone who does not, at least currently, fit into the categorization scheme that I have presented in this chapter.

Continuums, Variation Within Levels, and Stages of Change

Although I have used categorical terminology (i.e., "low," "moderate," and "high") throughout much of this chapter, it is important to remember that the phenomena of narrative coherence and posttraumatic growth are both continuums—not constructs having three distinct categories. Nonetheless, I have grouped research participants into three distinct categories as an analytical device that has enabled me to first examine the relationship between these two constructs and then to present case studies that exemplify key aspects of this relationship.

However, the use of any analytical device involves drawbacks. In this instance, the use of distinct categories masks much of the variation that occurs within each level. For example, among Level II survivors, some individuals score on the higher side with regard to both narrative coherence and PTG, and they are thus on the verge of being

classified as Level I. Conversely, some Level II survivors score on the lower side with regard to both constructs and are near the threshold of being classified as Level III. Moreover, some trauma survivors have narrative coherence scores close to the upper boundary delineating the levels, whereas their PTG scores may be close to the lower boundary between the levels. More rarely, the inverse occurs: the survivor's narrative coherence score is on the low side within the level, while their PTG score is on the high side within the level. I highlight these various scenarios to make this point: although a categorization scheme focuses one's attention on similarities within a level, there is, nonetheless, considerable variation.

Given that both narrative coherence and posttraumatic growth occur on a continuum, individual trauma survivors may progress, more-or-less in tandem, from the low end of the two continuums toward the higher ends. In some unfortunate circumstances (e.g., if another traumatic event occurs), one can also imagine a trauma survivor regressing from the higher end of the continuums back toward the lower ends. It thus follows that the three levels that I proposed earlier in this chapter may be best conceptualized as stages of post-trauma change.

Due to the limitations of cross-sectional data, this study cannot definitely demonstrate that Levels III, II, and I are progressive stages of post-trauma change, as this would necessitate following-up with the research participants months or even years later to assess their levels of narrative coherence and posttraumatic growth at different time periods. Nonetheless, many of my interviewees (especially Level III and Level II survivors) referred to their own post-trauma meaning-making efforts and posttraumatic growth as being, in some way, a work in progress. While beyond the scope of the current

research project, a future longitudinal study of trauma survivors' narrative reconstruction and posttraumatic growth would contribute much to our understanding of trauma survivors' post-trauma trajectories.

CONCLUSION

To summarize, in this chapter, I have extended the work of narrative-constructivist and assumptive world theorists by exploring the relationship between trauma survivors' narrative reconstruction efforts and their development of posttraumatic growth. Specifically, I have presented three categories that best represent the experiences of my sample: Level I includes those survivors who have high narrative coherence and high posttraumatic growth; Level II includes survivors who have moderate narrative coherence and moderate posttraumatic growth; and Level III includes survivors who have low narrative coherence and low posttraumatic growth. I have demonstrated that having a coherent life narrative is positively associated with posttraumatic growth, and I have argued that the relationship between them is co-constitutive.

The primary contribution of this research is that it is, to my knowledge, the first study to empirically examine the relationship between narrative reconstruction after trauma and the development of posttraumatic growth. This study paves the way for future, longitudinal research to examine the temporal and potentially causal or co-constitutive relationship between narrative reconstruction and the various forms of growth. Longitudinal research may also address key issues regarding trauma survivors' post-trauma trajectories, their "forward" and "backward" movements along the two continuums, and stages of post-trauma change.

This study also raises questions regarding the role of cultural narratives, collective traumas, and the discursive environment in trauma survivors' processes of healing and posttraumatic growth. Future research is needed to examine the nature of the relationships among these variables, as well as to further our understanding of how cultural and collective narratives facilitate survivors' efforts to reconstruct coherent post-trauma narratives for their lives. Future research should also explore the various types of cultural narratives that trauma survivors weave into their individual life stories, as well as how social norms, politics, and individuals' locations in the social structure shape their (post-)trauma narratives.

Finally, further research is needed to explore precisely how helping professionals—including psychologists, psychiatrists, social workers, counselors, and clergy members—may best promote both narrative reconstruction and posttraumatic growth in the lives of trauma survivors.

In conclusion, I have demonstrated that developing a coherent, post-trauma life narrative is positively associated with experiencing posttraumatic growth. While there is much more still to be investigated about the relationship between these two variables and about the processes of narrative reconstruction and posttraumatic growth in general, one thing is clear: individuals' post-trauma narratives are a fruitful area of inquiry in the quest to better understand posttraumatic growth. There is thus much exciting work ahead!

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Table 3.1: Demographic and Trauma-Related Variables by Level

	% of Sample	Gender	Race/ Ethnicity	Family Household Income	Age	Education Level	Religious/ Spiritual	Trauma -Related Therapy	# of Trauma Types	Total Trauma Frequency	Months Since Trauma
Level I (N = 15)	33%	60% Women 40% Men	80% White 0% Black 7% Asian 13% Other	47% <$50K 7% $50-100K 47% >$100K	Mean = 22.1 years (SD = 2.4)	13% Freshman or Sophomore 33% Junior or Senior 27% Recent College Graduate 27% Graduate Student	60% Yes 40% No	67% Yes 33% No	Mean = 4.1 (SD = 2.2)	Mean = 15.4 (SD = 14.3)	Mean = 30.0 months (SD = 28.9)
Level II (N = 23)	50%	65% Women 35% Men	52% White 22% Black 9% Asian 17% Other	22% <$50K 43% $50-100K 35% >$100K	Mean = 21.1 years (SD = 2.5)	17% Freshman or Sophomore 57% Junior or Senior 13% Recent College Graduate 13% Graduate Student	83% Yes 17% No	61% Yes 39% No	Mean = 2.8 (SD = 1.8)	Mean = 11.0 (SD = 12.7)	Mean = 33.9 months (SD = 35.2)
Level III (N = 5)	11%	40% Women 60% Men	60% White 0% Black 20% Asian 20% Other	20% <$50K 40% $50-100K 40% >$100K	Mean = 20.8 years (SD = 2.3)	20% Freshman or Sophomore 40% Junior or Senior 20% Recent College Graduate 20% Graduate Student	40% Yes 60% No	40% Yes 60% No	Mean = 2.2 (SD = 0.8)	Mean = 4.5 (SD = 3.8)	Mean = 15.8 months (SD = 10.4)
Other (N = 3)	7%	67% Women 33% Men	33% White 33% Black 33% Asian 0% Other	0% <$50K 100% $50-100K 0% >$100K	Mean = 22.7 years (SD = 2.1)	0% Freshman or Sophomore 33% Junior or Senior 33% Recent College Graduate 33% Graduate Student	100% Yes 0% No	33% Yes 67% No	Mean = 4.7 (SD = 4.0)	Mean = 17.3 (SD = 17.0)	Mean = 24.2 months (SD = 31.3)
Total Sample (N = 46)	100%	61% Women 39% Men	61% White 13% Black 11% Asian 15% Other	28% <$50K 35% $50-100K 37% >$100K	Mean = 21.5 years (SD = 2.4)	15% Freshman or Sophomore 46% Junior or Senior 20% Recent College Graduate 20% Graduate Student	72% Yes 28% No	59% Yes 41% No	Mean = 3.3 (SD = 2.1)	Mean = 12.1 (SD = 13.0)	Mean = 30.0 months (SD = 30.8)

Note: Percentages may not total 100% due to rounding.

CHAPTER 4

"I REALLY WANT TO HELP PEOPLE": SURVIVOR HELPERS, SURVIVOR MISSIONS, AND SURVIVORS' EMPOWERMENT

> I feel like if I wasn't in that situation with my mom, I wouldn't realize how important it is to make something of your life, make a difference, change the world. But now I see how many people are suffering, how many bad things [there are] in the world that I would want to help change or help turn around. And that's a priority to me now. I want to help people. I want to change things versus just live a normal life. I want to live a better-than-normal life. I want to actually make an impact.
>
> —Devon, 19 years old, primary caregiver for his mother as she died of cancer

> All the experiences that I've had, maybe I can use [them] to help others, to understand other people…. So maybe because I went through this and I understand better, I can help others and I can be there for them.
>
> —Jennifer, 23 years old, survivor of multiple traumas

The above quotations highlight one of the most inspiring aspects of many of my interviews with trauma survivors: their desire to somehow use their painful pasts in a way that benefits others who are struggling with similar difficulties. This chapter focuses upon this phenomenon.

BACKGROUND

Generativity

One of the major constructs that researchers have used when examining human propensities for engaging in socially productive activities is generativity. Generativity has been defined as:

> The adult's concern for and commitment to the well-being of the next generation, as manifested in parenting, teaching, mentoring, and other behaviors and involvements that aim to contribute a

> positive legacy that will outlive the self. [McAdams, Diamond, de St. Aubin, & Mansfield, 1997, p. 678]

The prototypical example of generativity is parenting, but there are countless other activities through which individuals may invest their time and energy for the advancement of future generations. Other examples include volunteering with children or disempowered groups, producing works of art, engaging in religious and political activities, and advocating for social causes (McAdams & Logan, 2004). In short, generative activities promote the well-being of others or the betterment of the human condition.

The concept of generativity originated with developmental psychologist Erik Erikson (1950, 1959), who described it as "the concern in establishing and guiding the next generation" (1963, p. 267). In his well-known theory regarding the stages of psychosocial development, Erikson depicted the juncture in which individuals must choose between generativity and stagnation as the seventh of the eight stages in the human life cycle. Although Erikson's theory suggests that generativity is primarily the concern of midlife adults, several teams of researchers have documented that it may develop in young adults or even adolescents (Brady & Hapenny, 2010; Lawford, Pratt, Hunsberger, & Pancer, 2005; McAdams, de St. Aubin, & Logan, 1993; Peterson & Stewart, 1993). In the decades since Erikson coined the term, researchers have discovered generativity to be a complex and multi-dimensional construct (e.g., McAdams & de St. Aubin, 1992). While a thorough review of the vast literature on generativity is outside of the scope of this chapter, McAdams and Logan (2004) present a recent summary of the research in this field. In this chapter, I will focus upon one form of generativity that manifests in the lives of some trauma survivors: a survivor mission.

Survivor Missions

In her book, *Trauma and Recovery*, Judith Herman (1992) asserts that there are three stages of trauma recovery: 1) the establishment of safety; 2) remembrance and mourning; and 3) reconnection with ordinary life. In the first stage, the main therapeutic task is establishing the safety of the survivor—beginning with individuals regaining control of their body, and moving outward toward control of various aspects of their environment; at this stage, the focus of treatment is on issues of self-care, safety planning, and efforts aimed at regaining a sense of stability and predictability. Other researchers (e.g., Calhoun & Tedeschi, 1998; Epstein, 1967; Parkes, 2002; Sewell & Williams, 2001) concur with Herman's (1992) insistence that "no other therapeutic work can possibly succeed if safety has not been adequately secured" (p. 159) and some semblance of stability has been restored.

In Herman's (1992) second stage, the central therapeutic task is remembrance and mourning, and the focus of treatment turns to the trauma itself. During this stage, survivors transform the pre-verbal and disjointed traumatic imagery and sensations into a detailed (verbal) narrative of the traumatic event, mourn what they have lost because of the trauma, and gradually integrate the experience into their life story. Chapter 3 highlighted the importance of this second stage in the trauma recovery process, where survivors seek to reconstruct their life stories following traumatic events.

The third and final stage, which Herman (1992) terms "reconnection," focuses on reconnecting survivors with ordinary life—including relationships with the self and with others in their social environment. During this stage, trauma survivors turn their attention to developing their new identities, building relationships with others, and creating a new

life for themselves. According to Herman (1992, p. 207), for most trauma survivors, the reconnection stage involves engaging in various ordinary activities "within the confines of their personal lives." However, a "significant minority" of trauma survivors develop what Herman terms a "survivor mission." This chapter focuses upon this one aspect of the third and final stage in the trauma recovery process. Herman explains:

> These survivors recognize a political or religious dimension in their misfortune and discover that they can transform the meaning of their personal tragedy by making it the basis for social action. While there is no way to compensate for an atrocity, there is a way to transcend it, by making it a gift to others. The trauma is redeemed only when it becomes the source of a survivor mission. [Herman, 1992, p. 207]

Although Herman never explicitly defines the term "survivor mission," she does note that this "social action" may take many forms—including working directly with others who have experienced similar traumas, engaging in educational, legal, political, or public policy efforts to address a social problem, participating in activities to raise public awareness about an issue, and using the criminal or civil court systems to bring offenders to justice. While survivor missions of various sorts all center around helping others in some way, Herman asserts that these activities also bring healing to the individual engaging in them. According to Herman, "In taking care of others, survivors feel recognized, loved, and cared for themselves" (1992, p. 209). In short, trauma survivors who develop a survivor mission not only make a positive difference in the lives of others, but they also experience benefits themselves.

Almost 20 years have passed since Herman published her influential book on trauma recovery. Strangely, while many of Herman's ideas have had tremendous staying power, her discussion of a "survivor mission" has received minimal attention in the empirical literature. In fact, keyword searches in several social science databases and the Google search engine unearthed fewer than a dozen references to the term in published

sources, theses, or dissertations (e.g., Dietz, 2000; Goldenberg, 2008; Lebowitz, Harvey, & Herman, 1993; Moultrie, 2004; Russel, 2005; Schiller & Zimmer, 2005).

Robin Russel, the Director of the School of Social Work at the University of Maine, wrote an essay about the phenomenon in which formerly traumatized individuals find a survivor mission and pursue careers in social work. She writes:

> What I have found to be…common in my career are students who have done a lot of work on their issues, usually in therapy, and then enter the field as a way of "giving back" in response to the help they received from others. I have also found them to generally be determined to impact the societal conditions that support the types of trauma they experienced. [Russel, 2005, p. 1]

Dietz (2000) similarly uses the term "survivor mission" in her feminist critique of the disempowering aspects of clinical social work practice. She asserts:

> Survivors may become social workers as part of a "survivor mission" (Herman, 1992), and their experiences of transforming abuse and resisting oppression may inform and enhance their practice. They can serve as role models, offering understanding, empathy, and hope to others who have been similarly oppressed. They can also educate their fellow social workers about what helps and what hurts in recovering from the long-term effects of oppression and abuse. [Dietz, 2000, p. 381]

Goldenberg's (2008) dissertation on the coping mechanisms of then-adolescent survivors of the Holocaust, in the years after World War II, lists survivors' searches for meaning and for a survivor mission as being among the important coping mechanisms used to manage the impact of their traumatic experiences. And Lebowitz, Harvey, and Herman (1993), in an article outlining their matrix model of recovery from sexual trauma, reiterate that developing a survivor mission is one possible expression of the "reconnection" stage of trauma recovery.

In their research on female sexual abuse survivors, Schiller and Zimmer (2005) discuss the survivor missions in which some of their clients engage during the final stage of trauma recovery. They observe:

> During this stage many survivors also embark upon what Herman refers to as a "survivor mission." They find a way to give back to the community and frequently, as they discover new purpose, find a project or career path that gives their life meaning and transforms their pain. They may pursue further education in counseling or law or social work with the hope of using their own

> experiences to help others. Some survivors pursue social action and political involvement as a way of working toward social change and prevention. Survivors bring a wealth of energy and vision to such work as they find a way to make meaning out of their own personal suffering. [pp. 301-302]

Of the works that cite the term "survivor mission," Moultrie (2004) gives the greatest empirical attention to the topic, although it is but one of numerous foci in her master's thesis. Moultrie, who subtitled her study "Survivors with a Mission," conducted an evaluation of a school-based trauma support project in an impoverished, gang-ridden, urban South African community. She sought to explore both the negative and positive impact of layperson volunteerism in trauma work. Moultrie found that, by providing trauma survivors with structured "opportunities to help others heal their trauma," (2004, p. 17) the project facilitated the empowerment of the volunteer helpers. She explains:

> Helping others appeared to function partly as a form of vicarious healing and empowerment, especially where volunteers who were themselves survivors of child abuse were able to give abused children "the love we never got". Such helping experiences appear to have created retrospective opportunities for efficacy, where in similar personal experiences the volunteers had previously been helpless. [Moultrie, 2004, p. 43]

In sum, very little is known about survivor missions. There has been minimal theorizing or conceptual work on the topic, only one researcher (Moultrie, 2004) has, to my knowledge, empirically examined the subject, and I could find no explicit definition for the term in either the published or unpublished literatures.

Professionally-Led Mutual Aid Groups, Self-Help Groups, and Programs Using the Helper Therapy Principle

Although scholars have rarely empirically investigated Herman's (1992) concept of a "survivor mission," a substantial amount of related research has been conducted. In fact, there are many helping traditions, therapeutic modalities, and empirically evaluated programs in which individuals—who are either in the midst of their own struggle or who

have reached a sufficient level of stability or recovery—assist others like themselves. Three of the most common helping traditions that use this type of model are professionally-led mutual aid groups, self-help groups, and programs built upon the "helper therapy principle."

Professionally-led mutual aid groups have long been used by social workers, psychologists, and other therapists. The central tenet of professionally-led mutual aid groups is that the source of the helping is (primarily) the members of the groups themselves, while the role of the professional "leader" is that of a facilitator (Gitterman, 2004; Schwartz, 1961; Shulman, 1999). These groups have been used in a variety of settings, including schools, workplaces, health care facilities, shelters for battered women, and correctional facilities (Gitterman & Shulman, 2005). They have also been effective in addressing the needs of a wide range of population groups across the life course, including bereaved children, traumatized children, pre-teens negotiating various life transitions, adolescents in impoverished urban settings, teens in residential treatment programs, persons living with HIV/AIDS, survivors of sexual abuse, sexual assault, and domestic violence, men who have battered their partners, homeless women and children, parents of developmentally disabled children, single parents, and widow(er)s, to name only a few (Gitterman & Shulman, 2005).

Self-help groups, which, in their present form, date back to the founding of Alcoholics Anonymous in 1935, have proliferated in the U.S., particularly during the past four decades. These groups caught the attention of researchers beginning in the mid-1970s (e.g., Borman & Lieberman, 1976; Caplan & Killilea, 1976; Katz & Bender, 1976; Riessman, 1976). According to the American Self-Help Group Clearinghouse (ASHGC,

n.d.), self-help groups have four primary characteristics: 1) They are based upon mutual help; 2) They are run by members of the group (not professional helpers); 3) They are composed of people facing the same type of problem; and 4) They are voluntary, non-profit organizations. Self-help groups, across the country (and beyond), have developed to support individuals facing a broad range of difficulties arising from addictions, bereavement, serious medical conditions, major life transitions, mental illness, infertility, various forms of traumatic victimization, and sexual orientation and gender identity, to name only a few (White & Madara, 2002).

Helper therapy is a term coined by Riessman (1965), and it refers to a model of helping in which those persons who would ordinarily receive help are given opportunities to provide help; the foundational assumption of this model is that both the help-receivers and the helpers themselves will experience benefits from their roles. The helper therapy principle has been applied in many contexts, including with overweight or formerly overweight individuals trained as weight management specialists (Wallston, McMinn, Katahn, & Pleas, 1983), individuals with histories of substance abuse trained as alcoholism counselors (Kahn & Fua, 1992), low income mothers volunteering as community health workers with low income, pregnant women (Roman, Lindsay, Moore, & Shoemaker, 1999), foster grandparents who assist at-risk children (Corporation for National Service, 1998; Senior Corps, n.d.), terminally ill children and their families helping other children and families (Lipton, 1978), and teenagers living in the ghetto of South Bronx forming care-taking relationships with younger children (Farber & Rogler, 1982). Moultrie's (2004) research with laypersons working as "survivor therapists,"

described earlier in this chapter, is another example of the helper therapy principle in practice.

Helping Professionals With Trauma Histories

There is also a body of literature that has attempted to ascertain the percentage of helping professionals who have personal histories of trauma. Empirical studies, utilizing various methodologies and sampling from assorted categories of helping professionals (e.g., psychologists, social workers, medical students, marriage and family therapists, and children's services workers), have found prevalence rates of childhood physical abuse ranging from 7-56%, childhood sexual abuse levels ranging from 9-43% (deLahunta & Tulsky, 1996; Elliott & Briere, 1992; Follette, Polusny, & Milbeck, 1994; Hansen et al., 1997; Howe, Herzberger, & Tennen, 1988; Nuttall & Jackson, 1994; Pope & Feldman-Summers, 1992; Portwood, 1998; Shapiro, Dorman, Burkey, & Welker, 1999; Yoshihama & Mills, 2003), and rates of domestic violence victimization ranging from 11-50% (Follette et al., 1994; Hansen et al., 1997; Pope & Feldman-Summers, 1992; Shapiro et al., 1999; Yoshihama & Mills, 2003).

Elliott and Guy (1993) are notable for having administered a survey to a stratified random sample of 2,963 professional women throughout the U.S. (e.g., accountants, attorneys, engineers, musicians, etc.). They found that, compared with other professional women, mental health professionals reported significantly higher rates of childhood physical and sexual abuse, parental alcoholism, the hospitalization of a parent for mental illness, and the death of a parent or sibling.

Yoshihama and Mills (2003) conducted one of the most recent studies, surveying 303 children's services workers in Southern California regarding their personal abuse histories. Nearly one-third of respondents (30% of the women and 42% of the men) reported experiencing childhood physical abuse, more than one-fifth (22% of the women and 21% of the men) reported having been victims of childhood sexual abuse, and approximately one-half of the respondents (52% of the women and 39% of the men) reported experiencing at least one act of physical or sexual violence by an intimate partner.

With few exceptions, however, these studies do not assess the prevalence rates of other traumatic life events—such as major car accidents, the suicide or sudden death of loved ones, sexual assaults by non-intimate partners, or natural disasters—in the lives of helping professionals (for exceptions, see Elliott & Guy [1993] and Follette et al. [1994]). These quantitative studies also do not ascertain whether or not these individuals chose to pursue careers in the helping professions because of their traumatic experiences (i.e., due to having a survivor mission), or if traumatic experiences in adulthood preceded individuals' decisions to enter the helping fields. Moreover, no large-scale study has been conducted, with a nationally-representative sample, across all of the helping professions in the U.S., to determine the prevalence of trauma survivors among their ranks.

At least two qualitative studies have also explored the ways in which personal trauma histories may lead individuals to pursue careers in the helping professions. In his dissertation research, Chudnof (1988) qualitatively analyzed the life stories of 12 helping professionals. Although drawing from a convenience sample, he found that all of his

research participants came from "dysfunctional" households or had other significantly painful experiences early in their lives, and that these experiences contributed to these individuals' decisions to pursue careers helping others. Chudnof states:

> I have found, both in my research and in my teaching, that many students entering the helping professions have learned to give meaning to their life tragedies by dedicating themselves to helping others. [1988, pp. 279-280]

Higgins (1994) similarly conducted a qualitative study of 40 highly resilient survivors of severe childhood abuse and observed that most of these individuals engage in social and political activism, and that many of them pursued careers in the human services field. She refers to these generative activities as "healing pathways," due to the benefits that the trauma survivors themselves receive.

In short, there are no available data regarding the percentage of trauma survivors who eventually develop a survivor mission. Despite limited data, it is clear that the ranks of the helping professions are filled with significant numbers of trauma survivors. There is also some evidence that suggests that personal trauma histories frequently lead trauma survivors to choose careers or engage in volunteer activities that enable them to help others. More research is clearly needed in these areas.

Generativity, Survivor Missions, and Posttraumatic Growth

Due to the dearth of conceptual work regarding the construct of a survivor mission, I believe that it is important to clarify the relationships among several related constructs, as I view them: generativity, survivor missions, and posttraumatic growth. Although these three terms have not previously been connected in the published

literature,[18] I see them as interrelated. Thus, it is important to understand the similarities and differences among these phenomena.

With regard to generativity and survivor missions, both concepts involve making a positive difference in the world. However, there are two important distinctions. First, only trauma survivors can develop survivor missions, whereas any person can engage in generative activities. And second, individuals with survivor missions seek to assist other trauma survivors, whereas individuals participating in generative acts may focus their efforts upon a vast array of groups in society—such as one's children, neighborhood, or community—or even upon the world at large. In short, generativity is a much broader category than survivor missions. Survivor missions are forms of generativity that are enacted by trauma survivors who want to improve the lives of others facing similar difficulties.

Generativity and posttraumatic growth are similar but distinct concepts as well. When comparing the most frequently employed quantitative measures of both generativity and posttraumatic growth (i.e., the Loyola Generativity Scale [LGS; McAdams & de St. Aubin, 1992] and the Posttraumatic Growth Inventory [PTGI; Tedeschi & Calhoun, 1996], it becomes clear that there is some overlap between these two constructs. Many forms of posttraumatic growth (e.g., a shift in one's priorities toward helping others; working to address social problems) are generative. Similarly, many generative acts (e.g., volunteering for a charitable cause, teaching important skills

[18] One study has quantitatively examined the relationship between generativity and posttraumatic growth. Among a sample of cancer survivors, Bellizzi (2004) found a positive correlation between generative concern and posttraumatic growth. The author suggests that traumatic events may cause individuals to "grapple with the psychosocial task of generativity" earlier in the life cycle than they might otherwise (Bellizzi, 2004, p. 272). Bellizzi does not, however, discuss survivor missions or theorize regarding the conceptual relationship between generativity and posttraumatic growth.

to others)—if performed by trauma survivors and understood by them to be a result of their traumatic experiences—would be considered evidence of posttraumatic growth. However, like survivor missions, posttraumatic growth can only be developed by trauma survivors, whereas anyone can become generative.

With regard to survivor missions and posttraumatic growth, I assert that developing (and enacting) a survivor mission is a previously unidentified form of posttraumatic growth. Although the Posttraumatic Growth Inventory includes several vague survey items that may capture research participants' survivor missions (e.g., "I have increased compassion for others," "I'm more likely to try to change things which need changing," "I developed new interests," "I established a new path for my life"), I suspect that this form of growth is not adequately represented in quantitative studies that utilize the PTGI, which may lead to some individuals' growth being underestimated. Due to the lack of empirical research on survivor missions, this chapter is dedicated to exploring this important but rarely examined form of posttraumatic growth.

A Note Regarding Terminology

Several terms have been used by other researchers (and in the popular press) to refer to trauma survivors who, after achieving substantial recovery in their own lives, develop a survivor mission. One of the oldest and most frequently referenced terms is that of the "wounded healer." Researchers and the popular press alike have noted both the risks and potential benefits of having the formerly afflicted care for those who face similar difficulties (e.g., Elliott & Guy, 1993; Goldberg, 1986; Maeder, 1989; Nouwen, 1979; Scott & Hawk, 1986).

In his book *The Wounded Healer*, for example, Nouwen (1979) urges members of the ministry to recognize their shared humanity and suffering with those that they seek to serve. He argues that the wounds of clergy members are not a detriment, but are rather a potential source of personal strength and of healing for others. Nouwen explains:

> Our own experience with loneliness, depression, and fear can become a gift for others, especially when we have received good care. As long as our wounds are open and bleeding, we scare others away. But after someone has carefully tended to our wounds, they no longer frighten us or others. When we experience the healing presence of another person, we can discover our own gifts of healing. Then our wounds allow us to enter into a deep solidarity with our wounded brothers and sisters….That is healing. [Nouwen, 1979, p. x]

A decade later, Maeder (1989) took a very different stance in a controversial cover story for *The Atlantic Monthly*. In his article titled "Wounded Healers," Maeder alleged that many therapists' clinical competence is compromised due to their own mental health problems stemming from childhood maltreatment. Despite empirical evidence directly contradicting the claim that helping professionals with trauma histories have poorer mental health and perform worse than their colleagues without trauma histories (Elliott & Guy, 1993; Follette et al., 1994), the term "wounded healer" continues to have mixed connotations today.[19]

At least two alternative phrases to "wounded healers" have been suggested. Moultrie (2004) uses the term "survivor therapists" to refer to volunteer laypersons, with substantial trauma histories, working to help other trauma survivors in their South African community. And Russel (2005, p. 1), states that she prefers to think of individuals with survivor missions who enter the field of social work as "healed heroes

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[19] Russel (2005), for example, refuses to use the term "wounded healer," due to the remaining negative connotations regarding clinical incompetence. Nonetheless, others have embraced the term. For example, there is a website titled "The Wounded Healer Journal" that provides resources and chat forums for "psychotherapists and others who have experienced the devastation of trauma including child abuse" (http://www.twhj.org/twhj/index.html), a book titled *The nurse as wounded healer: From trauma to transcendence* (Conti-O'Hare, 2002), and a relatively recent online essay titled "The Way of the Wounded Healer" (Gordon, 2006).

and heroines." Russel's phrase, although uplifting, seems too grandiose and overgeneralized. Moultrie's (2004) term has the benefit of shifting the focus from helpers' wounds to their survivorship, but the "therapists" component does not adequately capture the breadth of survivor missions in my sample. Subsequently, I have constructed my own term. In this chapter, I have chosen to use the term "survivor helpers" to refer to trauma survivors who either are currently working with, or who have future plans to help, others like themselves. My hope is that this phrase recognizes individuals' trauma histories, emphasizes their successful shift from victims to survivors (rather than their wounds), and encompasses a broad range of helping activities.

In summary, while the term "survivor mission" is not new, this concept has not been thoroughly explored through empirical research with trauma survivors. There is much that is not known, for example, regarding the various types of survivor missions, what survivor helpers believe that they have to offer other trauma survivors, why survivor helpers want to help others, and what survivor helpers "get out of" having a survivor mission. Moreover, to my knowledge, no research to date has examined the differences between trauma survivors who do and do not develop survivor missions, in order to better understand the circumstances under which survivor missions might develop. In short, no known article or thesis has extensively focused upon examining the nature of survivor missions among trauma survivors. This chapter, which I believe to be the first of its kind, begins to explore this important topic.

METHODS

This article is one part of a larger project that examines the trauma recovery and posttraumatic growth among 46 young adults who might be considered the "success stories" of trauma recovery. The sample was recruited from among the undergraduate and graduate students (and some recent graduates), of a large, prestigious, public university in the Midwest United States. Additional information regarding the recruitment and screening of research participants, the data collection procedures, the measures I took to protect the well-being and confidentiality of research participants may be found in Chapter 1.

Although both quantitative and qualitative data were gathered for this study, this article relies primarily upon the qualitative data. Subsequently, I will describe the qualitative methods in more detail here. For detailed descriptions, sample items, and internal reliability analyses of each survey instrument, see Chapter 2.

The qualitative data included an in-depth, semi-structured interview with each research participant, as well as the detailed fieldnotes I took following each interview. Although I used an interview schedule to guide each interview, I was also flexible in adapting the order, wording, and nature of questions to match the personal style of each interviewee and the content of the interview. The interview schedule drew upon several questions from McAdams' (1993) Life Story Interview. The interviews generally consisted of four sections: 1) An overview of the interviewee's life story and major life events; 2) Questions regarding the interviewee's traumatic experience(s), the impact of the trauma(s), and how she/he coped with the trauma(s); 3) An exploration of the interviewee's posttraumatic growth; and 4) A wrap-up section that included questions

regarding the interviewee's future goals and plans, clarification questions regarding her/his answers on the quantitative surveys, and debriefing questions regarding the interviewee's experience of participating in the study. (See Appendix B for a copy of the interview protocol.) I also explored any additional topics that an interviewee said was relevant to her/his experience post-trauma.

I began the process of qualitative data analysis by listening to all of the interviews, reading each transcript, reading all of my fieldnotes, and taking notes on the major themes that I observed. I also wrote numerous initial memos regarding these themes and, later, integrative memos that tied together multiple themes and connected them with other research and various theoretical literatures (Charmaz, 2006; Emerson, Fretz, & Shaw, 1995).

The general topic of this chapter—that is, the survivor missions of trauma survivors—emerged as a major theme during my initial, inductive coding of the interview transcripts. Without a specific prompt in the interview protocol (other than a general question regarding what research participants envision for their future), numerous interviewees spontaneously spoke—often repetitively or at length—about their desire to somehow use their past traumatic experiences for the betterment of the lives of other trauma survivors.

After identifying this major theme, I used the coding techniques of grounded theory to inductively develop the various sub-themes which now form the contours and substance of this chapter (Charmaz, 2006). Specifically, I conducted line-by-line coding of all of the transcript passages that pertained to the theme of survivor missions; this resulted in dozens of codes that remained very close to the data or even used participants'

own terms (i.e., *in vivo* codes). I then grouped together the initial codes that seemed to have a common overall theme. Throughout this process, I built my analyses "step-by-step from the ground up" (Charmaz, 2006, p. 51).

In order to compare survivor helpers in the sample with non-survivor helpers, I next categorized individuals with regard to the current presence or absence of a survivor mission in their lives. Individuals were categorized as being survivor helpers if they discussed either of the following: 1) their current involvement in activities aimed at helping—directly or indirectly—other trauma survivors; or 2) their desire, intentions, or future plans to help—directly or indirectly—other trauma survivors.

For the majority of research participants, the interview transcripts clearly revealed whether or not they had a survivor mission. In a small number of cases, however, it was less clear-cut; in all but one of these cases, I categorized these individuals as *not* having a survivor mission. For example, one research participant, who experienced dating violence, is pursuing a graduate degree in social work; however, when describing how she chose this field, she did not connect her decision to her traumatic experience and she is not preparing to work with other survivors of intimate partner violence. Another research participant is about to join the Peace Corps and is very committed to engaging in community service and in activities that promote social justice; however, during his interview, he linked these interests to his spiritual philosophy rather than to his traumatic experiences. Yet another interviewee, on the verge of getting married, expressed her eagerness to really invest her energies in creating the type of loving family that she lacked during her own growing-up years; however, this generative concern did not seem to extend to other trauma survivors.

In short, my categorization of the "borderline" cases reveals four important points: 1) The focus of survivor helpers is upon helping *other trauma survivors*; 2) Survivor missions are perceived, *by the survivor*, to be connected with the survivor's own traumatic experiences; 3) The individual's intentions or motives matter with regard to whether or not a specific behavior (e.g., pursuing a career in a helping profession) is evidence of a survivor mission; and 4) An individual can be generative without having a survivor mission.

I then used inferential statistics to determine if group-based differences, based upon survivor mission status, were statistically significant. Specifically, I used Fisher's exact tests to investigate the relationships between survivor mission status and the categorical, independent variables (e.g., gender, race/ethnicity, etc.)[20], and I used Wilcoxon-Mann-Whitney tests (i.e., non-parametric independent samples t-tests) to examine the relationships between survivor mission status and the continuous, independent variables (e.g., age, total trauma frequency, etc.).

To preserve the anonymity of these research participants, I have removed, obscured, or, occasionally, changed certain potentially-identifiable details about their life stories. However, none of these omissions or alterations impact the key characteristics that are being analyzed in this chapter.

RESULTS

Who Are The Survivor Helpers? Group-Based Differences By Survivor Mission Status

[20] I did not use chi-square tests, due to the small numbers (i.e., fewer than five) of cases in certain cells.

Among the forty-six research participants, there were 19 survivor helpers (41% of the sample). Approximately three-fourths of the survivor helpers were women, their diversity with regard to race/ethnicity and socioeconomic status closely resembled that of the sample as a whole, and the survivor helpers' average age was 21.26 (*SD* = 2.33). Sixty-eight percent of survivor helpers had received trauma-related therapy at some point during their lives. Table 4.1 describes demographic and selected trauma-related information regarding research participants with and without survivor missions.

There were several interesting demographic and trauma-related differences between the trauma survivors who did and did not (currently) have a survivor mission.[21] Survivor helpers experienced an average of 4.16 different types of traumas (*SD* = 2.59), compared with a mean of 2.63 (*SD* = 1.45) among individuals without survivor missions. The relationship between survivor mission status and the number of trauma types was statistically significant, $z = -1.98$, $p = .05$. Likewise, the relationship between survivor mission status and total trauma frequency approached statistical significance, $z = -1.86$, $p = .06$. Once again, survivor helpers experienced a higher total trauma frequency ($M = 16.74$, $SD = 14.74$) than individuals without survivor missions ($M = 8.91$, $SD = 10.71$).

One possible explanation for these findings is that respondents who have experienced more trauma, both in terms of the number of trauma types and total trauma frequency, may have incorporated those experiences more fully into their identities, worldviews, and future plans. Being a trauma survivor may be an important part of these individuals' identities, and their traumatic experiences may have had more of an impact upon their future plans. In contrast, respondents who have experienced less trauma (i.e.,

[21] See Chapter 2 for additional information regarding how various constructs (e.g., socioeconomic status) were operationalized and regarding how the quantitative variables were created, calculated, and coded.

fewer types of trauma and/or lower trauma frequency) may view those experiences as an anomaly in an otherwise trauma-free life. Such individuals may largely resume their pre-trauma, "normal" life once they have regained a certain level of functioning.

None of the type of trauma variables had a statistically significant association with survivor mission status. However, the relationship between survivor mission status and experiencing a sexual trauma approached statistical significance, $p = .12$, with 59% of individuals who had experienced a sexual trauma having a survivor mission, compared with 31% of individuals whose traumatic experiences were not sexual in nature.

In addition to the number of trauma types and the total frequency of trauma, survivor mission status was significantly associated with several other forms of adversity. There was a statistically significant relationship between survivor mission status and the number of chronic stressors, $z = -2.35$, $p = .02$, and the association between survivor mission status and the total amount of chronic stress approached statistical significance, $z = -1.90$, $p = .06$. Specifically, survivor helpers had greater numbers of chronic stressors ($M = 20.63$, $SD = 4.35$) and higher levels of total chronic stress ($M = 62.25$, $SD = 18.65$) than research participants without survivor missions ($M = 17.44$, $SD = 5.03$ and $M = 50.22$, $SD = 21.97$, respectively). There was also a statistically significant relationship between survivor mission status and the total amount of sexual harassment stress, $z = -2.79$, $p = .005$, and the association between survivor mission status and the number of sexual harassment stressors approached statistical significance, $z = -1.78$, $p = .08$. Specifically, survivor helpers had experienced both higher levels of sexual harassment stress ($M = 51.77$, $SD = 49.20$) and greater numbers of sexual harassment stressors ($M = 5.89$, $SD = 2.28$) than individuals without survivor missions ($M = 21.69$, $SD = 30.14$, and

M = 4.30, *SD* = 3.15, respectively). The relationship between survivor mission status and the composite cumulative adversity (stress-frequency) variable was also statistically significant, $z = -2.49$, $p = .01$, with survivor helpers experiencing greater amounts of cumulative adversity (*M* = 1.58, *SD* = 3.69) than individuals without survivor missions (*M* = -1.11, *SD* = 3.17).

The reasons for the positive association between cumulative adversity and having a survivor mission may be similar to those discussed above with regard to the amount of trauma experienced. However, additional dynamics may be at work. As I demonstrated in Chapter 2, members of less privileged groups in society (e.g., women, non-Caucasians, persons with lower socioeconomic status) experience greater levels of cumulative adversity than members of more privileged groups. And it is these same, less privileged, individuals who most often develop a survivor mission and want to help other trauma survivors. As I discuss later in this chapter (and in Chapter 5), this may be evidence of oppressed groups using their experiences of trauma to motivate their own empowerment, personal and interpersonal transformation, social action, and social change. As Foucault (1979, 1980) asserted, power (and the lack thereof) can be a creative and productive force that provides opportunities for resistance.

The only time-related variable with a statistically significant association with survivor mission status was the respondents' age at the time of their first traumatic experience, $z = 2.84$, $p = .005$. Survivor helpers experienced their first (or only) trauma at younger ages (*M* = 7.89, *SD* = 4.72) than individuals without a survivor mission (*M* = 12.63, *SD* = 5.24). There are at least two possible explanations for this. First, it is possible that developing a survivor mission simply takes time, and that too little time has

passed for many young adult survivors of late-adolescent or early-adulthood traumas to develop a survivor mission. And second, respondents' age at first trauma is strongly correlated with the number of trauma types experienced, $r = -.61$, $p < .001$, the total trauma frequency, $r = -.64$, $p < .001$, and cumulative adversity (stress-frequency), $r = -.65$, $p < .001$.

There was a statistically significant association between narrative coherence and survivor mission status, $z = -2.24$, $p = .02$, with survivor helpers having higher levels of narrative coherence ($M = 19.00$, $SD = 3.59$) than individuals without survivor missions ($M = 16.00$, $SD = 4.50$).

Finally, not surprisingly, survivor helpers experienced higher levels of posttraumatic growth—whether that growth was measured via the Posttraumatic Growth Inventory (PTGI) or via my own, interview-based, posttraumatic growth coding rubric. Using the PTGI, survivor helpers had an average posttraumatic growth score of 69.37 ($SD = 15.50$), compared to an average score of 49.14 ($SD = 20.23$) among individuals without survivor missions. This difference was statistically significant, $z = -3.25$, $p = .001$. Similarly, using my own PTG coding rubric, I found that survivor mission status was significantly associated with the level of posttraumatic growth ($p = .003$), with 71% of the high growth respondents having a survivor mission, compared with only 41% of the moderate growth respondents, and 0% of the low growth respondents.

As I argue in this chapter, developing a survivor mission may be a heretofore unrecognized form of posttraumatic growth, which would explain some of the relationship between these two variables. While developing posttraumatic growth by no means guarantees that an individual will become a survivor helper (as evidenced by the

29% of high PTG respondents who do not have survivor missions), it appears that survivor missions do not develop in the absence of at least moderate levels of growth. However, given the conceptual overlap between developing both posttraumatic growth and a survivor mission, this association should be interpreted cautiously.

There were no statistically significant associations between survivor mission status and gender, race/ethnicity, age, family household income, socioeconomic status, education level, relationship status, being financially independent from one's parent(s)/guardian, being spiritual/religious, having received trauma-related therapy, experiencing a traumatic death, experiencing a chronic trauma, experiencing dating/domestic/family violence, experiencing interpersonal violence, the number of major (sub-trauma) life event stressors, the amount of major (sub-trauma) life event stress, the number of discrimination stressors, the amount of discrimination stress, or the time since the (most recent) trauma.

In sum, the overall, average "portrait" of a survivor helper in this sample is someone who experienced her/his first trauma at a young age (i.e., around age eight) and who has experienced a substantial amount of cumulative adversity—particularly with regard to the number of trauma types, the total trauma frequency, the number of chronic stressors, the amount of chronic stress, the number of sexual harassment stressors, and the amount of sexual harassment stress. Nonetheless, s/he has developed a relatively coherent narrative about her/his life and has experienced at least moderate levels of posttraumatic growth.

Forms of Survivor Missions

Survivor missions take many forms and may look very different in the lives of various trauma survivors. I have identified three general categories of survivor missions in my sample: 1) career paths; 2) volunteer work separate from one's career; and 3) miscellaneous activities aimed at "making a difference."

The most common form of survivor mission, in this sample, is a career path that involves helping others—either directly or indirectly—who are experiencing a similar form of trauma. Specifically, numerous research participants aspire to be psychologists, therapists, or social workers; several others plan to be doctors or nurses, while another is pursuing a career in public health.

Kristen, for example, struggled with depression, bulimia, and self-mutilation prior to attempting suicide during her mid-teens. Her college major and her career plans are both strongly tied to her past experiences. She explains:

> I really want to help people on a talk therapy level, so maybe counseling, social work, something like that. So, I want to go in that direction. I want to turn people's lives around, who are going through something similar to me, maybe something different, but some type of hard time. And I want to be a guide. I want to help guide them towards a happier life basically. Because I feel like everyone deserves that and everybody can have that, even despite, you know, whatever cards are dealt to them. There's a way to deal with everything. And I mean there are people who have gone through much worse things than I have—well, depending on how you look at it I guess—and not everybody has the tools to learn how to deal with it. And I want to help guide them in that direction I guess. And I just want to make some kind of difference in someone's life, in terms of making them realize what they are capable of.

In this quotation, Kristen expresses her desire to work in a therapeutic setting with people having "some type of hard time," providing them with the "tools" to deal with their difficulties, and guiding them "towards a happier life." Her survivor mission, like many others in my sample, involves direct practice work in a helping profession, serving the needs of people facing issues similar to those she herself has overcome.

In a similar vein, Hua developed a survivor mission that somewhat altered her career path after her close friend committed suicide. She describes this shift as follows:

> So, I've always wanted to be a doctor 'cause I don't like helping people like with talking issues, I like fixing people, like technically, just fixing people. And I wanted to be a cardio surgeon [prior to her friend's death], but I changed to trauma brain surgeon [after his death] because there's so many suicides every day—like jumping off buildings and they're still alive, like sometimes when they hit the floor, or like when they shoot themselves. So it's like when they get carried in, maybe if I get the second chance, I could save them and give them a second chance to live.

Although Hua has long felt drawn to the medical field, her friend's suicide led her to change her focus to a specialty area within medicine that would give her a "second chance" to save the lives of people like her deceased friend.

Although career paths that involve helping others are the most common form of survivor mission in my sample, this is unlikely to be the case amongst the general population of trauma survivors. This sample, with an average age of 21.48 years (*SD* = 2.41) and comprised of current students or recent graduates from college or graduate school, is drawn from individuals in a particular stage in the life course where they are choosing their career paths and are, for the most part, able to easily make changes in their career trajectories. Subsequently, survivor missions developed by these young adults are more likely to involve their career aspirations than the survivor missions of older, mid-career trauma survivors whose career trajectories have already been well-established.

A second form of survivor mission involves individuals' dedication to engage in volunteer work in their community or in other countries. Once again, these survivor missions usually involve direct contact with people who are facing difficulties similar to those in the trauma survivors' pasts. However, what differentiates this category of survivor mission from the first category is that these trauma survivors do not intend to pursue these activities full-time as a career. Instead, they plan to either volunteer full-time for a finite period of their lives (e.g., going into the Peace Corps for two years) or

engage in volunteer activities, on an ongoing basis, during some of their non-work hours (i.e., volunteering "on the side," while having a separate career).

James, for example, eventually plans to pursue a career in economics or business, but he first wants to spend some time dedicated to his survivor mission:

> Regardless of what my career path is gonna be, I never wanna deviate from a position where I can help people because of my past experiences. A lot of what I really consider doing even next year would be, like, take a year off and do maybe like a social work-type situation, either in the U.S. or possibly go abroad too. I really wanna go to Africa, or possibly even South America, as well too. And help those less fortunate, or those who are struggling, or those who are going through family problems, by providing the skills that I have acquired throughout this process. And I think my motivation and my desire to really help other people in these similar situations is the most positive thing I can gain from this.

James is committed to helping others through "similar situations" throughout his lifetime, but he especially plans to pursue this dream fulltime, as a volunteer, for the first year after he graduates from college.

Other trauma survivors, like Neal, plan to regularly incorporate volunteer work into their lives for many years to come. Neal's experience with trauma required him to dramatically "rebuild" numerous areas of his life. After expressing his desire to "help other people" due to his ability "to relate to them," Neal describes why he is interested in doing volunteer work:

> I've always thought volunteering was cool. You know? So every Christmas for the last couple years I've gone, and every Thanksgiving I've gone, to like the local interfaith shelter in [a nearby city] and I've volunteered. It's a small thing, it's just one day, but I feel good about it. And so I'd like to do more. Now that I feel I'm done working on me, I'd like to actually help people in some manner to rebuild, to put their lives in order, to do something positive with other people's lives. You know what I'm saying?...Just get out and do some volunteer work would be something I'd like to do.

In this quotation, Neal explains that now that he has completed much of the hard work of rebuilding his own life post-trauma, he would like to spend some time, on a regular basis, helping other people "to put their lives in order." However, his survivor mission is separate from his intended career in political science.

The final category of survivor mission in my sample includes the many miscellaneous activities—separate from one's career or volunteer work—in which trauma survivors are eager to engage in order to "make a difference" in the lives of others like themselves. Janelle is an example of a trauma survivor whose survivor mission falls into this category. Janelle has experienced multiple traumas—including being the primary caregiver for her adoptive mother as she died of cancer, as well as being sexually assaulted. She describes the impact that she wants to make upon the world as follows:

> [I] think about the values that my mother instilled on me and I'm just inspired. I feel like since she was so focused on education, I can start up an education scholarship in her memory. Or start up a community development project, in her memory. Or like donate to leukemia or lupus, in her memory.… Like everything that she has done for me and how selfless she was, is, like, what I want to be, is like what I want to do. Like, my mother adopted three kids at [age] sixty. And my mother selflessly gave herself for her children. And it wasn't like she had money, it wasn't like one of those rich adoption stories, not at all. We were still in the 'hood, struggling, and she like was the best person ever to me. So I want to be like that. That gives me hopes, and gives me, like, dreams to be able to change somebody's life the way she changed my life. She gave me opportunities where there were no opportunities. I could've been sitting in the freakin' [foster care] system for my whole entire life, [but] she adopted me and she cared for me so much. I wanna be able to do that for someone else.

Janelle then goes on to explain one additional aspect of her survivor mission:

> In terms of the idiots in my life, who tried to touch me [sexually]…I feel like it just makes me, like, if I have a son, I want to raise my son better than that. I don't want my son to think it's okay to ever touch a female without her wanting to be touched.

In these quotations, Janelle expresses her desire to start up an education scholarship in her mother's memory, as well as to donate to charitable causes that involve combatting cancer. She also plans to adopt children from the foster care system. Furthermore, she wants to instill values in her own son that would prevent him from ever perpetrating a sexual assault against a woman. Although these activities do not involve her career or even volunteer work, per se, they nonetheless constitute a survivor mission that provides direction for Janelle's life. Other miscellaneous activities engaged in by

survivor helpers in the sample include simply being a friend to, or praying for, others who are experiencing the difficult aftermath of traumatic events.

What Survivor Helpers Believe That They Have to Offer Other Trauma Survivors

Survivor helpers believe that they can "make a difference" in the lives of other trauma survivors and/or "make an impact" with regard to a social problem in the world at large. Throughout their interviews, survivor helpers describe both their desire and their ability to "help people who are suffering" and "change somebody's life." Moreover, individuals with survivor missions assert that their past traumatic experiences have made them uniquely qualified (compared to non-trauma survivors) to help others in similar situations. In short, survivor helpers feel confident in their own agency and they believe that they have many things to offer other trauma survivors.

After analyzing every transcript section on the topic of survivor missions via line-by-line coding, I found that survivor helpers' anticipated contributions may be grouped into six major categories. First, some survivor helpers plan to provide physical or material support that will improve the lives of other trauma survivors. For example, Hua, quoted earlier in this chapter, whose close friend committed suicide, has plans to provide life-saving medical care for people who have attempted suicide. She states that she enjoys "technically, just fixing people," and that her future work as a trauma brain surgeon with survivors of attempted suicide will enable her to "save them and give them a second chance to live." Janelle, quoted earlier in this chapter, is a second example of someone whose survivor mission focuses upon providing physical or material support to other trauma survivors. Janelle envisions herself starting-up an education scholarship in

her mother's memory, organizing a community development project, donating money to charitable causes that involve combatting cancer, and adopting children from the foster care system.

The second category of contribution that survivor helpers believe that they can make is one of the most widely cited by research participants in my sample: they assert that their own past traumatic experiences have enabled them to more deeply understand and more fully relate to other trauma survivors. Meredith, for example, has survived numerous traumatic events—including child sexual abuse, emotional abuse, and several physical and sexual assaults. Despite her lengthy trauma history, Meredith has a strong survivor's mission, and she has chosen to pursue a career as a social worker so that she can help others who have experienced significant adversity. Meredith asserts that her own traumatic experiences have enabled her to identify with—and subsequently more fully understand—other people who are struggling, as she eloquently describes here:

> Meredith: I think when you suffer and when you feel emotional pain, you learn to look beyond people's exterior and look at their hearts. I wouldn't be a social worker if I hadn't gone through some of this. 'Cause I wouldn't understand some of people's pain.
>
> Interviewer: Yeah, I meant to ask you actually. How did you get into social work?
>
> Meredith: I went on an alternative spring break trip in Chicago and worked at a homeless shelter. And I loved it! There were rats. There were feces all over the attic and it was a warehouse. It was dirty and ugly, but I loved it. 'Cause I felt like I belonged there. I felt like I understood these people. These people were real. These people had experiences. They had lived. And I could relate to them on a different level. On an intuitive level, I felt like these people were like me. And I could help them and they could help me. Not in a physical or emotional way, [but] like I could learn from them. Because everybody has something to offer. On a deeper level, like we could help each other, just by being with each other, like walking together. Like if you've been through it, you can relate to people. You can suffer with them. When I hear people tell stories [about their lives], it's like I sometimes feel the same emotion that they do. 'Cause I've been through so much of it myself. So I understand on a different level.

As this lengthy quotation illustrates, Meredith believes that her own suffering has given her the ability to see "beyond people's exterior," to "understand some of people's pain," to "suffer with them," and to "relate to them on a different level."

Neal is another good example of a survivor who believes that his trauma background enables him to better understand other survivors. He notes:

> Because I've had these types of experiences, the thought [is] that I could somehow help other people—be able to relate to them and be a support structure. I know how I felt. I know the utter, like, just the bad place that you can get to, where you feel like you don't have any value, you know? And realizing that other people feel this way and I can help them not to.

Similarly, James, who experienced traumatic deaths within his family, states:

> I feel like I can understand a little better what people are going through with family tragedies, with personal injuries and losses. And I think I feel, like on a psychological front, I've got a little better perspective and understanding on what maybe others would go through. And thus I can help as well too, just because of my experiences.

In sum, survivor helpers believe that their own traumatic experiences make them uniquely suited to working with other people who are going through similar situations because they have obtained a deep level of understanding that non-trauma survivors simply cannot match. This understanding then allows survivor helpers to profoundly relate with other trauma survivors.

Third, survivor helpers emphasize that they can provide emotional support to other trauma survivors. As with the previous category, the vast majority of individuals with survivor missions in my sample cited this category as one of the primary contributions they can make to other trauma survivors. Erin, for example, has experienced multiple traumas, including a traumatic death in her family. She describes her desire to provide emotional support to other trauma survivors as follows:

> I'd like to maybe someday be like [a] co-facilitator of a grieving group or something like that. [In the past,] I did join a coping group for people who are experiencing grief or trauma or whatever, [and] it was really helpful. It made me someday want to have a group like that. It made me kind of just want to help other people who are experiencing different kinds of grief, to be a source of support for other people. Because I feel pretty confident in my ability to help others, [to] just be a strong source of support, without myself needing to be there crying or something. Like I'm ready to let someone else grieve to me.

Other research participants described their wish to "be there" for others who are hurting, "comfort" them, "be a friend to somebody," and even "suffer with them." In

sum, survivor helpers feel that their traumatic experiences have prepared them to provide emotional support to other trauma survivors.

The fourth category of contribution is that survivor helpers believe that they have specialized knowledge that they can impart to, or use on behalf of, other trauma survivors. For example, James, quoted earlier in this chapter, explains that he feels able to "help…those who are going through family problems by providing the skills that [he has] acquired throughout this process." Kristen, quoted earlier in this chapter, similarly described the role that she wants to play in others' lives. She notes that she hopes "to be a guide" to others who are having a difficult time, particularly those individuals who lack "the tools to learn how to deal with it," so that she can "guide them towards a happier life." And Jennifer, who has experienced multiple traumas and significant adversity, likewise asserts:

> Now I know where to go, and now I know what I need to do; and because I know I have that experience, I know how I should approach things.

Kalia is yet another example of a survivor helper who wants to use the knowledge that she has gained through her traumatic experiences to help others. Despite her substantial trauma background, Kalia has a survivor mission and plans to pursue a career in the helping professions. She explains:

> I just kinda want to use like my experience, things I've learned, things I've been through. 'Cause I really don't want other people to have to experience it if they don't have to, which is probably why I want to work with young people. Like, if you don't have to make all these mistakes, don't do it. I think I'm pretty wise beyond my years. I've been through a lot of stuff, so I think I've dealt with a lot that people my age probably have never come in contact with. But I definitely just kinda want to step in [to the lives of young people], you know, before we get to like this issue or these problems. And, you know, kinda just try to make a difference somewhere along the way.

In sum, these research participants argue that their traumatic experiences have given them the "skills," "tools," and specialized knowledge necessary for them to work with (or on behalf of) other trauma survivors and "make a difference" in their lives.

Fifth, survivor helpers believe that they can provide hope to other trauma survivors. For example, Jamie, who has survived multiple traumas including numerous sexual assaults, witnessing a friend's death, and a major injury-causing car accident, states:

> I want to work with people that have had rough lives, who have gone through really tough things. And I want to do some sort of counseling, and I want to help them and try to offer them, like, a slice of hope.

Like several of the aforementioned categories, this type of contribution is uniquely suited to survivor helpers. Because they themselves have been through traumatic experiences, these individuals are able to provide real encouragement to, as well as be role models for, other trauma survivors. The hope that they have to offer others who are hurting is intricately connected with their own life stories; in essence, these survivor helpers' lives are testimony to the fact that the trauma can, indeed, be overcome.

The sixth and final category is that survivor helpers believe that they can advocate on behalf of other trauma survivors. Darcy, for example, has experienced multiple traumas including witnessing domestic violence between her parents. Darcy's survivor mission involves wanting to give "a voice" to others:

> I thought about my mom's issues, and I took classes in Women's Studies and all the African-American classes—with the race and ethnicity and gender—and I'm really into that kind of stuff. So I'm now deciding to do Public Health. And so it's kind of a personal issue, but I know that it affects more than just my mom, and that's one reason I'm going in that direction. [I am] realizing how I can apply everything I've learned through all these incidents to something to change in the world or help others. Just using what I know to do something that I could be good at. And that's why I wanna go into health. Just *giving a voice* to those who might not have a voice, because whether they're too poor to have the means or the time to dedicate to that kind of stuff, or the knowledge to know what to do to help themselves.

In sum, as a result of their deeper understanding of trauma survivors' experiences and the subsequent specialized knowledge they have developed, survivor helpers like

Darcy believe that they are in a unique position to advocate on behalf of other trauma survivors.

Why Survivor Helpers (Want to) Help Others

In the above sections, I have described several forms of survivor missions, as well as the various "gifts" that survivor helpers believe that they have to offer to other trauma survivors. In this section, I demonstrate that having a survivor mission fills many and various roles in the lives of survivor helpers. Just as the form and degree of survivor mission varies between individuals, so, too, do survivor helpers' rationales for wanting to help others. In this sample of research participants, I found that there are six major reasons that explain survivor helpers' desire to help other trauma survivors. The first three categories are inwardly focused—involving benefits that the helpers themselves receive from having survivor missions. The latter three reasons reflect an "outward focus" upon the impact of one's actions on the lives of others. It is important to note that most research participants have more than one reason for pursuing their survivor missions.

First, survivor helpers assist others because it makes them feel good. Throughout their interviews, when talking about their survivor missions, survivor helpers note that they receive positive emotional rewards from assisting other trauma survivors. Erin eloquently explains how she has benefited from her past volunteer work:

> You learn a lot from volunteering. It's almost, I feel like, better for you than [for] the people you're helping. I learned so much from it—about different people, about myself. *You feel good about yourself.* You feel like you're contributing. You feel challenged every day. It's just nice to feel part of something bigger.

In this quotation, Erin acknowledges that her volunteer work brings so many benefits to her own life—such as making her "feel good" about herself and enabling her to "feel part of something bigger"—that these rewards "almost" outweigh the assistance her efforts provide to others.

Lisa, a survivor of multiple traumas, likewise describes her reason for pursuing a career in the helping professions, working with children and families:

> Ultimately, *I liked the feeling* that, like, I got to work with people and that I could make a difference in areas that I cared about, like with people's lives. And, honestly, it's been hugely reinforcing for me in graduate school, to like see people that I work with have better lives. I mean to see a woman move out of an abusive spouse [situation] because of work that you've done with her is like the most rewarding thing, you know? I mean stuff like that is just amazing. And to feel like you can be some small part in that process is awesome.

As Lisa observed, working with trauma survivors and seeing the impact of her efforts feels "rewarding," "amazing," and "awesome." Other research participants, such as Alex and Meredith, who were quoted earlier in the chapter, note that helping fellow trauma survivors has been "empowering" and that it has made them feel "like [they] belonged." In short, one of the reasons why survivor helpers want to help others is that, in doing so, they experience positive emotions and "feel good" about themselves.

The second category is closely related to the first. Not only does working with other trauma survivors "feel good" to survivor helpers, but it also helps to further their own healing or recovery process. Meredith, quoted earlier in this chapter, is a good example of someone whose survivor mission is, at least in part, motivated by the mutuality of the helping relationship. She described this as follows:

> On an intuitive level, I felt like these people were like me. And I could help them and they could help me. Not in a physical or emotional way, [but] like *I could learn from them*. Because everybody has something to offer. On a deeper level, like *we could help each other*, just by being with each other, like *walking together*.

Erin, quoted above, similarly notes that, in helping others, she has "learned so much" about herself. And Neal states that providing "a support structure" to others is "kind of a self-reinforcing type of progression."

The essence of this category is that assisting other trauma survivors reinforces or even advances survivor helpers' own healing or recovery process. Other researchers have noted this phenomenon as well (e.g., Herman, 1992; Moultrie, 2004). While the details regarding how this happens are not clear, I nonetheless have a hypothesis. I suspect that helping other trauma survivors who are dealing with similar difficulties reminds survivor helpers how far they have progressed in their own recovery process, enables them to recognize their own strength and resilience, helps them to continue forming a coherent narrative regarding their lives, illuminates areas of their lives in which further healing is needed, and prompts them to continue engaging in those activities that have been most helpful in their recovery thus far. In sum, survivor helpers are frequently motivated, at least in part, to assist others because they recognize that their own healing is in some way enhanced by supporting other trauma survivors through difficult events.

Third, survivor helpers develop survivor missions because doing so gives meaning to their past and future. Hua, quoted earlier in this chapter, is a prime example of someone whose survivor mission seems to be motivated by her wish to make amends for perceived mistakes in the past. The day before her close friend committed suicide, the friend called Hua and asked her to come over to his house and talk with him. Not realizing that he was suicidal, Hua told him that she was "kind of busy and [she] just kind of blew him off." Many months passed before Hua's feelings of guilt subsided and she was able to forgive herself for her perceived failure as a friend. Even today, Hua's career

plan of becoming a trauma brain surgeon is motivated by her desire to have a "second chance" with persons who have attempted suicide. She states: "Maybe, if I get the second chance, I could save them and give them a second chance to live."

Devon, the young man quoted at the beginning of this chapter, also has a survivor mission that gives positive meaning to both his past and his envisioned future. After being the primary caregiver for his mother as she died of cancer, and after observing the devastating effects of Alzheimer's disease in the life of another family member, Devon decided to pursue a career in medicine. He explains the satisfaction that he gets from his pre-med studies as follows:

> It's just something I am extremely passionate about and I love. Just fighting back at something that has kind of taken a lot from me.

Janelle, who was quoted earlier in this chapter, reflected upon the "selfless" example set by her deceased adoptive mother and how this has "inspired" her own survivor mission. She then explains:

> It gives you something almost to live for…. That gives me hopes, and gives me, like, dreams to be able to change somebody's life the way she changed my life…. So, instead of dwellin' on how sad I am that she's not here, it's like, just make her proud.

In sum, whether focused primarily upon their past or future, survivor helpers develop survivor missions, in part, because it helps them to construct positive meanings for their experiences. Assisting other trauma survivors gives survivor helpers a sense of purpose; it allows them to redeem the past and provides a meaningful structure for their future.

The fourth major reason for survivor helpers' desire to help others is that they want to repay a perceived debt, most often by "paying it forward." "Pay it forward" is a form of generalized reciprocity, and it refers to the idea that if one receives a favor from

others, one should repay that good deed by engaging in an act of generosity toward others. The "pay it forward" philosophy, although popularized by a movie of the same name in 2000, is not new. In fact, in his 1841 essay, titled "Compensation," Ralph Waldo Emerson [pp. 101-102] wrote:

> In the order of nature we cannot render benefits to those from whom we receive them, or only seldom. But the benefit we receive must be rendered again, line for line, deed for deed, cent for cent, to somebody.

This desire to repay a debt or "pay it forward" is the most commonly cited reason, within my sample, for why research participants want to help others.

At the core of this category is survivor helpers' sense of gratitude regarding the help or good fortune they themselves have received. Jennifer is a good example of an individual whose survivor mission—to become a medical missionary and nurse—is strongly shaped by her sense of being fortunate. In addition to suffering from several other traumas and significant adversity, Jennifer contracted malaria overseas and almost died. She notes:

> Every 30 seconds, one person dies from malaria, and it was like [only a] couple dollars that was needed to get treated. And I was lucky to be able to be treated, you know? And there were so many other people that just died from it.

In a similar vein, Erin feels fortunate to have received benefits that others lack. She states:

> I feel privileged in my life, and I feel like I should pass that on to people. Because I know that I was lucky. I didn't earn everything I got, in a sense, and some people don't earn the bad things they get.

Janelle also has a sense of gratitude. In her case, Janelle is grateful to her deceased adoptive mother for taking her out of the foster care system, providing her with many opportunities, and teaching her the value of education. After reflecting on everything her adoptive mother did for her, Janelle states:

> So I want to be like that. That gives me hopes, and gives me, like, dreams to be able to change somebody's life the way she changed my life…. I wanna be able to do that for someone else.

In sum, one of the primary reasons why survivor helpers want to help others is because they wish to repay a perceived debt. Despite their traumatic experiences, these individuals feel lucky, privileged, or blessed. They are grateful for the support they have received from others or for the good fortune bestowed upon them. Subsequently, they wish to "pay it forward" by helping others through difficult life events.

The fifth category is closely related to the previous one. Survivor helpers want to help others because they feel an ethical or moral duty to do so. These research participants are aware that, through their own experiences with trauma, they have developed specialized knowledge, skills, tools, strengths, and understanding that make them uniquely capable of helping others through similar situations. Recognizing their ability to help others, they then feel an obligation to use their skills and knowledge for the benefit of other trauma survivors.

Melissa, for example, has experienced multiple traumas, including growing up with an alcoholic, drug-addicted, violent, and neglectful mother and being sexually assaulted. Despite her considerable trauma history, Melissa has a survivor mission that involves helping impoverished individuals in third-world countries. After doing volunteer work overseas, she returned to the U.S. with a strong sense of obligation to make a positive difference in the lives of others who have received even fewer privileges than herself. Melissa explains:

> Like the whole thing with me wanting to help others, I just feel like *I should* if I have the means. I mean, I was just fortunate enough to be born in a developed country. And, you know, although my situation hasn't been the most ideal, like for me to know about these problems that are going on and to know about so much of the world that lives in that kind of poverty, and not do anything about it *is just fucking wrong* to me. Like, I can't justify it in my mind, like *it's not right*. Like, you can change things. Like, really, that's all people need is other people that care about them in life.

As this quotation demonstrates, once Melissa became aware of other people whose circumstances were even worse than her own miserable childhood, she felt a moral obligation to take action on their behalf. This sense of duty was further heightened by Melissa's recognition that she has "the means" to help others and that her efforts "can change things."

Devon similarly describes the new perspective he gained through taking care of his mother during her illness. He states:

> I feel like if I wasn't in that situation with my mom, I wouldn't realize how important it is to make something of your life, make a difference, change the world. But now I see how many people are suffering, how many bad things [there are] in the world that I would want to help change or help turn around. And that's a priority to me now.

Now that he realizes "how many people are suffering," Devon feels a sense of duty to "make a difference" by becoming a doctor. Likewise, Kalia notes that "it just always kinda *seemed right* to try to step in [to others' lives] and make a difference." In short, one of the reasons that survivor helpers assist others is that these individuals feel both capable of, and ethically or morally responsible for, making a positive difference in others' lives.

The sixth and final reason why survivor helpers help other trauma survivors is the most altruistic: they genuinely want positive things to happen in the lives of others or in the world at large. For example, Kalia hopes to prevent other adolescents from experiencing some of the pain that she went through. She explains:

> I just kinda want to use like my experience, things I've learned, things I've been through. 'Cause I really don't want other people to have to experience it if they don't have to, which is probably why I want to work with young people. Like, if you don't have to make all these mistakes, don't do it.

Brian is another example of someone whose survivor mission is largely motivated by his wish for others to have the positive experiences that he himself lacked for so long.

Brian is biracial and he experienced emotional and physical abuse during his childhood, harassment related to his sexual orientation, and confusion regarding his ethnic identity; he subsequently became chronically suicidal for a part of his teenage years. In the ensuing years, he has developed a survivor mission. During the interview, I asked him to describe the person he is today. Brian replied:

> I would describe myself as an individual that is first concerned with attempting to provide a space where others can escape or can avoid experiences—internal [or] external—of oppression that would weigh down on them. I do this because for me and for others I desire just to be happy. I want people to be able to go to a state fair and not feel like the color of their skin or the people that they date, you know, makes them unwelcome. You know, just being able to explore who they are and let out whatever forces that they have within them that can help make the world a better place is something that's so important to me that I would consider it probably my defining characteristic.

In this lengthy quotation, Brian expresses his desire for others "to be happy" and to be able "to explore who they are" without fear. His survivor mission is motivated by his altruistic wish for others to "escape" the "oppression" that has shaped so much of his own life. In sum, survivor helpers, like Kalia and Brian, want to help other trauma survivors because they have a genuine concern for others' well-being and a strong desire to do whatever they can to improve the world.

Survivor Missions Exist On a Continuum

Despite the terminology used in this chapter thus far, having a survivor mission is not a binary (i.e., yes or no) construct. Rather, survivor missions exist on a continuum, and different trauma survivors have varying degrees of survivor missions. For some people, their survivor missions may be the all-consuming, passionate foci of their lives. Their career aspirations (particularly if their survivor mission developed by young adulthood) likely revolve around their survivor mission, but it is much more than a career to them—it is a calling. At the other end of the spectrum, an individual's survivor

mission may be a relatively small—albeit important—part of her/his life. These trauma survivors may occasionally volunteer for a social cause or help anyone in their social circle through a particular type of difficulty, but their survivor missions are not one of the primary activities in which they plan to engage in their lives.

Do Survivor Missions Fade or Change Over Time?

In addition, it is possible that survivor missions may change, fade, or even disappear over time. As the years pass, or as new traumatic or major life events occur, individuals' survivor missions may be forgotten or simply feel less important than they once did. Within this sample, one individual, Alex, experienced this loss of a survivor mission. During his high school years, Alex was driving a car filled with teen passengers when they were struck by a drunk driver; one of Alex's close friends was killed in the accident. Following this tragedy, Alex developed a survivor mission, wanting to help other students through similar difficulties. He explains:

> I joined a group at school and like, through this group, persuaded the teacher in charge to send us for training in crisis management and response so that, like, when something happened in school, we would be able to help other students kind of cope and things like that…. [Then], my last week of senior year, two students were killed in a car accident. And so, like, me and this group, we were there in this room with these other students—like students who knew them—kind of helping them kind of deal with what was happening and cope in that way. That was one of the most intense weeks of high school. And like it was really overwhelming, but it was empowering also to know that we were able to give these like students support. And even, like, kind of help them get through this immediate really rough time in a way that they otherwise wouldn't have had available. So, like, I wouldn't have joined that group had that [his friend's death] not happened and had I not wanted to kind of help other students deal with that.

Alex's desire to help others through difficult times, however, was interrupted by another traumatic event. During college, Alex experienced the traumatic death of a close family member. Although he has come a long way in grieving this death, moving on with his life, and even developing moderate amounts of posttraumatic growth, Alex's

priorities in life have shifted away from his former survivor mission. Reminded of how short life may be, Alex is currently anxious to travel the world while he has the chance. He does plan to go into the Peace Corps sometime soon, but when asked about his future vision for his life, he made no further mention of working with other trauma survivors. Perhaps his survivor mission will return someday or he will develop a new one; but, for now, Alex's survivor mission seems to have been replaced by other concerns.

DISCUSSION

I reviewed numerous literatures at the beginning of this chapter—including conceptual work and/or empirical research on generativity, prior uses of the "survivor mission" term, professionally- and member-led mutual aid groups, applications of the helper therapy principle, and research on helping professionals with trauma histories. While these literatures all serve to contextualize the empirical findings of this chapter, a brief discussion on two additional topics is needed: the concept of empowerment and the twelfth step of Twelve Step programs.

Empowerment

The concept of empowerment is an integral aspect of the social work, sociological, and feminist literatures. In social work, empowerment is conceptualized as a process of change involving changes in consciousness, confidence, and connection. It is further depicted as having three levels: personal empowerment, interpersonal empowerment, and political empowerment (Gutièrrez & Lewis, 1999). Empowerment begins with the development of a critical consciousness, or an understanding of how

social structures, structural inequalities, and the mechanisms of power, privilege, and oppression shape one's own life experiences and perceptions (Freire, 1978; Gutièrrez & Lewis, 1999; Martin-Baro, 1994). In the next step in the empowerment process, individuals or groups identify how they can play an active role in social change; this involves the development of self- and collective-efficacy (Gutièrrez & Lewis, 1999). This is consistent with Foucault's (1979, 1980) theorizing regarding power as a productive—not merely repressive—force that may foster resistance. Finally, empowerment entails actually taking social action in an effort to change the distribution of power, lessen social inequalities, and pursue social justice (Freire, 1973; Gutièrrez & Lewis, 1999; Simon, 1994).

Certain traumas (particularly those overtly connected with social inequalities) and other experiences of oppression may thus spark increases in social consciousness and empowerment on individual, interpersonal, and political levels. The development of a survivor mission may be one manifestation of trauma survivors' empowerment. Furthermore, although many survivor helpers have micro-level goals (e.g., survivors who want to engage in direct practice work with other trauma survivors), other survivor helpers have a more macro orientation. As many scholars have theorized (and a few have empirically demonstrated), even small-scale, individual empowerment and transformation can lead to political empowerment, collective action, social manifestations of growth, social movements, and profound, large-scale social change (Bloom, 1998; Coover, Deacon, Esser, & Moore, 1977; Schechter, 1982; Tedeschi, 1999; Tedeschi, Park, & Calhoun, 1998).

There are several social work theoretical or practice models that incorporate key sociological and social work insights regarding social structures, privilege, inequality, and empowerment. Such models include Bronfenbrenner's (1977, 1979) Ecological Model of Human Behaviour, Harvey's (1996) Ecological Model of Psychological Trauma and Recovery, and Almeida, Woods, Messineo, and Font's (1998) Cultural Context Model (see also, Almeida & Durkin, 1999). In each of these models, individual problems are understood to be impacted by myriad proximate and distal factors and to occur within a social and structural context.

The Twelfth Step of the Twelve Step Model

Since the inception of Alcoholics Anonymous in 1935, Twelve Step programs have proliferated and flourished in the U.S. Today, they are a widely used approach for dealing with alcoholism, drug abuse, and other addictive or dysfunctional behaviors (McCrady & Miller, 1993). Although a review of the various steps of these programs, their underlying assumptions and philosophy, and the pros and cons of their general approach is beyond the scope of this chapter, the final step of Twelve Step programs deserves special attention here.

During this twelfth step, the individual (e.g., an alcoholic) is instructed to "carry this message to other addicts" (Alcoholics Anonymous, 1955, p. 89). That is to say, individuals who have reached this advanced stage of successful recovery are directed to become helpers—often by becoming "sponsors"—to others who are more actively struggling with their addiction. Sponsorship, wherein individuals who are further along in the recovery process serve as role models and provide support and guidance to newer

members of the group, is one of the hallmarks of Twelve Step programs (Hamilton, 1996). According to the authoritative text of Alcoholics Anonymous, the addict-sponsor relationship provides important benefits to both individuals:

> Practical experience shows that nothing will so much insure immunity from drinking as intensive work with other alcoholics….You can help when no one else can. You can secure their confidence when other [sic] fail….Life will take on new meaning. To watch people recover, to see them help others, to watch loneliness vanish, to see a fellowship grow up about you, to have a host of friends—this is an experience you must not miss. [Alcoholics Anonymous, 1955, p. 89]

The author of another of the primary texts of Twelve Step programs (Carnes, 1994, pp. 285-286) elaborates upon the benefits of helping other addicts:

> Helping others is a significant part of the program…When you live the program and share it with others, you are carrying the message, especially when you sponsor new members. In practicing the Twelfth Step you will find that—
>
> - By witnessing to others, your appreciation of the program and the program's impact on your life deepens.
> - By hearing the stories of new members, you are reminded of where you were when you started.
> - By modeling to others, you become aware that you need to practice what you preach.
> - By giving to others, you develop bonds with new people who really need you.
> - By helping others, you give what you have received.
> - By supporting new beginnings, you revitalize your own efforts.

In short, during the Twelfth Step, individuals in advanced stages of recovery provide assistance to other addicts. This helping relationship is expected to enrich the lives of the addict and the sponsor alike.

Several of the claims made by proponents of Twelve Step programs have been validated through empirical research. For example, Emrick, Tonigan, Montgomery, and Little (1993) conducted a meta-analysis of 107 published and unpublished studies regarding the effects of participation in Alcoholics Anonymous (AA). It should be noted, however, that, due to vast discrepancies in the variables measured and information reported across these studies, the actual number of studies included in the meta-analyses reported here only ranged from 2 to 13. Nonetheless, Emrick et al. found modest (i.e., weighted r-values ranging from .17 to .29) but statistically significant relationships

between decreased drinking behavior and 1) increased participation in AA, 2) having an AA sponsor, 3) leading an AA meeting, 4) working the 12th step of the program, 4) the frequency of AA attendance, and 5) sponsoring another AA member. The authors also found that AA involvement was positively associated with psychological adjustment. Additional data regarding the effectiveness of Twelve Step (and other self-help) programs can be found in Kyrouz, Humphreys, and Loomis' (2002) review article and on the website of the American Self-Help Group Clearinghouse (n.d.).

The Benefits and Possible Risks of Being a Survivor Helper

As many researchers have suggested (e.g., Follette et al., 1994; Herman, 1992; Pearlman and MacIan, 1995), mutual aid programs (including Twelve Step programs) have asserted, and a handful of researchers have documented (e.g., Higgins, 1994; Moultrie, 2004), trauma survivors who assist others also experience benefits themselves. The programs built upon the helper therapy principle, cited near the beginning of this chapter, have all been found to provide benefits to the helpers. Roman et al. (1999), for example, found that their volunteer helpers experienced increased positive feelings, a sense of belonging, greater self-esteem, increased access to information and resources, and the development of new skills.

The current study confirms these findings. In fact, of the six major categories of reasons regarding why survivor helpers in this sample (want to) help others, three consist of direct benefits to the survivor helpers themselves (i.e., it provides emotional rewards, furthers one's own healing, and gives meaning to one's past and/or future). Just as

becoming a sponsor brings rewards to recovering addicts working on the twelfth step, so, too, becoming a survivor helper benefits the helper.

As proponents of mutual aid groups, researchers evaluating programs based upon the helper therapy principle, and survivor helpers in the current study all assert, the transition to being a helper is a very powerful experience. In moving from being survivors to being helpers, individuals transform their pain and suffering into a "gift" that they present to others. Paradoxically, survivor helpers find that in assisting others, they experience deeper healing. In connecting with others' pain, they connect more fully with themselves. By trying to make the world a better place for others, it becomes a more meaningful place for them. In connecting with something larger than themselves, survivor helpers find a sense of belonging and wholeness. By providing support and assistance to others, they come to feel helpful, strong, and validated. In short, by trying to make a positive difference in others' lives, survivor helpers also help themselves.

At the same time, there may be costs and dangers associated with becoming a survivor helper. Moultrie (2004), for example, found that some lay "survivor therapists" experienced distress and feelings of guilt and inadequacy. She observes:

> Their identification with their clients and consequent desire to help, combined with the community's seemingly insatiable demand for their services, appears to have put them at risk for extending themselves beyond their own perceptions of the limits of their resources, even given their high levels of resilience. [Moultrie, 2004, p. 43]

Pearlman and Saakvitne (1995) warn that adult survivors of childhood sexual abuse who become therapists may face heightened risks of countertransference issues, particularly if the therapist has unresolved trauma issues. And there is some empirical evidence that survivor helpers are more vulnerable to compassion fatigue (Figley, 1995) and vicarious traumatization (McCann & Pearlman, 1990). Cunningham (2003), for

example, found evidence that social workers with a personal history of sexual abuse experienced more vicarious traumatization than clinicians without a history of victimization. Pearlman and MacIan (1995) examined vicarious traumatization in 188 trauma therapists and found that therapists with personal trauma histories reported more negative effects (i.e., disruption in cognitive schemas, symptoms of posttraumatic stress disorder, and general distress) as a result of client material than therapists without personal histories of trauma. However, Schauben and Frazier (1995), in their study of 118 female psychologists and 30 female sexual violence counselors found that counselors with personal histories of sexual victimization did not experience greater difficulties than counselors without histories of victimization.

These potential struggles and risks were not discussed by any trauma survivors in this study. However, this is likely due, in part, to the fact that many of these survivor helpers have not yet fully implemented their survivor missions. Moreover, individuals who unsuccessfully attempted to enact a survivor mission may not have mentioned this experience during their interviews.

In sum, there are likely both rewards and potential risks in becoming a survivor helper. More research is clearly needed on this topic.

Re-Conceptualizing the Goals of Trauma Work?

As demonstrated earlier in this chapter, the idea that trauma survivors who have reached a sufficient level of recovery can themselves assist others struggling with similar difficulties is not new. Whether we refer to this as "helper therapy," pursuing a "survivor

mission," or "working the twelfth step," the general concept is the same. And while there are potential risks in becoming a survivor helper, there are also substantial rewards.

In light of the findings of this study, combined with research on professionally-led mutual aid groups, self-help groups (including Twelve Step programs), and programs based upon the helper therapy principle, I believe that it may be time to re-conceptualize the end goal of trauma work. While establishing safety, remembering and mourning losses (Herman, 1992), developing a coherent, reconstructed narrative, reducing dysfunctions, and increasing well-being are all important and necessary components of trauma recovery, there are even loftier aims toward which to strive.

I believe that the final phase of trauma treatment should involve the empowerment of trauma survivors at all three levels: personally, interpersonally, and politically (Gutièrrez & Lewis, 1999). The ultimate goal of trauma work should mirror the overall goal of the social work profession itself: "to help individuals, families, groups, and communities develop the capacity to change their situations" (Gutièrrez & Lewis, 1999, p. 12). Changing one's situation may include the positive internal and interpersonal changes that comprise what is currently labeled posttraumatic growth, but it may also, for some survivors, involve the development and enactment of a survivor mission.

In suggesting that (at least some) trauma survivors be encouraged to become survivor helpers, I am in no way minimizing the often long and arduous journey that must precede the transition to the role of the helper. For some individuals, the first part of the process—that of shifting one's identity from being a trauma victim to being a trauma survivor—may involve many years of therapy and/or self-help activities. Moreover,

positive transformation, the development of posttraumatic growth, and the transition to becoming a survivor helper should never be an obligation placed upon trauma survivors (Miller, 2007). However, the literatures on professionally-led mutual aid groups, self-help groups, the helper therapy principle, and empowerment all suggest that the transition from survivor to survivor helper—if it is done when the individual is sufficiently ready and prepared—may be one of the most healing and beneficial stages of trauma recovery.

CONCLUSION

To summarize, in this chapter, I have explored the phenomenon of survivor missions and the role of the survivor helper. Specifically, I have examined the various forms of survivor missions, what survivor helpers believe that they have to offer to other trauma survivors, the reasons why survivor helpers (want to) assist others, and some of the differences between individuals who do and do not have a survivor mission. I have discussed both the benefits and potential risks associated with becoming a survivor helper, and I have suggested that the end goal of trauma treatment should be re-conceptualized as the empowerment of trauma survivors.

This chapter is significant because it is, to my knowledge, the first study to empirically investigate the nature of survivor missions. This is an important, but heretofore understudied, area of inquiry. This study is also important because it paves the way for future research on this topic. Specifically, research is needed to examine the prevalence of survivor missions among trauma survivors, the process through which survivor missions develop, the degree to which survivor helpers' intentions to assist others lead to actual helping behaviors, the trajectories and "staying power" of survivor

missions over the life course, and the meanings of survivor missions in the lives of survivor helpers. A quantitative instrument should also be developed in order to assess the presence and degree of individuals' survivor missions. In addition, future research should further examine the differences between survivors with and without survivor missions. Fruitful areas of inquiry may include differences based upon the type of trauma(s) experienced, the amount of time since the (most recent) trauma, personality traits, and the degree to which the individual's reference groups (e.g., family, friends) engage in helping or other generative activities. Research is also need regarding the potential risks of engaging in a survivor mission and how those risks may be reduced. Finally, while my findings suggest that receiving trauma-related therapy may increase the likelihood that individuals will become survivor helpers, further research is needed to explore precisely how helping professionals may best facilitate trauma survivors' empowerment, including (for some survivors), the development of a survivor mission.

In conclusion, given both the potential benefits and possible risks to trauma survivors of engaging in a survivor mission, my hope is that this study spurs many more in-depth explorations of this topic. Clearly, much work remains to be done to better understand survivor missions, the role of the survivor helper, and how helping professionals can best assist trauma survivors in their processes of empowerment. Indeed, these courageous and inspiring individuals have a lot to teach us all!

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Table 4.1: Demographic and Trauma-Related Variables by Presence or Absence of a Survivor Mission

	% of Sample	Gender	Race/ Ethnicity	Family Household Income	Age	Education Level	Religious/ Spiritual	Trauma -Related Therapy	# of Trauma Types	Total Trauma Frequency	Months Since (Most Recent) Trauma
Individuals With a Survivor Mission (N = 19)	41%	74% Women 26% Men	58% White 11% Black 16% Asian 16% Other	32% <$50K 32% $50-100K 37% >$100K	Mean = 21.3 years (SD = 2.3)	21% Freshman or Sophomore 42% Junior or Senior 19% Recent College Graduate 21% Graduate Student	63% Yes 37% No	68% Yes 32% No	Mean = 4.2 (SD = 2.6)	Mean = 16.7 (SD = 14.7)	Mean = 26.6 months (SD = 22.6)
Individuals Without a Survivor Mission (N = 27)	59%	52% Women 48% Men	63% White 15% Black 7% Asian 15% Other	26% <$50K 37% $50-100K 37% >$100K	Mean = 21.6 years (SD = 2.5)	11% Freshman or Sophomore 48% Junior or Senior 22% Recent College Graduate 19% Graduate Student	78% Yes 22% No	52% Yes 48% No	Mean = 2.6 (SD = 1.4)	Mean = 8.9 (SD = 10.7)	Mean = 32.4 months (SD = 35.8)
Total Sample (N = 46)	100%	61% Women 39% Men	61% White 13% Black 11% Asian 15% Other	28% <$50K 35% $50-100K 37% >$100K	Mean = 21.5 years (SD = 2.4)	15% Freshman or Sophomore 46% Junior or Senior 20% Recent College Graduate 20% Graduate Student	72% Yes 28% No	59% Yes 41% No	Mean = 3.3 (SD = 2.1)	Mean = 12.1 (SD = 13.0)	Mean = 30.0 months (SD = 30.8)

Note: Percentages may not total 100% due to rounding.

CHAPTER 5

CONCLUSIONS AND IMPLICATIONS

> Trauma is always bad—but it's also the beginning of the story, not the end. In the midst of tragedy, we must mourn, but also maintain a belief that our behavior still matters and that growth in life is still possible.
>
> —Shawn Achor (2011, para.12)

This mixed-methods dissertation explores the relationships between posttraumatic growth and cumulative adversity, narrative reconstruction, and survivor missions. Together, the three articles that comprise this dissertation address several important gaps in past research. In this concluding chapter I summarize the findings of the three empirical articles, discuss the methodological, sociological, and social work contributions of this dissertation and their implications, review the limitations of this study, and suggest numerous fruitful areas for future research.

SUMMARY OF THE EMPIRICAL CHAPTERS

In Chapter 2, I used inferential statistics to examine various correlates and predictors of posttraumatic growth. I found that experiencing a sexual trauma, *not* experiencing interpersonal violence, the amount of time that had passed since the (most recent) trauma, narrative coherence, and having a survivor mission were all positively associated with posttraumatic growth. Cumulative adversity, or the total amount of traumatic and sub-traumatic adversity experienced in one's lifetime, also explained a significant and relatively large amount (i.e., 25%) of the variance in total posttraumatic

growth, with individuals who had overcome the greatest amounts of adversity also experiencing the most growth. Within this sample of trauma survivors, sub-trauma adversity was found to have a greater impact upon total posttraumatic growth than either the number of trauma types or the total frequency of trauma.

In Chapter 3, I utilized mixed methods to further investigate the relationship between post-trauma narrative reconstruction and posttraumatic growth. Using my own coding rubrics, and relying primarily upon research participants' interviews, I rated the coherence of their narratives and their level of posttraumatic growth (PTG). I then used these scores to divide research participants into three categories: Level I (i.e., persons with high narrative coherence and high PTG), Level II (i.e., persons with moderate narrative coherence and moderate PTG), and Level III (i.e., persons with low narrative coherence and low PTG). I presented a case study exemplar representing each of these Levels, in order to showcase the primary characteristics of each Level. I also employed inferential statistics to investigate group-based differences between the levels. I argued that the relationship between narrative reconstruction and posttraumatic growth is likely co-constitutive, and that the three levels might best be conceptualized as stages of post-trauma change. I next examined the roles of trauma-related therapy, writing, informal conversations, and self-reflection in the narrative reconstruction processes of trauma survivors. And I discussed the possible impact of cultural narratives, collective traumas, and the discursive environment upon trauma survivors' efforts to reconstruct coherent, post-trauma narratives.

Finally, in Chapter 4, I utilized mixed methods to explore the phenomenon of survivor missions and the role of the survivor helper. I employed inferential statistics to

investigate the differences between trauma survivors who did and did not have survivor missions. I found that survivor helpers, on average, experienced their first traumas at younger ages, experienced higher levels of cumulative adversity, developed more coherent narratives about their lives, and experienced higher levels of posttraumatic growth than research participants without survivor missions. I next used grounded theory techniques to explore the narratives of survivor helpers. I found that there are numerous forms of survivor missions, that there are a variety of reasons why survivor helpers (want to) assist others, that survivor helpers believe that they have specialized knowledge and skills to use on behalf of other trauma survivors, and that survivor helpers themselves benefit from their survivor missions. Drawing upon the literatures on professionally-led mutual aid groups, Twelve Step programs, empowerment, and research on other programs using the helper therapy principle, I discussed both the benefits and possible risks associated with becoming a survivor helper. I concluded the chapter by suggesting that the end goal of trauma-related treatment should perhaps be re-conceptualized as the empowerment of trauma survivors.

THE CONTRIBUTIONS OF THIS DISSERTATION

The many contributions of this dissertation may be divided into three categories: methodological, sociological, and social work contributions. In the following sections, I summarize these contributions and their implications—while also highlighting the major themes running through the three empirical articles and synthesizing the quantitative and qualitative findings.

Methodological Contributions

This dissertation makes several important methodological contributions to the study of posttraumatic growth, cumulative adversity, narrative coherence, and survivor missions. First, this study used an innovative approach to not only document the types of posttraumatic growth experienced by participants, but also to ascertain the meaning and significance of these positive changes in trauma survivors' lives. Specifically, I instructed research participants to complete the Posttraumatic Growth Inventory (PTGI) during our first meeting together. Then, during our second meeting, I first asked interviewees to discuss their growth in their own words, and then, secondly, I showed them their PTGI survey and asked them to describe what the survey items meant to them and what those positive changes looked like in their lives. Using this mixed-methods approach enabled me to gather data capturing the breadth of individuals' experiences with various forms of posttraumatic growth, while also obtaining "thick description" (Holloway, 1997; Lincoln & Guba, 1985) of the meaning and meaningfulness of these positive changes in research participants' lives.

Second, in Chapter 2, I present an innovative way to both operationalize and calculate cumulative adversity. Past work on cumulative adversity has only measured such stressors as traumatic events, major (sub-trauma) life events, chronic stressors, and (occasionally) employment discrimination (Pimlott-Kubiak, 2005; Turner & Lloyd, 1995; Turner, Wheaton, & Lloyd, 1995), and many of the common survey instruments primarily include stressors most common in the dominant (i.e., white, male, heterosexual, middle class) culture. Subsequently, past operationalizations of cumulative adversity underestimate the unique stressors faced by women, persons of color, members of sexual

minority groups, individuals with disabilities, and other oppressed and marginalized social groups. This dissertation, however, measures stressors that may arise as a result of individuals' underprivileged social identities—including those related to gender, race/ethnicity, socioeconomic status, sexual orientation, religion, and ability status. Thus, I operationalize cumulative adversity as including the following five components: traumas, major (sub-trauma) life event stressors, chronic stressors, sexual harassment stressors, and (major and everyday) discrimination stressors.

In terms of calculating cumulative adversity, I use two different methods in order to compare the results. The first method, which I refer to as the "simple counts" method, has been used throughout previous research on cumulative adversity (Pimlott-Kubiak, 2005; Turner & Lloyd, 1995; Turner, Wheaton, & Lloyd, 1995). In this method, the number of each type of stressor (e.g., counts of trauma types, life events, and chronic stressors) is used as an independent variable in quantitative analyses. However, this "simple counts" method does not take into account the chronicity, frequency, severity, or duration of any type of stressor. The second method, which I refer to as the "stress-frequency" method, addresses this shortcoming by constructing variables that take into account the frequency and/or stressfulness of each component of cumulative adversity. The "stress-frequency" method of calculating cumulative adversity is a significant improvement over the "simple count" method because it acknowledges that some forms of trauma and sub-trauma adversity may be repeatedly experienced, longer in duration, more stressful, or more severe than others.

A third methodological contribution of this dissertation is that I have proposed a new way to quantitatively code the narrative coherence of individuals' post-trauma life

stories. (See Appendix H for a copy of my coding rubric.) The approach that I use in Chapter 3 differs markedly from several other methods of assessing narrative coherence (e.g., Baerger & McAdams, 1999; Habermas & Bluck, 2000; Mandler, 1984) in terms of its focus and its target population (i.e., trauma survivors). Mandler (1984), for example, emphasized the structural aspects of accounts, such as the temporal and causal sequencing of actions enacted in pursuit of a specific goal. Habermas and Bluck (2000) differentiate between four aspects of narrative coherence: temporal coherence, causal coherence, thematic coherence, and autobiographical coherence. My coding scheme draws upon some aspects of Baerger and McAdams's (1999) approach, which emphasizes the orienting details of the accounts, the temporal sequencing, the narrators' affect, and the integration of the account into larger life themes. My primary focus, however, is not upon the linguistic *structure* of the narrative, but, rather, upon its *content*, its degree of completeness, the self-understanding reflected within it, the degree to which the narrator made sense of the traumatic events in her/his life, and the degree to which the narrator had a vision regarding her/his post-trauma future.

Fourth, in Chapter 3, I present a coding rubric for quantitatively assessing research participants' level of posttraumatic growth based upon in-depth, qualitative interviews. (See Appendix I for a copy of my coding rubric.) This coding scheme assesses the breadth of positive life changes after trauma, the depth or degree of life change, and the significance and meaningfulness of these changes to the trauma survivor her/himself. Although further refinements are undoubtedly necessary, the development of this preliminary coding rubric is particularly important given the many critiques of current quantitative instruments measuring positive post-trauma changes, in general, and

the Posttraumatic Growth Inventory, in particular (e.g., McFarland & Alvaro, 2000; Nolen-Hoeksema & Davis, 2004; Park & Lechner, 2006; Wortman, 2004).

The final methodological contribution of this dissertation is that, in Chapter 4, I operationalize the concept of a survivor mission, delineating guidelines that may be used to assess whether or not trauma survivors have a survivor mission. Although several published sources make reference to Herman's (1992) "survivor mission" construct, no prior empirical study has put forth a categorization scheme to determine which trauma survivors have developed such a mission. In this dissertation, I take this important first step. The next step in this process, which I intend to do in my future work, is to develop a coding system that assesses the degree of individuals' survivor missions, rather than simply determining its presence or absence.

In sum, through the use of both qualitative and quantitative methods, this dissertation paints a more complete and nuanced picture of posttraumatic growth, cumulative adversity, narrative coherence, and survivor missions than could be obtained through either set of methods alone. In addition, this dissertation is innovative with regard to assessing posttraumatic growth, operationalizing and measuring cumulative adversity, measuring narrative coherence, and assessing the presence or absence of a survivor mission.

Sociological Contributions and Implications

This dissertation, which draws primarily upon symbolic interactionism and social psychological theoretical frameworks, makes five major contributions to various sub-fields within the discipline of sociology.

First, the topics of trauma, adversity, dysfunction, trauma recovery, resilience, and posttraumatic growth have all largely been studied through an individualistic, psychological lens. Problems such as trauma, chronic stressors, experiences of harassment and discrimination, and the resulting psychological and behavioral dysfunctions have been treated as *individual* problems—caused or perpetrated by individuals and occurring to individuals. Likewise, trauma recovery, resilience, and posttraumatic growth have been thought of as *individual* processes, characteristics, or accomplishments.

In his seminal text *Suicide*, Durkheim (1897) demonstrated that even though suicide appears to be an individual act, it is, in fact, a *social* phenomenon. Rather than being randomly distributed throughout the population, suicide is instead socially patterned and is impacted by individuals' level of integration in and regulation by society. Durkheim's work illustrates one of the primary tasks of the sociologist: to illuminate the social aspects of our seemingly individual-level identities, ideas, perceptions, experiences, and behaviors.

One of the most important contributions of this dissertation is the way in which it highlights the *social* nature of trauma, adversity, trauma recovery, narrative reconstruction, and posttraumatic growth. Most types of trauma and adversity are *social* problems, are the result of *social* inequalities, are experienced in *socially* patterned ways, and must be addressed at the levels of *social* structure, *social* institutions, and *social* policy.

Yes, some people (including several participants in this study) who have experienced major amounts of trauma and cumulative adversity, against all odds,

overcome these experiences and develop posttraumatic growth. These individuals are both amazing and inspiring. But the success of a few individuals (who, more than likely, received support from at least some social institutions, such as the church, the school, or the family) should not make us lose sight of the *social* nature of their seemingly individual difficulties, or of the *social* nature of the large-scale, long-term, socio-political-structural changes that need to occur in order to prevent such adversity in the first place and to maximize the likelihood of positive, post-trauma outcomes in the aftermath.

The second sociological contribution of this dissertation is that it demonstrates that these same phenomena (i.e., trauma, adversity, trauma recovery, narrative reconstruction, and posttraumatic growth) are intricately connected to social stratification and structural inequalities. Rather than being randomly distributed throughout a population, trauma is disproportionately experienced by members of disadvantaged groups in society. So, too, major life event stressors, chronic stressors, sexual harassment stressors, and major and everyday discrimination stressors—that is, the components of cumulative adversity measured in this study—are experienced with more frequency and greater severity by women, non-Caucasians,[22] and persons with lower socioeconomic status, compared to men, Caucasians, and persons with higher socioeconomic status. Individuals who experience higher levels of cumulative adversity, in turn, experience greater amounts of posttraumatic growth.

[22] The one exception is that, in this sample, Caucasians experienced slightly more sexual harassment than non-Caucasians (both in terms of the number of stressors and the total amount of stress), but the difference was not statistically significant.

However, as I pointed out in Chapter 2, the fact that cumulative adversity is positively and linearly associated with posttraumatic growth in this study is likely due, at least in part, to the particular research design and sampling criteria used in this study. This is a study of the "success stories" of trauma recovery and growth. And while cumulative adversity appears to foster resilience in the individuals in this sample, there are likely many other trauma survivors whose experiences with trauma and cumulative adversity did not lead to positive, post-trauma outcomes (and, thus, were not eligible for inclusion in this project). In fact, the psychological, public health, medical, social work, and sociological literatures are overflowing with research documenting that trauma and adversity—particularly at young ages and/or in large quantities—are associated with poorer physical and mental health, substance abuse, relational difficulties, homelessness, criminal activities, incarceration, and general decreases in functioning and well-being. The point here is that the amazing successes of a handful of individuals should not distract us from the reality that there are many social problems and inequalities that need to be addressed and remedied.

The findings of this dissertation (and their implications) connect with the sociological and feminist literatures on intersectionality. The concept of intersectionality refers to the simultaneous, multiplicative, and interlocking nature of oppressions (Collins, 1990; Combahee River Collective, 1977; Crenshaw, 1991; King, 1988; Smith & Smith, 1981). As Collins (1990) emphasizes in her conceptual model of the "matrix of domination," social identity is complex. An individual may be located in a position of privilege on one axis (e.g, by being White), while simultaneously being subject to oppression as a result of her location on other identity axes (e.g., by being female, a

lesbian, and/or poor). What these feminist scholars teach us is that the various forms of oppression are interconnected and cannot be separated. Subsequently, in order to successfully reduce the cumulative adversity experienced by certain groups of people, we have to address the numerous root causes of oppression—including sexism, racism, classism, homophobia, able-ism, and religious intolerance.

Third, this dissertation sociologically examines trauma as a potential turning point in individuals' lives—often initiating changes in identity, necessitating narrative reconstruction, and presenting the opportunity to make positive changes in one's life trajectory.

Symbolic interactionists assert that individuals' interactions with their environment—including other people, ideas, institutions, etc.—are an integral part of the process through which we develop a sense of self. According to Mead's (1967) theory of the self, one part of our identity (which Mead termed the "me") is created through our understanding of societal values, social norms, and others' expectations. Giddens (1991) further theorizes that, in the era of late modernity, identities are not only self-reflexive, but they are also "projects" on which individuals (more-or-less) deliberately work. That is to say, our sense of self is constructed through the complex interplay of our interactions with people, social structures, and other aspects of our social environment, our own reflections upon those interactions, and our ideas about the identities we wish to "accomplish." Far from static, this sense of self is continuously being shaped, evaluated, and (re-)constructed (Eckert, 2000; Giddens, 1991; Polkinghorne, 1988).

Life course theorists, meanwhile, explain that life trajectories, which may be defined as "the stable component of a direction toward a life destination" (Wheaton &

Gotlib, 1997, p. 2), once set in motion, tend to simultaneously present and restrict various opportunities, such that the trajectory is maintained. Such trajectories are thus, generally, continued unless or until some sort of dramatic and jarring event, choice, or experience—called a "turning point"—alters the probability of one's life destination and opens up new possibilities (Elder, 1998; Wheaton & Gotlib, 1997). Turning points may result in changed schemas about the self and the world, altered relationships, the reconstruction of life narratives, and shifts in life trajectories.

One of the contributions of my dissertation is that I bring symbolic interactionist theories of the self into dialogue with theories on the life course. As I have demonstrated throughout this dissertation, traumatic events are one type of turning point that have the potential to change life trajectories, narratives, and identities in positive ways. The experiences of trauma, trauma recovery, and the development of posttraumatic growth often involve substantial shifts in individuals' identities, cognitive schemas, narratives, and life trajectories. Giddens (1991) explains the intertwined nature of identity and narrative as follows:

> A person's identity is…found…in the capacity to keep a particular narrative going. The individual's biography, if she is to maintain regular interaction with others in the day-to-day world, cannot be wholly fictive. It must continually integrate events which occur in the external world, and sort them into the ongoing "story" about the self. [p. 54]

In the aftermath of trauma, the questions that Giddens (1991) asserts are already a fixation for everyone living in an age of late modernity—that is, "What to do? How to act? Who to be?" (p. 70)—are an even more pressing concern for trauma survivors. Indeed, for many participants in this study, one of the greatest impacts of trauma upon their lives was the way in which it shattered their prior notions of self, thus creating the need to reconstruct both their identity and a coherent narrative of their lives. As I

demonstrate in Chapters 3 and 4, some trauma survivors accomplish these tasks with greater success than others. But for those who manage to hurdle these challenges, trauma, as a trajectory-altering turning point, may be the initiator of tremendous growth and wisdom, and the source of greater meaning and a newfound direction in life.

The fourth major sociological contribution of this dissertation parallels the first and is closely tied to the third: although the processes of meaning-making and narrative development/reconstruction are most often examined psychologically, they are, nonetheless, *social* phenomena. Meaning is not constructed in a vacuum, but, rather, through the complex, iterative interactions between the self and the social environment. Individuals' narratives about their selves and their lives are, similarly, socially-constructed—drawing upon extant discourses in the discursive environment (Frankenberg, 1993) and shaped by myriad historical, political, cultural, and sub-cultural forces (McAdams, 2006; Plummer, 1995).

Finally, this dissertation demonstrates that trauma, as a turning point, has the potential to lead to empowerment, social action, personal and interpersonal transformation, and social change. Although some sociologists may claim that the purpose of sociology is simply to study the workings of society in order to generate knowledge, I would strongly disagree. From its very founding, sociological thinkers such as Auguste Comte (1858) and Karl Marx (1867) believed that the goal of sociology was to improve peoples' lives and society as a whole. Moreover, in his writings on the nature of power, Foucault (1979, 1980) argues that power is not simply regulatory, prohibitive, and repressive. Rather, power can also be a creative and productive force that provides opportunities for resistance (Foucault, 1979, 1980).

Trauma thus provides opportunities for positive change. Some of these changes are micro, such as individual and interpersonal empowerment, consciousness-raising, and the many personal and interpersonal aspects of posttraumatic growth. However, individual empowerment and transformation can lead to political empowerment, collective action, social manifestations of growth, social movements, and profound, large-scale social change (Bloom, 1998; Coover, Deacon, Esser, & Moore, 1977; Schechter, 1982; Tedeschi, 1999; Tedeschi, Park, & Calhoun, 1998). Drawing upon the work of Freire (1973) and Simon (1994), Gutièrrez and Lewis (1999, p. 10) assert:

> As individuals view themselves capable of acting in the world, they will use their self-knowledge and ability to work toward the transformation of larger systems… This is one path toward achieving the goal of social justice.

In short, through education and consciousness-raising, trauma survivors can learn to identify those areas where power, authority, and structural systems are illegitimate, discriminatory, and oppressive. Such knowledge may lead individuals to join together and take collective, social action against oppressive laws, policies, social structures, and institutions. It is here, in the realm of facilitating empowerment, pursuing social justice, and enacting social change, that the nexus of sociology and social work becomes most apparent.

Social Work Contributions and Implications

This dissertation also makes five major contributions to, and has various implications for, social work research, education, and practice.

First, this dissertation provides empirical evidence regarding the importance of narrative reconstruction and empowerment in the lives of trauma survivors, while also

suggesting that trauma survivors may receive benefits from becoming survivor helpers and/or taking social action. My findings, particularly in Chapter 3, support the psychological and sociological literatures on cognitive schemas, meaning-making, and narrative development, as well as Calhoun and Tedeschi's (2006) conceptual model regarding how posttraumatic growth occurs. I demonstrate that narrative coherence is positively associated with posttraumatic growth, and I argue that the relationship between them is likely co-constitutive. In Chapter 4, I draw upon the empowerment literature in social work (and, to a lesser extent, in sociology, psychology, and feminist studies) and demonstrate that traumatic experiences may, for some individuals, lead to personal, interpersonal, and/or political empowerment (Gutièrrez & Lewis, 1999), the development of a survivor mission, and/or social action.

The primary implication of these findings is that social workers and other helping professionals should continue or even increase their efforts to promote trauma survivors' narrative reconstruction, empowerment, and, where appropriate,[23] their development of a survivor mission. As I note (in both Chapters 3 and 4), there are already many therapeutic modalities and countless programs that encourage the development of narrative coherence in trauma survivors. Whatever the modality, the overarching theme is that, after aiding trauma survivors in establishing their safety (Briere & Scott, 2006; Herman, 1992; Hobfoll et al., 2007), helping professionals should continue to assist survivors to put their traumatic experiences and cumulative adversity into words (either orally or in writing), to integrate the trauma(s) into their life story, and to reconstruct a

[23] As I have noted in Chapter 4, due to the dearth of research regarding the benefits and potential risks of engaging in a survivor mission, the optimal timing for beginning such a mission, and how helping professionals can facilitate this process without inadvertently placing pressure upon trauma survivors, helping professionals are advised to proceed with caution.

narrative that not only affirms the positive aspects of the self but, also, (re-)creates meaning in life and a hopeful vision for the future.

Individual counseling is not the only treatment approach that has been proven to be effective for trauma survivors. At their best, mutual aid groups (whether professionally- or member-led) reduce participants' sense of isolation, shame, and stigma. In addition, mutual aid groups provide participants with validation and other emotional support, and facilitate the sharing of practical solutions and knowledge of resources (Gitterman & Shulman, 2005a). These groups also help participants to cognitively and emotionally process their experiences, develop narrative coherence, reconstruct their narratives in empowering ways, shift their identities from being victims to survivors, develop positive coping mechanisms, and facilitate the healing process. In the words of Gitterman and Shulman (2005b):

> Group members help themselves by helping others…Group members, by helping others to heal, heal themselves. Essentially, when we lend our strength to others, we strengthen ourselves. [p. 20]

My challenge to social workers, other helping professionals, and the leaders of mutual aid groups is this: if you are not already doing so, incorporate consciousness-raising activities (including education regarding structural inequalities, privilege, and oppression) and an explicit focus upon social action into your treatment program or model. While not every trauma survivor will develop a survivor mission or choose to take collective social action, every individual benefits from being personally, interpersonally, and politically empowered. Social change begins with individuals—including trauma survivors—joining together and taking action. Helping professionals can (and do) play an important role in this process.

The second major social work contribution of this dissertation is its contribution to the literatures on resilience, hardiness, and stress-related risk and protective factors. In this study, individuals who had endured the most trauma (both in terms of the number of trauma types and the total trauma frequency) and the most cumulative adversity experienced the greatest levels of posttraumatic growth. Conversely, those individuals who had experienced the least amounts of trauma and cumulative adversity experienced the lowest levels of posttraumatic growth.

Research on risk and protective factors among children living in highly stressful environments has found that protective factors can be grouped into four general categories: 1) individual temperament, 2) family patterns, 3) external supports, and 4) environmental resources (Basic Behavioral Task Force, 1996; see also Anthony, 1987). The findings from this dissertation, however, suggest that some amount of adversity may also act as a protective factor with regard to buffering the impact of later traumatic events. Future research is needed to clarify when, how, and in what "dosage," adversity may promote hardiness and resilience.

A third contribution of this dissertation is that it calls attention to the fact that there are a lot of undergraduate and graduate students who are currently facing, or are struggling to overcome, significant amounts of trauma and cumulative adversity—even on the campus of a prestigious university. Because this study was conducted with a non-representative sample of students, I cannot use my findings to ascertain general prevalence rates of trauma and cumulative adversity among college and graduate students. However, the numerically-overwhelming inquiries I received during the recruitment phase of this project suggest that not only are experiences of trauma common

in the lives of many students at this university, but also that students are eager to share their stories. As I describe in Appendix A, more than half of the research participants in this study said that they found their participation in the project to be helpful or beneficial in some way. Interviewees spoke of feeling better about themselves after the interview, of having gained new insights about themselves and their lives, and of feeling "validated" or "affirmed." At least two participants stated that they found their interviews to be "therapeutic." Several people further commented that it was refreshing to reflect upon their lives in positive ways and to, in essence, reframe or reconstruct their stories of loss and struggle as narratives of recovery and growth.

Individuals' positive experiences as participants in this study are particularly intriguing when juxtaposed with the negative experiences that some of them have had in explicitly "therapeutic" settings. Although I have not yet fully coded and analyzed the data regarding students' experiences with helping professionals and on-campus therapeutic resources, my overall sense was that, of the 59% of research participants who had received trauma-related therapy, approximately half of them were dissatisfied with their experiences. Many other research participants, for a variety of reasons (e.g., due to a fear of being stigmatized, a belief that they could handle their problems without help, or feeling satisfied with their existing support network), stated that they would be unlikely to ever seek assistance from a helping professional, even if they experienced additional trauma.

What these tentative findings suggest is that many young adult trauma survivors welcome opportunities to share their stories in supportive, validating settings. In fact, many of these survivors seemed to reconstruct their narratives in positive ways *during the*

interview itself, and they perceived this process to be beneficial to them. At the same time, many of these survivors were hesitant about seeking professional assistance, had had negative experiences with therapy in the past, and/or were adamant that they could handle their difficulties on their own (or with the assistance of members in their social network).

The implication here is that college and graduate students may need greater access to both traditional and not-so-traditional forms of therapeutic assistance. In addition to low- or no-cost individual and group counseling services, student trauma survivors may also benefit from increased opportunities to share—and reconstruct—their stories in positive, validating settings. Examples of this might include "speak-out" events, where survivors of specific types of trauma come together and share their stories of trauma and recovery using a variety of media (e.g., poetry, visual art, story-telling). Other examples might include the formation of writing clubs specifically for trauma survivors, art or drama groups that focus on processing the experiences of trauma survivors, and speakers' bureaus (comprised of survivors) that provide education on trauma-related topics.

The fourth major contribution of this dissertation is its support of certain types of models of social work practice. In this dissertation, I found that the development of posttraumatic growth is associated with a whole host of *social* phenomena—including one's age at first trauma, narrative coherence, the amount of trauma experienced, having experienced certain types of trauma (e.g., sexual trauma, interpersonal trauma), experiences of chronic stress, sexual harassment, discrimination, cumulative adversity, and having a survivor mission. All of these variables are themselves impacted by social identities, social inequalities, social structures, privilege, and oppression.

In order to address the complex, simultaneous, multiplicative, and interlocking nature of oppressions (Collins, 1990; Combahee River Collective, 1977; Crenshaw, 1991; King, 1988; Smith & Smith, 1981), social work practice models need to incorporate ecological and sociological perspectives. There are several excellent models that do this and I will highlight two of them here. First, Bronfenbrenner's (1977, 1979) "Ecological Model of Human Behaviour" is a well-known example of a theoretical model built around the continuous interactions between the individual and her/his environment. According to Bronfenbrenner, the individual interacts with myriad factors and forces in the social environment at four primary levels (listed here, in order, from proximate to distal): the microsystem, the mesosystem, the exosystem, and the macrosystem. The implication of this model is that the most effective approach to tackling any particular problem is to address its underlying causes at all four levels.

A second, more practice-oriented model was developed by Almeida, Woods, Messineo, and Font (1998; see also, Almeida & Durkin, 1999). Almeida et al.'s "Cultural Context Model" was designed for the treatment of domestic violence and it explicitly acknowledges that seemingly personal or interpersonal problems occur within a social and structural context. Almeida et al.'s model incorporates the roles of culture, institutions, intersectional identities, and the interlocking nature of oppressions into its treatment model, and socio-education and consciousness-raising are explicit goals of their program.

My dissertation research suggests that it is models such as the two referenced above that will be most effective in addressing the complex issues associated with trauma, cumulative adversity, trauma recovery, and posttraumatic growth. In addition,

these types of models should be thoroughly integrated throughout the social work curriculum.

Finally, this dissertation has important implications regarding social work education. Although much of social work education is built upon a strengths-based approach, courses on trauma tend to focus primarily (if not solely) upon the many possible dysfunctions and difficulties that may result. Trauma recovery is often presented as the single end goal of treatment. While distress and dysfunction are undoubtedly important sequelae of trauma, they do not represent the entire story of trauma's potential impact. Moreover, as this dissertation demonstrates, many trauma survivors not only successfully recover from the most difficult experiences of their lives, but they also experience growth, develop survivor missions, and are transformed in positive ways. Social work students should be taught about posttraumatic growth in any course involving trauma-related topics. Of course, positive transformation should never be an obligation or additional burden placed upon traumatized individuals (Miller, 2007), but students should, nonetheless, be taught about the possible ways in which they may facilitate positive, post-trauma outcomes.

In addition, social work educators need to remember (or be aware) that some unknown (but likely sizeable) percentage of their students are themselves trauma survivors; in fact, some social work students have chosen to enter the profession as a part of their survivor mission. The implication of this is two-fold. First, these students bring incredible passion and motivation to their work and may even, as suggested in Chapter 4, possess unique abilities that allow them to understand and be particularly effective in working with other trauma survivors. But, secondly, it is also possible that (some of)

these survivor helpers have unique vulnerabilities, have unresolved trauma issues, and/or are at particular risk for experiencing vicarious trauma (Cunningham, 2003; Pearlman & MacIan, 1995). Further research is needed in this area.

THE LIMITATIONS OF THIS STUDY

While this dissertation research has many strengths and makes numerous methodological, sociological, and social work contributions, there are important limitations that should be considered when interpreting the findings. First, due to the relatively small sample size (i.e., 46), I was not able to control for many variables in the quantitative, multivariate analyses. While the possibility of confounding variables exists in any study, it is even more likely to occur when only a handful of parameters may be included in any given model. In addition, the small size of the sample may account for some of the non-statistically significant findings in this study. With a larger sample, additional group-based differences might have become apparent.

Second, this sample has some unique characteristics. Because this dissertation project was explicitly designed to investigate the phenomenon of posttraumatic growth among a sample of young adults who might be considered the "success stories" of trauma recovery and posttraumatic growth (i.e., due to their educational accomplishments, relatively high functioning, and self-identification as persons who had experienced personal growth), this sample is not necessarily representative of the larger population of trauma survivors. Thus, these findings may not be generalizeable to an older, less educated, less privileged, and/or lower functioning population of trauma survivors, or to

those who do not identify as having grown, at least to some extent, from their traumatic experiences.

Finally, this dissertation relies upon cross-sectional data and is subject to all of the limitations therein. Thus, the temporal ordering of many variables (e.g., narrative reconstruction and posttraumatic growth), the potentially causal relationships between variables, and the numerous changes that may take place over time (e.g., shifts in or the disappearance of one's survivor mission) cannot be investigated or determined using these data.

SUGGESTIONS FOR FUTURE RESEARCH

Due to the exploratory nature of much of this dissertation, combined with the relative recency of empirical inquiry into posttraumatic growth, there are numerous ways in which other researchers and I may build upon the findings of this dissertation.

First, longitudinal research is greatly needed in order to address many unanswered questions regarding posttraumatic growth, cumulative adversity, narrative reconstruction, and survivor missions. Ideally, a longitudinal study would be designed in such a way that a large group of individuals would be tracked over time, prior to (at least some of) them experiencing any trauma at all. Every year, these individuals would be asked to fill out survey questionnaires regarding their experiences with various forms of stress and adversity, any trauma (if applicable) they have experienced in the past year, various indices of trauma recovery (if applicable) and general well-being, and posttraumatic growth (if applicable). In addition, each year, the sample would be interviewed regarding their major experiences during the past year, the meanings they attach to those

experiences, the overall themes of their life stories, and their plans for the future. A sub-sample of individuals, comprised of those who have experienced a traumatic event in the past several years, would be asked more detailed questions regarding the trauma, its impact on their lives, the social support they have received, their methods of coping, any meaning they have found in the event(s), their experiences (if any) with posttraumatic growth, and their future plans (including whether or not they have a survivor mission). The narrative coherence of each research participant's life story would be assessed annually, and the changes in their narratives would be examined.

This type of longitudinal research may answer many of the following questions. What differentiates trauma survivors who successfully recover and even experience posttraumatic growth from those who experience only negative, post-trauma outcomes? When, post-trauma, does posttraumatic growth develop? *How* does PTG develop? Do the forms of posttraumatic growth change over time or across the life cycle? Does PTG fade or disappear over time? (How) does the timing of (sub-trauma) adversity impact the development of posttraumatic growth? Are there causal connections between some of the correlates of PTG and the growth itself? When does post-trauma narrative development and reconstruction occur? *How* does narrative development and reconstruction occur? In what ways do post-trauma narratives change over time? When do survivor missions develop? *How* do survivor missions develop? Are there phases of survivor missions (e.g., desire to help, intention, preparation, and action)?[24] To what degree do survivor mission and other generative *intentions* lead to actual behavioral changes? And do

[24] I would like to thank Daniel Saunders for sparking the idea that there may be various phases of survivor missions.

survivor missions and other, trauma-related forms of generativity change or fade over time?

Second, the relationships between cumulative adversity, resilience, empowerment, and posttraumatic growth deserve further investigation. Considering that some forms of adversity, particularly witnessing or experiencing violence or abuse as a child, are predictors of future violence perpetration and other criminal behaviors (Ferguson et al., 2008; Smith & Thornberry, 1995; Widom, 1989; Zingraff et al., 1993), it is especially intriguing that, in this sample of relatively high-functioning and highly educated young adults, cumulative adversity was positively correlated with posttraumatic growth. In fact, in this study, it was the most privileged individuals in the sample (i.e., Caucasians, men, persons with high SES, etc.) who experienced the least amount of cumulative adversity during their lifetimes and who also experienced the lowest levels of posttraumatic growth. Does adversity somehow serve as a buffer between individuals and the full (negative) impact of traumatic experiences? Why does adversity and trauma lead some individuals into negative spirals of self-destructive behaviors, while other individuals successfully recover and even grow from their experiences?

Given the fair amount of research conducted in the area of "oppression psychology" (e.g., Bulham, 1985), researchers should also investigate the various adaptive and positive responses to oppression evidenced in the lives of many members of disadvantaged groups. Researchers should explore if and how cumulative adversity might "pave the way" for growth after trauma. In addition, researchers should examine how much adversity, and under what circumstances, is "enough" to produce posttraumatic growth. It would also be interesting to investigate if there are other,

unanticipated "costs" of having privilege (i.e., in addition to developing less resilience)? Given their vulnerability with regard to trauma, how might parents, educators, and helping professionals promote resilience and more shatter-proof schemas among members of privileged groups? Furthermore, is there some amount of cumulative adversity that is "too much" for most individuals to cope with, let alone grow from? With a larger sample, researchers could also examine whether the relationship between cumulative adversity (and its various components) and posttraumatic growth is linear or, as I anticipate, curvilinear. In sum, further research is clearly needed to answer these intriguing questions.

Third, there are important, unanswered questions regarding the impact of the types of trauma upon the development of posttraumatic growth, the process of narrative reconstruction, and the development of a survivor mission. Does the type of trauma impact what types of growth are experienced, the timing of growth, the level of growth, or the likelihood of developing a survivor mission? Do certain types of traumas pose more difficulties with regard to narrative reconstruction? In this dissertation, the vast majority of the sample (78%) had experienced more than one type of trauma, which made it difficult to separate out the effects of any one type of trauma. Researchers designing future studies to address questions regarding the impact of trauma type upon posttraumatic growth should consider obtaining a sample comprised of survivors of several different types of traumas (e.g., child abuse, domestic violence, life-threatening illness, natural disaster, life-threatening accident, traumatic death, etc.) who have each *only* experienced that one type of trauma.

Fourth, there is a tremendous need for additional research that examines the *social* aspects of trauma recovery, post-trauma meaning-making, narrative reconstruction, posttraumatic growth, and the development of a survivor mission. Building upon feminist scholarship on intersectionality, researchers might further investigate how the above phenomena are shaped by social identities and are impacted by interlocking systems of oppression. This study also raises questions regarding how individual and collective narratives are shaped by social, historical, political, cultural, and sub-cultural forces. Future research might also explore the types of cultural narratives that trauma survivors draw upon when reconstructing their life stories. It might also be intriguing to conceptualize the processes of trauma recovery and the development of posttraumatic growth as being a part of individuals' post-trauma identity projects. Research is also needed regarding the connections between posttraumatic growth, social movements, and social transformation. How can traumatic events—experienced individually or collectively—lead to social action and, even, to large-scale social change?

A fifth fruitful area for future research is the phenomenon of survivor missions. Conceptual refinements are needed regarding the definition and scope of survivor missions, as well as regarding the possible phases and trajectories of survivor missions. Methodologically, researchers should develop a quantitative instrument that assesses the presence, nature, and degree of trauma survivors' survivor missions. Research is needed that investigates the prevalence of survivor missions among trauma survivors, documents the range of survivor missions, and explores the differences between trauma survivors who do and do not develop survivor missions. Researchers might also examine the factors that influence the timing, successfulness, and effectiveness of trauma survivors'

transitions into being survivor helpers. Further research should also be conducted to examine the role that survivor mission activities play in the lives of survivor helpers, as well as to explore the positive and negative impact of survivor missions on both the survivor helpers and upon those that they aim to help.

Finally, research is needed to investigate how helping professionals—including psychologists, psychiatrists, social workers, counselors, and clergy members—may best promote narrative reconstruction, posttraumatic growth, and the development of survivor missions and other forms of generativity in the lives of trauma survivors. In addition, helping professionals may play an important role in assisting trauma survivors who have faced significant amounts of cumulative adversity to not descend into dysfunctional, downward spirals but, rather, like many of the research participants in this study, experience positive, post-trauma outcomes. In light of many trauma survivors' reluctance to participate in "traditional" therapy, what innovative, non-traditional therapeutic techniques, models, or programs might we develop to facilitate these survivors' narrative reconstruction and positive, post-trauma outcomes? Research is also needed to clarify when, and under what circumstances, it is appropriate and beneficial (to both the survivor helper and the people she/he aims to help) for helping professionals to encourage trauma survivors to become survivor helpers.

In sum, my hope is that this dissertation, which is largely exploratory in nature, will inspire much future research, using a variety of methodologies, on posttraumatic growth, cumulative adversity, narrative reconstruction, and survivor missions. Such research will not only deepen our understanding of positive, post-trauma outcomes, but it may also, indirectly, be used to positively impact people's lives.

In conclusion, as Achor (2011, para. 12), quoted at the beginning of this chapter, reminds us, trauma is "the beginning of the story, not the end." Statistics, and our own lived experience, inform us that the vast majority of the human population will experience at least one trauma in their lifetime, and that we all will face adversity of one kind or another. Indeed, few of us leave this world unscathed. What this research on posttraumatic growth tells us, however, is that our post-trauma story matters, that adversity can be overcome, that tragedy can give birth to wisdom and growth, that our life stories can be reconstructed in positive ways, that meaning can be created in the midst of chaos, that we can transform our pain into a gift for others, that we can experience personal growth in the aftermath of trauma, that tragedy and oppression can spark social change, and that we can choose to live lives of integrity, meaning, and purpose regardless of what may happen to us. In the words of Viktor Frankl (1959, p. 112), "When we are no longer able to change a situation…we are challenged to change ourselves." Doing so will not only enrich our own lives, but will also benefit our families, communities, and the world.

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APPENDICES

APPENDIX A

MINIMIZING THE RISKS AND MAXIMIZING THE BENEFITS TO RESEARCH PARTICIPANTS

Background

In recent years, there has been much interest in the ethics of conducting research with survivors of trauma, in general, and in research that requires research participants to describe their past experiences with trauma, in particular. Interdisciplinary summits, such as the New York Academy of Medicine and the National Institute of Mental Health's 2003 meeting on "Ethical Issues Pertaining to Research in the Aftermath of Disaster" (Collogan, Tuma, Dolan-Sewell, Borja, & Fleischman, 2004), have convened on the subject, and a handful of review articles summarizing the state of knowledge in the area and best practices in trauma research have recently been published (e.g., Jorm, Kelly, & Morgan, 2007; Newman & Kaloupek, 2004; Newman, Risch, & Kassam-Adams, 2006). A growing body of literature documents that "research participation for trauma survivors is not harmful, and that it also may result in positive perceived benefits" (Griffin, Resick, Waldrop, & Mechanic, 2003, p. 227).

Studies regarding the positive and negative effects of participating in trauma-related research have been conducted among many different populations, including survivors of domestic violence (Griffin, Resick, Waldrop, & Mechanic, 2003; Johnson & Benight, 2003), sexual abuse and assault (Draucker, 1999; Griffin et al., 2003), physical

assault (Griffin et al., 2003), child abuse and neglect (Newman, Walker, & Gefland, 1999), traumatic physical injury (Ruzek & Zatzick, 2000), and combat (Halek, Murdoch, & Fortier, 2005), parents of stillborn babies (Brabin & Berah, 1995), friends or relatives of a suicide (Cooper, 1999); refugees (Dyregrov, Dyregrov, & Raundalen, 2000), and persons affected by the terrorist attacks on September 11th (Boscarino et al., 2004).

Jorm, Kelly, and Morgan (2007) conducted a systematic review of 46 empirical studies that examined research subjects' distress following participation in research on psychiatric disorders or risk factors associated with psychiatric disorders; included in this review were 23 studies of trauma or other adverse life experiences.[25] The authors found that a minority of participants (generally less than 10%) experience distress during psychiatric research that does not focus upon trauma, while a somewhat larger minority of participants in studies investigating trauma become distressed while participating in the study. However, positive reactions following participation in psychiatric studies (e.g., research participants felt relieved, felt better about life, enjoyed the interview, learned more about themselves, gained insight, found interview helpful) are significantly more common than negative reactions.[26] Furthermore, the negative and positive reactions appear to be largely independent of one another, such that many research subjects who experience distress also view their overall experience with the study as positive. Evidence regarding the longer-term effects of participation in psychiatric research studies

[25] See also Newman and Kaloupek (2004) for a review of 12 trauma-focused research studies. Their findings are consistent with those of Jorm et al. (2007).

[26] Griffin, Resick, Waldrop, and Mechanic (2003), in a study that assessed survivors of physical and sexual assault less than three weeks after their trauma, found that the research experience "was generally rated as a very positive and interesting one" (p. 226)—even for participants who were highly symptomatic for PTSD.

is limited, but the existing evidence suggests that there is no adverse impact, even in studies of traumatic experiences.

The positive benefits of participating in trauma-related empirical studies appear to be greater in interview-based research than in studies based upon questionnaires or laboratory experiments (Collogan et al., 2004). In their analysis of the personal benefits spontaneously described by participants in qualitative health-related studies, Hutchinson, Wilson, and Wilson (1994) found that interviewees reported experiencing numerous, sometimes unanticipated, positive benefits that resulted from their participation in research studies. These benefits included: catharsis and feelings of relief; self-acknowledgment and validation; a sense of purpose; increased self-awareness; empowerment; healing; and providing a voice for the disenfranchised. Narrative theorists explain such benefits by pointing out that storytelling is the primary means through which human beings make sense of their experiences (Brody, 1987; Bruner, 1986; McAdams, 1993; Neimeyer, 2001). Similarly, Coles (1989, p. 7) asserts that people tell their stories in order to "understand the truth of their lives." Subsequently, telling the story of one's life may itself have transformative power and bring benefits to the narrator.

In light of recent findings regarding the minimal risks and likely rewards to trauma survivors who participate in research studies (even for the minority who experience temporary negative emotions), many scholars are urging institutional review boards and ethics committees to "not focus on whether participants will become distressed by the research, but rather on whether the study is designed in such a way that the final outcome will be a positive one for participants" (Brabin & Berah, 1995, p. 165; see also, Jorm et al., 2007).

Protective Measures Used in This Dissertation

In this vein, I designed this dissertation project so as to maximize the potential benefits, while minimizing the possible risks, to research participants. Specifically, I incorporated numerous specific recommendations and best practices, described in the current literature on ethical and benefit-enhancing research with trauma survivors, into my research design (see Griffin et al., 2003; Jorm et al., 2007; Newman & Kaloupek, 2004). These practices can be categorized as occurring during three phases of the interaction with research participants: 1) During the informed consent process; 2) At the beginning of (and during) the interview; and 3) At the conclusion of the interview.

First, with regard to the informed consent process, I (both on the informed consent form and verbally) acknowledged to the potential interviewee that research participation may cause distressing emotions. I also clearly stated that while many people find research participation to be a positive and even beneficial experience, the purpose of the research project is not to provide therapeutic services but rather to better understand the nature and process of posttraumatic growth. This informed consent process, along with the interview itself, occurred in a safe, quiet, and private location chosen by the interviewee.

Second, prior to beginning the interview, I also let interviewees know that the interview could be stopped at any time, that they could take breaks during the interview, and that the interview could be spread over multiple sessions if this would be preferable to them. The purpose of these measures was to give the control (as much as possible) regarding where, when, and how the interview proceeded to the research participants themselves. During several interviews, a participant became distressed during the

interview. When this occurred, I asked how they were feeling, responded in a supportive manner, and asked if they would like to pause or end the interview.[27] Although no interviewee discontinued her/his interview, numerous research participants requested brief breaks—usually for mundane reasons such as to get more water, make a phone call, or stretch their legs. On two or three occasions, however, interviewees took a break to wipe away tears and regain their composure.

Finally, near the end of each interview, I debriefed interviewees regarding their experience of participating in the study. Using a series of open-ended questions modeled after the Reactions to Research Participation Questionnaire Revised (RRPQ-R; Newman, Willard, Sinclair, & Kaloupek, 2001), I gave interviewees the opportunity to express any distress, regrets, and perceived benefits resulting from their participation in the study. None of the 46 interviewees reported having regretted their participation in this research project. Moreover, more than half of the interviewees said that they found their participation in the study helpful or beneficial in some way. For example, one interviewee commented that the interview made her "feel better" about herself and that it reminded her that she is "really a cool person!" Several others said that reflecting upon their lives reminded them of how strong they are, one research participant commented that he had not previously realized how much support his girlfriend had provided him, a handful of participants spoke of feeling "validated" or "affirmed," and at least two interviewees stated that they found the experience "therapeutic." Several research

[27] As a social worker with an MSW degree and more than two years of experience working as a crisis counselor and advocate with survivors of domestic violence, sexual assault, child abuse, and medical and psychiatric emergencies, I have the necessary training to assess research participants' distress, deal with crises (e.g., help people to ground themselves), and refer individuals to appropriate mental health providers.

participants also expressed their hope that sharing their own life stories would, ultimately, benefit other trauma survivors.

At the conclusion of the interview, I gave each research participant a referral sheet outlining the various trauma-related therapeutic services available at the University and in the greater community. I also encouraged interviewees to contact me if they had any adverse reactions following their participation in the study (which, as far as I know, none of them did).

Together, these measures served to minimize the risks to research participants and maximize the potential benefits that interviewees experienced through their participation in this research study.

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APPENDIX B

INTERVIEW PROTOCOL

Before we begin, I want to let you know that I really value your time and appreciate your willingness to talk to me about your life experiences. If there is anything I ask you that you would rather not talk about, please let me know and we'll skip to the next question. If you need a break at any time, just let me know. Also, please feel free to ask me any questions you have as we go along. OK?

This interview is about the story of your life. In telling your life story, you should focus upon the key events, relationships, recurring themes, and anything else that you believe to be important in some fundamental way—information about yourself and your life experiences that says something significant about you and how you have come to be who you are. I am particularly interested in those aspects of your life story that in some way shed light upon how you came to experience personal growth following a traumatic life event or series of events.

This interview is divided into several sections—including a general overview of different time periods in your life, details about the traumas you have been through, and the negative and positive impact of those experiences on your life. We will aim to complete the interview within two hours. Do you have any questions before we begin?

1. I would like you to begin by describing your growing up years, let's say birth through middle school. How would you, in general, describe this time period in your life?
    - 1a. Where were you born? Where all have you lived?
    - 1b. Who did you live with?
    - 1c. What was your family life like?
    - 1d. What major life events were significant in shaping who you are today?
    - 1e. What people were most important in your life during this time?

2. How would you describe your high school years?
    - 2a. What was your family life like?
    - 2b. What major life events were significant in shaping who you are today?
    - 2c. What people were most important in your life during this time?

3. How would you describe your college years (so far), as well as your years since undergrad (if applicable)?
    - 3a. What major life events were significant in shaping who you are today?

3b. What people have been most important in your life during this time?

4. I'd now like you to describe a few of the best moments in your life, the high points in your life story. These moments could be accomplishments, favorite memories, or some other sort of peak experience in your life.

-what happened, where did it happen, when did it happen, who was involved, what did you do, what were you were thinking and feeling, what impact did this experience have upon you, and what does this experience says about who you were or who you are

5. I'd now like to ask you about the most traumatic experience(s) in your life story. *[Refer to survey and identify which trauma(s) have had the most impact on their life.]* Even though these memories are unpleasant, I would still appreciate your efforts to be as detailed as you can be. What happened? When? Who was involved? What did you do? What were you thinking and feeling?

5a. How did you cope or deal with this experience? Did your coping strategies change over time—from the days and weeks after the experience to the months or even years later?

5b. Have you talked about this experience with other people? Have other people assisted you in dealing with this experience? If so, how? Were some people's responses more helpful to you than others' responses? Explain.

5c. Have you ever seen a counselor, therapist, doctor, psychiatrist, social worker, clergy, or other type of helping professional to obtain support or services following this experience? If so, how would you describe your overall experience with these services?

5d. How has your life been affected by this traumatic experience? Physically? Psychologically? Emotionally? Spiritually? Relationally? Professionally?

5e. In what ways—positive and negative—do you feel that you have changed as a result of this traumatic experience? How would you describe yourself prior to the trauma? How would you describe yourself now?

5f. After a traumatic event, some people say that they have found meaning in the experience or that they have made sense out of it. Have you found some sort of meaning in the trauma you experienced?

6. I'd now like to ask you about other major life events or challenges that you have experienced. *[Refer to surveys and identify which events/stressors have been most significant.]*

-What happened? When did it happen? Who was involved? What did you do? What were you thinking and feeling? What impact has the event had on you? What does it say about who you are or who you were? Why is it important?

7. Reflecting back on your life story, think about the people or groups that have had the greatest influence—whether positive or negative—on your story. Please describe these people or groups and the way in which they have had an impact on your life story.

8. I would like to next explore the **posttraumatic growth**, or positive personal changes, that you have experienced since _____ (the traumatic event). In what ways do you believe you have grown from your traumatic experience? [approx. 15 min.]

10a. What is the most important area of growth or most positive thing that has come out of this traumatic experience?

10b. How do you explain the growth that you've experienced? That is, <u>how</u> did these good things come out of this negative experience? What was the process like for you?

10c. *[Follow-up questions regarding interviewee's responses on the Posttraumatic Growth Inventory (PTGI)]* On the PTGI, you indicated that you had grown with regard to (fill-in particular item on the inventory)… Could you tell me more about that?

10d. To what degree do you believe that you have "recovered" from the trauma you've experienced?

9. Now that you have told me a bit about your past, I would like you to consider the future. Specifically, I would like you to describe the future that you envision for yourself—that is, a realistic portrayal of what you would like to do with your life, as well as the goals and dreams that you hope to accomplish. Also, please explain if and how your traumatic experience has affected how you envision your future. [approx. 5 min.]

Wrap-Up [approx. 10 min.]

10. *[Here, I will ask any necessary questions to clarify the interviewee's answers on any of the surveys.]* On the _____ (the name of the instrument), you indicated that _____. Could you tell me more about that? What was that like for you?

11. Is there anything that I haven't asked that you would like to talk about or that you think is important for me to know in order to understand your life story?

12. After doing this interview, do you have any questions about the research project?

13. What was it like for you to participate in this study? Was this interview easier or more distressing than you had expected it to be? Did you find this interview to be beneficial or helpful in any way? Do you have any regrets about participating in this study?

14. Why did you choose to participate in this study?

15. If you were giving advice to someone who had recently experienced the traumatic life event(s) that you have experienced, what would you tell them?

Thank you very much!!

APPENDIX C

DEMOGRAPHICS QUESTIONNAIRE

1. What is your gender?	Female Male Other
2. How old are you?	
3. What year in school are you?	Undergraduate: Freshman Sophomore Junior Senior Major:_____ Grad. School: 1st year 2nd year 3rd year 4th year 5th year 6th year or more Graduate Program:_____
4. How would you identify your sexual orientation?	
5. How would you identify your ethnicity/race?	
6. How would you describe your marital/relationship status?	
6a. If you are married or in a committed relationship, how long have you been with your partner?	
7. Do you live with anyone?	Yes No
7a. If yes, what is your relationship with the person(s) residing with you?	
8. Where did you spend most of your time growing up? (city, state, country)	
9. Do you consider yourself to be religious and/or spiritual?	Yes No
9a. What, if any, is your religious affiliation?	
9b. How often do you attend religious services?	
10. Do you currently have paid employment?	Yes No
10a. If yes, how many hours per week do you work, on average?	
10b. What type of work do you do?	

11. Do you currently participate in any volunteer activities?	Yes No
11a. If yes, what type of volunteer work are you involved in?	
12. Do you consider yourself to be financially independent of your parents or guardian(s)?	Yes No
12a. If yes, what is your annual household income? (check one)	___ Less than $24,999 ___ $25,000 – $49,999 ___ $50,000 – $74,999 ___ $75,000 – $99,999 ___ $100,000 – $149,999 ___ $150,000 – $199,999 ___ $200,000 or more
13. To the best of your knowledge, what is the annual household income of your family of origin (parents or guardians)? (check one)	___ Less than $24,999 ___ $25,000 – $49,999 ___ $50,000 – $74,999 ___ $75,000 – $99,999 ___ $100,000 – $149,999 ___ $150,000 – $199,999 ___ $200,000 or more
14. What is the highest level of education your parents/guardians obtained?	Mother _____ Father _____ Guardian(s) _____

APPENDIX D

LIFE EVENTS CHECKLIST

Listed below are a number of difficult or painful life events that sometimes happen to people and which may be (or have been) a source of stress in your life. For each item, first consider whether or not the event has happened to you or to someone close to you during your lifetime (or, in the case of friends or romantic partners, during the time that you have had a relationship with them). Second, indicate to whom this experience happened (i.e., to you, to a close family member, and/or to a close friend or romantic partner). If more than one person has experienced this event (e.g., both your parents and your best friend have gone through a divorce), place a check-mark beside "close family member(s)" and "close friend or romantic partner." Finally, for each event that has happened to you or to someone close to you, indicate **how stressful this experience was for you** (e.g., How stressful for you was your parents' divorce?).

	Who experienced this event? (check all that apply)	Not at all stressful	Somewhat stressful	Moderately stressful	Very stressful	Extremely stressful
1. Involved in a lawsuit	__You	0	1	2	3	4
	__Close Family Member(s)	0	1	2	3	4
	__Close Friend or Romantic Partner	0	1	2	3	4
2. Major financial crisis	__You	0	1	2	3	4
	__Close Family Member(s)	0	1	2	3	4
	__Close Friend or Romantic Partner	0	1	2	3	4
3. Received welfare or other form of public assistance	__You	0	1	2	3	4
	__Close Family Member(s)	0	1	2	3	4
	__Close Friend or Romantic Partner	0	1	2	3	4
4. Filed for bankruptcy	__You	0	1	2	3	4
	__Close Family Member(s)	0	1	2	3	4
	__Close Friend or Romantic Partner	0	1	2	3	4

5. Personal business failed	__You	0	1	2	3	4
	__Close Family Member(s)	0	1	2	3	4
	__Close Friend or Romantic Partner	0	1	2	3	4
6. Detained in juvenile corrections facility or jail	__You	0	1	2	3	4
	__Close Family Member(s)	0	1	2	3	4
	__Close Friend or Romantic Partner	0	1	2	3	4
7. Arrested or accused of a crime	__You	0	1	2	3	4
	__Close Family Member(s)	0	1	2	3	4
	__Close Friend or Romantic Partner	0	1	2	3	4
8. Served prison term	__You	0	1	2	3	4
	__Close Family Member(s)	0	1	2	3	4
	__Close Friend or Romantic Partner	0	1	2	3	4
9. Major illness or injury	__You	0	1	2	3	4
	__Close Family Member(s)	0	1	2	3	4
	__Close Friend or Romantic Partner	0	1	2	3	4
10. Major loss of personal property (e.g., due to fire, flood, etc.)	__You	0	1	2	3	4
	__Close Family Member(s)	0	1	2	3	4
	__Close Friend or Romantic Partner	0	1	2	3	4
11. "Came out" regarding one's sexual orientation	__You	0	1	2	3	4
	__Close Family Member(s)	0	1	2	3	4
	__Close Friend or Romantic Partner	0	1	2	3	4
12. Major change of residence (e.g., moved to a different city or state)	__You	0	1	2	3	4
	__Close Family Member(s)	0	1	2	3	4
	__Close Friend or Romantic Partner	0	1	2	3	4
13. Experienced major change(s) in values, belief system, or spirituality	__You	0	1	2	3	4
	__Close Family Member(s)	0	1	2	3	4
	__Close Friend or Romantic Partner	0	1	2	3	4
14. Found out that spouse/partner/girlfriend/boyfriend was unfaithful	__You	0	1	2	3	4
	__Close Family Member(s)	0	1	2	3	4
	__Close Friend or Romantic Partner	0	1	2	3	4

15. Divorce or legal separation	__You	0	1	2	3	4
	__Close Family Member(s)	0	1	2	3	4
	__Close Friend or Romantic Partner	0	1	2	3	4
16. Experienced a major or painful breakup with romantic partner	__You	0	1	2	3	4
	__Close Family Member(s)	0	1	2	3	4
	__Close Friend or Romantic Partner	0	1	2	3	4
17. Experienced a severed relationship with a close family member or close friend	__You	0	1	2	3	4
	__Close Family Member(s)	0	1	2	3	4
	__Close Friend or Romantic Partner	0	1	2	3	4
18. Unwanted pregnancy	__You	0	1	2	3	4
	__Close Family Member(s)	0	1	2	3	4
	__Close Friend or Romantic Partner	0	1	2	3	4
19. Abortion or miscarriage	__You	0	1	2	3	4
	__Close Family Member(s)	0	1	2	3	4
	__Close Friend or Romantic Partner	0	1	2	3	4
20. Placed on academic probation or suspended from school	__You	0	1	2	3	4
	__Close Family Member(s)	0	1	2	3	4
	__Close Friend or Romantic Partner	0	1	2	3	4
21. Dropped out of school	__You	0	1	2	3	4
	__Close Family Member(s)	0	1	2	3	4
	__Close Friend or Romantic Partner	0	1	2	3	4
22. Got into trouble for minor violations of the law (e.g., traffic ticket)	__You	0	1	2	3	4
	__Close Family Member(s)	0	1	2	3	4
	__Close Friend or Romantic Partner	0	1	2	3	4
23. Involved in injury-causing accident (e.g., motor vehicle accident, house fire, major sports injury, etc.)	__You	0	1	2	3	4
	__Close Family Member(s)	0	1	2	3	4
	__Close Friend or Romantic Partner	0	1	2	3	4
24. Victim of a non-violent crime (e.g., identity theft, burglary)	__You	0	1	2	3	4
	__Close Family Member(s)	0	1	2	3	4
	__Close Friend or Romantic Partner	0	1	2	3	4

25. Victim of a violent crime (e.g., mugging, assault)	__You	0	1	2	3	4
	__Close Family Member(s)	0	1	2	3	4
	__Close Friend or Romantic Partner	0	1	2	3	4
26. Fired or laid-off from work	__You	0	1	2	3	4
	__Close Family Member(s)	0	1	2	3	4
	__Close Friend or Romantic Partner	0	1	2	3	4
27. A close family member, romantic partner, or close friend died	__You	0	1	2	3	4
	__Close Family Member(s)	0	1	2	3	4
	__Close Friend or Romantic Partner	0	1	2	3	4
28. Transferred to a new school at the same academic level (e.g., changed high schools, transferred from one college to another)	__You	0	1	2	3	4
	__Close Family Member(s)	0	1	2	3	4
	__Close Friend or Romantic Partner	0	1	2	3	4

For items 29-42, consider whether or not each event has happened **to you** at any point during your lifetime. Then, indicate how stressful this experience was for you. If you have not experienced an event, circle "N/A" (for "not applicable").

	Not at all stressful	Somewhat stressful	Moderately stressful	Very stressful	Extremely stressful	
29. You failed an important exam	0	1	2	3	4	N/A
30. You failed a course	0	1	2	3	4	N/A
31. You repeated a grade (e.g., did 1st grade twice)	0	1	2	3	4	N/A
32. You changed college majors	0	1	2	3	4	N/A
33. You received lower than expected grades	0	1	2	3	4	N/A
34. You engaged in consensual sexual activity that you later regretted	0	1	2	3	4	N/A
35. You moved out of your parent(s)' or guardian(s)' home	0	1	2	3	4	N/A
36. You were rejected from a fraternity or sorority you wanted to join	0	1	2	3	4	N/A

37. You were rejected from a college/university you wanted to attend	0	1	2	3	4	N/A
38. You were rejected from a graduate school you wanted to attend	0	1	2	3	4	N/A
39. You lived in a foster home, group home, or as a ward of the state	0	1	2	3	4	N/A
40. A pet you felt attached to died	0	1	2	3	4	N/A
41. A grandparent or other family member moved into your house	0	1	2	3	4	N/A
42. A sibling or other family member moved out of your house	0	1	2	3	4	N/A

APPENDIX E

CHRONIC STRESS SURVEY

The purpose of this survey is to identify the various types of ongoing or recurring sources of stress (i.e., stressors) in your life. The following is a list of situations that sometimes come up in people's lives. For each item, first consider whether or not you have experienced this stressor for either **6 or more months** OR on **6 or more occasions** during your life. Then, for each source of ongoing or recurring stress that you have experienced, indicate how stressful this experience is/was for you.

0 = I did not experience this source of stress OR my experience with this stressor was neither ongoing (6 months or more) nor recurring (6 times or more)
1 = I experienced this situation, but it was *not at all stressful* for me
2 = This situation was *somewhat stressful* for me
3 = This situation was *moderately stressful* for me
4 = This situation was *very stressful* for me
5 = This situation was *extremely stressful* for me

How Stressful Was This?	**Source of Stress**
0 1 2 3 4 5	1. Your parent(s) were unemployed when they wanted to be working
0 1 2 3 4 5	2. Your family is/was homeless
0 1 2 3 4 5	3. You or your family moved around a lot (i.e., 6 or more times)
0 1 2 3 4 5	4. You or your family have/had transportation problems (e.g., no car, car needs repairs)
0 1 2 3 4 5	5. You have/had a long commute to school or work
0 1 2 3 4 5	6. Your housing or neighborhood is/was noisy, dirty, polluted, or overcrowded
0 1 2 3 4 5	7. You live(d) in a dangerous neighborhood
0 1 2 3 4 5	8. You have/had child care responsibilities (as a sibling or as a parent)
0 1 2 3 4 5	9. You take/took care of an aging, ill, or disabled loved one
0 1 2 3 4 5	10. You are/were a single parent

0	1	2	3	4	5	11. You have/had heavy academic demands
0	1	2	3	4	5	12. Your parent(s) have/had financial difficulties
0	1	2	3	4	5	13. You have/had financial difficulties
0	1	2	3	4	5	14. You live(d) far from your family
0	1	2	3	4	5	15. You live(d) far from your boyfriend/girlfriend/partner
0	1	2	3	4	5	16. You or a family member have/had problems related to alcohol or substance abuse
0	1	2	3	4	5	17. You have/had difficulties associated with your sexual orientation
0	1	2	3	4	5	18. You have/had poor working conditions at your place of employment
0	1	2	3	4	5	19. You have/had a health condition or problem
0	1	2	3	4	5	20. A close relative, friend, or significant other has/had a health condition or problem
0	1	2	3	4	5	21. You have/had conflict or a poor relationship with your parent(s) or other family member(s)
0	1	2	3	4	5	22. You have/had conflict or a poor relationship with a roommate or friend
0	1	2	3	4	5	23. You have/had conflict or a poor relationship with a boyfriend/girlfriend/partner/spouse
0	1	2	3	4	5	24. You have/had conflict or a poor relationship with a co-worker or supervisor
0	1	2	3	4	5	25. You have/had conflict or a poor relationship with a professor, teaching assistant, advisor, athletic coach, or other university employee
0	1	2	3	4	5	26. You are having/have had difficulty finding a job
0	1	2	3	4	5	27. You have/had difficulty affording “basic” necessities (e.g., food, housing, clothing, medical care, utilities)
0	1	2	3	4	5	28. You can’t/couldn’t find someone to date
0	1	2	3	4	5	29. You have/had sexual difficulties (e.g., not enough sex, not enjoy sex)
0	1	2	3	4	5	30. You don’t/didn’t have a close friend
0	1	2	3	4	5	31. You have/had a secret you can’t/couldn’t confide to anyone
0	1	2	3	4	5	32. You are/were concerned about your appearance or weight
0	1	2	3	4	5	33. You have/had issues with over-eating or under-eating
0	1	2	3	4	5	34. You have/had a physical, mental, or learning disability
0	1	2	3	4	5	35. You consistently get/got too little sleep

0	1	2	3	4	5	36. You have/had to work a part- or full-time job while attending school
0	1	2	3	4	5	37. You are having/have had difficulty making major decisions about your future
0	1	2	3	4	5	38. You are providing/have provided ongoing emotional support to a family member, romantic partner, or close friend who is/was going through a rough time
0	1	2	3	4	5	39. You have/had difficulties related to your citizenship or immigration status
0	1	2	3	4	5	40. You have/had difficulties related to not being a native English-speaker
0	1	2	3	4	5	41. You consistently do/did not have enough time to fulfill all of your responsibilities

APPENDIX F

CORRELATION MATRIX OF PRIMARY INDEPENDENT AND DEPENDENT VARIABLES

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1) Total PTG	1.00																			
2) Gender (Male)	-0.10	1.00																		
3) Race (Caucasian)	-0.06	0.10	1.00																	
4) Age	0.20	-0.22	0.22	1.00																
5) SES	-0.05	0.07	0.19	-0.14	1.00															
6) In a Relationship	-0.04	0.05	0.13	0.02	-0.12	1.00														
7) Religious/ Spiritual	-0.02	-0.09	-0.21	0.07	0.19	-0.26	1.00													
8) Survivor Mission	0.48	-0.22	-0.05	-0.08	-0.16	-0.17	-0.16	1.00												
9) Narrative Coherence	0.42	-0.10	0.19	0.20	-0.14	0.06	0.03	0.34	1.00											
10) Received Therapy	0.14	-0.23	0.05	0.09	-0.17	0.08	-0.04	0.17	0.15	1.00										
11) Sexual Trauma	0.25	-0.43	-0.03	0.04	-0.01	-0.18	0.08	0.27	0.06	0.09	1.00									
12) Traumatic Death	-0.18	0.00	0.09	0.07	0.13	-0.31	0.14	0.13	0.06	-0.22	-0.05	1.00								
13) Chronic Truama	0.21	-0.41	-0.22	0.26	-0.49	-0.19	0.06	0.17	0.18	0.46	0.28	-0.13	1.00							
14) DV/Fam. Violence	0.15	-0.32	-0.12	0.12	-0.41	-0.10	0.02	0.17	0.01	0.63	0.17	-0.35	0.71	1.00						
15) Interpers. Violence	-0.07	-0.35	-0.12	0.15	-0.33	-0.22	0.05	0.06	0.10	0.50	0.09	0.00	0.59	0.61	1.00					
16) Age at 1st Trauma	-0.34	0.28	0.15	-0.20	0.43	0.12	0.03	-0.43	-0.21	-0.33	-0.35	-0.02	-0.58	-0.57	-0.31	1.00				
17) Time Since Trauma	0.14	0.23	0.16	0.16	-0.05	0.30	-0.03	-0.09	0.18	-0.04	-0.20	-0.18	-0.28	-0.15	-0.18	-0.07	1.00			
18) # of Trauma Types	0.29	-0.38	-0.01	0.30	-0.24	-0.19	-0.04	0.36	0.18	0.34	0.51	0.25	0.55	0.42	0.44	-0.61	-0.32	1.00		
19) Total Trauma Freq.	0.33	-0.33	-0.02	0.13	-0.18	-0.20	-0.06	0.30	0.11	0.47	0.44	-0.04	0.64	0.66	0.51	-0.64	-0.12	0.72	1.00	
20) # of Life Events	0.13	-0.20	-0.06	0.03	-0.24	0.07	-0.07	0.06	0.04	0.13	0.40	-0.13	0.23	0.28	0.12	-0.40	-0.23	0.41	0.20	1.00
21) Total Life Event Stress	0.26	-0.26	-0.30	-0.11	-0.22	-0.10	-0.03	0.10	-0.07	0.19	0.40	-0.23	0.33	0.39	0.21	-0.43	-0.24	0.41	0.36	0.84
22) # of Chronic Stressors	0.43	-0.10	-0.30	0.20	-0.27	-0.04	-0.01	0.32	0.01	0.28	0.28	-0.24	0.30	0.33	0.08	-0.49	-0.18	0.40	0.27	0.55
23) Total Chronic Stress	0.50	-0.26	-0.33	0.19	-0.25	-0.05	-0.07	0.28	-0.11	0.39	0.34	-0.35	0.38	0.49	0.16	-0.52	-0.17	0.41	0.42	0.41
24) # of Sex. Har. Stressors	0.24	-0.31	0.08	0.13	-0.10	0.07	-0.14	0.27	-0.01	0.13	0.43	-0.17	0.11	0.17	0.00	-0.38	-0.24	0.37	0.25	0.48
25) Total Sex Har. Stress	0.44	-0.38	0.05	0.05	-0.02	-0.19	0.07	0.36	0.05	0.13	0.51	-0.07	0.36	0.27	0.23	-0.39	-0.16	0.50	0.61	0.22
26) # of Discrim. Stressors	0.04	-0.10	-0.41	-0.12	-0.14	-0.07	-0.01	0.13	-0.05	0.17	0.22	-0.08	0.20	0.15	0.28	-0.29	-0.32	0.23	0.11	0.47
27) Total Discrim. Stress	0.28	-0.10	-0.30	-0.01	-0.05	-0.17	0.19	0.29	0.01	0.36	0.09	-0.18	0.24	0.37	0.37	-0.35	-0.09	0.14	0.25	0.09
28) C. Adv. - Simple Counts	0.30	-0.29	-0.19	0.15	-0.27	-0.04	-0.08	0.31	0.04	0.28	0.50	-0.10	0.37	0.36	0.25	-0.58	-0.35	0.65	0.42	0.78
29) C. Adv. - Stress - Freq.	0.50	-0.37	-0.25	0.07	-0.20	-0.20	0.03	0.37	0.00	0.43	0.49	-0.24	0.54	0.60	0.41	-0.65	-0.21	0.61	0.73	0.49

	21	22	23	24	25	26	27	28	29
21) Total Life Event Stress	1.00								
22) # of Chronic Stressors	0.58	1.00							
23) Total Chronic Stress	0.60	0.84	1.00						
24) # of Sex. Har. Stressors	0.40	0.49	0.49	1.00					
25) Total Sex Har. Stress	0.37	0.23	0.38	0.51	1.00				
26) # of Discrim. Stressors	0.43	0.57	0.43	0.47	0.10	1.00			
27) Total Discrim. Stress	0.17	0.36	0.49	0.27	0.37	0.54	1.00		
28) C. Adv. - Simple Counts	0.71	0.81	0.69	0.75	0.42	0.74	0.37	1.00	
29) C. Adv. - Stress - Freq.	0.69	0.63	0.80	0.53	0.76	0.45	0.63	0.72	1.00
Note: If r greater than .28, $p < .05$; if r greater than .37, $p < .01$; two-tailed									

APPENDIX G

TRAUMA CODING RUBRIC

Participant #2009-0___

Type of Trauma	X = Yes	Age: Began	Age: Ended (+ month/year)	Frequency	Notes
Life-Threatening Illness					
Life-Threatening Accident					
Natural Disaster					
Death—Accident					
Death—Homicide					
Death—Suicide					
Other Traumatic Death					
Attempted Suicide (Self)					
Child Physical Abuse					
Child Emotional Abuse					
Child Sexual Abuse					
Child Neglect					
Physical Violence (as adult; not DV)					
Dating/Domestic Violence (self)					
Forced Sex—Completed					
Forced Sex—Attempted					

Unwanted Sexual Touching (as adult)					
Threatened With a Weapon					
Witnessed Violence —as Child					
Witnessed Violence—as Adult					
Other Trauma #1					
Other Trauma #2					
Other Trauma #3					
Other Trauma #4					
Other Trauma #5					
Other Trauma #6					
Other Trauma #7					

Approximate # of Months Since Most Recent Trauma Ended (prior to interview): _____

# of Trauma Types: _____ (ie, # of different categories of trauma)

Total Trauma Frequency: _____ (ie, sum of each trauma x its frequency)

APPENDIX H

NARRATIVE COHERENCE CODING RUBRIC

Participant # 2009-0____

Very Low	Low	Moderate	High	Very High	
1	2	3	4	5	The narrator articulates a continuous and detailed storyline, without constant prompting, regarding her/his life before, during, and after the trauma(s)
1	2	3	4	5	The narrator's life story is intelligible, organized, and makes logical sense
1	2	3	4	5	The narrator articulates a clear sense of self before and after the trauma(s)—aware of both the continuity and change of the self
1	2	3	4	5	The narrator has incorporated the trauma(s) into her/his worldview or belief system
1	2	3	4	5	The narrator has integrated the trauma(s) into her/his vision of the future

Narrative Coherence Total Score: ____

Narrative Coherence Category: Low (5-11) Moderate (12-18) High (19-25)
(circle one)

APPENDIX I

INTERVIEW-BASED POSTTRAUMATIC GROWTH CODING RUBRIC

Participant # 2009-0____

Very Low	Low	Moderate	High	Very High	
1	2	3	4	5	The individual has experienced positive, post-trauma life changes across a vast breadth of life domains
1	2	3	4	5	The individual has experienced positive, post-trauma life changes to a great depth or degree in those life domains
1	2	3	4	5	The individual perceives the positive, post-trauma life changes that she/he has experienced as being significant, transformative, and meaningful in her/his life

Posttraumatic Growth (PTG) Total Score: ____

PTG Category: Low (3-6) Moderate (7-11) High (12-15)
(circle one)