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Pepperdine University

Graduate School of Education and Psychology

ON HUMOR AND HEALING: A QUALITATIVE ANALYSIS OF EXPRESSIONS OF HUMOR IN THERAPY WITH CLIENTS WHO HAVE EXPERIENCED TRAUMA

A clinical dissertation submitted in partial satisfaction

of the requirements for the degree of

Doctor of Psychology

by

Rebecca Rutchick, Ed.M.

July, 2013

Susan Hall, J.D., Ph.D. — Dissertation Chairperson

This clinical dissertation, written by

Rebecca Rutchick

under the guidance of a Faculty Committee and approved by its members, has been submitted to and accepted by the Graduate Faculty in partial fulfillment of the requirements for the degree of

DOCTOR OF PSYCHOLOGY

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I would also like to express my appreciation to Dr. Susan Hall, my dissertation chair, for her enthusiasm and support throughout this journey. This accomplishment certainly would not have been possible without her. I am also deeply thankful for Dr. Harrell and Dr. Briere, my committee members, who took time from their very busy schedules to provide me with insight and feedback.

Last, I offer my sincere gratitude to the family and friends who helped me along the way. To my husband, Abe, thank you for making me smile and for always building me up; I am excited and honored to share the title of Dr. Rutchick with you. To my wonderful family (especially Donna and Tom Dragosits, Sarah and Simon McCaffery, Chris and Ron Rutchick, and Elisabeth and Brian Reickert): thank you for all of your words of support and encouragement from afar, and for being a constant reminder of what is most important to me. To the rest of my Pepperdine siblinghood (including, in alphabetical order, Jason Dorin, Beth Ledbetter, Sara Mehrabani, and Ayala Ofek): thanks for your friendship and for all of the shenanigans. Once again (and I can assure you that this won't be the last time), I would like to take this opportunity to express my gratitude for each and every one of you.

VITA

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EDUCATION

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- Dissertation: On Humor and Healing: A Qualitative Analysis of Expressions of Humor in Therapy with Clients who have Experienced Trauma (Chair: Susan Hall, J.D., Ph.D.; Committee: John Briere, Ph.D., Shelly Harrell, Ph.D.)

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Certificate of Advanced Graduate Study (C.A.G.S.), Counseling and Psychology, 2009

- Capstone Project: Treating Anxiety in College Students (Advisor: Susan Gere, Ph.D.)

Harvard University, Graduate School of Education, Cambridge, MA
Ed.M., Human Development and Psychology, 2006

- Focus: Psychological research on challenges and interventions for young adults

University of California at Santa Barbara, Santa Barbara, CA
B.A., summa cum laude, Psychology, 2005

- Minors: Applied Psychology; Women's Studies
- Honors Thesis: Experiment on processes that regulate the functioning of social responses within the hierarchical power domain of social life (see page 5 for resulting publication)
- Morgan Award for Academic Excellence in Psychology; UCSB Regents Scholar
- Honor Societies: Golden Key International Honor Society, Psi Chi National Honor Society in Psychology, National Society of Collegiate Scholars, UCSB Honors Program

CLINICAL EXPERIENCE

Counseling and Psychological Services (CAPS), California State University, Long Beach, CA
Doctoral Intern, 2012 - present

- Provide clinical services to socioculturally diverse students at a large, urban university
- Conduct intake interviews, brief and long-term individual therapy, and process groups
- Perform "on-call" duties: respond to student emergencies and consult with faculty/parents
- Offer outreach programming and consultation services across campus
- Develop formal liaison relationship with Disabled Student Services
- Participate in CAPS training committee and doctoral intern selection
- Train and supervise Graduate Peer Educators on mental health issues and outreach efforts

Cedars-Sinai Medical Center, Psychiatry and Behavioral Neuroscience, Los Angeles, CA

Doctoral Practicum Student, Adult Outpatient Programs, 2011 – 2012

- Conducted intakes and structured diagnostic interviews, provided cognitive-behavioral therapy (CBT) to individual patients, and led psychoeducational therapy groups
- Participated in weekly didactic seminars (e.g., on treating mood & anxiety disorders), Grand Rounds lectures, and other training opportunities offered throughout Cedars-Sinai
- Gained experience working within a short-term and multidisciplinary model of psychiatric services with a socioculturally diverse and often severely mentally ill patient population

Pepperdine Community Counseling Center, West Los Angeles, CA

Doctoral Practicum Student, 2010 – 2012

- Completed intakes and provided individual and couples counseling to culturally diverse adolescents and adults with a wide range of mental health problems
- Videotaped and reviewed therapy sessions and participated in group supervision and case conferences to advance knowledge/skills, and to promote client progress

Sports Concussion Institute, Los Angeles, CA

Doctoral Practicum Student, 2010 – 2011

- Conducted clinical interviews and administered baseline and post-concussion neuropsychological assessments (e.g., ImPACT, D-KEFS) to professional/student athletes
- Scored assessment measures, interpreted results, developed "return to play" plans, and coordinated treatment with medical professionals, family members, and athletic trainers
- Administered and scored a wide range of neuropsychological assessments (e.g., WMS-IV, WAIS-IV, REY-O) for adults presenting with memory and other cognitive impairments
- Wrote integrated reports, participated in feedback sessions, and offered cognitive rehabilitation services

Pepperdine University Counseling Center, Malibu, CA

Doctoral Practicum Student, 2009 – 2010

- Offered a range of counseling services to undergraduate and graduate students at a medium-sized liberal arts university situated in a residential setting
- Provided brief and ongoing individual therapy to students presenting with various difficulties, including homesickness, depression and anxiety, and eating disorders
- Developed and offered a range of outreach services

Fisher College Counseling Center, Boston, MA

Masters Practicum Student, 2008 - 2009

- Offered counseling services to undergraduate students at a small college in an urban setting
- Provided brief therapy, ongoing treatment, crisis counseling, referrals to off-campus therapists and specialized professionals, and consultation with faculty and staff
- Developed and implemented outreach efforts aimed at engaging international students
- Ran national screening days throughout the year to educate and engage the students

RESEARCH EXPERIENCE

Pepperdine Applied Research Center (PARC), Los Angeles, CA

Research Supervisor, 2010 – present

- Systematically collect data from Pepperdine's Community Counseling Centers by transforming closed client files into de-identified files to be used for dissertation research
- Serve as a coder on three studies that examine expressions of protective factors (i.e., humor, cultural worldviews, social supports) in psychotherapy with trauma survivors
- Supervise a group of Master's level research assistants participating in data entry process

Cedars-Sinai Medical Center, Psychiatry and Behavioral Neuroscience, Los Angeles, CA

Research Assistant, Adult Outpatient Programs, 2011 – 2012

- Participated in the evaluation and refinement of Future-Directed Therapy, a novel intervention for depression developed to help people gain greater awareness and control over the process by which they create their future with thoughts and behaviors (Supervisor: Jennice Vilhauer, Ph.D.)
- Observed sessions and provided feedback to inform the development of therapist manual

Lesley University, School of Education, Cambridge, MA

Project Manager of National Initiatives, Dean's Office, 2006 - 2009

- Conducted research on the supply and demand for teacher education programs nationally
- Completed market research on competing universities and presented findings to upper management
- Assisted in the development and implementation of new teacher education initiatives

Harvard University, Cambridge, MA

Student Coordinator, FemSex Program, 2005 – 2006

- Helped to develop a non-academic course on female sexuality at Harvard University
- Researched current information on issues such as Sexually Transmitted Infections and women's reproductive health, organized information, and used the information to develop a course reader

Harvard University, Cambridge MA

Research Assistant, National Center for the Study of Adult Learning & Literacy, 2005-2006

- Worked on a pilot program to improve instruction for adult basic education
- Administered interviews, background questionnaires, and various reading tests (e.g., PPVT) to the adult literacy students participating in the study

UC Santa Barbara, Autism Center, Santa Barbara, CA

Undergraduate Research Assistant and Counselor, 2004 – 2005

- Assisted in screenings for early detection of Autism Spectrum Disorder (ASD)
- Implemented interventions to improve speech and language, social behavior, and disruptive responding in children with ASD using Pivotal Response Treatment
- Worked weekly with children with ASD and their families to improve communication
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SUPERVISORY/MENTORSHIP EXPERIENCE

Counseling and Psychological Services, California State University, Long Beach, CA

Graduate Peer Educator (GPE) Supervisor, 2012 – present

- Supervise GPE students for Project OCEAN (On Campus Emergency Assistance Network), a Prevention and Early Intervention Initiative implemented by CalMHSA
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- Meet with GPE students after their presentations to debrief and provide feedback

Pepperdine Community Counseling Center, Irvine, CA

Clinical Peer Supervisor, 2011 - 2012

- Served as a clinical peer supervisor for two first-year doctoral students in Pepperdine's Psy.D. program and provided clinical support and guidance
- Met weekly with supervisees to review cases, videotaped therapy sessions, and intakes
- Helped to provide generalist and CBT-oriented training to trainee doctoral students

California State University, Northridge (CSUN), Northridge, CA

Invited Speaker, CSUN Graduate Peer Mentoring Program, 2011

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- Provided students with general information regarding a Psy.D. degree and the focus/trajectory of such programs, and discussed its similarities to and differences from Ph.D. programs
- Advised students on how to find and prepare to apply to high-quality Psy.D. programs

Pepperdine University, Los Angeles, CA

Volunteer Mentor, Psy.D. "Buddy" Program, 2010 - 2011

- Acted as a mentor to a first-year student in the Psy.D. program throughout my second year
- Provided support to "buddy" with regard to her Psy.D. program coursework, the practicum application process, clinical case conceptualizations, and general adjustment

Harvard University, Cambridge, MA

Volunteer Mentor, Student-Alumni Mentoring Initiative, 2007 – 2008

- Acted as a mentor to an incoming graduate student at the Graduate School of Education
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UC Santa Barbara, Santa Barbara, CA

Volunteer Honors Peer Mentor, 2003 - 2005

- Helped incoming freshman Honors students transition and adapt to college life by facilitating college tours and registration for classes and participating in planned social activities.

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Presentations:

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- "Understanding and Improving Your Self Esteem and Body Image"
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- "Using Mindfulness to Reduce Daily Stress"

Publication:

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PROFESSIONAL DEVELOPMENT

Specialized Training and Skills:

- Completed the following trainings at California State University, Long Beach:
  AB540 Ally Training (mission: improve immigrant student success)
  Safe Zone Ally Training (mission: foster safe environment for LBGTQ)
- Completed training on "Treating Complex Trauma in Children and Adolescents" (2010). Speakers: John Briere, Ph.D., & Cheryl Lanktree, Ph.D. Host: CA Professional Society on Abuse of Children.
- Completed 9-hour course on "Stress Reduction and Mind/Body Techniques for use in Education and Clinical Settings" (2008). Host: Harvard Medical School.

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- "Culture and Social Justice Within the Rainbow" (2012). Keynote speakers: Arlene Noriega, Ph.D. and Doug Haldeman, Ph.D. Host: University of La Verne.
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- American Psychological Association (Student Affiliate)
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- Association for Applied and Therapeutic Humor (Student Member)
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ABSTRACT

From a positive psychology perspective, humor can be viewed as an adaptive strength, an important aspect of holistic health, and a potentially beneficial coping mechanism in the face of stressful or traumatic events. Existing research generally supports the idea that individuals can manage threatening situations by turning them into something that can be laughed at, although the effectiveness of such humor use is dependent on contextual factors and the specific forms of humor that are used (e.g., aggressive versus benign humor). However, there is minimal research on how trauma survivors actually express humor in therapy, particularly in the context of difficult or traumatic subject matter.

Accordingly, the purpose of the current study was to qualitatively explore expressions of humor in therapy with trauma survivors. A sample of 5 client-participants from community counseling centers was selected, and videotaped therapy sessions involving trauma discussions for each client-participant were analyzed. A qualitative and deductive content analysis was employed, using a coding system that was created based on existing literature on humor and psychology, to examine verbal expressions of humor and laughter in psychotherapy sessions with trauma survivors. The results indicated that client-participants deliberately used and responded to humor both verbally and in the form of laughter in psychotherapy sessions, and most frequently in the context of serious, difficult, or traumatic topics. Client verbal expressions of humor (VEH) frequently consisted of different combinations of *Dark*, *Aggressive*, and/or *Self-Deprecatory Humor*. Client-participants were also found to laugh almost twice as often as they produced a VEH, and their therapists laughed along with them about half the time. Last, therapists

often laughed inappropriately and outside the context of any identifiable humor (VEH or laughter) in their work with trauma survivors.

It is hoped that this study will raise awareness around the issue of client humor use in therapy, humor use in coping with stressful or traumatic events, and cultural variations in humor use. The findings have implications for clinical training and shed light on the use of potentially maladaptive forms of humor in therapy, an area of study that has been almost entirely neglected.

Chapter I. Literature Review

Many people are exposed to potentially traumatic events at some point in their lives; however, the ways in which they respond to or cope with these disturbing events varies greatly. Researchers have identified distinct trajectories following traumatic experiences, including resilience, recovery, and growth (Bonanno, 2004; deRoon-Cassini, Mancini, Rusch, & Bonanno, 2010; Linley & Joseph, 2005). The positive psychology movement emphasizes the significance of examining such adaptation to adversity and illness (Seligman & Csikszentmihalyi, 2000).

Humor, in particular, has long been identified as a significant contributor to psychological well-being, and has also been found to be an aspect of resiliency and an adaptive coping mechanism in the face of trauma (Kuiper, Martin, & Olinger, 1993); in fact, "few would deny that the capacity for humour, like hope, is one of mankind's most potent anecdotes for the woes of Pandora's box" (Vaillant, 1977, p. 116). Although much has been written on the use of humor in psychotherapy in general (e.g., on the potential risks and benefits of *therapeutic humor*; Franzini, 2001) and humor use in coping with stress and adversity, there is an apparent paucity of research on the use and functions of humor in therapy with clients who have experienced trauma. Research in this area is further complicated by the fact that both humor and traumatic experiences are defined, interpreted, and valued differently among various ethnic groups (Cardeña, 2003; Tummala-Nara, 2007). Accordingly, researchers and therapists must take cultural differences into account when using humor with or while studying, conceptualizing, and treating clients who have experienced trauma (Maples et al., 2001).

The current study involves a qualitative analysis of expressions of humor with psychotherapy clients who have experienced trauma, specifically a threat to their physical integrity (TPI). First, the literature review begins with a discussion of positive psychology and its relation to psychotherapy and trauma. The literature on coping is then discussed, including various models, styles, strategies, and ways to assess coping. Research findings regarding the functions and forms of humor, in general and more specifically as a coping tool in the face of stressors, are then reviewed. Finally, this chapter discusses humor and psychotherapy with individuals who have experienced trauma. The chapter concludes with a description of the purpose of the study and research questions.

Positive Psychology, Psychotherapy, and Trauma

This section describes the field of positive psychology, its connection to humor and psychotherapy, and critiques of positive psychology. Next, trauma and potential posttraumatic trajectories, including positive and negative outcomes that can arise from experiences of trauma, are explained. Last, implications for psychotherapy and sociocultural considerations are presented.

Positive psychology. Positive psychology, as a field, developed as a result of a perceived imbalance between negative and positive in the field of clinical psychology, in which the majority of research seemed to focus on mental illness and pathology (Gable & Haidt, 2005). Critics and proponents alike, however, note that positive psychology is not an entirely new notion or field of study, but rather builds upon earlier work within various areas of the field of psychology that focused on areas such as giftedness, meaning

making, and positive human characteristics (e.g., Allport, 1958; Gable & Haidt, 2005; Jung, 1933; Maslow, 1968; Terman, 1939).

In response to this perceived disparity, positive psychologists set out to understand human strengths (e.g., optimism, faith, gratitude, positive emotions, humor) that could be fostered to buffer against mental illness, in an effort to understand the full spectrum of human experience (Seligman & Csikszentmihalyi, 2000). Seligman and Csikszentmihalyi (2000) asserted that "the aim of positive psychology is to begin to catalyze a change in the focus of psychology from preoccupation only with repairing the worst things in life to also building positive qualities" (p. 5). Accordingly, positive psychology involves the study of the conditions and processes that help individuals, groups, and institutions to not only endure and survive, but also to flourish (Gable & Haidt, 2005; Seligman & Csikszentmihalyi, 2000). In 2002, Seligman declared the *three pillars* of positive psychology to be positive subjective experience, positive individual characteristics (i.e., strengths and virtues), and positive institutions and communities.

Positive psychology and humor. Of particular relevance to this dissertation, humor has been identified as a positive psychological trait and character strength. In their book *Character Strengths and Virtues: A Handbook and Classification,* Peterson and Seligman (2004) attempted to identify and classify a number of positive psychological traits in a manner similar to the Diagnostic and Statistical Manual of Mental Disorders (DSM IV-TR; American Psychiatric Association, 2000). The authors specifically identified humor as a character strength of *transcendence*, which allows individuals to make connections to the larger universe and helps to provide meaning to their lives. Peterson and Seligman (2004) noted that "humor as a psychological strength is

particularly visible when an individual or group is facing adversity, inasmuch as it helps to mitigate, suppress, interrupt, or even permanently replace negative impact" (p. 595).

According to Peterson and Seligman (2004), humor (also described as playfulness) meets the criterion of a character strength for the following reasons: (a) it can be personally fulfilling (e.g., it can produce amusement and a variety of positive emotions); (b) it is a highly valued trait (e.g., one that individuals find very attractive and desirable in friends and potential mates); (c) it has the capacity to bring people together (e.g., sharing a joke) and the display of humor by an individual (in its *good* form) does not diminish others; (d) the opposite of humor (e.g., grim, tedious, boring) is undesirable; (e) it can be seen and measured in a wide range of behaviors (e.g., thoughts, feelings, actions), although its complex nature can make that somewhat challenging; (f) humor and playfulness are distinct strengths that cannot be broken down into any other character strengths identified in the handbook (although they often co-occur with others); (g) this character strength is personified in cultural role models, parables, etc. (e.g., Bill Cosby, Oscar Wilde); (h) the loss of sense of humor is often evident in various forms of psychopathology, suggesting that a good sense of humor is a defining feature of positive mental health; and (i) larger society provides institutions and rituals for fostering and sustaining this strength (e.g., comedy clubs, *New Yorker* cartoons, *Seinfeld, The Office*).

In sum, humor has been identified as a positive psychological trait and an individual strength that has the potential to help people manage life's stressors. Humor will be further discussed later in this chapter (See "Humor and Coping with Trauma").

Positive psychology and psychotherapy. Research suggests that positive psychological theories and findings can be effectively integrated and used in therapy

(e.g., by attending to and incorporating patient strengths into treatment; Lambert & Erekson, 2008). For example, initial evidence on positive psychotherapy (PPT) suggested that these concepts can be applied in the therapeutic setting to relieve depression by fostering the following three components of happiness: positive emotions, engagement, and meaning (Seligman, 2002; Seligman, Rashid, & Parks, 2006). The researchers further proposed that these positive effects may not be limited to the treatment of depression. Similarly, in a meta-analysis of positive psychology interventions (PPIs), Sin and Lyubomirsky (2009) found treatment methods aimed at fostering positive feelings, behaviors, and cognitions (e.g., writing gratitude letters, practicing optimistic thinking, replaying positive experiences, socializing), as opposed to *fixing* something pathological or deficient, to be effective in decreasing depressive symptoms and also in enhancing well-being. However, it was noted that members of individualistic cultures were found to benefit more from PPIs than members of collectivist cultures, suggesting that cultural backgrounds and values need to be taken into account when implementing such strategies (Sin & Lyubomirsky, 2009).

Erickson (2010) described one case, in particular, in which the principles of positive psychology were applied to a male client (race/ethnicity not identified) who had been sexually abused as an adolescent. Using a positive psychology framework, the therapist chose to focus more on function than dysfunction, outcome more than problem or pathology, and strengths more than weaknesses. That is, she chose to focus on what was *right* about him and encouraged him to do the same thing. Ultimately, this led to the client being able to identify himself as an individual who was victimized as opposed to someone who was a victim (a more global perspective). In addition, humor played a

critical role in therapy, helping to "enhance the learning process… remove some of the burden about discussing a difficult topic, and [diminish] the intensity of the associated negative emotions" (p. 38). For example, the client was having difficulties maintaining an erection and described to the therapist how he failed in successfully completing sexual acts. The therapist took this opportunity to reframe the issue by stating that it was his erection (and not him), that had failed. In response, the client noted that he was actually attached to the erection, which led to laughter on both the client and therapist's part. This laughter appeared to take away some of the negative emotions that were burdening the client (see "Humor and Coping with Stressors or Trauma" for further discussion of humor use and coping with adversity).

Critiques of positive psychology. Despite the benefits of positive psychology, there are several noteworthy criticisms of this field. Miller (2008) claimed that the tenets of positive psychology (or the *new science of happiness*) are based upon faulty arguments using circular, tautological reasoning. For example, the assertion that "people who are by nature optimistic, amiable and untroubled by worries or doubts are happiest" (p. 605) may be viewed as a simplistic statement that merely associates mental health with a personality type. Other critics claimed that positive psychologists take a *Pollyanna* view of the world and fail to recognize the negative aspects of life (Lazarus, 2003; Held, 2004). Positive psychologists have responded to these claims by emphasizing their goals of building up a knowledge base on human resilience, strength, and growth, but *not* erasing or replacing work involving pathology and dysfunction (Gable & Haidt, 2005).

Lazarus (2003) also noted four major methodological and conceptual limitations of the positive psychology movement. First, he claimed that the cross-sectional nature of

much of the research does not allow strong causal claims to be supported and also fails to effectively differentiate between emotional *states* and *traits*. In addition, he questioned the oversimplification of emotions as solely *negative* or *positive*. Third, he noted that individual differences are not given sufficient attention in research. Last, he questioned the validity of using *casual* questionnaires and checklists for assessing often complex emotions. In sum, although Lazarus supported the study of positive emotions and personality traits that could serve as resources in one's life, he critiqued the simplicity with which positive psychological research was being conducted. In response, Csikszentmihalyi (2003) asserted that many of these critiques of positive psychological theories and methods (e.g., its failure to demonstrate causal effects) can, in fact, be applied to psychological research in general and are not limited to the field of positive psychology. Furthermore, he noted that the field is too young to realistically expect significant longitudinal research.

Also critiquing the field of positive psychology, Christopher and Hickinbottom (2008) asserted that the discipline appears ethnocentric and narrowly focused on Western values (e.g., individualism). For example, the researchers noted that the very conception of a *self* and how it is defined varies across cultures and over time; this, in turn, can affect how one thinks about the *good person* or the *good life*. Accordingly, the researchers suggested that positive psychologists be critical of the Western assumptions and values that shape their work and begin to integrate various cultural meanings and manifestations into their work.

Similarly, Lopez et al. (2005) asserted that the scientific study of positive psychology must include multiculturally relevant frameworks, constructs, and values

(e.g., what exactly does a *good life* mean in various cultural contexts?). That is, while human strengths may be found in all cultures, they are not necessarily universal, and it is critical that culturally and socially determined values and strengths be considered and incorporated in research (Pedrotti, Edwards, & Lopez, 2009). Accordingly, Gable and Haidt (2005) suggested that "the future task of positive psychology is to understand the factors that build strengths, outline the contexts of resilience, ascertain the role of positive experiences, and delineate the function of positive relationships with others" (p. 108).

Positive psychology and trauma. Linley and Joseph (2005) suggested that traditional theories and research on trauma, in particular, may underestimate the ability of a person to not only remain psychologically and physically healthy and stable in the face of trauma, but to actually learn and grow from such experiences. Proposing a holistic approach that accounts for both the negative and positive aspects of human functioning, Joseph, Linley, and Harris (2005) suggested that the study of positive change following trauma and adversity can help to inform our understanding of how people cope with stress and trauma in their lives, and, in turn, the development of appropriate therapeutic interventions. Thus, this section begins with a discussion of definitions of trauma and is followed by a description of posttraumatic trajectories, including negative responses to trauma, resilience, and posttraumatic growth. Next, implications for psychotherapy and related sociocultural considerations are presented.

Definition of trauma. According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR; American Psychiatric Association, 2000), "traumatic events," for diagnostic purposes in the identification of PTSD or Acute Stress Disorder, must meet the following criteria:

> direct personal experience of an event that involves actual or threatened death or serious injury, or other threat to one's physical integrity; or witnessing an event that involves death, injury, or a threat to the physical integrity of another person; or learning about unexpected or violent death, serious harm, or threat of death or injury experienced by a family member or other close associate. (p. 463)

In addition, an event is only regarded as traumatic by the DSM-IV-TR if the person experiencing it responds with helplessness, fear, or horror. Thus, there are both subjective and objective components, and psychological stress and appraisals of life events also need to be considered when discussing trauma. Psychological stress can be defined as "a relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being" (Lazarus & Folkman, 1984, p. 21). Researchers generally agree that such stress is an inevitable aspect of life, but emphasize the significance of *how* one copes with stress on human functioning and the development of related disorders (Lazarus & Folkman, 1984; Selye, 1978). This operational definition of trauma appears to be widely used in the field of clinical psychology and has served as a useful construct for researchers and clinicians by organizing the commonalities among various types of trauma used in trauma research (Weathers & Keane, 2007).

However, not all researchers agree that this DSM-IV-TR definition of trauma most accurately captures all aspects of traumatic events. Norris (1992), for example, argued for a more objective and restrictive definition of trauma that is not dependent on the responses of individuals to potentially traumatic events. Rather, she advocated for a definition of traumatic events as involving "violent encounters with nature, technology,

or humankind" (p. 409). Similarly, McNally (2004) proposed that a more restrictive definition might be helpful in targeting only those individuals who have experienced trauma directly (and not also those who may have witnessed or learned about an event in which there was a threat to the physical integrity of another, as the DSM-IV-TR sets forth).

As an example to illuminate the difficulties inherent in an over-inclusive definition, McNally (2004) described the terrorist attacks of September 11th, 2001. According to the current DSM-IV-TR definition, a vast number of individuals who experienced horror when watching the day's events on the television could meet criteria for experiencing a traumatic event. McNally noted that it is problematic "when seemingly trivial stressors are appraised as traumatic" (p. 5). In terms of research on trauma, an excessively broad definition could lead to the inclusion of participants who are quite heterogeneous and not necessarily as appropriate as those who have directly experienced trauma. However, McNally also recognized the potential risks of adopting an overly rigid definition of trauma; namely, a narrow definition could fail to capture the experiences of people who developed symptoms after subjectively experiencing trauma, and could thus deny them of necessary mental health services.

Clearly, there are a number of challenges in accurately defining traumatic events. For example, Weathers and Keane (2007) noted that if a person's subjective appraisal of an event is included in the definition (as it is in the DSM-IV-TR version), this can further complicate the ability to objectively define what a *stressor* may be. However, the authors ultimately supported the DSM-IV-TR definition of a traumatic event and its utility in

providing a common framework for stressors that may vary in type, duration, intensity, and proximity.

An accurate and inclusive definition of trauma must also take into account cultural issues. Tummala-Narra (2007) noted that "the way in which trauma is experienced by the individual or community and the way it should be approached from a clinical standpoint is highly influenced by cultural history" (p. 39). For example, the diagnosis of posttraumatic stress disorder (PTSD) was developed in Western cultures, where individual control over one's destiny tends to be valued. Furthermore, the notion that PTSD is a typical response to abnormal conditions implies that individuals should have control over their fate under normal circumstances. However, there has been little research done within cultural contexts that emphasizes the importance of accepting one's fate. Thus, even the definition of what constitutes *normal* experiences and *normal* responses to and recovery from trauma is culturally defined. Ruchkin et al. (2005) suggested that such nuances of cultural symptom expression are often not adequately captured by research and clinical practice or current DSM-IV-TR categories. Other researchers have also noted such limitations of present models of trauma, question whether PTSD is in fact a culture-bound diagnosis, and argue for the inclusion of a broader range of traumatic responses (Bracken, Giller, & Summerfield, 1995; Briere & Scott, 2006).

Scurfield and Mackey (2001) also claimed that the DSM-IV-TR, in general, fails to adequately include cultural considerations relevant to trauma in ethnic minorities. Specifically, the DSM-IV-TR does not reference race-related stressors or traumas (e.g., verbal or physical abuse as a result of one's race) and, in fact, does not include the word

racism or *racist* anywhere in the text. The researchers stated that "the silence in DSM-IV-TR about race-related stressors is deafening" (p. 25). However, relationships have been found between experiences of racism and numerous emotional and behavioral reactions, including anger, substance use, anxiety, depression, PTSD, and somatization (Carter & Helms, 2009). Carter and Helms (2009) also noted that individuals who experience race-based trauma often do react with pervasive fear, stress, and helplessness, but may be reluctant to openly talk about these symptoms due to a perceived threat to one's life, family, or general well-being. Race-based traumatic stress may also contribute to the experience of PTSD symptoms, but not those that constitute the full criteria for diagnosis in the DSM-IV-TR, as the core reaction for individuals facing race-based traumatic stress may represent emotional pain and not necessarily a physical threat.

The misdiagnosis of patients from racial or ethnic minority groups could itself be viewed as a form of *racially-based trauma* (Tummala-Narra, 2007). For example, African American patients who present with symptoms of anxiety are often incorrectly diagnosed with psychotic disorders, partly due to differences in symptom presentation (Frueh et al., 2002). In one study related to trauma, African American combat veterans diagnosed with PTSD endorsed more items suggestive of psychosis than Caucasian American veterans, although other self-report measures indicated no differences in disturbed thinking. The researchers suggested that the psychotic symptoms reported by the African American veterans may be better understood as trauma-related dissociation. Similarly, Antai-Otong (2002) maintained that attitudes and perceptions of trauma vary both across and within cultures and can lead professionals to misdiagnose or incorrectly identify individual experiences as maladaptive.

Racial violence and oppression can also be viewed as forms of trauma than span generations and thus can become both a personal and shared experience. The African American slavery experience, Native American genocide, Japanese American internment, and the Holocaust are all examples of prolonged physical and psychological oppression that can be collectively experienced and re-experienced by future generations (Tummala-Nara, 2007). Tummala-Nara (2007) asserted that "a racial or ethnic community's collective memory of past traumas helps to create a 'second generation' of survivors" (p. 41). That is, experiences and effects of trauma can be transmitted to children long after the original trauma has occurred and can have a profound impact on an individual's sense of self and overall functioning (Kogan, 1993). In addition, the rate of occurrence of trauma and violence is higher for many ethnic minority groups; for example, Native women are at an increased risk for experiencing physical and sexual assault as well as child abuse and neglect (Walters & Simoni, 2002). Thus, the definition and aftermath of traumatic events is often highly influenced by cultural factors.

Due to some of the criticisms of the DSM-IV-TR definition of *traumatic events* noted above, there have been a number of proposed changes to PTSD criteria for the DSM-5 (Friedman, Resick, Bryant, Brewin, 2011; Miller et al., 2012). More specifically, the diagnosis is expected to move from the anxiety disorders section into a new section titled "trauma-and stressor-related disorders." In addition, the criterion requiring the experience of fear, helplessness, or horror to occur following the traumatic event (A2) will be removed. In addition to other minor symptom criterion revisions and additions, there will also be a new four-cluster system (instead of the current three-cluster system) to organize the symptoms (Miller et al., 2012).

Due to the fact that the DSM-5 was not yet finalized when this dissertation was conducted, this study predominantly used the definition of trauma proposed by the DSM-IV-TR, although it was modified slightly as suggested by McNally (2004) and Friedman et al. (2011) so that only individuals who directly experienced or witnessed a serious threat to physical integrity (or death) were included. Indirectly witnessing or simply learning of a threatening event (e.g., on television) did not qualify for a traumatic experience for the purpose of this study. As set forth in the Structured Clinical Interview for DSM-IV Axis I Disorders (SCID; First, Spitzer, Gibbon, & Williams, 2002), examples of such events could include serious accidents or fire, life-threatening combat experiences, rape or physical assault, life-threatening major disasters, and seeing another person being killed or badly hurt. In addition, although research on PTSD has traditionally focused on *external* traumatic events such as assault, war, or traffic accidents, *internal* stressors or events such as a medical illness (e.g., a stroke) have more recently been recognized as potentially traumatic events (Bruggimann, Annoni, Staub, & Van der Linden, 2006; Merriman, Norman, & Barton, 2007) and were thus considered as such for the purposes of this study. This definition also included forms of trauma related to cultural or race-based factors (e.g., hate crimes involving threatened or actual assault), as PTSD symptomatology can result from race-based traumatic stress injury (Carter & Helms, 2009). The person experiencing the trauma must also have responded with fear, helplessness, or horror for it to meet this definition of trauma.

Trajectories of trauma. After the occurrence of a traumatic event, there are a variety of ways in which an individual may respond; such patterns of behaviors and functioning in response to traumatic events are known as trajectories (Bonanno, 2004). A

wide range of response trajectories have been identified and discussed in the literature, including a potentially *chronic* disruption in functioning, a *delayed* onset of dysregulation with an increase in disruption over time, and *recovery*, which refers to a decrease in dysregulation over time after the experience of trauma. Additionally, a posttraumatic trajectory characterized by *resilience* is evident when individuals exhibit minimal symptoms and maintain a relatively stable equilibrium after the experience of trauma (Tedeschi & Calhoun, 2004). Last, in *posttraumatic growth*, an individual actually attains a level of personal psychological growth in the aftermath of the traumatic event (Linley & Joseph, 2005).

Recent studies with individuals hospitalized for serious physical injury following a single traumatic event found support for four post-trauma response trajectories (chronic, delayed, recovery, and resilience) in the first six months of rehabilitation from traumatic injury (deRoon-Cassini et al., 2010; Quale & Schanke, 2010). Additionally, these studies found that the majority of individuals actually maintained generally stable functioning during the initial rehabilitation period, with minimal or no PTSD symptomatology (i.e., they demonstrated resilience). They also found that exposure to concurrent or multiple stressors decreased rates of resilience, while exposure to a single traumatic event resulted in severe injury increased rates of resilience. These findings support the notion that resiliency after a traumatic exposure is a more common response than previously believed and that levels of resilience can change over the course of a lifetime (Bonanno, 2004; Quale & Schanke, 2010). However, this study failed to incorporate a posttraumatic growth trajectory or assess long-term outcomes. Longitudinal studies appear needed to provide information regarding long-term response patterns and trajectories (de-Roon-

Cassini et al., 2010; Quale & Schanke, 2010). The following subsections describe negative responses or trajectories to trauma, resilience, and posttraumatic growth.

Negative responses to trauma. Some posttraumatic trajectories are associated with a number of both short and long-term negative consequences that often arise after exposure to traumatic events. The DSM-IV-TR captures many of these responses in their symptom criteria for PTSD, including: "recurrent and intrusive distressing recollections of the event," "intense psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event," "efforts to avoid thoughts, feelings, or conversations associated with the trauma," "difficulty falling or staying asleep," and "hypervigilance" (American Psychiatric Association, 2000, p. 468). In addition to fear and helplessness, meta-analyses have also identified anger, hostility, and interpersonal difficulties to be commonly associated with PTSD following a variety of traumatic events (Orth & Wieland, 2006; Taft, Watkins, Stafford, Street, & Monson, 2011). Specifically as it relates to humor, PTSD has been found to be associated with fewer expressions of humor and acceptance in veterans and their intimate partners (Miller et al., 2013). A wide range of stressors have been found to contribute to the development of PTSD symptomatology, including: war/combat exposure, childhood sexual abuse, domestic violence, natural disasters, transportation accidents, crime victimization, rape/sexual assault, terrorist attacks, life-threatening illness, sex trafficking, torture, and emergency worker trauma exposure (Woo & Keatinge, 2008). Research suggests that the experience of interpersonal and human-caused traumas (e.g., rape) generally leads to higher levels of symptom distress, increased negative outcomes, and more dysfunctional

avoidance than noninterpersonal traumas (Briere & Rickards, 2007; Briere & Scott, 2006; Briere, Hodges, & Godbout, 2010).

The term *complex trauma* has more recently been adopted to describe multiple or chronic and often prolonged traumatic events that typically have an early onset and are of an interpersonal nature (e.g., community violence, physical or sexual abuse; Courtois, 2008). When trauma is repetitive and cumulative, the result is often complex and enduring disruptions in social, psychological, and biological systems (Briere, Kaltman, & Green, 2008; Courtois, 2008). New disorders such as Complex Posttraumatic Stress Disorder (CPTSD) and Developmental Trauma Disorder (DTD) have been proposed to more accurately capture these disruptions (Williams, 2006; van der Kolk, 2001). DTD, in particular, seeks to better describe the developmentally adverse effects of early, severe, and chronic trauma. Domestic violence, child abuse, war-related events, human trafficking, and illnesses that require intensive medical interventions are examples of pervasive and complex forms of traumatic experiences that can lead to CPTSD or DTD, although more research in this area is needed to fully understand the nature of these proposed disorders and their similarities to and differences from PTSD (Courtois, 2008). In addition to PTSD and CPTSD, survivors of childhood trauma (e.g., physical or sexual abuse) are also more likely to suffer from major depression, attention deficit/hyperactivity disorder, low self-esteem, a host of other behavioral problems in childhood, and impaired functioning in adulthood, than those without such a trauma history (Heim & Nemeroff, 2001; Reiland & Lauterbach, 2008).

Exposure to traumatic events early in life has also been found to be associated with neurobiological changes that may underlie the aforementioned difficulties (Heim &

Nemeroff, 2001). For example, Heim and Nemeroff (2001) found that women with an abuse history exhibited increased amounts of adrenocorticotropic hormone when compared to women without any history of abuse. The researchers also found histories of childhood maltreatment (i.e., sexual, physical, or emotional abuse or neglect) to be correlated with hyperactivity in corticotrophin-releasing factor neurotransmission as well as in other neurotransmitter systems, leading to increased sensitivity and stress responsiveness. In another study, Santa Ana et al. (2006) found increased rates of substance dependence (roughly 50%) among individuals suffering from PTSD with a history of (unspecified) childhood or adult trauma. In addition, these individuals also exhibited less adrenocorticotrophin hormone responsiveness than those in the control group.

Although exposure to trauma has been empirically linked to a variety of behavioral, cognitive, and neurobiological problems, the likelihood and course of such difficulties is significantly influenced by risk factors including ethnicity, gender, age at trauma occurrence, trauma severity, and both life stressors and social support present after the trauma (Brewin, Andrews, & Valentine, 2000). In a meta-analysis of 77 articles with participants who had experienced combat trauma, sexual assault, accidents (e.g., motor vehicle), natural disasters, or life-threatening medical conditions, Brewin et al. (2000) found that women and minorities were at higher risk for developing symptoms of PTSD. Those who experienced trauma at a younger age and those who received less social support after the trauma were also at increased risk. Not surprisingly, individuals who experienced multiple and more severe traumas and those who experienced more subsequent life stress were also found to be at an increased risk for PTSD

symptomatology. Although overall significance was found, the authors noted that the effects of certain risk factors (e.g., gender, age at trauma, ethnicity) were not consistent across all studies included in the meta-analysis. They also found a significantly larger effect size for age at trauma for men than for women, indicating interaction effects. These findings provide support for the notion that traumatic events are often associated with various negative outcomes, but a number of risk factors likely interact and impact the presence and severity of posttraumatic symptoms.

Similarly, in a more recent meta-analysis, Ozer, Best, Lipsey, and Weiss (2008) found that variables including prior trauma and psychological adjustment, a family history of mental health problems, perceived threat to life during the trauma, social support in the aftermath of the trauma, and emotional responses and dissociation during the trauma were predictive of PTSD symptoms. The studies included in this meta-analysis included participants who were victims of interpersonal violence, accidents, combat trauma, or natural disasters. As compared to the Brewin, Andrews, and Valentine (2000) study, however, Ozer et al. (2008) highlighted the strong predictive value of psychological processes that occur during the trauma (i.e., *peritraumatic*), versus prior characteristics, in the development of PTSD.

Research suggests that although many responses to traumatic events are common across diverse populations (e.g., sleep difficulties, guilt, concentration disturbances, social withdrawal), its effects are by no means universal (Antai-Otong, 2002). The fields of cross-cultural psychology, community psychology, and anthropology have noted the significant impact of culture on the experience and expression of emotion. For example, Salvadoran refugees and members of other Central American communities often view

somatic experiences of anxiety, sadness, and anger (e.g., through headaches, stomach pains, intense body heat) as more acceptable expressions of feelings than verbal expressions (Tummala-Narra, 2007). Thus, cultural differences in the experience of trauma could partly be the result of variations in emotional expression.

As aforementioned, racism itself can be viewed as a form of trauma that affects one's interpersonal relationships, view of mental health care, and sense of security (Scurfield & Mackey, 2001; Sorsoli, 2007). Jackson et al. (1996) found empirical evidence supporting the relationship between racial discrimination and psychological distress among an African American sample. Clark, Anderson, Clark, and Williams (1999) also related a number of specific negative physiological and psychological health outcomes, including anger, paranoia and anxiety, to perceptions of racism. Scurfield and Mackey (2001) identified negative consequences of race-related experiences to also include interpersonal difficulties in relationships with individuals (from the same or different racial or ethnic background) and ambivalence and/or confusion regarding one's racial or ethnic identity. These researchers identified factors that could affect the impact of race-related experiences to include the severity, frequency, course or onset, and the client's role (e.g., whether they experience guilt or anger with regard to their role in or response to the event).

Resilience. Although much of the early research on trauma focused on those individuals who responded negatively to trauma, it was noted almost twenty years ago that the majority of individuals who experienced trauma actually demonstrate resilience (Lyons, 1991). The identification of risk and protective factors of resiliency became an important objective in the beginning stages of resiliency research (Pan & Chan, 2007).

Individual characteristics such as psychiatric history (Bonanno, 2004; Pan & Chan, 2007), low intellectual functioning (Bonanno, 2004), pre-trauma coping difficulties (Bonanno, 2004; deRoon-Cassini et al., 2010; Lyons, 1991), and certain personality characteristics (Lyons, 1991) were identified as potential risk factors for negative responses to trauma. Environmental risk factors that were identified included inadequate social support (Bonanno, 2004; Ellis, Nixon, & Williamson, 2009; Lyons, 1991), limited educational opportunities (Bonanno, 2004), and community stressors (Pan & Chan, 2007).

Since the aforementioned factors were expected to place individuals at risk for experiencing negative responses to trauma, Bonanno (2004) noted that "it seems likely that at least some of these factors, if inverted, would predict resilient functioning" (p. 107). That is, strong social support networks (Lyons, 1991) and access to and participation in educational opportunities (deRoon-Cassini et al., 2010) should act as protective factors for individuals exposed to trauma. The capacity to find meaning in the aftermath of traumatic experiences has also been found to be a protective factor (Lyons, 1991). Lastly, the nature of the traumatic event itself can impact resiliency, with accidental trauma being more likely to result in resilience and trauma committed by another person more likely to result in chronic distress (deRoon-Cassini et al., 2010).

In order to more thoroughly identify the risk and protective factors and understand how they influence posttraumatic trajectories, the second generation of resiliency research focused more on the underlying processes through which protective factors influence trauma responses (Pan & Chan, 2007). Accordingly, there was a shift from an examination of static factors or traits to the *process* of resilience and researchers began to

view the resiliency process as a balance of risk and protective factors that shape posttraumatic trajectories.

Thus, although resilience was originally regarded as a personal trait or a set of characteristics that developed through adverse or stressful experiences, resilience has more recently been defined as an ongoing and adaptive interaction between an individual (with certain internal and external resources) and their environment, in response to changing stressors (Pan & Chan, 2007). However, operational definitions of resilience vary widely within the literature as well as in clinical practice. For example, the term is used commonly among mental health professionals, but it is often used broadly in reference to *coping* (Miller, 2003). Although effective coping skills appear to be important for attaining resilience (McGhee, 2010), the concepts are not necessarily interchangeable. Coping, specifically, will be discussed more thoroughly in the next section.

Currently, the most frequently used operational definitions of resilience include the absence of psychopathology or PTSD, the ability to persist in the face of adversity, and other adaptive behaviors (Levine, Laufer, Stein, Hamama-Raz, & Solomon, 2009; Miller, 2003). However, Miller (2003) noted that a more unified definition and understanding of the term must distinguish resilience from other positive outcomes observed in trauma research. Accordingly, he questioned the severity of the stressor needed and the degree of *success* an individual must experience after trauma in order for he or she to be considered *resilient*. A culturally relevant definition of resilience must also take into account not only individual development, but also community impact and cultural belief systems.

Not only does defining resilience continue to be problematic, but its measurement is also limited by its reliance on self-report scales (e.g., measuring socioeconomic status, mental illness, hardiness) that may not be relevant across various cultural contexts (Clauss-Ehlers, 2008). In response to the paucity of culturally relevant measures of resilience, Clauss-Ehlers (2008) developed the "Cultural Resilience Measure," which can help explore the development of resilience in individuals from diverse cultural backgrounds, in hopes that such resilience could be recognized and fostered. Although this measure does not appear to have been used in other studies as of yet, the researchers plan to continue to collect data to determine its validity and reliability in order to substantiate its value.

Throughout the various waves of research on trauma and resilience, researchers have emphasized the importance of individual differences and the unique experiences of trauma survivors (Bonanno, 2004; Pan & Chan, 2007). Although current views of trauma trajectories can help aid in the understanding of the patterns of behaviors and functioning in trauma survivors, responses to traumatic incidents can vary widely both between and within individuals throughout the lifespan (Bonanno, 2004; deRoon-Cassini et al., 2010; Quale & Schanke, 2010). Accordingly, the impact of context and culture must be given significant attention. For example, although the concept of resilience is commonly discussed and applied in relation to clients across the lifespan, most of the research has been done on younger populations (Bonanno, 2004; Miller, 2003). Continued empirical research with various populations (e.g., with regard to age, ethnicity) may help in understanding and more accurately applying concepts and interventions related to resilience.

Several theories and significant research findings related to culture and resilience have already been noted in the literature. For example, research suggests that consistent support from one's family is a significant form of resilience that can serve as a protective factor in culturally diverse populations (Banyard, Williams, Siegel, & West, 2002; Hernandez, 2002). Spiritual beliefs and artistic creation have also been shown to help certain ethnic minority groups (e.g., indigenous or Native women) to effectively cope with traumatic experiences (Walters & Simoni, 2002). Cultural and spiritual belief systems can also provide a buffer against traumatic experiences and may lead individuals to endure suffering more silently for the greater good of the community (Tummala-Narra, 2007). In line with a positive psychology perspective, Tummala-Narra (2007) noted that under traumatic conditions, people in communities can build trusting relationships and a shared experience of hope that helps them to survive racial violence and oppression; such *collective resilience* involves the "construction of coping processes within a particular social and political context" (p. 46).

Walters and Simoni (2002) developed an indigenous stress-coping model that incorporates many of the aforementioned theories and empirical findings. The model suggests that the effects of life stressors or traumatic experiences is moderated by cultural factors such as thoughts and feelings related to one's identity, which can act as a buffer against the negative effects of stressors and help to strengthen both psychological and emotional health. The researchers also noted that Native women suffer from a number of behavioral or physical health problems (e.g., alcoholism, high blood pressure, diabetes) that are directly related to colonization and systemic discrimination. In other words, the experience of oppression and the chronic strains related to various forms of

discrimination may contribute to increased physical and mental health problems among people of color. However, environmental context, personal and cultural factors, and identity processes are thought to mediate or moderate the effects of traumas for Native women in particular. Specifically, Walters and Simoni (2002) identified "the extent to which one internalizes or externalizes attitudes toward oneself and one's group" (p. 523) as an important cultural buffer capable of enhancing self-esteem and facilitating effective coping of psychological distress.

Westphal and Bonanno (2007) also noted that "the multiple pathways to resilient outcomes undoubtedly vary in adaptive value across different people, situations, and cultural contexts" (p. 425). For example, research indicates that strong ethnic and gender identities can be predictive of resilience in response to stress, which suggests that ties to cultural histories can act as a buffer against despair for families who face multiple stressors (Clauss-Ehlers, Yang, & Chen, 2006). Accordingly, the researchers suggested that cultural factors can have a potentially positive influence on coping and resilience in individuals from diverse cultural backgrounds. Specifically, a particular trait such as personal autonomy or achievement may be viewed as fostering resilience in individualistic cultures (e.g., the United States or Western Europe), but may actually be a viewed as a liability in more collectivistic cultures (e.g., Chinese or Indian) where a "shared sense of self efficacy, or communal mastery may be more central to people's resiliency in the face of stress and adversity" (Tummala-Narra, 2007, p. 43). Individual characteristics and developmental changes can also have a significant impact on the ways in which a potentially traumatic event influences an individual's life (Tummala-Narra).

With regard to humor, specifically, researchers have suggested that individuals who are resilient often find ways to produce positive emotions when faced with stress (Frederickson, 2001; McGhee, 2010). This, in turn, allows individuals to quickly recover from stressful events, prevent depression, and otherwise generally flourish (McGhee, 2010). Thus, the positive emotions often created by humor can help to facilitate one's resilience; this "Broaden-and-Build Theory of Positive Emotion" will later be discussed in more depth (see "Humor and Coping with Stressors or Trauma"). Similarly, Hutchinson and Lema (2009) reviewed relevant research and suggested that inviting laughter, fun, and positive emotions into psychotherapy can help clients who experienced trauma to build resilience, as it represents a "small way[s] to resist even the most violent of situations" (p. 9). Accordingly, interventions aimed towards increasing positive emotions may also increase one's resilience (McGee, 2010).

Posttraumatic growth. The notion that adverse experiences have the potential to facilitate positive change has been present throughout history (Tedeschi, Calhoun, & Cann, 2007). Many world religions (e.g., Christianity, Hinduism, Judaism, and Islam) involve finding meaning in suffering and its' transformational qualities (Sheikh, 2008; Tedeschi et al., 2007). Specifically in the field of psychology, individuals such as Victor Frankl and Carl Rogers reflected upon the capacity for growth in the face of adversity and accordingly paved the way for the development of positive psychology as a discrete field of study (Martin, 2007). Recent psychological research has aimed to better understand such growth and "the paradox that profound personal value can arise out of profound personal tragedy" (Sheikh, 2008, p. 86).

The study of positive outcomes following exposure to trauma has become more prevalent with increasing reports of growth among trauma survivors (Tedeschi & Calhoun, 2004). The *catastrophic* perspective posits that such growth takes place in response to emotional traumas that cause dramatic changes in an individual's circumstances and cause them to challenge their pre-existing understanding of the world in which they live (Showers & Ryff, 1996; Tedeschi & Calhoun, 1995, 2004). After exposure to traumatic events (which Tedeschi and Calhoun define more broadly than the DSM-IV-TR does), some individuals are compelled to reconceptualize their beliefs and assumptions about the world in order to accommodate these difficult experiences (Tedeschi & Calhoun, 2004). For these individuals, struggles with major life stressors can result in increased well-being, insight, sense of meaning, spirituality, connectedness, and interpersonal values (Tedeschi & Calhoun, 1996, 2004). Although it does not appear that they have studied humor specifically as an outcome variable, other researchers have identified humor as a variable that is positively related to PTG (Cadell, 2007; Schroevers & Teo, 2008).

According to the organismic valuing process theory of growth, individuals are intrinsically motivated to reconstruct their assumptions about the world after a traumatic experience in a manner consistent with their pre-existing personal inclination to move towards growth and self-actualization (Linley & Joseph, 2005). This process of developing a positive awareness or understanding from traumatic experiences is a part of the growth process and is referred to in a variety of terms, including *posttraumatic growth* (PTG), thriving, adversarial growth, stress-related growth, benefit finding, hardiness, and optimism (Tedeschi & Calhoun, 2004; Tedeschi et al., 2007).

Although posttraumatic growth represents an outcome trajectory of trauma distinct from resilience, the two have often been confused and used interchangeably in the literature. Self-report measures (e.g., the PTSD Symptom Scale, Foa, Riggs, Dancu, & Rothbaum, 1993; Posttraumatic Growth Inventory, Tedeschi & Calhoun, 2004) have typically been used to assess these constructs; individuals who report minimal depression or other stress-related symptoms after a certain period of time following the traumatic event are categorized as resilient, whereas individuals who report gaining hope, confidence, and/or purpose, for example, are categorized as demonstrating posttraumatic growth (Hobfoll et al., 2009). In one examination of response trajectories of individuals who faced war and terrorism-related traumatic events, Hobfoll et al. (2009) used this method to differentiate the various posttraumatic response trajectories and found response patterns similar to that of chronic distress, resilience, and posttraumatic growth. However, the researchers noted that their criteria for identifying a resilience trajectory is only one way of doing so, as resilient individuals may actually experience symptoms of PTSD or depression yet still obtain pleasure in and participate in daily activities and tasks.

Levine et al. (2009) provided a helpful clarification and described resilience as a variety of personal characteristics and the ability to use such traits in response to trauma so that individuals are able to continue on without considerable distress of disruption in functioning. In contrast, posttraumatic growth refers to an initial experience of vulnerability and distress after a traumatic experience that ultimately results in a process of coping that leads to meaning-making, positive outcomes, and changes in behavior. Like resilience, posttraumatic growth has been viewed as both a personal trait (i.e., a

resource that can contribute to resiliency; Hobfoll et al., 2009) and an evolving process (i.e., that develops as an individual becomes cognitively capable of processing traumatic experiences; Salsman, Segerstrom, Brechting, Carlson, & Andrykowski, 2009; Tedeschi et al., 2007).

Research has generally supported the notion that trauma survivors sometimes experience positive changes and a trajectory of trauma associated with PTG. For example, Mols, Vingerhoets, Coebergh, and van de Poll-Franse (2009) used a correlational analysis and found breast cancer survivors to experience benefit-finding (i.e., finding positive outcomes to their cancer experience). In addition, the trauma survivors who reported a high level of life satisfaction were also found to be likely to experience PTG. These experiences of PTG were positively correlated with positive and effective coping, perceived emotional intensity of cancer, perceived threat to life/physical integrity, opportunities to discuss breast cancer, contact and communication with other survivors, support partners, socioeconomic status, and time since diagnosis. Similarly, a meta-analysis by Sawyer, Ayers, & Field (2010) examined adults with cancer and HIV/AIDS and found PTG after diagnosis to be correlated with more positive mental health as well as improved self-reported physical health. The researchers also found younger adults and non-white samples more likely to report PTG and positive mental health. Again, future longitudinal studies should seek to replicate and further clarify such results.

With regard to humor specifically, research has generally supported the notion that humor is often a part of the posttraumatic growth process (Cadell, 2007). In one study, Cadell (2007) qualitatively explored changes in the lives of 15 caregivers who lost

a loved one due to HIV/AIDS-related complications. The study found that many of the participants used humor in their bereavement process (e.g., in fondly recalling their loved ones, providing support and/or closure) and generally regarded humor as a coping mechanism. Cadell noted that many of the participants continued to experience distress related to their losses, but also demonstrated growth, which could at least partially be attributed to use of humor as a coping tool (in addition to support and spirituality). Similarly, a study led by Schroevers and Teo (2008) examined the experience of posttraumatic growth in a group of Malaysian cancer patients and found greater use of humor as a coping strategy to be associated with increased PTG. This study highlighted the role that humor can play in PTG and suggested that this may not only be a phenomenon in Western countries.

Implications for psychotherapy. Findings from research on the effects of trauma and posttraumatic responses have a number of significant implications for psychotherapy. The following subsections explore the application of resilience and PTG research specifically to clinical work with trauma survivors. It concludes with a discussion of sociocultural considerations related to trauma.

Psychotherapy and resilience. In clinical work, mental health professionals often assume or expect a certain level of dysregulation after an individual faces trauma (Bonanno, 2004). However, as previously discussed, research clearly states that the development of PTSD symptoms is not the typical response trajectory. In fact, by assuming that significant emotional distress or disruption will invariably occur as a result of trauma, resilience (or PTG) could be viewed as maladaptive by clinicians (Bonanno, 2004). Western cultures, in particular, tend to assume that individuals who experience

trauma will be unable to return to their pre-trauma life (Quale & Schanke, 2010). This and related misinformation can lead to the development and use of inappropriate clinical interventions. For example, clinicians have historically believed that an immediate debriefing following a traumatic event will help to decrease later disruption. However, empirical evidence suggests that debriefing is generally ineffective; Bonanno (2004) noted that debriefings may actually reduce an individual's natural level of resilience and instead facilitate a trajectory comparable to recovery. Clearly, a better understanding of the complex factors that contribute to and enhance resilience is needed.

Orner (2010) provided a case example of a male client who survived a life-threatening shipwreck while on vacation. The author noted that some of the typical post-traumatic symptoms (e.g., crying, despair, panic) that he experienced could actually have been adaptive (e.g., by helping to communicate his presence to others). *Evoked* reactions also signified a need for help; "crying, fear, vigilance, and hyperarousal [are] adaptive to the extent that they mediate signals for others to respond to" (p. 216). From this perspective, clients' reactions to trauma could be viewed as a natural way to signal the severity of adversity and the need for help from others. Orner further asserted that enduring trauma reactions involve complex and dynamic processes that need to be more clearly understood and "the tradition of construing reactions evoked by trauma as negative symptoms of disorder probably does a massive disservice to survivors" (p. 216). In therapy, clinicians can apply these principles by helping clients to reconceptualize their evoked reactions as adaptive signals and encouraging them to accept and utilize them (e.g., to practice self-care and fulfill needs for safety and security). Therapy could

also involve working with clients to develop and implement actions plans that help empower them.

Psychotherapy and PTG. Established theories and research on PTG also have important implications for clinical practice with individuals who have experienced trauma. For example, the PTG literature suggests that clinicians should assess a client's readiness for change and cognitive processing without holding assumptions related to either invariable distress or immediate recovery or growth (Calhoun & Tedeschi, 1999; Sheikh, 2008). Calhoun and Tedeschi (1999) suggested that clinicians working with trauma survivors should utilize several specific approaches or skills, including listening without solving, observing and labeling growth as it occurs, and using accurate language. That is, a clinician should watch as a client develops and modifies their trauma narrative and help to label and discuss growth, without overemphasizing its importance or putting pressure on the client to acknowledge elements of growth. Additionally, since cognitive processing is an integral part of the PTG process, clinicians can remain active and engaged in the client's trauma narrative and help them to transition from rumination to cognitive processing (Tedeschi et al., 2007). Journaling and other cognitive-behavioral tasks can also be used to facilitate meaning-making and recognitions of personal strengths related to the trauma. This emphasis on protective factors and the integration of client strengths (including humor) into clinical treatment may also be considered a positive psychological intervention, as discussed earlier (see "Positive Psychology and Psychotherapy").

Tedeschi and Calhoun (2010) developed one such positive psychological approach for treating individuals who have experienced trauma, which they labeled

expert companionship. Expert companionship accounts for both the therapist's expert knowledge about therapeutic techniques as well as the client's expert ability to find his or her own recovery path and potentially move towards posttraumatic growth in either the spiritual, interpersonal, or self-perception domains. According to this view, therapists should "leave [themselves] open to hearing the most difficult aspects of the client's story, seeing the possibilities for growth in their suffering and ultimately, and learning from the client" (p. 228). That is, clients are seen as the experts on their own lives and tragedies and therapists can learn from them. In a case example, the researchers discussed a 21-year-old healthy female who developed acute stress disorder after she was randomly stabbed while working as a customer service representative. Using their approach, Tedeschi and Calhoun described the importance of allowing this client to integrate this experience into her own life story in a meaningful way. In this way, "memories of the struggle with her misfortune will be infused with the positive aspects of her attempts to cope, the decisions she made, and the lessons she learned" (p. 234). However, the authors also noted the importance of never downplaying the negative aspects of a client's experience. In this case, the therapist was respectful, empathic, and nonjudgmental, and listened for themes of growth that the client introduced. In sum, a better understanding of the various trauma response trajectories and implications for therapeutic interventions is necessary to best meet the needs of individuals who have experienced trauma.

Sociocultural considerations. Psychotherapy can help aid in the recovery process for individuals of diverse backgrounds who experience trauma, but it is critical that therapists recognize the broader sociocultural context in which the trauma occurred by "address[ing] both internal (i.e., intrapsychic) experience and external (i.e., family,

community) ramifications of individual and collective traumatic experiences" (Tummala-Narra, 2007, p. 48). Scurfield and Mackey (2001) asserted that the impact of traumatic or stressful race-related experiences (e.g., being verbally or physically assaulted as a result of one's race or experiencing racial discrimination) can be a significant etiological factor in a client's presenting problem, but note that "many clinicians do not systematically and specifically assess a client's possible exposure to a range of race-related experiences, such as racial discrimination that occurs solely or primarily because of the client's racial status or appearance" (p. 24).

Scurfield and Mackey (2001) noted a number of potential explanations for this failure on the part of many clinicians to thoroughly consider or discuss race-related experiences in therapy. First, they suggested that it may be due to a lack of understanding on the part of researchers and clinicians regarding the potentially significant impact of race-related experiences on psychological functioning. It could also be due to either a discomfort in discussing such experiences or a preoccupation (by both clinician and/or client) with more familiar and commonly discussed stressors such as physical abuse or exposure to death. Lastly, the managed care system's limit on the number of sessions that will be reimbursed could inhibit discussion of race-related experiences. Thus, clinicians need to be aware of these potential barriers to effectively assessing clients for the impact of race-related experiences on client's presenting problems problem and psychological functioning. In particular, the psychotherapeutic relationship can be critical for recovery and the mobilization of resilience in the context of therapy for trauma survivors.

Nevertheless, Scurfield and Mackey (2001) asserted that a strengths-based approach can be very helpful in working with individuals from racial and ethnic minority

groups who have experienced trauma, including race-related experiences. Accordingly, they developed a comprehensive and systematic interview guide to assess the potential impact of race-related experiences on the development of adjustment disorders. In particular, their approach focused on assessing potentially positive aspects of race-related experiences that could help offset traumatic exposures and facilitate effective coping. In contrast to the typical diagnosis and treatment of individuals that focus on individual deficits, the researchers suggest that positive aspects of race-related experiences could potentially help individuals to counter the negative effects of trauma and to develop successful coping techniques. Although race-related stressors are often environmental stressors that contribute to the development of adjustment or stress disorders, they can also lead to strength or resilience factors. That is, "it is not inevitable that exposure to race-related stressors will by psychologically damaging to all individuals who have such experiences" (p. 31). For instance, reflecting upon traumatic or stressful experiences has led some trauma survivors to become active in human rights and social justice movements (e.g., Holocaust survivors, Frankl, 1984; Vietnam veterans, Wiest, Root, & Scurfield, 2001). In addition to such positive behavioral outcomes, race-related experiences could lead to the development of positive attitudinal traits such as internal fortitude, increased resolve, a higher tolerance threshold, and increased pride in one's racial heritage (Scurfield & Mackey, 2001).

Banyard et al. (2002) asserted that therapists first must establish competence in working with culturally diverse trauma survivors (e.g., by becoming familiar with the psychobiology of trauma, dissociation, PTSD) and conducting a thorough assessment (e.g., utilizing self-report measures that can help therapists to gain a broad range of

information that include race-related experiences and responses). The researchers also suggested that therapists be particularly cognizant of how a client's race, social class, and/or sexual orientation may inform the treatment plan. Lastly, it is imperative that therapists seek to develop a support system for their clients, since this has been shown to improve psychological functioning. This may include educating and involving relatives, friends, and community members in the recovery process.

It is also important that therapists be willing to discuss topics often avoided in therapy (e.g., race, sexuality, spirituality) in order for trauma recovery to be effective (Bryant-Davis, 2005). Bryant-Davis (2005) asserted that integrating and affirming the client's coping strategies (which are often influenced by cultural factors) in the therapeutic process is crucial. She suggested that this can be done through activities such as journal assignments, visual art (e.g., asking the client to draw themselves at the time the trauma occurred), or simply through creating a safe place in which the client feels comfortable discussing the trauma and coping strategies he or she has used. Treatment should also include efforts to counter feelings of shame and blame and foster individual strengths and feelings of self-worth.

Although recent research has begun to focus on the impact of culture, ethnicity, and race-related stressors on trauma and resilience, there is certainly a need for more systematic empirical study of these issues (Scurfield & Mackey, 2001). In addition, it could be helpful to study within group differences (e.g., differences within ethnic groups) regarding experiences of trauma and expressions of resilience and PTG (Tummala-Nara, 2007). Scurfield and Mackey (2001) base their framework on a substantial amount of empirical research, but more research should to be done on the therapeutic relationship in

the context of therapy with clients of ethnic minority groups who have experienced trauma and factors that inhibit or facilitate the recovery process (Tummala-Nara, 2007).

Summary. For trauma survivors, the potential to find purpose and meaning through suffering highlights the importance of finding ways to foster personal growth and positive changes therapeutically (Joseph et al., 2005). Similar to Erickson's (2010) focus on client strengths (see "Positive Psychology and Psychotherapy"), Orner (2010) suggested that therapists and clients both view reactions evoked by trauma as adaptive signals that should be accepted and utilized in the aftermath of trauma. Tedeschi and Calhoun (2010) further emphasized the importance of acknowledging a client's expertise on his/her own life and experiences and listening for themes of growth and positive changes (e.g., compassion, strength). However, Erickson (2010), Orner (2010) and Tedeschi and Calhoun (2010) base their claims on theory and lack substantial research to support them empirically. Given the treatment implications of such positive psychology perspectives on trauma, more research is needed to support these theories.

A more culturally informed understanding of both trauma and resilience must also include an exploration of cultural bias in research with ethnic minority populations and inclusive definitions of trauma (including, for example, race-related experiences, cultural symptom expression, and/or collective trauma) and resilience. In addition, the role of families, communities and cultural beliefs that influence the experience of and recovery from trauma must be taken into account. Last, cultural factors help determine whether trauma survivors even seek and/or benefit from clinical services or turn to cultural support networks including families, communities, or traditional healing practices (Antai-Otong, 2002). Therapists must understand the complexity of trauma, the client's meaning

of the traumatic event, and be willing to develop holistic and individualized interventions that address the client's perceptions of *wellness* and illness.

Coping

Research suggests that it is not only the nature and severity of a traumatic event that influences one's reaction to trauma, but also an individual's ability to cope with stress (Heppner et al., 2006). Folkman (1984) defined coping as "cognitive and behavioral efforts to master, reduce, or tolerate the internal and/or external demands that are created by a stressful event" (p. 843). Similarly, Carver, Scheier, and Weintraub (1989) described it as "the process of executing [a response]" once a potential threat is perceived (p. 267). Thus, coping refers generally to all (typically conscious) efforts to solve problems and manage stressors, regardless of whether or not those efforts are successful; such efforts are influenced by both personality traits and social/contextual factors (Carver & Connor-Smith, 2010). Whereas posttraumatic trajectories refer to responses over time following exposure to a traumatic event, coping refers generally to the strategies that individuals employ to handle challenging, stressful, or traumatic experiences. This section discusses a widely accepted theory on stress and coping, different categories of coping (e.g., common styles and strategies), contextual approaches to coping, assessment of coping, and introduces humor as it is related to the coping literature.

Lazarus and Folkman's transactional model. Lazarus and Folkman (1984) noted that traditional theories on stress and coping were based on antecedent-consequent or stimulus response models, in which the antecedent or stimulus is viewed as an environmental factor, and personality factors are introduced as mediating variables. They

asserted that “the traditional antecedent-consequent model is limited because it tends to treat variables as if they are in a linear and unidirectional relationship and as static phenomena” (Lazarus & Folkman, 1984, p. 325). In contrast, Lazarus and Folkman (1984), viewed coping as a process that occurs in stages and varies as a result of personality and situational factors that, in turn, influence cognitive appraisals. Cognitive appraisals are defined as “evaluative cognitive processes that intervene between the encounter and the reaction” (p. 52). Essentially, the meaning that an individual attributes to a particular event influences his or her emotional and behavioral response. For example, an individual may appraise a potentially stressful event as irrelevant, benign-positive, or stressful. Furthermore, the researchers asserted that stressful appraisals can be threatening (i.e., the individual anticipates harms or losses) challenging (i.e., the individual feel capable of gaining mastery), or harmful/loss-based (i.e., the individual has already sustained damage). Secondary appraisals involve a judgment regarding whether current coping strategies may be successful and an evaluation of potential consequences of using such strategies given internal or external demands or constraints. Lastly, individuals may utilize reappraisals based on new information or cognitive coping efforts. Through these cognitive appraisals, individuals are able to evaluate the significance of what is happening for his or her well-being.

Appraisals are influenced by a number of factors. They are partially determined by the resources that an individual possesses, including health, beliefs (i.e., about God or sense of control), commitments, problem-solving skills, social skills, social support, and material resources (Lazarus & Folkman, 1984). Conversely, Lazarus and Folkman (1984) noted that coping is also affected by personal constraints that limit the use of such

resources (e.g., internalized cultural beliefs that prescribe particular ways of behaving). Environmental factors that influence coping include novelty, predictability, and event uncertainty. The timing of stressful events (e.g., how imminent it is, duration) can also impact how the event is appraised and managed. Similar to personal constraints, environmental constraints include "demands that compete for the same resources and agencies or institution that thwart coping efforts" (p. 179). Individuals may also be prevented from effectively using coping resources due to high levels of threat.

In sum, this model assumes that stress is not necessarily a direct response to stressors, but rather is mediated by individual and environmental resources that affect one's ability to cope. Furthermore, stress is the result of how an individual appraises his or her resources to cope with a particular stressor. Thus, stress may have more to do with how an individual perceives the strength of his or her resources than the actual situation. Lazarus and Folkman (1984) also noted that coping implies effort, but can become automatized in time through learning processes. The researchers intended this theory to be a useful *metatheory* for coping with stress, although they acknowledge several limitations, including difficulties in accurately measuring appraisals, a lack of sociocultural diversity in samples used, and methodological limitations (e.g., causal inference, confounds) that are pervasive across the social sciences.

Coping categories, styles, and strategies. Various categories or descriptors for different coping efforts are used in the literature. In the context of coping, the term *response* appears to refer generally to all cognitive and behavioral efforts to cope with a stressful situation. More specific *strategies* for coping with trauma or stressors (e.g., distraction, seeking information, humor use) are often classified into broader *styles* of

coping employed by individuals when under stress (Snyder, 1999). That is, a coping style refers to a person's particular pattern of coping strategies used across stressful situations (Lazarus and Folkman, 1984). However, it should be noted that these terms (i.e., responses, strategies, styles) are sometimes used interchangeably in the literature. This subsection discusses a meta-analysis regarding the different categories of coping, followed by two styles and strategies that are used most often in research.

Coping categories. Skinner, Edge, Altman, and Sherwood (2003) noted that there is little consensus concerning the categories or dimensions that best distinguish various coping strategies. Accordingly, the authors sought to develop a classification system that accurately captured different levels of coping. Specifically, they proposed *instances* of coping (i.e., immediate responses to specific stressful events) to be the lowest level or category, and *strategies of adaption* (i.e., fundamental, adaptive processes that have evolved in time) the highest.

Skinner et al. (2003) also offered several intermediate levels, including *ways of coping*, which organize specific instances of coping into clear categories according to action types (e.g., problem-solving, escape), which can be further classified into multidimensional *families of coping* according to adaptive functions (e.g., emotion-focused coping, approach). The researchers noted that there is no fixed number of coping instances, ways of coping, families of coping, or adaptive processes.

After analyzing 100 assessments of coping and the strategies used to develop them, Skinner et al., (2003) found that a fairly comprehensive list of lower-order categories already exists, but noted a number of limitations with regard to labeling higher-order categories. Rather than using categories that refer to single functions (e.g.,

emotion versus problem focused), one-dimensional distinctions (e.g., active versus passive, approach versus avoidance), the researchers suggested the use of broader action types that serve adaptive functions (e.g., accommodation, proximity seeking) as higher order categories. The researchers hoped that these suggestions would lead to further research geared towards developing a structure linking specific instances of coping to adaptive processes in a meaningful way. The following subsections discuss common distinctions among various one-dimensional or single-function styles and strategies.

Problem-focused versus emotion-focused styles and strategies. As referenced by Skinner et al. (2003), there are a number of common distinctions in the literature between contrasting coping styles, one of the most common of which is problem-focused coping versus emotion-focused coping. From this perspective, coping is viewed as serving two major functions: the management of the problem that is causing distress (i.e., problem-focused coping) and the regulation of associated emotions or distress (i.e., emotion-focused coping; Folkman, 1984). More specifically, problem-focused coping involves directly addressing problems by seeking out information, developing a plan of action, and taking steps to manage the stressor; emotion-focused coping focuses on reducing or managing the negative feelings associated with the stressor and includes expressing emotions, seeking emotional support, and religious beliefs (Bryant-Davis, 2005; Littleton, Horsley, John, & Nelson, 2007; Roussi, Krikeli, Hatzidimitriou, & Koutri, 2007).

Most research to date suggests that problem-focused coping is more effective in managing stress than emotion-focused coping (Littleton et al., 2007). In general, applied problem solving and coping has been found to play a critical role in effectively managing

stressful situations and can mediate or moderate the relationship between stress and psychological and physical health (Heppner, Witty, & Dixon, 2004). However, Lazarus and Folkman (1984) asserted that "no strategy should be considered inherently better or worse than any other; judgments as to the adaptiveness of a strategy must be made contextually" (p. 140). For example, the researchers suggested that denial may be an adaptive coping technique for certain individuals in particular situations. Thus, it may not be possible to categorize coping styles as simply *adaptive* or *maladaptive*. This concept may be particularly relevant to humor, which is used in a variety of contexts as a coping tool or strategy. Additionally, problem-focused coping may be more effective with controllable stressors, whereas psychological efforts such as emotional expression and cognitive processing may be more helpful in managing uncontrollable stressors (Folkman & Moskowitz, 2004; Osowiecki & Compas, 1999). Research supporting this notion has, however, been somewhat inconsistent (Riolli & Savicki, 2010).

In addition, Skinner et al. (2003) stated that "as categories, problem-focused and emotion-focused coping are not conceptually clear, mutually exclusive, or exhaustive" (p. 227). For example, Carver et al. (1989) noted that certain emotion-focused responses can involve social support-seeking, while others involve denial; likewise, problem-focused coping can involve seeking assistance or waiting before acting, two very different activities that should perhaps be measured separately instead of being classified together. Thus, further distinctions may better capture different coping styles (see "Contextual Approaches to Coping" for examples).

Engagement versus disengagement styles and strategies. Other research differentiates between *engagement* coping responses and *disengagement* responses or

approach-focused versus *avoidance-focused* coping (Littleton et al., 2007; Roussi et al., 2007). Engagement responses can be described as behavioral and physiological coping efforts that involve contact with a stressor and the accompanying emotions, whereas disengagement responses are coping efforts that distance an individual from the stressor and associated emotions (Roussi et al., 2007). Similarly, approach strategies are characterized by a focus on the actual stressor or an individual's reaction to it (e.g., seeking emotional support or information about the stressor) and are generally regarded as adaptive. Avoidance strategies involve avoiding the stressor or the individual's reaction to it (e.g., withdrawing from others, disengaging from one's thoughts and feelings about a stressor); such strategies can help to relieve distress in the short-term (Olff, Langeland, & Gersons, 2005; Riolli & Savicki, 2010) but may be maladaptive in the long-term (Littleton et al., 2007). Lazarus and Folkman (1984) identified distancing, confronting, and minimizing as additional aspects of coping that also appear relevant to avoidance. From a personality perspective, optimism, conscientiousness, extraversion, and openness appear to be linked to engagement coping, neuroticism to disengagement coping, and agreeableness, conscientiousness, and optimism less linked to disengagement coping (Carver & Connor-Smith, 2010). Personality and coping are thus posited to interact and mutually shape both physical and mental health.

Among engagement coping responses, a distinction between attempting to control the stressor itself (called primary-control coping) and attempting to adjust or adapt to the stressor (called secondary-control or accommodative coping) has been made (Carver & Connor-Smith, 2010; Skinner et al., 2003). Carver and Connor-Smith (2010) also describe proactive coping as intending to prevent a potentially harmful situation from

occurring and involving problem-focused strategies; that is, "if the beginning of a threat is perceived, the person can engage strategies that will prevent it from growing or that will remove the person from its path" (p. 687).

Research demonstrates a consistent association between a reliance on avoidance coping strategies for dealing with trauma and distress (Littleton et al., 2007). For example, Matthews, Harris, and Cumming (2009) found individuals who have experienced a TPI (e.g., a road accident or sporting injury) and used avoidant coping strategies to be more likely to have symptoms consistent with PTSD. The researchers suggested that individuals who rely on avoidance following trauma may be less likely to recover from PTSD. It may also be the case that those who do not recover from PTSD are more likely to turn to avoidant coping strategies. Similarly, the researchers found a significant correlation between active coping strategies and an increased potential to return to work. The researchers suggested that the use of active coping strategies following traumatic injury promotes increased potential to work. Conversely, participants who presented with PTSD symptoms reported significantly higher scores for negative appraisals about the self (e.g., "I am a weak person") and about the world (e.g., "people can't be trusted") several months after their accident. Similarly, Hooberman, Rosenfeld, Rasmussen, and Keller (2010) found emotion-focused disengagement coping to increase the likelihood of developing severe PTSD symptomatology in refugees, immigrants, and asylum seekers who had experienced torture and/or war-related trauma in their native countries.

Overall, the effectiveness of these different coping strategies or defenses may be highly dependent on the time frame being considered (Olff et al., 2005). For example,

when options are limited, defenses such as avoidance may provide optimal adaptation and protection from being overwhelmed by stressors. In fact, some research suggests that repressive coping, which is characterized by avoidance of unpleasant emotions, thoughts, and memories, can actually *promote* adaptation to adversity (Bonanno, 2004). However, these same defenses may prove to be damaging in the long run if they interfere with problem-focused coping efforts. Individual differences in defensive and coping strategies appear to influence the outcome of these different coping efforts (Olff et al., 2005). Additional research is needed to continue to shed light on the potential effects of avoidance as a coping strategy.

Contextual approaches to coping. Further research has emphasized the significance of context (i.e., the situation involved) as it relates to the effectiveness of particular coping strategies (Roussi et al., 2007). That is, the effectiveness of coping may be related to a fit between the particular demands of a given situation and the coping strategies employed (Roussi et al., 2007). Thus, the ability to identify and adapt to changing demands of a situation by using various coping strategies may be an important aspect of successful coping. In fact, when studying women coping with breast cancer prior to and after surgery, Roussi et al. (2007) found that *flexibility* (defined as "the use of multiple coping strategies," p. 97) was negatively related to distress, suggesting that the adaptiveness of various coping strategies can change as the stressor evolves. The researchers also found emotion-focused engagement coping (e.g., acceptance or emotional expression) at pre-surgery, when combined with social support, to be related to less distress three months later than individuals who did not use emotion-focused

engagement coping. Thus, the context of emotion-focused coping can impact its effectiveness.

Similarly, Riolli and Savicki (2010) suggested that "psychological adjustment may be less related to any specific coping strategy than to the individual's ability to draw upon a diverse set of effective strategies and to apply them flexibly" (p. 99). The researchers used the term *coping diversity* to describe an individual's ability to adapt to circumstances when typical coping strategies prove to be ineffective. In fact, research suggests that using *any* one coping strategy exclusively may be problematic (Cheng, 2001). Similarly, Westphal and Bonanno (2007) maintained that the ability to be flexible (e.g., in terms of appraisals, coping, and emotional regulation) when faced with potentially traumatic events is more important to a trajectory of resilience than using or relying on any one particular coping strategy. The researchers argued that individual differences may account for such variations in responses to potential trauma.

Lazarus and Folkman (1984) also advocated for a contextual approach to coping, but noted that this methodology makes it difficult to assess an individual's *overall* coping style. Rather, they identified two formal dimensions of style, complexity and flexibility. Lazarus (1998) also differentiated between a hierarchical view of coping (with an emphasis on particular styles) and coping as a *process*, with changes over time according to contextual and external, environmental factors. According to the latter approach, there are no *universally* bad or good coping processes. Further, "coping should not be equated with mastery over the environment; many sources of stress cannot be mastered, and effective coping under these conditions is that which allows the person to tolerate,

minimize, accept, or ignore what cannot be mastered" (Lazarus & Folkman, 1984, p. 140). Thus, definitions of what *effective* or *successful* coping may be is also variable.

Bryant-Davis (2005) suggested that although general theories of coping (e.g., Lazarus and Folkman's model, 1984) are generally applicable across various cultural frameworks, the impact of cultural context on coping can be critical. For example, she noted that African Americans are likely to use coping strategies involving spirituality, cultural pride, activism, and increased dependence on family and other social supports. Bryant-Davis (2005) further suggested that respecting and understanding such cultural variations in coping and integrating them into the therapeutic process can help make psychotherapy more relevant (and thus appealing) to this population as well as more effective in facilitating recovery.

Heppner et al. (2006) also emphasized the importance of considering cultural factors and noted that most of the research on coping and applied problem solving has used samples with White college students in the United States. They asserted that

> cross-national research would not only provide useful information about the generalizability of the problem solving and coping constructs but would also more importantly provide information about the universal or cultural specific nature of the link between problem solving and psychological health. (p. 108)

Accordingly, the researchers developed and validated a more collectivist construct of coping that integrates Asian values and philosophies (and is also consistent with some of Bryant-Davis's views above), including conceptualizations of control that may differ from Western models. In particular, the five-factor Collectivist Coping Styles Inventory (CCS) includes: (a) Acceptance, reframing, and striving; (b) Family support; (c)

Religion/spirituality; (d) Avoidance and detachment; and (e) Private emotional outlets. The scale was initially developed for use with college students in Taiwan, an East Asian country, to assess how they cope with stressful and/or traumatic events. Specifically, this measure differs from other existing ones in terms of its inclusion of questions related to various types of control. The researchers based the inventory on the work of Weisz, Rothbaum, and Blackburn (1984), who made a distinction between primary control, which involves taking control through active and direct influence on realities (a more Western concept), and secondary control, a more Eastern view which involves taking control by individuals "accommodating and reframing their existing realities, leaving them essentially unchanged but exerting control over their psychological impact" (Heppner et al., 2006, p. 108). The researchers included items on the CCS that reflected both primary and secondary control and suggested that the latter may be involved in coping for Asian populations. This research provides important information about cultural diversity in coping styles, but further research is needed on coping and psychological adjustment across diverse populations. For example, Heppner et al. (2006) asserted that the role of religion and spiritual activities in coping needs more in depth examination, as they found that approximately 40% of their participants used and found these activities helpful in resolving stressful events. In fact, significant research has recently been done in the area of religious and spiritual coping, leading to the development of measures such as the RCOPE (Pargament, Koenig, & Perez, 2000)

Coping assessment. Various techniques are used to assess the different aforementioned coping styles and strategies. In a review of the coping assessment literature, Skinner et al. (2003) noted that there are numerous self-report coping scales

that contain a highly variable number of coping categories as well as different methods for the development of the scales (e.g., bottom-up versus top-down approaches). The most commonly used measures and ones pertinent to humor are discussed next, followed by a critique of self-report measures of coping. In addition to self-report measures, structured interviews (Hardy, Power, & Jaedicke 1993; Weisz, McCabe, & Dennig, 1994) and behavioral observations (Curry & Russ, 1985; Manne, Bakeman, Jacobsen, & Redd, 1993) have also been used in research to assess coping, although none of these appear to have been done in the context of therapy or specifically assess humor.

The most commonly used self-report measure is the Ways of Coping Checklist (WCC; Folkman & Lazarus, 1980), later published as the Ways of Coping Questionnaire (WCQ; Folkman & Lazarus, 1985). The initial version included 68 items and asked respondents to indicate which specific coping thoughts or actions they may use in response to a serious current stressor. Although the measure originally made a distinction only between problem-focused and emotion-focused coping, the revised version (Aldwin & Revenson, 1987) now includes seven scales, including: Problem-focused, Wishful thinking, Growth, Minimize Threat, Seeks Social Support, Blamed Self, and a Mixed scale. According to this measure, making light of a situation (which could include use of humor), is classified as an avoidance strategy to minimize threat.

The commonly used Coping Orientation to Problems Experienced (COPE; Carver et al., 1989) includes 60 items that can be classified under the broad category of problem-focused or emotion-focused strategies and further distinguishes between engagement and disengagement responses. The COPE assesses and categorizes the use of humor as an emotion-focused engagement strategy and has been used in several studies assessing the

effectiveness of humor use as a coping strategy (e.g., Dorz, Novara, Sica, & Sanavio, 2003). In their review of 100 different coping assessment measures, Skinner et al. (2003) found humor to be included as a lower-order way of coping in five of them (Laux & Weber, 1991; McCrae, 1984; Patterson & McCubbin, 1987; Sidle, Moos, Adams, & Cady, 1969; Stanton, Kirk, Cameron, & Danoff-Burg, 2000). Most of these scales use items from pre-existing measures such as the WCQ and the COPE, in addition to newly developed items. The Coping Humor Scale (CHS; Martin & Lefcourt, 1983), which will be discussed in more detail in the next section on assessment of humor, also assesses the use of humor, specifically, as a coping strategy, but was not included in the Skinner et al. (2003) review.

Several limitations regarding the assessment of coping have been identified. First, Carver et al. (1989) suggested that many of the problems raised by existing measures of coping processes may have to do with the fact that most scales were empirically and not theoretically derived. As a result, the scales often are not related to theoretical principles and may not fully capture all coping processes. Accordingly, the researchers developed the theoretically-derived COPE measure (discussed above) to better understand different coping processes. However, Littleton et al. (2007) also identified a number of methodological issues with such measurements of coping, including possible confounds of coping strategies with distress (e.g., as in an item on the coping inventory COPE, which states: "I get upset and let my emotions out;" Carver et al., 1989) or coping process with coping outcome (e.g., as in the item: "I asked myself what was really important, and discovered that things weren't so bad after all" from the Coping Strategies Inventory; Tobin, Holroyd, Reynolds, & Wigal, 1989). Coping scales also often contain items that

assess multiple strategies (e.g., both approach and avoidance strategies). Similarly, de-Ridder (1997) questioned the validity of items on coping measures that are intended to represent different strategies. Littleton et al. (2007) also noted that there is a lack of research evaluating integrated and contextual coping models.

Stone, Greenberg, Kennedy-Moore, and Newman (1991) also identified potential problems with using self-report and situation-specific assessments of coping (e.g., the widely used WCQ; Folkman & Lazarus, 1985). In situation-specific coping questionnaires, participants are typically asked to describe and appraise a recent stressful event and then are asked to answer questions regarding how they handled the situation. The researchers suggested that these types of assessments may not be applicable to a variety of problems (e.g., interpersonal versus non-interpersonal). In addition, these questionnaires typically do not specify the time period of coping that should be considered in answering the questions, which could affect the interpretation of results. Lastly, the researchers stated that the response key used in the WCQ is rather unspecific, as it asks people to simply rate items on a 0-to 3- point scale for the "extent to which you used an item in coping with the situation you described" and does not specify whether that "extent" refers to frequency, duration, effort, or usefulness of that particular way of coping. As a result of these issues, Stone et al. (1991) asserted that it is unclear exactly what these coping questionnaires are measuring, which makes it difficult to draw any clear conclusions from them. de-Ridder (1997) also questioned the validity and reliability of coping data using a self-report method and suggested such data be compared with peer observations and/or laboratory research.

de-Ridder (1997) further noted a number of underlying conceptual flaws in coping assessment. For example, although some researchers (including Lazarus, 1998) have advocated for a process approach to coping, empirical studies on the influence of situational variability in coping are limited. Additionally, there continues to be a lack of consensus regarding the amount and characteristics of various dimensions of coping. For example, few coping assessment measures distinguish between strategies (e.g., distancing, self-control) and meta-strategies (e.g., avoidance or approach). Ultimately, de-Ridder (1997) suggested that many of the problems that exist in coping assessment are the result of a lack of clarity of the concept of coping itself, as demonstrated by the many assessment measures that address coping in different ways. Carver et al. (1989) and Skinner et al. (2003) have also identified similar problems related to a lack of clarity and general ambiguity in current coping assessment measures.

Humor as a coping tool. Humor is an example of a multifaceted coping tool or skill that can be helpful in appraising potentially stressful events. Thorson and Powell (1993) assert that "like individual outlook, use of humor as a coping response or as an adaptive mechanism is an element of personal sense of humor that demands admiration" (p. 15). Although researchers often fail to decisively categorize humor use as a coping method into one of the various aforementioned styles (e.g., emotion-focused versus problem-focused), humor is generally viewed as a coping tool that may facilitate coping and adjustment (Kuiper et al., 1993). As noted above, it has also been included in some coping assessment tools (e.g., COPE, CHS). The next section provides a more in depth discussion of humor, its potential to serve both adaptively (e.g., by increasing positive emotions) and maladaptively (e.g., by use of hostile or aggressive humor) as a coping

skill in the face of trauma, and the specific processes by which it may serve these functions.

Humor and Coping with Trauma

Humor is typically considered to play a major role in our everyday lives and is generally regarded as a potential coping tool for individuals who have experienced trauma. From a positive psychology perspective, humor can be regarded as an adaptive strength and an important aspect of holistic health (Seligman & Csikszentmihalyi, 2000; Ochberg, 1991). However, its complex nature makes it difficult to define and measure in psychological research (Ruch, 1998). Indeed, there is significant diversity within and limited systematic knowledge about humor (Martin, 2007). This section discusses various definitions and types of humor discussed in the psychology literature, the effects of humor (i.e., potential benefits and negative consequences), and methods and measures that have been developed to assess humor. The section concludes with a discussion of theories, research, and contextual uses of humor in coping with stressors and trauma.

Definitions of humor. According to the online Merriam-Webster dictionary, humor can be defined as "that quality which appeals to a sense of the ludicrous or absurdly incongruous;" "the mental faculty of discovering, expressing, or appreciating the ludicrous or absurdly incongruous"; or "something that is or is designed to be comical or amusing" ("Humor," 2011). From a psychological perspective, humor is an expansive and multifaceted concept that has been both operationally and theoretically defined in a variety of ways, often involving emotional, cognitive, psychophysiological, behavioral, and social aspects (Martin, 2001). According to Martin (2007), the fundamental components of humor include an "emotional response," a "social context," a "cognitive-

perceptual process," and "the vocal-behavioral expression of laughter" (p. 5). Similarly, Thorson and Powell (1993) identified the following to be elements of one's humor *repertoire*: recognition of oneself as a humorous person, recognition of others' humor, laughing, perspective, and coping humor (i.e. humor used as a way for coping with stress).

Accordingly, a variety of definitions have been proposed to account for these various aspects of humor. Some definitions focus on the behaviors of an individual; for example, Martin (1996) defined humor as "the frequency with which a person smiles, laughs, and otherwise displays mirth in a wide variety of life situations" (p. 253). Other definitions place more emphasis on the cognitive and social elements of humor; Peterson and Seligman (2004), for example, noted that humor can mean "the playful recognition, enjoyment, and/or creation of incongruity" (p. 584) or "the ability to make others smile or laugh" (p. 584). Thorson and Powell (1993) also reference cognitive and interpersonal aspects of humor in their definition, stating that humor is "a way of looking at the world…a style, a means of self-protection and getting along" (p. 13). In this definition, the authors also speak to humor's protective capacity. Peterson and Seligman (2004) expand on the concept of coping humor in the following definition: "a composed and cheerful view on adversity that allows one to see its light side and thereby sustain a good mood" (p. 584). Thus, when humor is used as a coping tool in the face of trauma, it may involve emotional (e.g., increasing positive emotions), cognitive (e.g., gaining perspective), social (e.g., fostering a sense of connectedness), and psychophysiological/behavioral (e.g., laughter, smiling, and accompanying benefits) elements. While there appears to be a number of definitions of humor, most involve a

cognitive dimension that has to do with an individual's ability to put things in a funny context, an emotional/affective dimension that includes motivation (e.g., benevolence versus malevolence), and a behavioral expression (Martin, 2007; Peterson & Seligman, 2004).

Not surprisingly, one challenge in humor research has to do with the various uses, multiple meanings of similar terms, and cultural variations in key terms and concepts (Peterson & Seligman, 2004). Even within the field of psychology, researchers in differences branches of the discipline may take a slightly different focus on the topic of humor. For example, cognitive psychologists may focus more on the mental processes involved in the appreciation of humor, while social psychologists define humor according to its interpersonal aspects and relevance to group dynamics (Martin, 2007). Although researchers from the various divisions of psychology have unique contributions to the study of humor, an integration of all such findings is necessary for a comprehensive understanding of the psychology of humor. Thus, this literature review includes research and perspectives from cognitive, social, biological, and developmental psychology, with a primary focus on clinical and applied psychology.

For the purposes of the current dissertation, humor is defined broadly to refer to the following:

> anything that people say or do that is perceived as funny and tends to make others laugh, as well as the mental processes that go into both creating and perceiving such an amusing stimulus, and also the affective response involved in the enjoyment of it. (Martin, 2007, p. 5)

Using this definition, the following subsections further discuss the trait-state debate on humor, humor types, forms, and functions.

The trait-state debate. Humor has been regarded as both a stable personality trait and a more variable state. According to the personality or trait approach, there are individual differences in the ways that people "perceive, interpret and enjoy humor stimuli or involuntarily funny objects and messages and in their ability or style of inventing, communicating, or channeling humorous messages" (Ruch, 1998, p. 11). The term *sense of humor* is often used by researchers to refer to these individual differences, personality trait, or family of related traits (Martin, 1998; Ruch, 1998). Most humor assessment scales have conceptualized humor as such an *invariant trait* with little consideration for "the waxing and waning of humor dispositions" (Peterson & Seligman, 2004, p. 595).

Conversely, a state perspective on humor is more related to situations, and humor is conceptualized as a relatively transient state (Martin & Lefcourt, 1983). Humor as a state thus involves a temporally and environmentally-influenced readiness to express humor or display humor-related behaviors (Ruch, Kohler, & van Thriel, 1996). For example, a person described as being in a *silly* or *playful* mood is considered to be in a humorous state that is time-limited and situationally-bound.

However, it appears that most psychology researchers acknowledge that humor is not solely a personality trait or purely situational, but rather develops from the combination of the two. For example, Martin, Puhlik-Doris, Larsen, Gray, and Weir (2003) asserted that humor is best conceptualized as a "multifaceted construct which is best viewed as a class of loosely related traits" (p. 49); according to their view, humor

can be viewed as a cognitive ability, an aesthetic response, a habitual behavior pattern, an emotion-related temperament trait, an attitude, a coping strategy or defense mechanism. Similarly, Ruch (1997) suggested a combined state-trait approach in which seriousness, cheerfulness, and moods are not solely traits based on temperament, but states that also vary across situations. This perspective generally views humor as a group of traits and skills that involve different components, functions, or forms of humor which may or may not be closely related to each other (Martin, 2007). For example, an individual who has an advanced ability to create humor also likely enjoys making others laugh, although he or she may not necessarily use humor to cope with daily stress.

Those who explore the influence of cultural factors in humor appreciation and expression also support a multidimensional perspective. Cardeña (2003), for example, viewed humor as a tool, rather than a trait, that is heavily influenced by environmental and cultural factors. In support of this theory, Cardeña found particular types of humor to develop and be used strategically among oppressed communities (e.g., use of humor by African Americans for survival and to deal with discrimination and exploitation). Consequently, Cardeña asserted that there cannot be one unitary definition of humor. Integrating all of these factors, Craik and Ware (1998) noted the following:

> An individual's humorous conduct consists of a life-long series of concrete individual actions; it is situated within the context and flow of everyday life settings; it takes place within sociocultural and physical environments which have their own humor-related properties, and it is constantly observed, noted, and discussed by members of individual's own social network. (p. 64).

In sum, researchers question whether humor is best thought of as *a situational construct* or a *trait phenomenon*. This debate is long-standing and relatively unresolved, although the field appears to be moving towards a more multidimensional conceptualization of humor (Lehman, Burke, Martin, Sultan, & Czech, 2001; Martin, 2007).

Types, dimensions, and functions of humor. Much like the various definitions of humor that have been proposed, there is comparable diversity among the types or dimensions of humor that exist and the functions that they serve. In this subsection, these numerous forms of humor are discussed from psychodynamic, developmental, and multidimensional perspectives and according to the various elements they contain and functions they serve. It concludes with a discussion of other common distinctions noted in the literature, including the content, appreciation, and production of humor.

Psychoanalytic theories of humor. Early on, Freud (1928, 1983) made a distinction between three different types of *mirthful* experiences, including jokes, the comic, and humor. According to psychoanalytic theory, "each of these involves a saving or economizing of psychic energy which, having become unnecessary for its normal purposes, is dissipated in the form of laughter" (Martin, 1998, p. 18). Essentially, Freud maintained that excess nervous energy can be released through laughter. According to Freud, jokes allow an individual to express unconscious aggressive and sexual impulses that would otherwise be repressed. The comic involves nonverbal sources of humor (e.g., circus clowns or slapstick comedy) and often results in childish behavior and delighted laughter. Humor, he asserted, occurs in situations in which individuals would ordinarily experience negative emotions (e.g., fear, sadness, anger), but the perception of

incongruous or amusing situational elements leads to an altered perception of the situation that allows them to avoid experiencing negative affect. The term humor is now used in a broader capacity to encompass all kinds of *laughter-evoking phenomena* (Martin, 2007, p. 35).

Freud (1916) also defined *gallows* humor as a form of humor in which an individual is capable of grasping the true meaning (and often dark aspects) of a problem, but manages it by using humor as a coping mechanism. More recently, Garrick (2005) described the use of gallows humor among police officers, paramedics, and other workers who face fatalities on a daily basis and use *dark* humor as a way to make it through their jobs. A great deal of literature and research also involves the use of such humor within different cultural groups, often as a means to cope with discrimination and/or oppression In fact, humor may be a *common language* that is essential to the way of life in societies exposed to social injustice by helping individuals in a minority group to gain perspective on their distress, preserve a sense of identity, and reaffirm their way of life (Martin, 2007). The use of gallows humor in coping with adversity will be discussed in more detail in the upcoming section titled "Humor and Coping with Stressors or Trauma."

Thus, early psychoanalytic theorists regarded humor "as a sign of maturity, an attitude akin to wisdom and presumably developing from experience with an imperfect world" (Peterson & Seligman, 2004, p. 594). Specifically, Allport (1961) considered humor to be a characteristic of a healthy or mature personality (e.g., an individual capable of laughing at while also accepting oneself) and stated that "the neurotic who learns to laugh at himself may be on the way to self-management, perhaps to cure" (p. 92). Similarly, Freud (1983) viewed humor as a sort of defense mechanism that allows

individuals to face a challenging or threatening situation without becoming overwhelmed by unpleasant emotion. Thus, he suggested that humor has a comforting and/or protective function. According to Vaillant (1992), humor allows an individual to overtly express feelings without personal discomfort or unpleasant effects on others. Like Freud, Vaillant (1977) stated that "humour can be regarded as the highest of these defensive processes. It scorns to withdraw the ideational content bearing the distressing affect from conscious attention as repression does, and thus surmounts the automatism of defense" (p. 233). Thus, according to psychoanalytic theory, these functions of humor are not necessarily considered to be consciously selected, but may rather be an automatic response similar to a defense mechanism (Freud, 1928; Vaillant, 1977).

Vaillant (1977), however, believed humor to be a mature defense and not a form of repression. In one study of college men in particular, use of mature defenses (including sense of humor) was found to be predictive of physical and mental health, job success, life satisfaction, and marital stability (Vaillant, 1992). More recently, Thorson and Powell (1993) have reinforced this idea, stating that "laughing as a problem (or laughing off a problem) is a kind of armor against the slings and arrows of outrageous fortune and is for that reason a potent coping mechanism" (p. 15). This view of humor as a healthy or mature defense mechanism is not confined to the psychoanalytic field, however, and continues to hold credibility within the field of psychology (Martin, 2007).

However, Freud also made a clear distinction between *humor*, which he regarded as benign and typically beneficial, and *wit*, which he referred to as more aggressive and potentially detrimental. Similarly, Vaillant (1977) regarded self-deprecating humor as an adaptive mechanism, but regarded humor at the expense of others or *lower* forms of

humor (e.g., wit with a hostile intent) as an aggressive form of humor akin to displacement. More recently, researchers and theorists such as Cann and Etzel (2008) have noted that "humor can be used to ridicule and disparage as well as to highlight the positive" (p. 158). Accordingly, the most significant distinction between types of humor continues to be with whether humor is productive/positive or negative/harmful. Psychoanalytic theories of humor also helped to attract awareness to certain aspects of humor, including the aggressive and sexual themes in many jokes, the emotional pleasure produced by humor use, and the generally powerful motivation to engage in humor (Martin, 2007). Overall, however, psychoanalytic theories of humor have received inconsistent and very limited empirical support, and a major limitation of Freud's theory is that he focused exclusively on intrapersonal dynamics and failed to consider the social and interpersonal context of humor. For example, more recent research suggests that expressing hostility or aggression, in any form, may be more harmful than it is cathartic (Atkins, Stoff, Osborne, & Brown, 1993). The next subsection discusses developmental theories of humor, some of which involve the contextual factors that Freud's lacked.

Developmental theories of humor. Humor appears to emerge in infancy (around four months of age) and continues to develop throughout the lifespan, well into adolescence and adulthood (McGhee, 1979). Similar to language, cognition, social functioning, and emotion, the development of humor involves a complex interaction between biology, genetics, and social/environmental factors (Martin, 2007). There are several models for the development of humor, most notably those of McGhee (1979) and Loeb and Wood (1986).

McGhee's (1979) four-stage model of humor development generally corresponds to the cognitive development of children. Accordingly, his model suggests that humor develops as cognitive abilities and various mental structures become more sophisticated and allow for the awareness and creation of *playful incongruities*. Thus, the forms of humor one might find humorous depends on the stage of development at which he or she is (McGhee, Ruch, & Hehl, 1990). This model includes the following stages: (a) incongruous actions towards objects, (b) incongruous labeling of objects and events, (c) conceptual incongruity, and (d) multiple meanings.

McGhee (1979) also noted that children often use humor and joke about topics that are associated with tensions, anxieties, and/or conflicts (e.g., toilet training). Noting this (and also often drawing upon Freud's view of humor as a socially acceptable form of expressing aggressive and/or sexual impulses), some researchers have suggested that humor is used as a form of emotional coping for children when faced with potentially threatening topics (Wolfenstein, 1954). That is, "by joking and laughing about issues that normally arouse feelings of anxiety and tension, children are able to feel less threatened and gain a sense of mastery" (Martin, 2007, p. 248).

Based on Erikson's model of psychosocial development, Loeb and Wood (1986) proposed a developmental model of humor in which humor is viewed as a way of managing the conflicts that may arise from different developmental crises (e.g., *trust versus mistrust*). Loeb and Wood further suggested that the more secure a person feels within each crisis, the more he or she is able to effectively use humor to deal with the potentially negative or anxiety-producing aspects of the crisis (e.g., joking about eternally remaining a bachelor when facing the *intimacy versus isolation* crisis). However,

empirical research on children's use of humor to cope is rather limited and a more comprehensive review of the literature on humor development, in general, is beyond the scope of this paper. Nevertheless, a significant amount of research exists on the role of humor in coping for adults (see "Humor and Coping with Stressors or Trauma"), and it appears that older individuals may actually be more able to use humor to cope with life stress than younger ones (Martin, 2007). Next, the various elements of humor that develop throughout one's life are presented.

Multidimensional model of humor and its functional dimensions. As previously discussed (see "Definitions of Humor"), humor involves a number of different elements. For example, Martin's (1998, 2007) multidimensional model includes cognitive, emotional, conative (motivational or functional), and expressive (e.g., laughter) aspects. That is, it involves the cognitive ability to perceive, create, and understand humor, the emotional tendencies to be in a cheerful, happy, and playful mood (which, together, Martin, 2007 labels *mirth*), and whether humor is used in a healthy/adaptive way or to disparage others (i.e., its motivational dimension or function). Using this framework, the tendency of individuals to respond to humor created by others would likely fall under the emotional dimension, and creating humor would fall under the cognitive dimension. This framework can also allow for various categorizations and different combinations of levels on these dimensions; "for example, the individual who has a dry, sardonic sense of wit might be high on the cognitive dimension and toward the 'unhealthy' pole of the motivational dimension, but low on the emotional dimension" (Martin, 1998, p. 59). This subsection specifically discusses the motivational or functional element of humor in more depth.

One of the most common distinctions between different forms of humor used in current humor research was proposed by Martin et al. (2003). Similar to Freud and other early psychoanalytic theorists, they recognized the relationship between healthy psychological functioning and particular uses or styles of humor, as well as the adverse effects of other forms of humor. Specifically, they made a distinction among the different *functions* of humor, including whether humor is used to "enhance the self" or to "enhance one's relationships with others" as well as whether the humor is fairly "benign and benevolent" or "potentially detrimental or injurious" (p. 52). Accordingly, the researchers categorized forms of humor as *affiliative, self-enhancing, aggressive*, and *self-defeating*.

Specifically, affiliative humor refers to the use of spontaneous humorous comments, jokes, and anecdotes for the purpose of amusing others, fostering relationship, and minimizing interpersonal tension (Martin et al., 2003). Self-enhancing humor is characterized by the use of humor to regulate emotions and as a coping mechanism for managing stress by maintaining a humorous and positive outlook on life (Martin et al., 2003). Aggressive humor has to do with the use of humor in order to demean or manipulate others (e.g., sarcasm, ridicule, or teasing). Lastly, Dozois, Martin, and Bieling (2009) described self-defeating humor as involving

> excessively self-disparaging humor, attempts to amuse others by doing or saying funny things at one's own expense as a means of ingratiating oneself or gaining approval, allowing oneself to be the 'butt' of others' humor, and using humor as a way of avoiding dealing constructively with one's problems. (p. 587)

However, is it also important to recognize that these distinctions are not necessarily exclusive, and certain forms of humor can involve several or all of these categories. For example, Cardeña (2003) studied a population of inhabitants in a neighborhood outside of Mexico City (named Tepito), a community long considered to be marginal, deviant, and mentally ill; "families living in the area have been strongly affected by economic insecurity, poverty, intense labour and insufficient or inadequate schooling" (p. 124). In this community, the value of sharing and intimacy appeared to help the families there to deal with their daily stress. The use of contextual humor, in particular, served an adaptive function by both enhancing group cohesion and used as a *weapon* against more privileged social groups. Such humor was found to be infused in language, artwork, and public writing. For example, Cardeña described how a particular expression, *Tentupito*! was developed from the contraction of *ten-tu-pito-in-Tepito,* a term that can mean *Tepito, take your whistle*. This code is cried from vendor to vendor to warn one another that the police are coming and that they should hide any illegal products that are being sold. However, the expression also suggests that the vendors (and not the police) are more skilled at using the *pito* (whistle) as a tool. Since *pito* can also be slang for penis, the expression *ten-tu-pito-in-Tepito* can also be translated to mean *take my penis*, a term that illustrates the use of humor to assert a sense of power over the police. Cardeña (2003) thus found that "Irony, absurdity and paradox, might be used to contest and transcend, both in thought and in action, the logic of dominant and dichotomous systems of thought where the attributes of pathology are embedded" (p. 115). Using the framework set forth by Martin et al. (2003), this form of humor involves affiliative, self-enhancing, and aggressive elements. Mental health professionals muse be

aware of the influences of culture, the negative power of stigmatization, and the capacity of humor to counter such oppression (Cardeña, 2003).

There may also be cultural expressions and forms of humor that may not be fully captured by Martin et al.'s (2003) model. For example, Garrett, Garrett, Torres-Rivera, Wilbur, and Roberts-Wilbur (2005) noted that "even something as simple as a joke or story can offer much more insight into a culture than may be apparent at first sight" (p. 195). Accordingly, the researchers explored the use of humor in Native people and found humor (through stories, witty remarks, anecdotes, songs, teasing) to be a powerful and long-standing source of healing. In fact, Garrett et al. regarded humor as "as integral as part of life as eating" (p. 196) to Native people. Laughter can help relieve stress and foster an environment of connectedness, harmony, and balance, which is important to the survival of the tribal community. Healing ceremonies, for example, often include the sharing or stories and/or meals and consistently results in spontaneous humor. Thus, humor appears to serve an *affiliative* function within this community. Indian humor can also dispel tension, manage conflict, or subtly communicate an important message and can often be seen in stories that are intended to both educate and entertain at the same time.

Garrett et al. (2005) described a specific, dry form of Native humor often referred to by Native people as *razzing* or *teasing*, which could potentially be viewed as aggressive and/or self-defeating according to Martin et al.'s (2003) model. Such humor involves exaggerations and observations of the obvious to depict the humorous aspects of things and can be used for dealing with social conflicts or "making light of serious

situations over which people have no control" (p. 200). Regarding a specific form of *razzing* called a *shame story*, Garrett el al. (2005) stated this:

> In this form, one person becomes the object (like Possum) of the razz in which a past incident involving that person is meticulously recounted to those present, who tend to join in with embellishments of their own. Each time the story is told, it can become more and more elaborate so that it may, indeed, barely resemble the original incident at all. Sometimes, the object of the razz will self-select him- or herself as the object of the razz and set him- or herself up for it intentionally. As an example, I (first author) remember a friend of mine, Joe Dudley (Yankton Lakota), saying in a Native peer-group situation, "Well, I just got finished with my 6-hour workout, and I'm not going to be able to go outside or they'll get me," implying that all the women would be after him. Another person responded, "Who, the flies?" whereupon the whole group burst out in laughter, joining in trying to contribute as many humorous remarks as they could. Another person said, "No, even the flies couldn't stand the smell of him right now! (p. 201)

Thus, Native Americans have long recognized the importance of not taking oneself too seriously and have come to use this coping method as a way of countering the negative effects of persecution, genocide, and exploitation. In this way, Native humor can serve "to reaffirm and enhance the sense of connectedness experienced in being part of family, clan, and tribe" (p. 202) and be effectively used to cope with misfortune.

Similarly, African Americans have used forms of humor such as self-deprecation as a "paradoxical defense that disarms the enemy by using the enemy's own pull to attack" (Cardeña, 2003, p. 122). Maples et al. (2001) also noted the friendly use of *put-*

downs or *snaps* as a humorous greeting among American-American culture. Although certain forms of humor (e.g., the Native American *shame story* or the use of *snaps* by African Americans) may be viewed as aggressive or hostile to those outside of the community, it is largely considered to be a healthy and adaptive form of humor within the community. Thus, existing models may not fully capture cultural forms of humor and the unique functions they sometimes serve. Accordingly, such models should perhaps be critically examined, revised, and redefined integrating the perspectives of diverse populations. Next, differences among the content of humor are discussed.

Content of humor. Although Martin's model can be helpful in better understanding sense of humor and its role in people's lives, it fails to account for the *content* of humor. The importance of differences in the content of humor that individuals appreciate the most have been conceptualized primarily from a psychoanalytic perspective and categorized as *sexual*, *aggressive*, or *nonsense* (Martin, 2007). Other researchers have identified content categories including *hostile*, *sexist*, or *sick*. Although there has been some research supporting the idea that enjoyment of different types of jokes or cartoons may be related to particular personality traits, a theoretically-based content approach to measuring humor has been criticized for a lack of empirical validation (Martin, 2007). Additionally, many humor appreciation tests using this approach were only used by individual researchers in one or two specific studies, making it difficult to compare the results across a more wide range of studies (Ruch, 1992). In one study, Ruch (1992) found sexual themes to be the only content area for which individuals responded in a consistent way to cartoons or jokes. The next subsection

discusses the various forms of humor (beyond content) that different individuals tend to appreciate.

Humor appreciation. Humor has also been analyzed according to different forms that individuals tend to *appreciate* most. Factor analysis has been used extensively to identify dimensions of humor that account for variance in humor appreciation (Martin, 2007). As opposed to theoretically-derived techniques, factor analysis uses empirically-derived factor dimensions which form the basis for theories. Researchers using this approach generally gathered a large and representative number of cartoons, jokes, and other humorous stimuli, and research participants were then asked to rate the stimuli for funniness. Using factor analysis, the researchers could then identify the underlying dimensions of appreciation of humor, categorize highly correlated ratings into different factors, and look closely at the shared characteristics of stimuli loading onto each factor. Using this approach, Ruch (1992) found three factors, in particular, that appear to be consistent across adolescent and adult populations (cultural/ethnic identification unknown) and humorous stimuli in accounting for much of the variance in humor appreciation. These factors include incongruity-resolution humor (i.e., jokes in which there is some incongruity which can be resolved by information offered somewhere in the joke or cartoon), nonsense humor (i.e., jokes or cartoons in which the incongruity in not necessarily resolved, but the incongruity itself is enjoyed for its bizarre or zany elements), and sexual humor (i.e., cartoons or jokes containing sexual content themes). The first two factors relate more to the structure of humorous stimuli, while the latter is related to content themes. However, as previously mentioned, humor appreciation only accounts for a small portion of the various forms of humor that individuals use or face in

their daily lives. Distinctions between reactive humor (including humor appreciation) and productive humor are discussed next.

Reactive versus productive humor. Another common distinction between forms of humor in the literature concerns *reactive* versus *productive* humor (Lehman et al., 2001). Reactive humor can be defined as the ability to recognize and respond to humorous stimuli in the environment (e.g., involving humor appreciation), whereas productive humor is an individual's ability to produce and use humor in situations that do not appear to be inherently humorous (Nezu, Nezu, & Blissett, 1988). Lehman et al. (2001) argued that much of the research done on the benefits of humor fails to make a distinction between these forms of humor, which leads to equivocal findings. However, even studies which did make such a distinction produced different results. For example, Martin and Lefcourt (1983) found productive humor (but not reactive humor) to be effective in moderating the negative effects of stress in a group of male and female college students; however, Lehman et al. (2001) were unable to replicate these findings in a similar sample. Instead, Lehman et al. found that participant priming on the creation and use of productive humor actually led to increased humor production (versus no priming). Their results were consistent with other research findings suggesting that production of humor can actually be facilitated for use during stressful situations (Lowis, 1997; Prerost, 1988).

Summary of types, dimensions, and functions of humor. In sum, difficulties in accurately capturing the multidimensional aspects of sense of humor and, in particular, differences between beneficial and maladaptive uses, pose significant challenges in humor research (Cann & Etzel, 2008). As Martin (2007) noted, humor "has taken on

many positive connotations over the years, while becoming increasingly vague and ill-defined" (p. 225). Accordingly, this dissertation will focus on a variety of elements and forms of humor that may serve different functions within the therapeutic context. Specifically, the following dimensions of (verbal) humor will serve as categories of humor for the purpose of the current study: (a) Reactive Humor, (b) Productive Humor, (c) Benign Humor, (d) Aggressive Humor, (e) Self- Deprecatory Humor, and (f) Dark Humor. Definitions and examples of each of these categories/codes are discussed in the next chapter.

Benefits of humor. As previously discussed, key historical figures in the field of psychology such as Freud, Maslow, Allport, and Valliant long ago recognized the positive effects of certain types of humor (Kuiper et al., 1993; Martin et al., 2003). In fact, humor has long been associated with holistic wellness, as it is purported to contribute to healthy physical and psychological functioning (Martin, 2007). This section will focus on general findings regarding humor and its effects on physical and psychological well-being, and humor specifically in coping with stress and trauma will be discussed in depth later in the paper.

The benefits of humor have been identified on neurophysiological, cognitive, emotional, and interactional levels (Cardeña, 2003; Kuiper et al., 1993). Physiological benefits of laughter include an increase in certain antibodies (e.g., immunoglobulin A) along with a decrease in stress hormones (Sultanoff, 1994). That is, laughter can actually strengthen the physical immune system. In addition, Sultanoff (1997) stated that humor can also help to "sustain the psychological immune system by altering how we feel,

think, and behave" (p. 1). Biochemically, humor has been shown to increase one's tolerance for pain (Sultanoff, 1997).

However, in a review of studies on the effects of humor and laughter on physical health, Martin (2001) argued that findings were largely inconsistent and the studies contained methodological problems. In fact, there have been few studies that found a significant correlation between humor as a personality trait and pain tolerance, immunity, or symptom distress. Lastly, Martin found minimal evidence confirming a stress-moderating effect of humor on variables of physical health or evidence of increased humor with greater longevity. Accordingly, he cautioned against drawing firm conclusions regarding the health benefits of laughter and humor. A more recent study also found the health benefits of laughter to be dependent on the *level* of laugher exhibited (e.g., moderate versus in excess) as well as culture (e.g., participants in Canada versus India; Hasan & Hasan, 2009). Additional research in this area is needed, as most empirical studies are over 10 years old.

Regarding psychological health, humor is considered to boost positive emotions and counteract negative moods and associated symptoms of anxiety and depression (Galloway & Cropley, 1999). Isen (2003) reviewed a number of studies that found individuals who experienced positive emotions (including humor or "mirth") to exhibit improved social behaviors and cognitive abilities, including: greater cognitive flexibility; more efficient memory organization and integration; improved planning, thinking, and judgment; and increased levels of social responsibility and associated helpful and/or generous behaviors. In another study, Frederickson and Levenson (1998) found that inducing positive emotions (including mirth) helps to reduce the physiological arousal

associated with negative emotions in female undergraduate students of diverse cultural backgrounds (37% Asian, 30% Hispanic, 25% Caucasian, 8% Black).

Humor and laughter also appears to be effective in relieving tension and anxiety (Abel, 2002; Kuiper & Martin, 1998). For example, Strack, Martin, and Stepper (1988) found that participants (male and female college students) rated cartoons as funnier and reported greater increases in positive mood when asked to hold a pen in their mouth in such a way that their facial muscles contracted to cause a smile.

Other studies have found forced laughter to significantly increase positive mood (Foley, Matheis, & Schaefer, 2002) and humor exposure (e.g., through a humorous film) to significantly reduce reported anxiety (Moran, 1996; Szabo, 2003). A recent study with university students and community members in Switzerland and the United States found *positive* forms of humor (i.e., benevolent and non-hostile) to be more effective than *negative* forms of humor (i.e., aggressive or mean-spirited) in increasing positive emotions and decreasing negative emotions (Samson & Gross, 2012). The researchers suggested that positive humor may involve reappraisals of a situation, whereas negative humor may serve to create emotional distance from negative events but does not necessarily allow an individual to create a more positive view of the events. However, experimental laboratory research only appears to support the short-term mood effects of humor and laughter; there is minimal evidence for more long-term psychological benefits (Martin, 2007).

Research has also generally supported the notion that humor can enhance interpersonal closeness and bonding, strengthen one's social supports, and reduce stress (De Koning & Weiss, 2002; Hampes, 2001; Martin, 2001). Humor is considered to be an

important mode of social communication and influence; for example, humorous exchanges may be motivated by a desire to impress others, gain attention, or convey messages in a more implicit manner (Martin, 2007; Mulkay, 1998). Empirical studies have some found support for the notion that individuals with a greater sense of humor have higher levels of self-esteem and a more positive self-concept (Abel, 2002; Ruch, 1998). However, these studies have used samples of predominantly Caucasian college students (male and female), and the results may not necessarily be applicable to a more diverse population. Martin et al. (2003) also noted that many self-report humor measures fail to show a strong relationship with mental health constructs and indicators of well-being. The researchers suggested that these weak findings may be partially due to the fact that many self-report measures of humor focus do not explicitly distinguish between potentially beneficial versus detrimental forms of humor and fail to adequately measure the various dimensions of sense of humor.

Negative effects of humor. Peterson and Seligman (2004) noted that humor appears to have such positive connotations that its *darker side* (e.g., ridicule or sarcasm) is often neglected. In support of this view, the researchers observed that the distinction between wit (a cognitive ability that is hurtful) and humor (which is benevolent and "comes from the heart;" p. 586) developed in the nineteenth century, was not reflected in research. However, researchers now acknowledge that there are both adaptive and maladaptive components of humor. Indeed, humor research would benefit from a more in depth examination of its potentially negative aspects (Martin et al., 2003; Peterson & Seligman, 2004).

Research has found some empirical support for the potential negative effects of humor. In their review of the literature, Kuiper, Grimshaw, Leite, and Kirsh (2004) noted that individuals who use humor negatively, whether directed towards the self or others, are more likely to experience pathological symptoms, interpersonal difficulties, and lower self-efficacy and self-esteem. To test their hypothesis regarding a multidimensional model of sense of humor (i.e., having both adaptive and maladaptive components), Kuiper et al. had participants (female and male undergraduates at a university in Canada, ethnicity/race not reported) complete measures related to eight different components of senses of humor as well as measures of psychological well-being (e.g., self-esteem, depression, anxiety). The researchers found that maladaptive components of humor that were focused on self (e.g., self-defeating or belabored humor) were associated with negative effects such as lower self-esteem, greater anxiety and depression, and poor judgments of self-competence. The researchers suggested that such individuals using self-disparaging humor in an attempt to gain the approval of others are likely hiding social and personal anxieties. In a similar population, Janes and Olson (2000) found self-ridicule to contribute to a decreased sense of personal worth and positive affect. However, as previously discussed (see "Multidimensional Model of Humor and its Functional Dimensions"), sociocultural issues may also influence whether these are, in fact, *maladaptive* forms of humor across diverse populations.

In sum, it appears "simply having a well-developed sense of humor is not enough to obtain the mental health benefits humor offers," as a well-developed by negative sense of humor can potentially interfere with psychological health and social relationships or interactions (McGhee, 2010, p. 43). Again, however, participants in many of the studies

discussed were limited to undergraduate college students of either unidentified ethnic/racial or Caucasian backgrounds. In some cases, culturally diverse participants were intentionally excluded because English was not their first language (e.g., Janes & Olsen, 2000). Thus, future studies should include culturally diverse participants in order to test the applicability of results.

Research on the potentially negative effects of humor has also been hindered by existing humor measures that do not fully capture the multidimensional nature of sense of humor (Cann & Etzel, 2008; Thorson & Powell, 1993). Distinctive types of humor such as avoidant, sarcastic, or disparaging that could potentially be harmful to one's psychological well-being, depending on culture, are often not taken into account in self-report measures (Martin et al., 2003). The next section reviews many of the ways in which humor has been assessed, including a variety of self-report measures that do and do not include negative types of humor.

Assessment of humor. Along with these different components of humor comes a range of instruments and methods aimed at measuring them. For example, different assessment methods have been used to measure comprehension of humor, ways in which humor is expressed, the ability to create humor, humor appreciation, the tendency to use humor to cope with adversity, and the degree to which individuals seek out sources they find humorous (Martin, 1998). Ruch (1998) noted that many such facets are assessed by single scales, making them idiosyncratic and difficult to compare on a larger scale. Other times, scales share the same label but actually measure different constructs, further limiting the applicability of related research findings. Overall, however, most scales attempt to measure a more global sense of humor using either cartoon/jokes tests or

questionnaires; the use of experimental approaches, peer evaluations, and behavioral observation methods in assessing humor have been very limited. Furthermore, most assessment instruments have been developed and used on adults, rather than children. Again, additional research on the assessment of humor is needed, as most studies are over 10 years old. The progression of humor assessment methods is now discussed.

Initial methods for assessing humor. Until about the 1980s, humor assessment methods focused primarily on humor appreciation and examined individual differences in the content of jokes or cartoons that individuals preferred and/or found funny by having individuals simply respond to presented material, usually using a rating scale (Martin, 1998; Peterson & Seligman, 2004; Ruch, 1998). Jokes or cartoon tests also measured humor creation by confronting an individual with an incomplete cartoon or joke and asking him or her to develop as many funny captions as possible. Researchers later evaluated the frequency and quality of the captions they wrote (Seligman & Peterson, 2004). For example, Martin and Lefcourt (1983) used behavioral assessments of participants' ability to produce humor by asking them to develop humorous captions to cartoons or develop a comedy routine with everyday objects. These captions and stories were then rated for number and overall humorousness of witty/funny comments.

In an early and ground-breaking study, Eysenck (1952) sought to assess markers of various features of humor (e.g., humor appreciation, humor creation) among a sample of 76 females. In a *Limerick Ranking test*, the participants were asked to rank twelve limericks in order of funniness; in the *Limerick Liking test*, they were asked to indicate how many of the limericks they found funny. Humor creation was measured by asking the participants to write captions for cartoons or find humorous endings for social

situations. Last, both a peer rating and a self-rating of sense of humor were given. Although previous research attempted to measure one domain of humor, this study suggested that sense of humor is not unidimensional. Seligman and Peterson (2004) noted that other early attempts to measure sense of humor or related states and traits also involved humor diaries, peer reports, behavioral observations, experimental tasks, interviews, and surveys, although these methods were significantly less common.

Self-report measures. Peterson and Seligman (2004) noted that significant progress in the assessment of humor has been made in the past couple decades. Researchers have broadened their focus to measure more comprehensive aspects of humor, including how humor is used as a coping mechanism. Self-report measures, which are based on what an individual states on a questionnaire about how he or she typically behaves, are now the most widely used method of measurement for humor. In addition, behavioral observations of laughing and smiling are sometimes used, although it is acknowledged that these may not necessarily be related to humor (e.g., individuals who laugh but do not actually get the joke, individuals who deliver a humorous anecdote with a deadpan expression; Thorson & Powell, 1993).

This subsection describes the most widely used self-report measures for assessing humor, including the Situational Humor Response Questionnaire (SHRQ; Martin & Lefcourt, 1984), Coping Humor Scale (CHS; Martin & Lefcourt, 1983), Sense of Humor Questionnaire (SHQ & SHQ-6; Svebak, 1996), Humor Styles Questionnaire (HSQ; Martin et al., 2003), and the Multidimensional Sense of Humor Scale (Thorson & Powell, 1993). The HSQ (Martin et al., 2003) and the CHS (Martin & Lefcourt, 1983) appear to

be the most comprehensive and widely used tools. Lastly, the use of a Q-Sort method as well as behavioral observations for assessing humor will also be discussed.

The SHRQ is a 21-item quantitative measure of sense of humor for university students that assesses how often an individual laughs and smiles as well as assesses productive humor (i.e., "the degree to which the individual tells funny stories and amuses people," Martin & Lefcourt, 1984, p. 154). Although many previous measures of sense of humor were simply tests of humor appreciation that compared the degree to which an individual enjoys one type of humor relative to another (Martin, 1996), the SHRQ was an effort to develop a measure that assessed the degree to which individuals find humor in their daily lives. Martin (1996) noted that "the fact that a subject indicates preference for one joke over another does not necessarily mean that he or she tends to perceive, create, and enjoy humor in the various experiences of daily life" (p. 253). Internal reliability analyses produced alpha coefficients ranging from .70 to .85 and retest reliability coefficients around .70. In terms of construct validity, the measure correlates .30 - .62 with frequency and duration of spontaneous laughter during an unstructured interview and .30 - .50 with peer ratings of individual's tendency to use coping humor and not to take themselves too seriously. However, the developer admitted that the SHRQ fails to sufficiently assess the wide range of cognitive, perceptual, and emotional processes in one's sense of humor (Martin, 1996). Thorson and Powell (1993) also asserted that "assessing likelihood to smile or laugh is not an especially good way to measure sense of humor as an overall construct" (p. 16). Lastly, the measure was developed on a college student population and it may not be as well suited for use with other populations.

Around the same time as the development of the SHRQ, Martin and Lefcourt (1983) also developed the CHS to measure an individual's use of humor specifically as a way of coping with stress. The scale is composed of seven items (all self-descriptive statements) such as, "I have often found that my problems have been greatly reduced when I tried to find something funny in them" (Martin, 1996, p. 257), that are rated on a Likert scale. Internal reliability analyses produced coefficients (Cronbach's alpha) ranging from .60 to .70 and retest reliability coefficients around .80. CHS scores correlated .50 with peer ratings of individual's tendency to use coping humor and not to take themselves too seriously. Although Thorson and Powell (1993) noted that this tool may only be useful in settings in which only one element of sense of humor needs to be assessed, research has found the CHS to be positively related to self-esteem, realistic cognitive appraisals, stability of self-concept, optimism, sense of coherence, and extraversion (Martin, 1996). Both the SHRQ and the CHS have been included in a number of studies on humor as a stress-moderating variable and as it relates to coping and well-being (e.g., Kirsh & Kuiper, 2003; Kuiper, McKenzie, & Belanger, 1995; Mauriello & McConatha, 2007).

An additional early measure is the SHQ & SHQ-6 (Svebak, 1996), which in its earliest version included 21 items intended to measure components of personality related to sense of humor along three subscales. The first, "the liking of humorous individuals and social interactions," (p. 348) refers to the degree to which individuals report liking and valuing humor in their lives. The second subscale measures "the cognitive sensitivity to humorous messages (meta-messages) in the process of communication," (p. 348) or the degree to which individuals report having the ability to recognize humorous stimuli in the

environment. The last subscale measures the degree to which individuals report expressing their emotions, including humor. Overall, the SHQ sought to measure individual differences in sense of humor as well as situational variables that could either facilitate or inhibit "mirthful laughter" (p. 351); that is, it conceptualized sense of humor and overt responses to humor (e.g., mirthful laughter) as a result of a combination of personal and situational variables. For the first two subscales, internal reliability analyses produced coefficients ranging from .60 to .75, with the third subscale typically yielding reliability coefficients below .20 (Martin & Lefcourt, 1983). As correlations between the first two subscales have been found to be below .50, these scales appear to measure different aspects of humor. Thorson and Powell (1993) noted that the SHQ lacks sufficient reliability and content validity and has been used in only a few studies since its development.

Martin et al. (2003) developed the HSQ to identify and differentiate the four aforementioned humor styles he set forth, including self-enhancing, affiliative, aggressive, and self-defeating. Such a distinction between potentially beneficial and harmful forms of humor was missing in almost all other measures. This self-report questionnaire is composed of 32 items which respondents rate on a Likert scale from one to seven. The measure was found to have an internal reliability (alpha coefficient) or .77 - .81 and test-retest reliability of .80 - .85. In addition, the HSQ correlated .22 - .33 with peer reports; correlations with other humor scales range from .47 - .75.

The researchers also found that these four styles of humor are differentially related to both psychosocial and emotional well-being. Self-enhancing humor is positively correlated with well-being variable such as optimism, positive moods, and self-

esteem, and negatively correlated with depression perceived stress, rumination, and anxiety. Affiliative humor is less strongly associated with emotional well-being, but is related to positive relationship variables such as social support, intimacy, secure attachment, relationship satisfaction, and is negatively related to interpersonal anxiety and loneliness. Self-defeating humor, however, is positively correlated with depression, anxiety, psychiatric symptoms, anxious attachment, and neuroticism, and negatively associated with optimism and self-esteem. Last, aggressive humor is less strongly associated with emotional well-being, but is negatively correlated with relationship variables such as interpersonal competence, relationship satisfaction, agreeableness, and positively correlated with neuroticism and hostility. These results suggest that greater use of self-enhancing humor and less use of self-defeating humor appears to be significant for emotional well-being, while greater use of affiliative humor and less aggressive humor is important for more healthy interpersonal relationships.

A more recent study with male and female undergraduate students at a large Southern university in the United States (79.2% identified as Caucasian, and the remaining 20.8% identified as American Indian, African American/Black, Asian/Asian-American, Hispanic/Latino, biracial, or other) found affiliative and self-enhancing humor styles to be negatively correlated with suicidal ideation, *perceived burdensomeness* (i.e., the belief that one is a burden to others), and *thwarted belongingness* (i.e., the absence of feeling connected to others and a perceived lack of reciprocal care) (Tucker, Wingate, O'Keefe, Slish, Judah, & Rhoades-Kerswill, 2013). Self-defeating humor styles were positively correlated with these factors.

In an effort to comprehensively assess the various elements of humor, Thorson and Powell (1993) also developed the Multidimensional Sense of Humor Scale. The scale consists of 29 items (alpha = .92) and asks respondents to either agree or disagree with statements on a Likert scale. The statements measure elements of humor such as "recognition of oneself as a humorous person" (e.g., "I'm confident that I can make other people laugh), humor recognition and appreciation (e.g., "I like a good joke"), behavioral responses to humor (e.g. laughter), humor as a form of perspective, and coping humor (e.g., "Uses of wit or humor help me master difficult situations").

Humorous behavior Q-sort deck. Taking a somewhat different approach to humor measurement than those looking at humor appreciation, self-report, or humor production, Craik and Ware (1998) developed the Humorous Behavior Q-sort Deck (HBQD) to be a comprehensive behavioral measure of five different domains of sense of humor that includes both positive and negative aspects of sense of humor (i.e., different *poles* within the domain). The researchers sought to identity the essential dimensions by which individuals classify various styles of humor in their daily lives and the patterns of related behaviors associated with those dimensions. The scales and descriptions of each are as follows: (a) socially warm humor (e.g., "uses good-natured jests to put others at ease" versus cold humor (e.g., "has a bland, deadpan sense of humor"; (b) reflective humor (e.g., "is more responsive to spontaneous humor than to jokes" versus boorish humor (e.g., "tells funny stories to impress people"); (c) competent humor (e.g., "displays a quick wit and ready repartee") versus inept humor (e.g., "spoils jokes by laughing before finishing them"); (d) earthy humor (e.g., "tells bawdy stores with gusto, regardless of audience") versus repressed humor (e.g., "does not respond to a range of humor due to

moralistic constraints"); and (e) benign humor (e.g., "finds intellectual word play enjoyable") versus mean-spirited humor (e.g., "jokes about others' imperfections"). The instrument consists of 100 statements that subjects are to "sort" into 9 different categories (e.g., very uncharacteristic, neutral, very characteristic). However, Martin (2007) noted that this validity and reliability of the instrument has not been explored and initial efforts to replicate the factor structure have been unsuccessful (e.g., Kirsh & Kuiper, 2003).

Behavioral observations. Because of the biases inherent in self-report methods, Martin (2001) argued that humor research should seek to utilize behavioral observation methods, particularly since they can offer important insight into the behaviors that people actually perform related to humor. One dimension captured by behavioral observations concerns genuine or fake humor. The presence or absence of a genuine Duchenne smile (which is characterized by raised mouth corners and cheeks along and wrinkles along the outer edges of the eyes) can be used to establish whether a person's display of laughter or smiling is genuine and an expression of spontaneous amusement or if is being used to fake enjoyment (Martin, 2007). Research suggests that perceivers of smiles are actually sensitive to smile type and respond differently to genuine versus feigned smiles (Johnston, Miles, & Macrae, 2010). Ruch, Kohler, and Van Thriel (1996) noted that observations of laughter and genuine Duchenne smiles can be interpreted as displays of mirth, and thus could be helpful in the assessment of humor.

A second dimension concerns intensity of humor expressions. Martin (2007) stated that the emotional expression of humor often involves laughter and smiling, ranging from a faint smile to a broad grin and from chuckling and laughter to louder guffaws. These behavioral expressions are also commonly accompanied by "a reddening

of the face as well as bodily movements such as throwing back the head, rocking the body, slapping one's thighs, and so on" (p. 9).

Third, the relationship between smiling and laughter has been examined. Smiling is almost universally recognized as a signal or communication of a positive emotional experience (Johnston et al., 2010) and is sometimes accompanied by the expressive behavior of laughter (Martin, 2007). Although some people consider laughter to be a form of exaggerated smiling, the literature suggests that smiles are more likely to demonstrate feelings of satisfaction, whereas laughter results from surprise or a perceived incongruity (Nilsen & Nilsen, 2000). However, an expression of humor or amusement is not always accompanied by the expressive behavior of laughter or smiling; conversely, laughter and smiling can also be caused by non-humorous stimuli (e.g., tickling, embarrassment, modeling; Attardo, 1994; Ambadar, Cohn, & Reed, 2009). Others researchers have noted that laughter can often serve solely as a function of social communication and that the majority of laughter in everyday situations results from comments that appear to be mundane or otherwise not humorous to observers (Provine, 2000). Thus, these expressive behaviors do not always signal a positive emotional state, although a genuine Duchenne smile appears to be more closely associated with a genuine expression of amusement and humor than laughter (Nilsen & Nilsen, 2000).

Behavioral observation methods have been employed, most often by personality psychologists, to measure these expressions of humor. Instruments such as the facial EMG (Ruch & Ekman, 2001) and the Facial Action Coding System (FACS; Ekman & Friesen, 1976, 1978) contain codes relevant to humor and have been used to help differentiate between genuine and feigned smiles/laughter. The EMFACS (Ekman &

Friesen, 1978), a version of the FACS, is an objective measure used to code emotional facial actions while viewing human interactions (live or videotaped). This tool is based on a number of laboratory studies, experiments, and results from cross-cultural research and uses a computer-based dictionary of emotions. The Riverside Behavioral Q-Sort (RBQ; Funder, Furr, & Colvin, 2000) also contains codes related to interpersonal behaviors involving humor, including *initiates humor*, *acts playful*, *laughs frequently*, and *smiles frequently*, although it does not appear to differentiate between Duchenne and non-Duchenne smiles.

Although less common than the nearly-ubiquitous self-report measures, these behavioral observation tools have been used in research related to coping and stress and trauma. Bonnano and Kelter (1997), for example, used the EMFACS in their longitudinal study on coping with bereavement with humor. Male and female widows who had lost their spouse were interviewed about their deceased partner. The interview was videotaped and later coded for genuine (Duchenne) and non-Duchenne smiles and laughter. The researchers found that increased Duchenne smiles and laughter during the interview significantly predicted fewer grief symptoms.

Accordingly, in addition to a qualitative analysis of verbal expressions of humor from clients who have experienced TPI, the current study will also seek to observe and examine relevant nonverbal behaviors and laughter.

Humor and coping with stressors or trauma. Of particular relevance to this study is humor's role in relieving tension and coping with adversity and life stress (Lefcourt, 2001; Lefcourt & Martin, 1986; Martin, 2007). Many individuals appear to be able to manage stressful situations and events that pose a threat to their wellbeing by

turning them into something that can be laughed at. In fact, the DSM-IV-TR has identified humor as a highly adaptive defense mechanism or coping style that can facilitate optimal adaptation in the management of stressors (American Psychiatric Association, 2000).

However, as previously discussed, use of humor as a coping tool varies greatly and does not appear to represent any one specific coping style; this is not necessarily surprising given its multidimensional and vague nature. In fact, researchers have conceptualized humor as representing various different coping styles. For example, Mauriello and McConatha (2007) suggested that high humor individuals are better able to distance themselves from stress-related problems and use various coping mechanisms, including active problem-solving. Humor as a problem-solving strategy could, for example, involve the use of (non-hostile) humor to diminish interpersonal conflicts and tension (Kuiper et al., 1993; Martin, 1989). Conversely, Lefcourt and Thomas (1998) regarded humor as an emotion-focused coping response in which negative or unsettling emotions are avoided by resorting to laughter.

McGraw, Warren, Williams, and Leonard (2012) also found *psychological distance* to be a significant factor in determining whether a *violation*, which they defined as "a stimulus that is physically or psychologically threatening" (p. 1216), is perceived by someone to be humorous. In a series of studies using participants recruited through Amazon's Mechanical Turk (66% male, 34% female; mean age of 30.2 years; 30% born in the United States; no additional cultural/demographic information reported), the researchers found that severe, aversive violations or *tragedies* were perceived to be more humorous when experienced from a distance (socially, temporally, hypothetically, or

spatially), whereas less aversive, mild violations or *mishaps* were perceived to be more humorous when they were psychologically close. The researchers suggested that psychological distance can reduce threat and influence the construal of a situation. For example, in one of their studies, participants were instructed to read an exchange on a simulated social networking site in which a woman finds out that she mistakenly donated either $2,000 (tragedy) or $50 (mishap) via a text message. In order to manipulate (social) distance, the participants were asked to rate the extent to which they found the posting funny/humorous (on a 6-point scale) when imagining the woman once as "a close friend" and another time as "someone you don't know." The participants judged a stranger unknowingly donating a larger amount of money as more humorous than a friend doing the same thing, but judged the $50 mistake as more humorous when it involved a friend rather than a stranger. Thus, perceptions of humor may be dependent on both psychological distance from a potentially humorous stimulus and the extent to which it appears aversive.

Another way that humor has been described as an emotion-focused coping strategy is due to the use of laughter to release built up emotions and its role in reversing negative emotions (e.g., arousing mirth rather than anger, amusement instead of sadness) when facing adversity (Lefcourt et al., 1995; Martin, 1989; McGhee, 2010). Martin (2007) also proposed that humor serves as a coping tool by facilitating social support, venting feelings of aggression, providing a distraction, or denying reality. Furthermore, the physiological benefits of humor and associated laughter are also likely involved in the use of humor as a coping tool (Martin, 1989).

Thus, the stress-buffering effects of humor may actually be related to a variety of functions, including cognitive appraisals, emotion-focused coping techniques, problem-solving strategies, psychological distance, and physiological mechanisms. Accordingly, this section discusses the various components and potential mechanisms by which humor may be helpful as a coping tool for managing stressors or trauma. However, it is important to note that the following aspects of humor are often interrelated; in fact, McGhee (2010) noted that "several different mechanisms - in addition to the generation of positive emotion - combine to account for humor's amazing ability to help cope with life stress" (p. 6). First, research methods and findings regarding the effectiveness of humor in coping with stress are reviewed. Next, theories, research, and contextual examples regarding the different mechanisms by which humor can help in the coping process are discussed.

Research on humor, stress, and coping. In addition to the general benefits discussed earlier, humor can also help individuals to cope with difficulties they encounter (Jacobs, 2009). Abel (2002), for example, found sense of humor to be associated with a more positive appraisal of negative life situations. Kirsh and Kuiper (2003) also found evidence to suggest that individuals with a well developed sense of humor cope in a proactive manner, have a more positive view of self, are more satisfied with their interpersonal relationships, and have a greater sense of mastery over their environment. Key studies in this area, utilizing varying methodologies, are discussed below.

In experimental investigations of humor as a stress moderator, participants are typically either asked to create humor during mildly stressful experiences (Lefcourt & Martin, 1986; Newman & Stone, 1996), or are exposed to humorous stimuli (e.g., a

comedy; Cann, Holt, & Calhoun, 1999; Yovetich, Dale, & Hudak, 1990) before facing a stressful event (e.g., watching a distressing film; being told that they would receive painful electric shocks). For example, in one study, college students were asked to create a humorous story, a non-humorous *intellectual* story, or no story at all while watching a silent film with painful and gory content (Lefcourt & Martin, 1986). Female participants who were asked to create the humorous narrative reported less negative emotions and expressed less distress (as measured by behavioral indicators) than the other two groups while viewing the film. Male participants, however, demonstrated minimal distress in all conditions, which suggests that the film may not have been very stressful for them. Although experiments of this kind can identify the direction of causality between humor use and stress responses, Martin (2007) noted that the *stressful situations* used in these studies appear to be relatively more artificial, milder, and/or shorter than stressors occurring in the real world, thus limiting the generalizability of the results. Additionally, results of experimental studies have not always been replicated.

Humor's coping-related functions have also been assessed by examining correlations between self-report humor measures and questionnaires assessing cognitive appraisals or coping styles that individuals tend to use when faced with stressful situations (Martin, 2007). For example, Kuiper et al. (1993) examined the relationships between sense of humor and cognitive appraisals and reappraisals of a potentially stressful event (as reported on a questionnaire regarding expected performance, personal importance of the test, and appraisals of challenge and threat). Kuiper et al. noted that the specific mechanisms/processes by which a sense of humor may mitigate the effects of stress are poorly understood and suggested that cognitive appraisals might be involved.

Using an academic examination as the *potentially stressful event*, the researchers found that female college students with a higher sense of humor appraised the exam in more positive and challenging terms, rather than focusing on the negative threat aspects. Thus, humor may help individuals cope with stressors by helping them to appraise the situation in most adaptive ways.

Kuiper et al. (1995) replicated these findings in a later study (also with female college students) and found self-report measures of humor to be positively related to the appraisal of an experimental task as a positive challenge. Overall, these correlational studies suggest that high-humor individuals often deal with stress by using various self-protective coping strategies and defenses (e.g., cognitive reframing, emotional management) and tend to hold flexible, more realistic, and less threatening appraisals of potentially stressful events (Martin, 2007). However, correlational studies do not allow for a determination of causality. For example, it is unclear whether humor itself directly contributes to the development of certain coping styles and/or cognitive appraisals or whether humor is a byproduct of those coping styles. It may also be the case that another personality trait accounts for both humor and the related coping style. This method also fails to account for the processes or contextual elements involved in the use of humor in coping (Martin, 2007). As these processes and contextual factors can be important in humor use and coping, they will be explored in detail in the next subsection.

Other studies investigating humor as a potential stress moderator have involved the use of questionnaires as well as other methods to assess specific elements of humor, the frequency of stressful events/situations, and current levels of a particular outcome (e.g., anxiety, depression). Hierarchical multiple regression analyses are then used to

determine whether the strength of the relationship between the occurrence of stressors and the given outcome vary as a function of level of humor. For example, using this methodology, Martin and Lefcourt (1983) found low humor individuals to have a higher correlation between negative life events and mood disturbance as compared with high humor individuals (i.e., humor moderated the relation between stressors and moods). Other research has been consistent with these findings and has found humorous individuals to display significantly lower levels of perceived stress and depression (Deaner & McConatha, 1993; Overholser, 1992).

Despite the well-established notion that a sense of humor is an important aspect of healthy psychological functioning, numerous studies fail to consistently demonstrate it empirically (Cann & Etzel, 2008; Kirsch & Kuiper, 2003). For example a study done by Porterfield (1987) failed to replicate results demonstrating the stress-moderating effect of coping humor. In general, Martin (2007) noted that research findings make it very difficult to identify the specific uses of humor that are helpful for coping with particular stressors, and outcomes that result from these uses. Next, theories regarding the mechanisms by which humor may help in coping with stress are discussed.

Theories of humor, stress and coping with trauma. The following subsections present various theories regarding the potential stress-moderating effects of humor. Specifically, the following are discussed as they relate to theories of stress, adversity, and trauma: cognitive-perceptual elements of humor, superiority theories and aggressive forms of humor, arousal theories, liberation and social enhancement aspects of humor, and the broaden-and-build theory concerning positive emotions. Contextual examples and

research findings that support or fail to support such theories are also discussed as they relate to these different perspectives.

Cognitive-perceptual components of humor. According to a cognitive perspective, humor buffers the effects of mood on daily life stressors as a result of a cognitive mechanism which allows an individual to appraise or perceive ominous situations in a less threatening manner (Kuiper et al., 1993; Martin, 1996; Peterson & Seligman, 2004). Theories of this nature tend to focus specifically on cognitions and less on the emotional and social components of humor (Martin, 2007). A number of researchers have applied Lazarus and Folkman's (1984) cognitive theory of stress, in particular, to explain the apparent benefits of humor in managing stressors (Abel, 2002; Kuiper & Martin, 1998). Dixon (1980), for example, suggested that the cognitive shift involved in humor allows an individual to distance him or herself from the stressful or traumatic event and allows the individual to view the situation from varying perspectives. This concept of a cognitive-perceptual mechanism of humor can be put under the general category of *incongruity theories*, which assert that:

> humor involves the bringing together of two normally disparate ideas, concepts, or situations in a surprising or unexpected manner…in other words, that which is originally perceived in one (often serious) sense is suddenly viewed from a totally different (usually implausible or ludicrous) perspective, and the original expectation bursts like a bubble, resulting in a pleasurable experience accompanied by laughter. (Martin, 1998, p. 25)

Similarly, Martin, Kuiper, Olinger, and Dance (1993) explained the positive effects in terms of the cognitive reappraisals of an event that humor allows, which can

minimize the perception of threat to self and thus decrease or moderate the resulting stress and related consequences. It is important to note that such reappraisals do not distort the actual stressful or traumatic events, but rather may allow an individual to perceive the problem more accurately by gaining distance and objectivity. This, in turn, may allow for more effective coping; "being better able to find the humor or invoke a humorous perspective when evaluation a potential threat counteracts the negative affect with positive affect and allows for more positive reframing of the threat and better coping" (Cann & Etzel, 2008, p. 157). Thus, humor allows an individual to gain a healthy distance from a given problem, which in turn allows one to look at problems with perspective (May, 1953). De Koning and Weiss (2002) noted that this ability to shift cognitive perspective might be related to intelligence and, in fact, research has found a significant relationship between humor cognition and intelligence (Feingold & Mazzella, 1991) and humor appreciation and creative problem solving (Köhler & Ruch, 1996).

Many researchers recognize that these cognitive shifts also involve an affective dimension by which the impact of negative emotions is often reduced. Lefcourt et al. (1995) and May (1953), for example, have suggested that the distance provided by altering one's perspective in a challenging situation also separates one from associated negative emotions. Furthermore, although this may appear to be part of a defensive process (e.g., repression, withdrawal), these and other theorists have asserted that humor allows one to remain aware of distressing situations while experiencing diminished emotional reactions. For example, Lefcourt et al. (1995) have asserted that "humor, as a mature defense, allows us to remain in difficult situations while minimizing the anger and/or depression that those circumstances might otherwise have engendered (p. 387).

The cognitive-perceptual elements of humor are, in fact, regarded as one of the most significant aspect of humor use in effectively dealing with hardships and contributing to coping and resilience (Martin, 2007).

The *reversal theory* of humor, proposed by Apter (1982), combines incongruity theories with social elements of humor in coping with adversity. Specifically, it emphasizes humor as a form of play resulting from humorous incongruities, which allows for a humorous outlook on stressful situations and the experience of such events as challenging rather than threatening. According to this perspective, "humor involves cognitive perceptions in a playful state of mind…in which incongruities are enjoyed for their own sake in the context of our interactions with other people" (Martin, 2007, p. 82). Although it is not as well known as others, Martin (2007) suggested that this theory provides a helpful framework that integrates the strengths of many other theories and can also account for a number of research findings.

A number of studies have sought to test incongruity theories and these cognitive-perceptual aspects of humor. For example, studies done by Kuiper et al. (1993) and Kuiper et al. (1995), both described earlier (see "Research on humor, stress, and coping), found humor to help facilitate coping and adjustment through cognitive appraisals of potentially stressful events. In reviewing these and related studies, Lefcourt and Thomas (1998) suggested that a humorous perspective is associated with a coping style that tends to lessen the effects of a stressful event, particularly after enough time has passed for one to change perspective. That is, these cognitive shifts may not be immediate, but rather take place over time. In a recent study, Mauriello and McConatha (2007) found self-enhancing humor, in particular (as reported on the HSQ), to be negatively related to

perceptions of stress. Overall, research generally suggests that when faced with stress, an "intervening variable" (e.g., cognitive appraisals of stressful events) can significantly affect the amount of stress and accompanying mood disturbance or anxiety levels an individual experiences.

Similarly, Wanzer, Booth-Butterfield, and Booth-Butterfield (2005) used Lazarus and Folkman's (1984) transactional theory of emotion and coping to explain the relationship between nurse's self-reported humor orientation (HO), coping, and job satisfaction. The researchers stated that highly humor-oriented individuals do not "wait to be entertained or to have their stress relieved by others…They initiate the process [and] proactively communicate humor in such a way that it helps ease interactions, increases satisfaction, and is productive in accomplishing communication goals" (p. 123). After having 142 nurses complete measures of HO, coping, efficacy, job satisfaction, as well as answer open-ended questions about their use of humor to relieve job tensions, Wanzer et al. (2005) found that the HO led to increased coping efficiency, which then affected job satisfaction. That is, higher HO was related to higher ratings of humor effectiveness, greater self-perceived coping efficacy, and higher emotional expressivity. Health care crises that nurses typically face can produce negative emotional responses, but those with higher HO appear to be likely to use humor as a way of coping and relieving stress. Their appraisals of job satisfaction is moderated by this response and results in higher job satisfaction.

Superiority theory and aggressive humor. De Koning and Weiss (2002) described *superiority* theories as those that assume that individuals use humor to feel better than others (e.g., by making jokes at the expense of others). Martin (2007) noted that theories

that view humor as a form of aggression have been described as *superiority*, *aggression*, *disparagement*, or *degradation* theories. Such theories date back to Aristotle, who thought that laughter arose primarily in response to ugliness or weakness (Martin, 1998). Thus, according to these theories, humor is the result of a sense of superiority gained from the disparagement of another person or of an individual's own past mistakes. For example, Turnbull (1972) described an African mountain tribe who, during a period of starvation and general misery, laughed at the suffering of an individual - a situation that would otherwise arouse empathy.

Some advocates of this approach base their theories on an evolutionary perspective in which aggression and competitiveness have been historically adaptive in helping humans to survive and thrive (Gruner, 1997). According to this theory, humor and laughter long ago became associated with the homeostatic and victorious release of physical and psychological energy or tension that built up during a physical battle. In fact, Gruner suggested that even those jokes that appear to be harmless contain an element of aggression, although he also argued that humor is still just a form of play not intended to harm others. Similarly, Bergen (1998) described such humor as a more socially acceptable way of expressing hostility or aggression. Martin (2007) noted that the research that has been done in this area suggest that humor can be simultaneously aggressive and pro-social. For example, as discussed earlier (see "Functions of humor"), seemingly *aggressive* forms of humor may also serve an adaptive function in diverse populations (e.g., Native Americans).

These aggressive aspects of humor can play a role in coping with adversity by helping individuals to minimize feelings of distress (often related to a threat to well-

being) that others may cause them and, in some cases, derive a certain amount of pleasure at their expense (Martin, 2007). Furthermore, such humor can be directed at specific individuals or broader social groups or structures that are perceived as a threat or irritation. While the benefits of such humor in enhancing feelings of personal well-being are often apparent in the short-term, Martin (2007) noted that its use can lead to the alienation of others and negative consequences in interpersonal relationships in the long term.

This view of humor is similar to Freud's conceptualization of "wit" discussed earlier. Accordingly, much of the research on the study of hostility and aggression in humor has been done within the psychoanalytic field. A basic hypothesis of such research involves a positive correlation between the amount of aggression or hostility in a given joke and the extent to which it is perceived to be funny. Some research has supported this prediction (McCauley, Woods, Coolidge, & Kulick, 1983; Singer, Gollob, & Levine, 1967), although others have found mild or moderately hostile cartoons to be rated as the most funny (Bryant, 1977; Zillmann, Bryant, & Cantor, 1974).

Critics such as Ruch (1998), however, argued that it was not the aggressive content but rather the structural aspects of the humor (e.g., incongruity-resolution) that influenced funniness ratings. According to the "misattribution theory" of disparagement humor, humor does not result solely from disparaging or humiliating another (typically disliked) person, but rather when there is also some aspect of a given situation that is unusual or unexpected that one's amusement can be (mis)attributed to (Martin, 2007). Zillman and Bryant (1980) provide the following example:

> If…we witness our neighbor backing his brand-new car into his mailbox, and a negative disposition predisposes us to enjoy this and makes us burst out in laughter, we can always tell ourselves that we laughed because of the peculiar way in which the mailbox was deformed, the peculiar expression on the neighbor's face, the peculiar squeaking noise of the impact, or a dozen other peculiar things. (p. 150)

Zillman and Bryant have found some empirical support for this theory, which essentially suggests that an individual can misattribute their amusement to humorous or odd elements (e.g., clever wordplay, incongruity) while taking a certain amount of pleasure in disparaging another person toward whom they feel negatively.

Thus, superiority and disparagement theories are generally consistent with and are considered to be a more contemporary version of Freud's view of humor as a way of coping with daily stress (Martin, 2007). Freud conceptualized humor as a defense mechanism that serves as protection from negative emotions that arise in response to stressful, traumatic, or adverse life events; from a superiority perspective, humor can be viewed as a method of refusing to be defeated by situations and people that pose a threat to one's well-being. According to McDougall (1922), disparagement humor can be viewed as an "emotional anesthesia" that helps people from becoming too emotionally involved in others' distress and perhaps feelings an amount of sympathy that could be overwhelming. From this perspective, making a joke about someone else's problems can help to separate someone from their emotional pain.

Extreme views of all humor as containing an element of aggression have generally been rejected, although most researchers and clinicians recognize that humor

can sometimes involve hostility (Martin, 2007). Cognitive incongruity theories (described above) have largely replaced superiority theories.

Liberation and social enhancement theories of humor. Humor has also been viewed as a form of liberation and self-enhancement (Martin, 1998; Mindess, 1971). This theoretical approach takes a more positive perspective and notes that humor can enhance an individual's self-esteem and sense of competence, often in the face of external threats. As Martin (1998) describes it:

> Rather than focusing on the hostile, sarcastic, and derisive aspects of superiority humor, this approach emphasizes the positive feelings of well-being and efficacy, and the sense of liberation and freedom from threat experienced when one is able to poke fun at other people or situations that would normally be viewed as threatening or constrictive. (p. 41)

Mindess (1971) explains that society and associated prescribed social roles require individuals to deny or suppress impulses and desires in order to conform to their surroundings and the expectations of others. Although adaptive for survival, these constraints can lead to negative feelings such as self-alienation and a loss of authenticity. Humor allows individuals to cope with this paradox and can provide a sense of freedom, mastery, and self-respect. That is, "a sense of humor allows for more adaptive and authentic functioning because it helps the individual to avoid becoming overwhelmed by the constraints and demands of life" (Martin, 1998, p. 41). Gallows humor (described earlier) is a good example of a form of humor that can be liberating and help one to gain a sense of perceived mastery over life's limitations and difficulties. However, this view is

not necessarily inconsistent with the tenets of superiority theory; humor can be liberating while simultaneously containing aggressive elements.

There is much anecdotal evidence for the benefits of humor in dealing with extreme and often uncontrollable stressful situations. African Americans, for example, have a history of using humor for psychological survival when facing slavery and dealing with prejudice, discrimination, and exploitation (Levine, 1977; Vereen, Butler, Williams, Darg, & Downing, 2006). Cardeña (2003) noted that particular humorous strategies within the African American population include jokes that "showed the inconsistencies of Whites' doctrines, the use of surrogate minorities (Jews, Polish and Irish) to expose the arbitrariness of dominant systems of values, and street displays whereby their views were re-contextualised in lived experience" (p. 122). In this way, African Americans have used humor to question the legitimacy of the beliefs and principles that served to oppress them. During slavery, humor was also used as a form of comic relief from the cruel reality African Americans faced and was "empowering in the midst of misery" (Vereen et al., 2006, p. 11). However, the authors also note that some African-Americans who have experiences harsh life struggles may not necessarily find things in their life to be funny (Maples et al., 2001). That is, significant variation may exist in the use of humor as a means of coping with stress or trauma; Peterson and Seligman (2004) noted that "whereas adversity may create or encourage humor, enduring or intense trauma may cause someone to lose interest in humor altogether." (p. 594).

Humor and laughter was also used to cope with the horrors faced by Jews during the Holocaust. In his book *Laughter in Hell: The Use of Humor During the Holocaust*, Lipman (1991) explored the use of humor by Jews who suffered in concentration camps

during the Holocaust and suggested that survivors relied heavily on sustained efforts to keep hope and humor alive during such horrific times. Humor allowed the survivors to release pent-up rage, anxiety, and depression. In fact, he asserted that "wit produced on the precipice of hell was not frivolity, but psychological necessity" (p. 8). Similarly, Frankl (2006), a psychiatrist and survivor of Nazi death camps (including Auschwitz) reflected upon his time in the death camps in his memoir and discussed how he and the other victims coped with the horrors they witnessed and endured. He identified humor as one such coping tool and noted that it is not possible to avoid suffering, but that one can choose how to cope with it. Thus, the use of humor during hardship can help not only to provoke positive emotions and hope, but also to maintain group solidarity and maintain a sense of self-respect and mastery in incredibly difficult and seemingly hopeless situations.

Humor use has also been explored in less extreme, yet still seemingly uncontrollable, stressful situations. For example, Rieger (2004) explored the use of humor within families of children with disabilities and found that families of children with disabilities used humor to release negative emotions and relieve stress, to learn, to problem-solve, to connect, to communicate, to express freedom, to foster optimistic thinking, to discover a "playful spirit in oneself" (p. 194), and to prevent others from taking put-downs of others to heart. Humor and laughter has also been shown to help people with a wide range of medical and health-related difficulties (e.g., cancer) to make light of their problems, maintain a sense of optimism, and emotionally distance oneself from thoughts about their own death (Martin, 2007). Using a qualitative approach, Vergeer and MacRae (1993) also found the use of therapeutic humor in health care

settings to be a potentially liberative and multi-faceted phenomenon. In addition to contributing to a sense of freedom, humor use in these situations also appear to involve cognitive-perceptual and "playful" elements.

Humor as a form of liberation also often involves shared experiences with others. As previously discussed (see "Benefits of humor"), shared humor can help to establish and maintain close relationships as well as enhance feelings of attraction and commitment in a mutually beneficial manner (Martin, 2007). In fact, Gervais and Wilson (2005) suggested that as humans developed higher cognitive and linguistic abilities and more complex forms of social organization, humor, too, evolved to aid in interpersonal communication and social influence. Specifically when facing adversity, humor can help to enhance group identification and cohesion. Laughter, the behavioral expression of humor, also contains social elements and can be understood as a form of communication that is meant to attract attention, express emotional information, and stimulate those same emotions in others; thus, laughter is inherently a social behavior that serves to coordinate social interactions and facilitate bonding by synchronizing the emotions of group members (Martin, 2007).

Arousal and physiological theories of humor and laughter. Another theory that seeks to explain how humor may help to manage stressors involves arousal or relief, whereby laughter and humor is viewed as a means for releasing built up energy and tension (De Koning & Weiss, 2002). According to arousal theories, humor can be described as a complex mind-body interaction between cognitions and emotions that is largely affected by the brain and nervous system (Martin, 2007). Accordingly, Martin (2007) asserted that "the greater the emotional arousal and tension engendered by the

stressful events, the greater the pleasure and the louder the laughter when joking about them afterwards" (p. 20). Similar to some of the Freudian and psychoanalytic theories of humor discussed earlier, arousal theories focus on the role of physiological and psychological arousal in the humor process. These theories were initially strongly influenced by the erroneous belief that *nervous energy* builds up in the body and needs to be released through movement, such as the muscular action of laughter (Spencer, 1860). Other arousal theories have conceptualized humor generally as a way of releasing negative energy without consequences (Martin, 2007). Berlyne (1972) based his theory on the established principle of an inverted-U relationship between arousal and subjective pleasure, whereby a moderate level of arousal is associated with the most pleasure, and too much or too little arousal with less pleasure. However, this theory has received little supportive evidence. In fact, Martin (2007) asserted that the relationship between arousal and enjoyment is linear and that humor should be conceptualized as an emotional response, in and of itself, that is associated with an increase in arousal expressed through laughter.

Consistent with a focus on the physiological aspects of humor, McGhee (2010) asserted that the muscle relaxation and associated release of psychological tension that caused by humor and laughter is one of the most important mechanisms by which humor allows a person to effectively cope with stress. In addition to muscle relaxation, the author noted that humor and laughter can also help to counteract the increased heart rate, blood pressure, circulation of stress hormones, and general cardiovascular reactivity that results from stress. Thus, McGhee asserted, humor can actually help with emotional regulation and provide a person with a sense of control, even if he or she cannot directly

control the specific situation that is causing the distress. Since stress levels can rise quickly when one feels powerless, this idea of control is, he argued, important to effectively managing stress.

Arousal theories were most prominent during the 1960s and 1970s and focused on the emotional aspect of humor (Martin, 2007). In a well-known study, Schachter and Wheeler (1962) manipulated the level of sympathetic nervous system activation in participants (male college students of unspecified ethnic/racial background) by injecting them with epinephrine, chlorpromazine, or a saline placebo solution, and then asked them to view a comedy film. Participants who had been injected with epinephrine, which is associated with an increase in arousal, exhibited greater amusement (demonstrated by smiling and laughter) and rated the film as funnier than participants in the placebo group. However, those individuals in the placebo group demonstrated more amusement and provided higher ratings of funniness than the participants in the chlorpromazine group (who were experimentally manipulated to experience decreased sympathetic arousal). This study thus found higher levels of arousal to result in increased expressions of humor and perceptions of amusement in response to a humorous stimulus, even when such arousal was drug-induced. Overall, this and similar studies provided support for the idea that humor is both and emotional and a cognitive phenomenon. Furthermore, regardless of the source, increases in autonomic arousal are associated with humor and can result in an increase in the emotional enjoyment of humor (Martin, 2007).

There are a number of real-life examples, particularly within medical and health-related contexts, that appear provide support for arousal theories of humor. As far back as 1976, Norman Cousins (in “Anatomy of an Illness”) described how he recovered from a

progressive and painful rheumatoid disease using laughter. Cousins claimed that spending 10 minutes a day laughing heartily helped to significantly relieve his pain, reduce inflammation, and allow him to sleep. While primarily anecdotal, Cousins' work is now widely cited as evidence for the health benefits of laughter. More recent research has found initial, though inconsistent, support for the effectiveness of humor coping on reducing pain in both children and adults (Ditlow, 1993; Martin, 2001; Goodenough & Ford, 2005). van Wormer and Boes (1997) also discussed the use of humor by staff working in the Emergency Room of a hospital and asserted that humor can help to relieve the tension associated with an otherwise extremely challenging job; even in such a dangerous environment, humor "renders the unendurable endurable" (p. 88). Movies such as Patch Adams (Shadyac, 1998), which is based on the life story of medical doctor Hunter "Patch" Adams, depict health professionals who use humor to treat patients and endure an otherwise very difficult job.

The benefits of laughter in coping with stress, however, are not necessarily the sole result of physiological processes. In a study by Keltner and Bonanno (1997), laughter was found to facilitate an adaptive response to stress, presumably as a result of the psychological distance (i.e., dissociation) from the distress and the social relations it fostered. In their study of bereaved volunteer participants, laughter displayed during a structured grief interview was found to be associated with adaptive responses to stress (i.e., reduced anger, increased experiences of positive emotions, increased psychological distance from the distress, improved social bonds with friends and family). Thus, the manifestation of humor or mirth can help individuals when faced with trauma or stressors, but again, there is not necessarily only one mechanism through which humor

can be helpful in coping with stress and/or trauma. Today, research continues to explore the physiological processes of humor by studying the brain, the autonomic nervous system, and the immune and endocrine systems (Martin, 2007).

Broaden-and-build theory and mirth. From a positive psychological perspective, humor may serve an adaptive purpose by fostering positive emotions that, in turn, can help an individual cope more effectively in the long term. According to Frederickson's (2001) broaden-and-build theory, positive emotions can be significant in coping with negative emotional circumstances by fostering personal resources (physical, intellectual, social, and psychological); "the capacity to experience positive emotions may be a fundamental human strength central to the study of human flourishing" (p. 218). The theory posits that both positive and negative emotions can serve complementary and adaptive functions with different physiological effects. Negative emotions narrow an individual's *thought-action repertoire* by impelling one to act in a particular way (i.e., fight or flight). In dangerous situations, this can lead to immediate, critical, and beneficial action; such a function could provide a selective advantage and therefore could plausibly have developed evolutionarily.

Conversely, positive emotions often occur in non-life-threatening situations and thus may not necessitate the quick and decisive action attributed to a narrowing of a thought-action repertoire. Rather, positive emotions (e.g., joy, interest, pride, love) may actually broaden an individual's momentary thought-action repertoire and widen the range of thoughts and actions that arise. For example, joy can broaden by creating a desire to play and be creative. Similarly, interest may broaden by creating an urge to take in new information, explore, and expand the self. In this way, positive emotions can

broaden habitual ways of thinking or acting, build enduring personal resources, foster psychological resilience, and enhance emotional well-being. In addition, according to this theory, positive emotions can also undo enduring negative emotions. Furthermore, while positive emotions may be fleeting, their effects can be long-lasting, as a result of their capacity to foster individual growth and social connection (Frederickson, 2001).

Specifically as it relates to humor, Martin (2007) similarly asserted that the positive emotions associated with humor can actually replace feelings of depression, anger, or anxiety that may otherwise arise, which allows a person to be more creative in their problem-solving strategies and generally think more flexibly and broadly. Furthermore, these positive emotions created by humor may also serve to physiologically counter the negative effects of stress-related emotions and help in emotional regulation.

Likewise, Tugade and Frederickson (2004) asserted that positive emotions can be elicited through the use of humor, which in turn can help individuals to cope effectively with stressors or traumatic experiences by eliciting positive emotions that can foster personal resources and resilience. However, humor, specifically, does not appear to have been studied in this context.

The broaden-and-build theory in general, however, has received empirical support from studies showing that experimentally induced positive emotions suppress the autonomic arousal produced by negative emotions (Frederickson, Mancuso, Branigan, & Tugade, 2000). It has also been demonstrated that positive emotions can broaden one's thought-action repertoire by producing creative and flexible patterns of thought and actions (Kahn & Isen, 1993). When there is no immediate threat, an individual is free to engage in exploratory behaviors that can enhance coping resources; "to the extent that

positive emotions are useful in counteracting negative emotional experiences and broadening thoughts and actions, they should also be useful in building important personal resources, such as resilience to negative circumstances" (Tugade & Frederickson, 2007, p 318). Thus, the experience of positive emotions over time may build up coping resources that can buffer against negative life experiences. According to Frederickson (2001), positive emotions do not only serve as markers of flourishing, but also produce it. As a result, the theory argues that positive emotions should be cultivated to help achieve psychological growth and optimal well-being over time.

As it relates to stress and trauma, research has found the experiences of positive emotion during periods of chronic stress and adversity to function a resource that can help manage stress and perceived threat (Folkman & Moskowitz, 2000). Fredrickson, Mancuso, Branigan, and Tugade (2000) further sought to test the *undoing* effect of positive emotions on a population of college students. The results suggested that feelings of amusement or contentment led to a more rapid cardiovascular recover from stress and anxiety than other neutral and sad feelings.

To investigate the potential costs and benefits of expressing positive emotions (outside of the context of psychotherapy) among survivors of childhood sexual abuse, Bonnano et al. (2007) conducted a study with females (average age of 18; 53% Caucasian, 47% Black or Hispanic) both with and without histories of childhood sexual abuse. Overall, the researchers found the display of genuine positive emotions (as demonstrated by Duchenne smiling and laughter) while discussing a personally distressing event to be associated with better long-term (two years later) social adjustment. However, survivors of childhood sexual abuse who expressed positive

emotion in the context of describing their history of abuse had poorer long-term social adjustment, whereas the survivors of childhood sexual abuse who expressed positive emotion while describing a distressing event not involving abuse had improved social adjustment. Although the researchers acknowledged that positive emotions can promote adjustment after the experience of an aversive event, they suggest that these benefits may be context-specific. In attempting to explain their results, Bonanno et al. (2007) suggested that individuals listening to an abuse survivor express positive emotions while discussing the abuse may view the survivor as unpredictable (i.e., as violating social norms) and may feel uncomfortable with the positive emotional display, thus evoking judgmental responses that could eventually leave the survivor at risk for social rejection and isolation. The researchers proposed that this could be true for laughter during disclosure of any events involving social stigma or potential misattributions of fault, although neither proposed explanation was tested in this study. Overall, these results suggest that the expression of positive emotions and laughter for female survivors of childhood sexual abuse may be generally adaptive, but not necessarily in the context of disclosing an experience of past abuse.

Although these findings provide some support for the theory, the potential for positive emotions to *undo* the enduring negative feelings associated with traumatic experiences remains unclear. Furthermore, other than in an unpublished dissertation (Dicterow, 2011), this theory does not appear to have been applied in the context of psychotherapy (e.g., therapeutic interventions focused specifically on positive emotions).

Several other criticisms of Frederickson's (2001) theory have been noted. For example, Lyubomirsky (2000) asserted that the definition of *broadening* and related

terms lack clarity, thus limiting its effectiveness as a theoretical tool. Additionally, Lyubomirsky questioned whether negative emotions could actually lead to broadened thinking, positive emotions to narrowed thinking, and neutral emotions to an increase in personal resources. For example, Rathunde (2000) noted that creativity, a characteristic that Frederickson relates to broadening, tends to broaden and narrow a person's thinking behavior according to the specific task that is presenting. Additionally, the specific mechanism by which positive emotions such as humor can help in coping still remains relatively unclear. For example, do resilient individuals actively seek to engage positive emotions to cope or are those positive emotions activated immediately in the context of coping? (Tugade & Frederickson, 2007). Future research is needed to more fully understand this complex process.

Another limitation concerns the populations in which the theory has been examined. Empirical studies on the tenets of the broaden-and-build theory have generally been done on male and female undergraduate students. Although some studies have included ethnic minorities, more cross-cultural studies on the regulation and effects of positive emotion are needed (Tugade & Frederickson, 2007). Similar to variances in the conceptualization and use of humor among ethnic minorities, cultural beliefs and values regarding emotional expression may influence the role of positive emotions in coping. For example, Gross, Richards, and John (2006) found Asians and Asian Americans to more easily suppress expressions of positive emotions than European Americans. Future research should seek to better understand the role of positive emotions in coping in diverse populations, including the use of humor.

Summary of humor and coping with stressors or trauma. Humor is a complex phenomenon involving emotional, cognitive, physiological, and interpersonal elements. Empirical research on the effectiveness of humor in coping with stress, in particular, is mixed and has a number of limitations, one of which is the failure of researchers to differentiate between the different uses of humor. Although the literature generally supports the view that humor can help with emotional regulation and in coping with stress, its effectiveness depends on contextual factors and the specific forms of humor that are used. For example, aggressive or gallows humor may be helpful and perhaps even necessary for survival in uncontrollable and extreme adverse situations (e.g., concentration camps), but may be maladaptive and lead to feelings of alienation and pessimism in a stressful work environment (Martin, 2007). Similarly, forms of humor that may be considered aggressive and thus maladaptive in certain cultural groups may serve an adaptive function in another.

Thus, it is far too simplistic to assume that humor is solely a beneficial method of coping with stress and trauma. Additionally, no single theory can fully explain the mechanisms by which humor can potentially help in coping with stressors or trauma; rather, it appears that cognitive, emotional, social, physiological and liberational elements of humor together may account for humor's healing potential. The next section discusses the use of humor in psychotherapy in general and specifically with individuals who have experienced trauma.

Humor and Psychotherapy with Diverse Populations

Humor is often avoided, ignored, or underappreciated in the therapeutic process and viewed as a "taboo" topic in therapy by therapists and clients (Ortiz, 2000).

Particularly since therapy is considered to be a serious matter, therapists are typically reluctant to recognize humor as a potentially important component of therapy. In response to this issue, Middleton (2007) noted that "therapy is not so serious that laughter need be excluded from it" (p. 148). In fact, a number of books and journal articles have been written on the role of humor in counseling and psychotherapy in the past 20 years (Franzini, 2001; Fry & Salameh, 1987, 1993; Saper, 1987). Additionally, the Association for Applied and Therapeutic Humor is an international organization of professionals (including therapists) that incorporate humor into their daily lives and seeks to provide evidence-based information regarding the application of humor in various settings. However, empirical evidence demonstrating the benefits of humor use in therapy is lacking. This section discusses the literature on therapeutic humor in general, including with diverse populations, and the need for and development of therapeutic humor training programs. Lastly, the use of humor in psychotherapy, specifically with trauma survivors, is discussed.

Humor and psychotherapy. The use of humor in psychotherapy has been approached from various perspectives. Accordingly, this section discusses both therapist and client use of humor in the therapeutic process. Cultural considerations and potential caveats of humor use in psychotherapy are also discussed.

Therapeutic humor. Therapeutic humor can be described as including "both the intentional and spontaneous use of humor techniques by therapists and other health care professionals, which can lead to improvements in the self-understanding and behavior of clients or patients" (Franzini, 2001, p. 171). Humor techniques or interventions can include formal structured jokes, unintended puns, extreme exaggerations, or humorous

observations of current events. In Falk and Hill's (1992) study on counselor interventions eliciting client laughter in brief therapy, categories of therapist humor were based on the work of Killinger (1987) and Salameh (1987) and included of the following: (a) Revelation of truth, (b) Exaggeration/simplification, (c) Surprise, (d) Disparagement, (e) Release of tension, (f) Incongruity, (g) Word play, (h) Nonverbal humor, and (i) Anecdote.

Theoretically, therapeutic humor can lead to a shared positive emotional experience between therapist and client, build rapport, reveal a client's illogical or irrational thinking, and/or promote a client's self-efficacy for dealing with difficult situations (Franzini, 2001). Vereen et al. (2006) further noted that the use of humor in therapy can help to relax rigid defenses, challenge or break stereotypes, and allow clients to express hostility and frustration. Referencing the cognitive-perceptual aspects of humor, Vereen et al. also noted that integrating humor into the therapeutic process can provide an alternative method by which clients can develop new perspectives and new problem solving or coping skills.

The general idea that humor use in therapy can be beneficial is supported across a wide range of theoretical orientations, including cognitive-behavioral (Ellis & Abrams, 1994; Linehan, 1993; Ventis, Higbee, & Murdock, 2001), gestalt (Jacobs, 2009), existential (Maples et al., 2001), Adlerian (Rutherford, 1994), and psychoanalytic (Freud, 1916). Accordingly, specific humor-based forms of therapy have been developed, including Provocative Therapy (a cognitive-behavior approach developed by Farrelly and Brandsma, 1974) and Natural High Therapy (a humanistic approach developed by O'Connell, 1981).

Humor is also used as a specific therapeutic technique in different forms of therapy. For example, humor is considered to be an integral technique of Rational-Emotive Behavior Therapy (REBT), a form of cognitive and behavioral therapy (Ellis & Abrams, 1994). REBT is based on the idea that irrational thinking can lead to difficulties and dysfunction; for instance, the irrational thought "because I would get better results if I performed well at school or at my job, I at all times must do so!" (p. 189) may lead an individual to push him or herself to the point of exhaustion and to feel unable of handling failure. That is, resorting to absolute "musts" or "shoulds" is thought to contribute to disturbances. Individuals who engage in this irrational thinking often lose their sense of humor. Accordingly, Ellis and Abrams (1994) suggested that individuals may surrender these maladaptive and irrational beliefs if encouraged to look at them humorously, ironically, or to recognize their absurdity. As a result, humor has long been incorporated into REBT as an emotive method of coping and a way to combat irrational thinking and their associated disturbances. More specifically, Ellis and Abrams discussed the use of humor in REBT in the treatment of terminally ill patients.

Similarly, Marsha Linehan's (1993) Dialectical Behavior Therapy (DBT) involves therapist use of "irreverent communication" or humorous statements that offer clients a different perspective from which to view their problems. In this way, a client who feels "stuck" may be able to view his or her behaviors and problems from a more enlightened perspective, rather than a place of shame. For example, a client who responds to anxiety-provoking topics in a dysfunctional way may respond positively to a humorous statement like "do you want help with your real problems or not?" (p. 396). While these

strategies or interventions must be used carefully, they have the potential to aid in client progress and functioning.

Specific humor-based interventions have been proposed for the treatment of people with a variety of psychological problems, including depression (Richman, 2003), obsessive-compulsive disorders (Surkis, 1993), phobias (Ventis et al., 2001), borderline personality disorder (e.g., DBT; Linehan, 1993), and stress-related disorders (Prerost, 1988). For example, Ventis et al. (2001) applied humor to systematic desensitization for fear reduction. Systematic desensitization is a behavioral intervention that typically involves having clients imagine themselves facing fearful situations or stimuli while practicing muscle or other relaxation exercises. The repeated pairing of the feared stimulus with the relaxation response allows an individual to habituate and gradually decreases the feelings of anxiety evoked by the stimulus. Ventis et al. used humorous hierarchy scenes (i.e., humorous images paired with feared situations) without relaxation with participants who were highly fearful of spiders. The participants were also assigned homework in which they were asked to come up with humorous images and statements related to spiders. Ventis et al. found the use of humor desensitization to be as effective as traditional desensitization, and more effective than no treatment in reducing associated fear. The researchers suggested that the positive emotional experience created by humor changed the cognitive appraisals of individuals in the humor treatment group and provided them with an increased sense of self-efficacy and a willingness to interact with the spiders. Moreover, Ventis et al. asserted that these effects may not be limited only to systematic desensitization therapy.

Frankl (1960) also developed a humor technique known as "paradoxical intention" that has been used in the treatment of people with anxiety, depression, obsessive-compulsive symptoms, and agoraphobia. Using this technique, clients are asked to intentionally increase the frequency and severity of their symptoms, which is expected to help them detach from and recognize the absurdity of their symptoms/behaviors and allow them to laugh. This intervention has been found to be effective in the treatment of students with test anxiety, although surprisingly it is more effective with individuals with low scores on sense of humor measures (Newton & Dowd, 1990). Paradoxical interventions have also been found to lead to improvements in the treatment of psychotic symptoms (Witztum, Briskin, & Lerner, 1999).

Humor has also been identified as a potentially helpful technique or tool in working with diverse populations. For example, Vereen et al. (2006) asserted that, when used appropriately, the use of humor as a clinical tool can empower African American clients by helping them to gain a sense of control over their experience, providing an opportunity to view their problems from a different perspective, and fostering the ability to make healthy choices that will improve their life situations.

Client humor. Although much of the literature on humor in psychotherapy involves the use of therapeutic humor, the importance of evaluation and/or facilitation of client use of humor has also been discussed. In fact, research suggests that clients are much more likely to initiate use of humor in therapy than therapists (Marci, Moran, & Orr, 2004). However, there are only a few studies that have attempted to examine the frequency of client humor in therapy (Gregson, 2009; Killinger, 1987), including three

that looked specifically at humorous client responses to group art therapy interventions (Kopytin & Lebedev, 2013; Silver 2002, 2007).

One topic area concerns the characterization or functions of client humor as adaptive or maladaptive. Marcus (1990), for example, acknowledged that humor use can be adaptive, but cautioned that client humor can be used as an inappropriate defense against emotion. In that case, Marcus noted that it should be addressed in therapy using an established psychotherapy framework, such as his structured approach (based on the model of Beck, 1995) to cognitive therapy. He argued the humor can be used to temper anxiety (e.g., nervous laughter), to mask hostility (e.g., through the use of aggressive humor such as hostile sarcasm or teasing), or to attenuate feelings of depression (e.g., "laughing through one's tears," p. 427). The author proposed that such humor be dealt with in psychotherapy by identifying the source of amusement, associated feelings, and automatic thoughts, developing a rational response, and recognizing the outcome of both the initial humor use and the rational response.

Similarly, Dozois, Martin, and Bieling (2009) suggested that a client's humor can be a useful target for intervention specifically in the treatment of depression. In their study, they found that cognitive vulnerabilities to depression may be mediated by adaptive or maladaptive forms of coping humor. Therefore, the researchers suggested that therapy should involve the therapist and client collaboratively evaluating the function that humor serves and its positive or negative consequences. If clients come to recognize negative consequences of their use of humor, therapy could focus on developing more adaptive humor styles and analyzing the impact of different humor styles on mood.

Mauriello and McConatha (2007) noted that the facilitation of self-enhancing humor, in particular, through psychotherapy, could buffer clients against depressive symptoms.

Also, Vereen et al. (2006) wrote that humor can be an effective coping mechanism for African American college students dealing with the feelings of isolation and tension that can often arise from being at a predominantly White institution of higher education. In fact, in the history of African American culture, "laughter has served as a means of coping with a challenged past, present, and future" (p. 11). As African American college students are often reluctant to seek counseling (Constantine, Lewis, Conner, & Sanchez, 2000), when they do it is critical that they feel respected and understood. In particular, it is important that therapists recognize African American college students' unique experiences and needs (Vereen et al., 2006).

Thus, although the notion that humor may represent a form of defensiveness is generally accepted by a range of theoretical approaches, not all researchers and clinicians believe such a defense to be inappropriate or maladaptive (see "Humor and Coping with Stressors or Trauma: Cognitive-Perceptual Components of Humor"). Still, determining when how best to respond or facilitate client use of humor in psychotherapy remains unclear.

Clinical considerations and caveats. Not surprisingly, there are many caveats and potential risks for the use of humor in therapy. Since humor is a multidimensional construct, individual differences in sense of humor should be taken into account when considering using humor (Kirsh & Kuiper, 2003). Specifically, some authors note that that eliciting and evaluating client use of humor can be helpful in working with culturally diverse clients. For instance, Garrett et al. (2005) recommended that therapists encourage

Native clients to share humorous stories or anecdotes to help the therapist to better understand the client's identity and current difficulties. This process could also offer insight into the client's social supports and potential resources that could be utilized in the course of therapy (Garrett et al., 2005). Similarly, Vereen et al. (2006) identified humor as a potentially helpful clinical tool for connecting with African American college students. When used appropriately, humor can be used to build rapport and foster a strong therapeutic alliance (Garrett et al., 2005).

Yet, like most therapeutic tools, humor has the potential to be destructive; indeed, "any clinical technique or medication that is powerful enough to be helpful is powerful enough to do harm" (Franzini, 2001, p. 183). For example, humor that "humiliates, deprecates, or undermines the self-esteem, intelligence, or well-being of the client" (Saper, 1987, p. 366) is inappropriate for therapy and potentially detrimental in and outside of the therapy room. In particular, Salemeh (1987) noted that even well-intentioned humor interventions could be misinterpreted and thus could potentially be harmful for patients who exhibit depression or symptoms of paranoia. Regarding therapists' reaction to client humor, Franzini (2001) encouraged therapists to be sensitive to humor attempts by clients, as they can represent importation transition points in the therapeutic process. For example, he stated that a therapist who genuinely laughs with a client may fare better than one that laughs falsely or attempts to respond with a more humorous story.

Culturally specific styles of communications and humor meanings could also potentially hinder the therapeutic process. Particularly when therapists are not members of the same ethnic group as their clients, they must be cautious, sensitive, and tactful in

their therapeutic use of humor (Garrett et al., 2005). For example, Maples et al. (2001) noted that therapists should be wary of direct teasing or too much self-disclosure with Asian clients, as that may alter the level of respect and trust. In regard to therapy with Latino clients, Maples et al. warned therapists to be careful not to present themselves as unprofessional or lacking maturity in any way, as that may hinder the development of a healthy working relationship. It is also important to take into account a client's level of acculturation and to never make assumptions regarding his or her cultural identity (Garrett et al., 2005). Additionally, it is crucial to learn about issues that specific clients may deal with (e.g., issues a Vietnamese American client faces versus a Japanese American; Maples et al., 2001).

Other clinicians warn that the timing of humor use in therapy is critical and that it should not be used before a strong therapeutic relationship is established (Saper, 1987). Many clinicians have noted the importance of gaining trust before initiating humor use in therapy, and this may be particularly important in working with clients from minority groups. For example, Maples et al. (2001) emphasized the significance of gaining respect and building trust with Latino clients, which, they suggest, can be done by understanding Latino values such as *familiarismo* and *respecto* and taking the time to become involved in community activities and other important celebrations (e.g., weddings). That is, the therapist should seek to become viewed as part of the family for humor use to be accepted and seen as sincere in therapy. Similarly, Garrett et al. (2005) advised therapists to use humor with Native clients only when they trust the therapist enough and there is a mutual sense of connection and trust.

The perceived importance of gaining trust before introducing humor into therapy with minority clients raises several important questions, including: (a) How does a therapist obtain such trust?, and (b) How can a therapist know that he or she has developed the appropriate amount of trust to begin to involve humor into therapy? These are challenging and complex questions without simple answers. With Asian American clients, for example, Maples et al. (2001) suggested that it may be important for the therapist to demonstrate respect for the client's culture and take the time to understand cultural beliefs that may influence the use of humor. For instance, the authors noted that Asian American families often express humor by making fun of themselves and other family members (i.e., "insiders") in a way that could be misperceived negatively by those who do not understand Asian culture (i.e., "outsiders"). In Asian culture, it is often the case that the value of being humble and the hierarchy of respect in the family is learned through this playful joking, but "making fun" of outsiders is considered disrespectful. Thus, a therapist working with an Asian American client would benefit from understanding such cultural beliefs and could do harm to the therapeutic relationship by using humor without taking the time to understand the cultural context in which it is being used.

For many of these reasons, some clinicians and researchers feel strongly that therapist use of humor in psychotherapy should be very limited. Jacobs (2009) noted that novice therapists, in particular, should use caution when applying humor in therapy, as it can often be used as the therapists' maladaptive defense against anxiety and/or perceived by the client as masked hostility (Jacobs, 2009). Franzini (2001) also noted that the effectiveness of humor use in therapy also depends on personal qualities of the therapist

(e.g., maturity, flexibility). However, Ortiz (2000) argued that, if used effectively, humor or lightheartedness can actually help to lessen the self-doubt and anxiety that many therapists in training experience.

In sum, humor can be beneficial in therapy, although it requires the therapist to be culturally sensitive and to understand the historical and cultural meaning of humor for specific groups and individuals. In addition, factors such as the timing of humor use, the client's receptiveness to humor, and the nature of the therapeutic relationship can affect the effectiveness of humor in therapy with a diverse population of clients. Overall, empirical research on the effects of humor use in therapy has been limited and has produced mixed results (Newton & Dowd, 1990; Ventis et al., 2001; Witztum et al., 1999), making it difficult to identify the critical differences between beneficial and nontherapeutic forms of humor (Martin, 2007). Overall, there is also an increasing need for research to support the theoretical writings on the use of humor in therapy with diverse populations.

Training for humor use in coping and in the context of psychotherapy. Initial research suggests that humor can, in fact, be taught and facilitated. Lehman et al. (2001), for example, found that brief priming on the creation and use of productive humor leads to greater humor production, suggesting that an individual's humor production can be facilitated for use during stressful situations. Other research has found that most people already know the rules for creating humor (Nevo & Nevo, 1983) and that humor use increases with positive reinforcement (Ziv, 1981, as cited in Ruch, 2007). Together, these findings have implications for the potential benefit of programs aimed at developing humor for use by people coping with stressful situations as well as training programs for

therapists who would like to integrate humor techniques or effectively respond to client humor in their clinical work.

Humor training programs. In their review of deliberate interventions to cultivate humor, Peterson and Seligman (2004) discussed two different views: 1) From a psychoanalytic perspective, sense of humor cannot be directly improved, but rather can be indirectly influenced through maturation or the therapeutic process (e.g., observation or modeling); 2) From a cognitive-behavioral perspective, however, humor is a skill that can be learned through cognitive restructuring and reinforcement. Similarly, in their review of the literature, Nevo, Aharonson, and Klingman (2007) asserted that the use of humor can be increased through modeling, reinforcement, or cognitive restructuring and stated that "the direct learning of deficient behaviors, reinforcement, cognitive restructuring can activate and improve sense of humor" (p. 288). Most programs that seek to cultivate humor in individuals have been developed based on the latter view, including the following three examples (Peterson & Seligman, 2004).

First, McGhee's (1994) 8-step program aims to improve one's sense of humor; the specific objectives of each step range in difficulty, with early sessions focused on increasing one's enjoyment with humor in everyday life and later sessions on helping individuals to successfully find and use humor during stressful situations. However, similar to other programs that have been developed (e.g., Salameh, 1987; Ziv, 1988), there has been no empirical data on its effectiveness.

Second, Nevo, Aharonson, and Klingman (2007) developed a program with steps similar to McGhee's (1994), but theirs appears to be the first to evaluate its effectiveness (as described in the next paragraph). The researchers conceptualized sense of humor as

involving cognitive, motivational, emotional, behavioral, and social components, and designed the program to target all components. For example, the emotional component is activated by encouraging participants to express their emotions and engage in playful activities (e.g., through role-plays), while the social component is activated by a focus on the social implications of humor and various uses of humor in relationships. Their systematic program consists of 14 different units or sessions (20 hours total) aimed at helping participants to: (a) understand the significance of humor in their life, (b) develop the attitudes cognitions most conducive for humor use, (c) expand humor use and associated techniques, (d) increase expression of emotions and a playful attitude, (e) develop social skills related to humor use, (f) and increase appreciation and production of humor. The program uses structured learning (e.g., on definitions and components of humor, cognitive restructuring), practice (e.g., with joke-telling, use of role-plays) and discussion (e.g., on the benefits of humor, barriers that block humor creation).

In Nevo et al.'s (2007) evaluation of their program for improving sense of humor, the researchers found partial support for their hypotheses. For example, participants were rated by their peers as being higher in both humor appreciation and production after the program (as compared to before and to the control group), but the program did not appear to have an effect on the motivational component of humor (e.g., participants' beliefs in the benefits of humor). However, difficulty in accurately measuring the various aspects of sense of humor with self-report measures was identified as a significant limitation and challenge to program development and evaluation. Furthermore, the researchers acknowledged their inability to determine the specific variables that may have led to an

improvement in sense of humor (e.g., cognitive restructuring versus teaching of techniques).

Third, Lowis (1997) developed a pilot humor intervention program specifically aimed at training individuals to use humor as a tool for coping with stress and depression. The "Humor Workshop" program involved four sessions that included structured learning (e.g., lessons on humor construction and the link between humor and creativity, reverse role-play exercises to foster perspective-taking, homework assignments) and a fifth session that was reflective and discussion-based. The researcher found initial evidence suggesting that such a program can help individuals to learn to effectively use humor as a coping mechanism for life stress. Although this was only a pilot exercise, the researcher suggested that humorous strategies could also be taught to individuals suffering from earlier traumas.

Therapist training programs. Because of the potential benefits of the use of therapeutic humor as well as the importance of therapists' responses to expressions of humor from clients, it is important that mental health professionals receive adequate training on humor use in therapy. Martin (2007) asserted that "the ability to use humor effectively with clients may be viewed as a therapeutic skill that clinicians need to practice and refine, just as they need to develop a number of other communication skills" (p. 341). Thus, in addition to the development and evaluation of programs aimed at improving the ability of individuals to effectively use humor in coping with stress, there is also a need for programs (e.g., graduate training, continuing education) that train clinicians to effectively use and respond to client humor in therapy sessions.

A number of authors have recommended formal humor training for therapists (e.g., Franzini, 2001; Prerost, 1988; Salameh, 1987). Franzini (2001), for example, proposed a specific humor training program be developed for therapists with varying levels of experience (e.g., supervisors, trainees). He suggested that the following components be included in such a curriculum:

> (a) the modeling and reinforcement of therapist humor behaviors by clinical supervisors, (b) specific training in the variety of humor techniques, and (c) sensitivity to any humor attempts by their clients, which can become critical transition points in the therapeutic process. (p. 179)

Franzini (2001) noted that humor training programs (such as McGhee's, 1994, program) could be used as the basis for the development of humor training curriculum.

Salameh's (1994) Humor Immersion Training is an example of a formal program for therapists that includes education on humor creation, the physiological and physiological benefits of humor, barriers to humor use, and differences between potentially therapeutic and harmful forms of humor. Additionally, the program involves a number of exercises and role-plays to provide mental health professionals with practice using humor techniques.

Yearly conferences (e.g., those held by the AATH) and continuing education classes also offer opportunities for therapists to learn about the effective use of therapeutic humor. Continued development and evaluation of such training will help to ensure the effective use of humor in therapy.

Humor and psychotherapy with individuals who have experienced trauma. There is minimal empirical research on humor use in therapy with trauma survivors.

Notwithstanding, some clinicians believe that humor can be a powerful healing tool in therapy, including with trauma survivors, when both the therapist and client are willing to discuss it openly (Garrick, 2005). This section discusses theoretical issues that have discussed in literature on humor and psychotherapy with trauma survivors.

In her work with Vietnam veterans, Garrick (2005) found that clients and therapists often leave humorous situations and behaviors out of the therapy process for fear that it would be considered disrespectful or inappropriate. For this reason, she encouraged therapists to challenge clients' beliefs that expressing humor or recollecting positive memories in therapy is inappropriate. Instead, clients "need to know that they are not alone in acknowledging the laughter amidst the horror" (p. 174); otherwise, the survivor's feelings of shame, guilt, and lack of self-worth may only be fostered further.

Thus, Garrick (2005) believes that therapists need to explore what humor means to their clients, and to validate and accept the survivor's sense of humor. By being willing to explore their sense of humor, therapists can learn more about their clients and their views of the world. Garrick noted that trauma survivors and veterans in particular often view themselves as having a "sick" sense of humor and feel guilty for laughing at things that they believe "normal" people would not find humorous. Trauma survivors also often feel as though they need to take everything in life seriously and do not deserve to experience positive emotions. However, therapists can help trauma survivors to understand that their sense of humor can be an important source of coping with their experiences and managing difficult emotions. Thus, "the crux of a victim's sense of humor is in the nuances of irony and satire that can be healthily exploited for the purpose of survival" (p. 176).

In fact, educating clients about certain forms of humor often used in challenging situations (e.g., gallows or black humor) can help diminish their feelings of isolation. Garrick (2005) noted that such sharing of humorous memories helped to facilitate group bonding, a sense of safety, and provided participants with new perspectives from which they could view difficult memories; "as veterans brought their previously disturbing memories to the surface, integrating their traumatic experiences became easier when the memories were no longer as awful as they had once seemed" (p. 170). For example, in a group session:

> one veteran recalled that while his platoon was crossing a rice paddy and he had stopped to fill his canteen with the murky delta water, his mother's childhood warning not to play in mud puddles had come to mind. Other members of the group were also able to recall parental admonishments that, when applied to their experiences in the Vietnam War, seemed absurd. (p. 170)

In this way, sharing humorous memories helped to facilitate group cohesion and validated and reduced the shame and loneliness associated with their "sick" sense of humor.

When survivors' feelings of shame and guilt are addressed, they can begin to view humor as an effective stress-relieving tool. Garrick (2005) noted that incorporating humor into the therapeutic process with trauma survivors can help them to respond to previously upsetting situations in a more lighthearted manner; in one case, the author noted client progress "by being able to see the absurdity in his own previously enraged reactions in certain situations" (p. 179). According to Garrick, using cognitive therapy to explore humor helped to improve the client's self and well-bring, and facilitated the use of

problem-solving skills to manage stressful situations. Thus, the therapist can help lead trauma survivors to rediscover a sense of enjoyment, to use humor to improve stressful situations, and to confront negative thinking.

Successful use of humor in the recovery process can also help individuals to "regain their sense of self by seeing the limits of the abuser's power over them or the abuser's ridiculousness" (Garrick, 2005, p. 178). In this case, REBT techniques can be used to facilitate this process and help to challenge the irrational beliefs that the abuser has installed into the victim's self-image. Feelings of safety and control can be re-established once the victim is able to recognize the absurdity of previously helpful irrational beliefs about both self and the perpetrator.

There are a number of established principles for conducting psychotherapy, in general, with individuals who have experienced trauma. For example, post-traumatic therapy often involves normalization (e.g., of difficult thoughts and feelings related to the trauma), a collaborative and empowering therapeutic relationship, and a recognition that "every individual has a unique pathway to recovery after traumatic stress" (Ochberg, 1991, p. 5). Adding humor to post-traumatic therapy, Ochberg (1991) claimed, does not mean that a therapist should simply be witty, but rather foster in clients the capacity to laugh. The therapist can assist in the recovery process by setting an example, helping to identify situations in which the client uses humor in a helpful way, and by acting as a good audience when the client is able to spontaneously use humor (Ochberg, 1991). Similarly, Bryant-Davis (2005) stated that humor can be a useful coping strategy for trauma survivors (specifically adult survivors of childhood violence) and thus emphasized the importance of integrating humor into the therapeutic process and reacting

to it in a helpful way. For example, she suggested using journal assignments, homework, or therapy discussions to explore coping strategies (including humor) that have been helpful. Specifically in working with trauma survivors, Bryant-Davis also identified the importance of helping the client "(a) to recognize cognitively and emotionally that he or she is not responsible for the abuse or violence and (b) to recognize that he or she has self-worth, strengths, and abilities" (p. 413). Thus, clinicians should also attend to clients' potential use of self-disparaging humor that may be detrimental and perpetuate feelings of shame and self-blame.

Humor can also help survivors of trauma to recognize that the pleasures in life still exist, despite the traumatic experiences that may have occurred. Use of their sense of humor in and outside of the therapy room may even allow them to see how they can thrive in their environment. For example, Schroevers and Teo (2008) found use of humor in coping to be significantly related to PTG in a population of Malaysian cancer patients and suggested that health-care professionals help patients to "see the situation from a different perspective, by stimulating them to find their own meaning in the situation and to integrate the experience into their life" (p. 1245). Clients should be encouraged to engage in activities they find enjoyable and spend time with supportive others in order to challenge the belief that they should not be able to enjoy life after the trauma(s) they have endured (Garrick, 2005).

Garrick (2005) noted that humor can also be used inappropriately or ineffectively in therapy by clients who have experienced trauma to avoid one's true feelings and distance oneself from related emotional pain (e.g., a client who laughs when recalling childhood abuse). In this sense, humor allows individuals to remain in their comfort zone,

which can hinder the therapeutic process if not handled well. Marcus (1990) suggested that therapists bring use of humor to clients' awareness and integrate such potentially pathological defenses into a cognitive framework, whereby the clients' thoughts and underlying emotions can be uncovered. In particular, therapists must pay attention to inconsistencies between what clients are reporting and their behaviors. Although humor has the potential to help facilitate recovery in therapy, it could also signify underlying low self-esteem and a lack of confidence in one's thoughts and opinions (Marcus, 1990). Additionally, if humor is used inappropriately in psychotherapy, it can support an unbalanced relationship between client and therapist that can undermine the therapeutic alliance (Kirsh & Kuiper, 2003). Lastly, before attempting to access or utilize humor in therapy with clients, therapists should explore their own views of humor and their use of humor in their own lives, to avoid potential biases (Adams, 1993; Garrick, 2005).

Summary of findings on humor use in therapy. The literature suggests that clinicians vary dramatically in their views of humor use in therapy, ranging from enthusiastic advocates to those who see more risks than potential benefits. Humor is considered by some to be a compassionate and genuine way to build the therapeutic relationship and foster client self-exploration, change, and insight. From this perspective, humor can be viewed as a type of interpersonal communication capable of advancing therapeutic goals (Martin, 2007). However, other clinicians believe that humor can also be used to disparage the client or simply distract from the goals of therapy. Unfortunately, there is a lack of rigorous empirical research on humor use in therapy (particularly with trauma survivors) as well as training programs for both clients who would like to develop their humor and clinicians interested in applying humor

interventions in therapy. The theoretical literature suggests that humor can be a useful coping tool for diminishing trauma-related stress, but it is imperative that cultural considerations and potential risks of humor use in therapy be explored. Because of these possible benefits and risks, it is also important that therapists be systematically trained for its use and that humor training programs and therapeutic humor techniques be empirically evaluated. Lastly, as much of the existing literature of humor in therapy with trauma survivors is based largely on clinical impressions and case examples, further research is necessary to study the particular uses of humor that may be helpful or detrimental with this population.

Purpose of Study and Research Questions

Overall, research suggests that humor can be a helpful coping tool or mechanism for individuals who have experienced trauma or are facing adversity. In addition, the notion that the ability to use humor as a coping tool could be fostered or taught to clients in therapy has been supported, although there is a lack of research on how therapists should or do respond to client expressions of humor in psychotherapy sessions. As a result, the purpose of this study was to explore client expressions of humor in therapy to see how humor is used in the therapy session by clients who have experienced a TPI.

Accordingly, this study involves a qualitative analysis of expressions of humor from psychotherapy clients who have experienced trauma, specifically a TPI. The specific research question was as follows: How do clients who have experienced trauma express humor in therapy sessions?

Chapter II. Method

The present study involved a qualitative analysis of expressions of humor in psychotherapy with clients who have experienced trauma. The following chapter provides a description of the methods used for the study, including the research design and rationale, participants, data collection, coding, and analysis procedures. The chapter concludes with a discussion of limitations and contributions of the study.

Research Design

This study used a qualitative research approach in order to sufficiently explore the complexity and meanings that people ascribe to human experiences (Morrow, 2007) - in this case, the various forms and expressions of humor by psychotherapy clients who have experienced a traumatic experience. Qualitative inquiry is often used in the field of clinical and counseling psychology to answer questions of "What" or "How" versus "Why," and typically focuses on experiences as a whole rather than on its constituents (Morrow, 2007; Moustakas, 1994). Because the use of humor in psychotherapy with trauma survivors is not well understood, it was expected that qualitative research in this area might help to uncover new knowledge and clarify this construct (Creswell, 1998). Qualitative research also views the roles of the researcher and participants as crucial to the inquiry; that is, "knowledge is not passively observed, but actively constructed and evolved from an exploration of people's internal construction" (Yeh & Inman, 2007, p. 370). Thus, the researcher is considered to be inherently connected to the process and must be aware of personal assumptions, practices, and values that could influence the research process (Glazer & Stein, 2010). In this sense, a parallel between qualitative

inquiry and the therapeutic process makes a qualitative methodology natural for studying elements of therapy.

Specifically, a qualitative content analysis was employed for this study. As a research method, content analysis is used to systematically and objectively describe and quantify phenomena, often by analyzing documents (Elo & Kyngäs, 2008). It allows a researcher to evaluate theoretical issues, provide knowledge or new insights, and arrive at both a more broad and condensed description of the phenomenon of study. The outcome of such an analysis is often key categories or concepts that describe the phenomenon and can be used to develop a model or conceptual system. Despite criticisms that such a method may be simplistic and lacking statistical analysis when compared to the quantitative field, content analysis is actually quite complex and allows for flexibility in research methods and sensitivity to content. Content analysis may be used inductively or deductively, depending on the purpose of a study. An inductive approach is typically utilized when there is little or fragmented knowledge about the phenomenon and categories are derived or emerge from the data; a deductive approach is used to test an existing theory, and the phenomenon is operationalized based on previous knowledge. Furthermore, an inductive approach moves from the specific (i.e., particular instances that are observed) to the general (i.e., a larger whole consisting of those particular instances) whereas a deductive approach moves from the general (i.e, an earlier model or theory) to the specific.

A directed content analysis was warranted for this study because there are existing theories and research on dimensions and styles of humor (e.g., Martin et al., 2003) that could benefit from further description and applied analysis. Thus, pre-determined

dimensions and styles of humor were used for the basis of the codes for this study, although they were modified as necessary (in particularly to adequately capture forms of humor used by diverse cultures who have experienced trauma). Thus, a review of existing humor measures, behavioral assessments, and research on cultural differences in humor use assisted in the coding process, and elements of inductive analysis was used to allow themes to emerge naturally from the non-coded parts of the transcribed therapy sessions.

A treatment process approach was also used to guide this study, as it can help to name, classify, describe, and count the behaviors of both the client and therapist according to various categories (Stiles, Honos-Webb, & Knobloch, 1999). These categories can include: (a) the size of the scoring unit (e.g., single works, topic episodes, phrases, varied interval times, entire sessions, phases of therapy); (b) the point of view or perspective of the client and therapist; (c) the format of the data and strategy for access (e.g., session notes, transcripts, audio or videotapes); (d) measure format (e.g., rating, coding into nominal categories, Q-sort); (e) level of inferences (e.g., coding only observable behavior versus making inferences based on the observed behavior); (f) theoretical orientation (e.g., specific orientations versus broader or more integrative orientations); (g) treatment modality (e.g., individual child or adult, family, group); (h) target focus of measurement (e.g., therapist, client, dyad, group, family); (i) form of communication (e.g., verbal, kinestic, paralinguistic); and (j) dimension of verbal coding measure (e.g., content categories which describe semantic meaning, speech act categories which involve the way in which the speech was expressed, and paralinguistic measures which describe the non-verbal behaviors that accompany speech). The specific research question or topic of investigation guides the particular measures that are chosen to be

used in the treatment process approach, but measures are typically aggregated across a particular segment of treatment or summarizing unit(s) (Stiles et al., 1999). The application of the treatment process approach to this study is described in the Data Analysis section.

Participants

Client-participants. As recommended for this type of qualitative research, purposeful sampling was utilized to identity and examine five to seven psychotherapy cases, with adequate data, from an archival database of videotaped sessions from a Southern California University's community counseling centers (Creswell, 1998; Mertens, 2009; Patton, 1990). Before accessing the database, the researcher sought approval by her university's Institutional Review Board (IRB). Prior to receiving counseling services, potential client participants must have provided written informed consent to include their written and video/audio records in the research database. Similarly, each trainee therapist (a master's or doctoral level psychology student) must have provided written informed consent to allow his or her written and video/audio materials to be included in the database. Identifying information (e.g., names, dates of birth, names of cities/states of residence) was removed from the records prior to their inclusion in the database. Also, all names of clients and therapists were removed and replaced with a random research code created specifically for the database.

Participants had to meet various inclusion and exclusion criteria in order to be included in the study. First, potential participants must have been at least 18 years of age at intake and be English-speaking. Both the participant and therapist must also have provided written consent for written and videotapes materials to be included in the

research database. To be included in this study, cases must also have included "sufficient" data, which means that their records, which consist of video recordings of psychotherapy sessions, and a written Telephone Intake Summary, Client Information Adult Form, Intake Evaluation Summary, and Treatment Summary (see Procedure section), must have signified that the client had experienced trauma (as previously defined). Participants must also have had at least one videotaped session in which they discuss a traumatic experience.

There were are also two exclusion criteria for this study. First, in order to maintain confidentiality and reduce potential research bias during the coding process, the therapist and client must not have been individuals whom the researchers were personally familiar with. Second, only adult participants seeking individual (versus couples or family) therapy were included in the sample. Table I provides a summary of the demographic information for each of the client-participants. A more thorough description of each of the client participants (based on information found in their research files) is discussed in the subsequent section.

Table 1

Client-Participant Demographic Information

C-P	Age	Gender	Ethnicity	Traumatic Event	DSM-IV-TR Diagnoses
1	28	Female	African-American	Child Sexual Abuse	Partner-Relational Problem
2	47	Female	European-American	Stroke/Blindness	No Diagnoses

(continued)

C-P	Age	Gender	Ethnicity	Traumatic Event	DSM-IV-TR Diagnoses
3	21	Female	El-Salvadorian	Child Phys/Sexual Abuse	MDD; R/O PTSD; BPD
4	39	Female	Black, American Indian, Caucasian	Child Sexual Abuse	Adjustment Disorder w/ Anxiety and Depression
5	28	Female	Caucasian	Child Phys/Sexual Abuse; DV	PTSD; Depersonalization Disorder; Dysth. Disorder

Note. CP = Client-Participant; PTSD = Posttraumatic Stress Disorder; MDD = Major Depressive Disorder; BPD = Borderline Personality Disorder; DV = Domestic Violence; Dysth = Dysthymic

Client-participant 1. Client-Participant 1 (CP1) was a 28-year-old, heterosexual, Christian, African-American woman who had moved to Los Angeles from Kentucky four years prior to beginning therapy. She was reportedly involved in a committed long-distance relationship with a man who lived in her hometown. At intake, CP1 reported having a steady job as an accountant at a travel agency, although she described struggling financially. She initially presented to therapy due to difficulties opening up and communicating her feelings to both her friends and her boyfriend, which she thought might be related to her past experience of being raped by her uncle (when she was in third grade and under his care). She noted that her uncle attempted to rape her a second time, but that he stopped once she threatened to tell her mother what happened. She did not disclose her history of sexual assault to anyone prior to coming to therapy, and her uncle is no longer alive. At intake, CPI indicated that she keeps in touch with her mother,

but that she had never met her father. She described her older cousin and brother to both be a part of her support system.

On the clinic intake form, CP1 selected the following presenting problems as being the most important reasons for seeking therapy: difficulty expressing emotions, feeling inferior to others, lacking self-confidence, difficulty controlling her thoughts, and trouble communicating sometimes. She also indicated that she was experiencing the following symptoms, albeit to a lesser extent: feeling angry much of the time, feeling down or unhappy, feeling lonely, experiencing guilty feelings, feeling down on herself, concerns about emotional stability, having difficulty being honest/open, being suspicious of others, and concerns about finances. CP1 was assigned a V-code of Partner-Relational Problem and a GAF of 75 upon intake. The Termination Summary for CP1 indicated that she was seen for a total of 21 sessions, which were focused on helping the client to explore her childhood trauma and to communicate her emotions.

Client-participant 2. Client-Participant 2 (CP2) was a 47 year-old, single, heterosexual, European-American woman. CP2 was born and raised in England, but moved to the United States over fourteen years ago. At intake, she was unemployed and awaiting disability benefits as a result of suffering from numerous medical conditions. She initially presented to therapy to address symptoms of frequent crying and skin-scratching, for which no medical basis had been identified by medical professionals. CP2 reportedly experienced a stroke about one year prior to coming in for therapy, after which point she began losing her eyesight. The client-participant identified her loss of eyesight as a trigger for her current scratching problem. CP2 also reported having additional

medical conditions, including diabetes, neuropathy, and balance problems. Despite the difficulties she was having, the client-participant reported having "great social support."

On the clinic intake form, CP2 selected the following presenting problems as being the most important reasons for seeking therapy: feeling down or unhappy, feeling nervous or anxious, needing to learn to relax, concerns about emotional stability, feeling lonely, difficulty making decisions, experiencing guilty feelings, concerns about physical health, and concerns about emotional stability. According to the client-participant's records, no diagnoses were assigned on Axis I or II, and therapy goals included exploring and addressing feelings associated with CP2's loss of eyesight as well as feelings from childhood that were coming up as result of her physical condition (i.e., about abandonment and needing to be dependent on others). As there was no Termination Summary for this client-participant, the course of treatment (including duration and orientation) was unclear. However, other documents included in her chart (e.g., appointment log, DVDs of recorded sessions) indicated that treatment lasted for 12 sessions.

Client-participant 3. Client-Participant 2 (CP3) was a 21-year-old married, Hispanic, Christian woman who immigrated to the United States from El Salvador at the age of 19. At intake, CP3 was living with her husband and working as a sales representative. She initially presented to therapy to address symptoms of depression (including suicidal ideation, anhedonia, and feelings of sadness, guilt, and worthlessness), conflict with her husband, difficulties with anger and impulsivity, and limited social support. CP3 reported experiencing extensive physical and emotional abuse by her biological mother and grandmother (from ages 11 to 17) in addition to two instances of

sexual abuse (age unspecified). On the clinic intake form, CP3 selected the following presenting problems as being the most important reasons for seeking therapy: feeling nervous or anxious, needing to learn to relax, and family difficulties. She also indicated that she was experiencing the following symptoms, albeit to a lesser extent: feeling angry much of the time, feeling down or unhappy, feeling guilty, thoughts of taking your own life, concerns about emotional stability, difficulty controlling your thoughts, being suspicious of others, difficulty making or keeping friends, and difficulty in sexual relationships.

At intake, CP3 was assigned a diagnosis of Major Depressive Disorder (Recurrent, Severe, Without Psychotic Features) and both Dysthymic Disorder and PTSD were offered as diagnostic rule-outs. During the course of therapy, Dysthymic Disorder was ruled out, but she was given an additional Axis II diagnosis of Borderline Personality Disorder. According to the Termination Summary, CP3 was seen for 31 sessions (primarily from a Dialectical-Behavioral Therapy orientation), and treatment focused on reducing the client-participant's suicidal ideation and helping her to build emotional regulation, distress tolerance, and communication skills. CP3 ended treatment prematurely, and she was provided with outside referrals.

Client-participant 4. Client-Participant 4 (CP4) was a 39-year-old married woman and mother of four children. She identified as being of Black, American Indian, and Caucasian descent. At the time of intake, CP4 worked as a stay-at-home mother as well as the power of attorney conservator of her paternal grandmother, who lived in an assisted living facility. However, she previously worked sporadically as a paralegal for 16 years.

CP4 initially presented to therapy due to emotional distress as the result of recently finding out that one of her daughters (whom she and her husband had guardianship over, but were not biologically related to) was likely molested by the client-participant's own father four years ago. This news was particularly difficult for her due to her own experience with sexual molestation (i.e., "touching and oral sex") by her paternal grandfather when she was 7 years old. At that time, CP4 noted that her grandfather threatened her so that she would not tell her mother about the abuse. At intake, she reported experiencing feelings of guilt, anger, anxiety, and sadness. The client-participant additionally described having difficulties with sleep, concentration, and her ability to trust others. She noted that her emotional difficulties were also causing some problems in her marriage. However, CP4 reported receiving high levels of social support from her friends and husband. On the clinic intake form, CP4 She also indicated that she was experiencing the following symptoms, albeit to a lesser extent: under pressure and feeling stressed, feeling angry much of the time, feeling down or unhappy, concerns about emotional stability, difficulty making decisions, feelings confused much of the time, difficulty controlling your thoughts, being suspicious of others, concerns about finances, trouble communication sometimes, family difficulties, and feelings related to having been abused or assaulted.

At intake, CP4 was diagnosed with an Adjustment Disorder with Mixed Anxiety and Depression and a V-code of Sexual Abuse of a Child. According to the intake form, CP4 was provided cognitive-behavioral-oriented treatment, and goals included decreasing the client-participant's feelings of anger and resentment and increasing her ability to trust. As there was no Termination Summary for this client-participant, the

actual course of treatment (including duration and orientation) was unclear, although the number of DVDs included in the research file (i.e., three) suggested that therapy was likely brief.

Client-participant 5. Client-Participant 5 (CP5) was a 28-year-old heterosexual, Caucasian, Protestant woman with two children. At the time of intake, CP5 was separated from her husband and was working as an administrative assistant. CP 5 was married at the age of 21, but reported being separated from her husband at the time of intake as a result of him being physically and verbally abusive towards her. CP5 was sexually abused by a neighbor at the age of 4, and the abuse reportedly lasted for several years; at the age of 14, she was also sexually abused by her father.

She initially presented to therapy to address symptoms of exhaustion, fear, and confusion, and she described being close to "falling apart." On the clinic intake form, CP5 identified "needing to learn to relax" as being the most important reason for seeking therapy, but she also selected the following as being significant reasons: feeling nervous or anxious, under pressure and feeling stressed, afraid of being on your own, difficulty expressing emotions, feeling inferior to others, lacking self-confidence, feeling down or unhappy, concerns about emotional stability, feeling confused much of the time, concerns about finances, trouble communication sometimes, concerns with weight or body image, feeling controlled/manipulated, marital problems, difficulties in sexual relationships, feelings related to having been abused or assaulted, and concerns about physical health.

At intake, CP5 was assigned diagnoses of Posttraumatic Stress Disorder, Depersonalization Disorder, and Dysthymic Disorder. No Treatment Summary was found for CP5, but according to the intake form, treatment goals included helping the client to

explore her abuse history, to identity and connect physical and emotional experiences, and to use her social support system. Although no Appointment Log was found for this client-participant, 13 DVDs were found in the research file, suggesting that the course of therapy lasted for at least 13 sessions.

Researcher-participants. The researcher-participants for this study were a team of three clinical psychology doctoral students responsible for coding the collected data (Coders 1, 2, and 3). A clinical psychologist served as the auditor for the study and supervised the research team throughout the data collection, coding, and analysis process. The inclusion of multiple researchers and an auditor was expected to provide different perspectives, minimize individual biases, and help to sufficiently capture the complexity of the data (Hill, Thompson, & Williams, 1997). The following is a personal description (e.g., background, professional views) provided by each of the coders and auditor in an effort to identify potential areas of bias.

Coder 1, the primary researcher and dissertation author, is a 29-year-old, married, Caucasian, female clinical psychology doctoral student. She was born and raised in a middle-class family in the northeastern part of the United States. Coder 1 generally conceptualizes and treats psychotherapy clients from a cognitive-behavioral perspective. Specifically, she believes that dysfunctional or maladaptive thinking, which develops as a result of early and/or impactful life experiences, can strongly influence how an individual thinks about and interprets situations. Accordingly, she believes that the identification and modification of various levels of thought in therapy will contribute to improvements in mood and behavior. Consistent with this perspective, Coder 1 also views the therapeutic relationship and a sense of authenticity as necessary elements upon which

such change can occur. Additionally, Coder 1 believes that humor, when expressed in a genuine and benevolent manner, has an incredible capacity to foster relationships and relieve distress. She thus views humor as a powerful means of human connection as well as a method by which one can challenge irrational or dysfunctional thinking. Although the general benefits of humor are widely recognized, Coder 1 is particularly interested in the potential advantages of use of humor in facing stressors and trauma.

Coder 2 is a 29-year-old Caucasian, female, doctoral student in clinical psychology. She is married and was raised in the northeastern part of the United States in a working-class family. Coder 2 primarily conceptualizes and treats clients from a psychodynamic perspective, although she incorporates strengths-based approaches and mindfulness practice in her work with clients. Coder 2 is also a Registered Art Therapist (ATR) and uses art therapy techniques in her clinical work. She values different forms of expression and interpersonal connection in the therapeutic experience that extend beyond "traditional talk therapy." Coder 2 views and values interpersonal relationships as highly significant in the human experiences and believes that early and ongoing relationships impact a person's sense of self and understanding of the world. As it pertains to this dissertation, Coder 2 believes that humor is an important aspect of human relationships over the lifetime and that approaches to humor likely change and develop with growth. In particular, she is curious about the use and meaning of humor in the therapeutic relationship as expressed by clients.

Coder 3 is a 26 year-old Caucasian male doctoral student in clinical psychology. He, his parents, and his grandparents were all born in the United States. He was raised in a middle-class home in a southwestern state where he lived for 20 years before moving to

California for graduate school. In general, Coder 3 conceptualizes clients and clinical cases from humanistic/existential as well as cognitive-behavioral perspectives. He conceptualizes a client as someone generally driven toward personal growth while navigating core existential dilemmas. He strongly believes in the human potential for growth beyond that of simple symptom reduction and is encouraged by therapies and theoretical frameworks that foster such growth through illuminating meaning in the human condition. In his academic pursuits, clinical training, and clinical experience, Coder 3 has developed an appreciation for deep existential concerns that are often looming underneath more superficial problems. Among these existential concerns, fear of death has been particularly interesting to him in that it seems to be the root of both debilitating terror as well as motivation for growth. Coder 3 is especially interested in the various strategies clients use to cope or achieve personal growth in the aftermath of trauma. Moreover, he believes that humor has the capacity to strongly influence the therapeutic relationship, which he considers paramount in working with clients who have experienced such severe hardships.

The auditor for this study is also the dissertation chair. She is a married, Christian, European-American female with a doctoral degree in psychology in addition to a terminal law degree. She is a tenured associate professor of clinical psychology with research and clinical interests in positive and forensic psychology. She conceptualizes clients primarily from a cognitive-behavioral perspective, although she also incorporates systems and strength-based approaches into her treatment. Accordingly, she believes that humor can be a coping mechanism and source of strength for individuals who have experienced trauma, including those who share such experiences in psychotherapy. In addition, she is

interested in how clients' humor may be adaptive and protective and may help and/or hinder the therapeutic process.

Instrumentation

In order to examine expressions of humor in psychotherapy with clients who had experienced trauma, the primary researcher created a directed coding system for the content analysis of humor based on those forms commonly discussed and assessed in the psychology literature. For the purposes of the current dissertation, humor was defined broadly to refer to "anything that people say or do that is perceived as funny and tends to make others laugh, as well as the mental processes that go into both creating and perceiving such an amusing stimulus, and also the affective response involved in the enjoyment of it" (Martin, 2007, p 5). For this dissertation, verbal expressions of humor and laughter (a behavioral expression of humor) were both coded and analyzed in the context of psychotherapy sessions in which discussions of trauma occurred.

Due to the complex and multidimensional nature of "humor" (as discussed in the literature review), verbal expressions of humor were coded along various dimensions. Specifically, each humorous verbalization was first coded as either (a) Reactive or (b) Productive. Expressions of humor were then further coded as at least one of the following: (a) Benign, (b) Aggressive, (c) Self-deprecatory, or (d) Dark. Expressions of humor that were consistent with the purposes of this study but did not fit within any of the other categories were referred to as (e) Expression of humor not otherwise specified. These five forms of verbal expressions of humor served as the initial coding categories (see coding manual in Appendix A for more detailed coding systems and procedures).

In addition to verbal expressions of humor, laughter was also coded along various dimensions. Although laughter was not originally included in the coding system, this component was added during practice coding sessions due to the fact that laughter, in addition to other nonverbal behaviors (e.g., tone of voice, mannerisms, gestures, facial expressions) was found to provide useful information in determining whether a verbalization qualified as an expression of humor. More specifically, client laughter was coded as either (a) Accompanied by a Coded Verbal Expression of Humor or (b) Laughter not Accompanied by a Coded Verbal Expression of Humor in addition to being coded as occurring either: (a) In the Context of a Serious or Difficult Topic or (b) In the Context of Benign or Positive Topics. Also, all instances of therapist laughter, regardless of context, were also identified and coded.

The qualitative data falling within these categories of client verbal expressions of humor and client and therapist laughter were recorded and analyzed by the researchers. Definitions and examples of each coding category are discussed next.

Verbal expressions of humor. This set of codes was used when clients expressed humor verbally during a (transcribed) psychotherapy session. Such expressions of humor included, but were not limited to, jokes, anecdotes, irony, puns, and sarcasm. These categories were not considered to be mutually exclusive and it was possible for an expression of humor to be assigned to multiple categories (e.g., aggressive *and* dark humor).

Reactive humor (code F1). This code was used when the client recognized and responded to humorous stimuli in the environment. A client's humorous response to an

expression of humor from the therapist or a client's humorous response to situational or unintentional humor in the environment fell under this category.

Productive humor (code F2).This code was used when the client deliberately produced and used humor in a situation that did not appear to be inherently humorous.

Benign humor (code H1). This code was used when the client used humor in a playful, benign manner, containing no apparent aggressive, self-deprecatory, or dark elements. The following exchange between client (C) and therapist (T) is illustrative of a productive (F2) and playful/benign (H1) expression of humor:

C: "I'm sorry for crying so much today."

T: "No need to apologize, I think it's important for you to freely express your emotions in here."

C: "Yeah, well, thank goodness the red-eyed look is totally in this season."

The same form of humor, in a spontaneous/reactive (F1), form might look like the following:

[Session takes place on a stormy day; client walks in with an umbrella.]

T: "Beautiful day out, huh?"

C: "Oh yes, days like this really make me appreciate living in Southern California!"

Aggressive humor (code H2). This code was used when the client expressed humor in a way that was hostile or demeaning to others, including the therapist or another person not present in the therapy room. This often took the form of sarcasm, satire, or teasing. Consider the following example, this time in the form of reactive humor (F1):

C: "My wife and I have been getting along better because we have decided to put aside our differences and focus on being responsible for the kids' sake."

T: "Maybe you should share some of your secrets with Congress."

C: "I think my kids have a better shot at raising themselves than that group of idiots does at learning to cooperate."

Self-deprecatory humor (code H3). This code was indicated when the client used humor in a way that was self-disparaging or when the client appeared to attempt to entertain the therapist by saying or doing things at his or her own expense. In other words, the client used self-ridicule or self deprecatory humor when he or she targeted him or herself as the object of humor. This may have been done to put the listener at ease, to ingratiate him or herself to the listener, or to demonstrate modesty (Martin, 2007). This form of humor ranged from subtle and/or playful mocking of oneself to more obvious and/or self-disparaging expressions. The following example is illustrative of this form of (productive, F2) humor:

T: "So you were hurt when your wife called you two-faced?"

C: "Well, maybe more confused than hurt- if I were two-faced, do you really think I'd choose to wear this one?"

Dark humor (code H4). This code was used when the client used humor in a way that made fun of situations ranging from difficult/challenging to terrifying/life-threatening. That is, humor was used to treat serious, dark, or painful subject matter in a light manner. Furthermore, the situation/topic/context in which humor was used had to be clearly identified as being difficult, challenging, serious, dark, or painful. Humorous expressions in reference to a client's presenting problem(s) generally fell under this

category. Although this category was originally defined as humor used in the context of a "life-threatening, terrifying, or disastrous situation," the definition was expanded during the practice coding process to also include "difficult" and "challenging" situations in order to capture less extreme examples of dark humor that were found . The following is an example of an expression of humor that would fall under this category (here in a reactive, F1, form):

> T: "So how was your recent hospital stay? Just delightful, I'm sure."
>
> C: [recently diagnosed with a terminal form of cancer] "Oh yes, a total blast. It's a shame I couldn't stay longer. You know, I've decided that I'm no longer afraid to die- I just don't want to be there when it happens."

As previously indicated, it was also possible for verbal expressions of humor to be assigned multiple codes. The following is an example of a verbal expression of humor that meets the criteria for both self-deprecatory (H3) and dark humor (H4) (here in a productive, F2, form):

> C: "I certainly have a lot of work to do in therapy! I'll have lots of material to keep us busy with, that's for sure [client laughter]."

Expression of humor not otherwise specified (code H5). This code was used when the client used a form of humor that was not adequately captured by any of the aforementioned codes. Second-hand and vague references to humorous expressions generally fell under this category. The following is an example of a form of (productive, F2) humor that would fall under this category:

> C: "I have been getting along with my roommate much better lately"
>
> T: "Really?"

C: “Yeah, the other day he told me this joke about this duck who crossed the road. He totally cracked me up.”

Laughter/behavioral expression of humor. This set of codes was used when a client or therapist expressed humor behaviorally through laughter.

Laughter in the context of serious or difficult topics(code D1). This code was used when the client’s laughter occurred in the context of subject matter ranging from serious/difficult to painful/traumatic. The topic/context in which laughter was evident must have been clearly identified as being serious, difficult, challenging, dark, traumatic, or otherwise explicitly regarded by client as eliciting negative emotions or as being difficult, challenging, etc. Laughter accompanied by verbal expressions of humor that were coded as H2, H3, or H4 generally fell under this category. Examples of D1 topics include: (a) Daily stressors; (b) Ruptures or conflict within the therapeutic relationship; (c) Traumatic event(s) (e.g., physical or sexual abuse); (d) Uncertainty with regard to client’s coping abilities; (e) Discussions of therapy that are directly related to issues/topics that are clearly identified by client as being distressing or problematic.

Laughter in the context of benign or positive topics (code D2). This code was used when the client’s laughter occurred in the context of subject matter ranging from neutral/benign to positive. Laughter accompanied by verbal expressions of humor that were coded as H1 generally fell under this category. Laughter in the context of topics that did not appear to elicit any negative emotions from the client also generally fell under this category. If a topic was not explicitly regarded as being negative, difficult, or challenging by the client, or could not be clearly identified as being serious, difficult, challenging, dark or traumatic, then it was coded D2. Examples of D2 subject matter

include: (a) Client successes; (b) Client hobbies (e.g., discussion regarding a television show); (c) Stories about benign, daily activities (e.g., cooking dinner) (d) Second-hand stories or vague discussions about others; (e) General discussions of therapy.

Laughter accompanied by a coded verbal expression of humor (code L1). This code was used when the client's laughter was accompanied by a (coded) verbal expression of humor. The following is an example, here in the form of D1 (i.e., occurring in the context of a serious or difficult topic):

T: "So how was your recent hospital stay? Just delightful, I'm sure."

C: [recently diagnosed with a terminal form of cancer] "Oh yes, a total blast [client laughter]. It's a shame I couldn't stay longer."

Laughter not accompanied by a coded verbal expression of humor (code L2). This code was used when the client's laughter was not accompanied by a (coded) verbal expression of humor. The following is an example, here in the form of D2 (i.e., occurring in the context of a benign or positive topic):

C: "I wish I had a vacation planned for this summer, but I don't think I have the time! Plus I might just prefer to relax at home [client laughter]."

Therapist laughter (code TL). All instances of therapist laughter, regardless of context, were coded as TL.

Procedure

Sample selection. The study used purposeful sampling to identify participants most suitable given the specific research question and design. This sampling was not expected to produce participants representative of the entire clinical population of interest, as is the case in random sampling, but was nevertheless deemed appropriate as a

result of the limited number of potential participants as well as the research question (Mertens, 2009). Furthermore, the issue of generalizability is not considered to be as critical for qualitative research, in which results often emerge naturally from the data (Creswell, 1998). Rather, Creswell (1998) recommended that research using purposeful sampling perform extensive analyses with four to five individual cases; the present study included five individual cases. Specific procedures for identifying potential participants who met the noted inclusion and exclusion criteria are discussed below.

Step 1: Obtain a list of potential participants. The researchers first obtained a comprehensive list of research records for clients who were no longer receiving therapy services and whose clinical records were already de-identified and entered into the research database.

Step 2: Narrowing the list based on demographic inclusion criteria. Next, the list was narrowed down to include clients who were at least 18 years of age, were English-speaking, and had engaged in individual therapy.

Step 3: Narrowing the list based on experiences of trauma. The list of potential research participants was then limited only to those individuals who had experienced trauma, as noted in clinical records included in the database. As recommended by McNally (2004), this study utilized a more narrow definition of trauma than that described in the DSM-IV-TR. Specifically, traumatic events were defined as:

> direct personal experience of an event that involves actual or threatened death or serious injury, or other threat to one's physical integrity; or [directly] witnessing an event that involves death, injury, or a threat to the physical integrity of another person. (p. 463)

In order to meet these criteria, an individual must have directly witnessed or experienced a traumatic event and responded in fear, horror, or helplessness, as indicated on clinical records/instruments described below. As previously discussed, common examples of traumatic events involving a TPI include serious accidents or fire, life threatening combat experiences, rape or physical assault, life threatening major disasters, the experience of a serious medical problem, and seeing another person being killed or badly hurt (First et al., 2002). This definition also includes forms of trauma related to cultural or race-based factors (e.g., hate crimes involving threatened or actual assault).

Several data instruments were used to help determine whether a potential participant had experienced a traumatic event that met the above definition. The researchers first looked at the information presented under the Family Data section of the Client Information Adult Form (Appendix B). In this section, the client was asked to indicate "Which of the following have family members, including yourself, struggled with," and was provided with a comprehensive list of distressing and potentially traumatic situations. The researchers looked to see if the client marked "Yes- This Happened" in the "Self" column for stressors including discrimination (e.g., hate crimes), death and loss, physical abuse, sexual abuses, rape/sexual assault, injury, debilitating illness, or disability.

Additional information from the Telephone Intake Form (Appendix C), the Intake Evaluation Summary (Appendix D), and the Treatment Summary (Appendix E) was also used to determine whether clients had experienced trauma. On the Telephone Intake Summary, for example, the Reason for Referral portion describes the client's rationale for seeking therapy; the researchers examined this portion to see if the client reported

seeking therapy for reasons associated with the experience of trauma. Various sections of the Intake Evaluation Summary were also examined for any reference to a trauma history, including: Presenting Problem/Current Condition (Section II), History of Presenting Problem and Other Psychological Conditions (Section III), Psychosocial History (Section IV), DSM-IV-TR Multiaxial Diagnosis (Section VIII), and Treatment Recommendations (Section X). In addition, the Treatment Summary was also reviewed for any indication that a trauma-related diagnosis had been considered or that the course of therapy involved discussing or processing trauma. The researchers all agreed that at least one of these forms clearly indicated the experience of trauma for a given client before moving on to the next step. The researchers also used an Excel spreadsheet to track information regarding client history of trauma found on clinic forms (see Appendix F).

Step 4: Narrowing selection based on discussions of trauma. To be included in this study, clients must have openly discussed their traumatic experience(s) with their therapist in at least one recorded therapy session. The researchers for this study reviewed each video recording of potential participants' therapy sessions to determine whether such a discussion took place. Based on definitions used in the literature regarding disclosure, discussions of trauma were defined as client verbalizations that consisted of the following: (a) descriptions of a traumatic event; (b) evaluative content about the traumatic event (e.g., beliefs, thoughts, attitudes); and (c) affective content (e.g., feelings and/or emotions regarding the traumatic event; Chelune, 1979; Cozby, 1973; Jourard, 1971; Omarzu, 2000; Pennebaker, Zech, & Rimé, 2001). Sessions in which discussions of trauma took place were later transcribed and coded. Although coding expressions of humor in psychotherapy sessions with clients who had *not* experienced a traumatic event

may have also produced useful data (e.g., making it possible to compare the data to that of trauma survivors), it was beyond the scope of this dissertation to do so.

If there were more than one recorded therapy session in which a client participant engaged in a discussion of trauma, only one was chosen for transcription and analysis. That session was selected based on the length of time in session spent discussing the trauma; that is, the session in which the client discussed the trauma for the longest length of time (compared to other sessions in which trauma was discussed) was chosen. This method was used to select the session to be transcribed and coded for client-participants 1, 2, 3, and 4, as there were multiple sessions in which trauma discussions took place. See Coding Manual (Appendix A) for additional information about client discussions of trauma.

Due to the fact that this was the first study to examine expressions of humor in therapy with trauma survivors and was intended to be exploratory in nature, it was decided to code entire psychotherapy sessions, and not solely the trauma discussions, for expressions of humor. This decision was also made based on the premise that being more inclusive would provide additional data and context for the current study as well as for future research (e.g., others may decide to compare frequencies and forms of humor used during trauma discussions to those outside of trauma discussions).

Step 5: Narrowing selection based on cultural diversity. The researchers attempted to choose culturally and demographically diverse participants who varied in age, gender, race/ethnicity, and religion/spirituality. Specifically, the researchers sought to use no more than four clients that identified with each demographic or cultural category/group. Demographic and cultural characteristics of potential participants were

determined from several clinic forms included in the archival database. For example, age and gender were generally noted in the Telephone Intake (Appendix C). Religion/spirituality, ethnicity/race, and disability status was often indicated in the (Optional) Social Cultural section of the Client Information Adult Form (Appendix B). Cultural information was also sometimes included in the Cultural Factors & Role of Religion in Client's Life portion (section F) of the Intake Evaluation Summary (Appendix D). The researchers examined each of these areas to determine the demographic and cultural characteristics of potential participants and used an Excel spreadsheet to track the relevant information (Appendix F).

Transcription. Four masters-level graduate students in psychology transcribed two of the selected therapy sessions on a volunteer basis as research assistants. The PARC database already contained the remaining three transcribed therapy sessions, as some were used in other dissertations. Prior to reviewing the data, the students/research assistants signed a researcher confidentiality statement, were trained on the transcription process by the researchers, and were asked to transcribe the sessions verbatim based on a transcription method adapted from Baylor University's Institute for Oral History. More detailed instructions on this process are included in the Coding Manual (Appendix A).

Coding. The three researcher-participants for this study, who were all doctoral-level graduate students in the field of clinical psychology, served as coders. Their dissertation chair served as an auditor for the study. Prior to coding actual cases for this study, the coders and auditor practiced coding with sample cases until they reached 75% agreement (i.e., three of four were in agreement). Although an 80% agreement is typically recommended for a study of this kind (Miles & Huberman, 1994), 75%

agreement was used because, with four coders, it is the highest possible rate of agreement short of unanimous. Each coder was trained on the specific coding processes used for this study, including relevant concepts, terms, and issues for identifying expressions of humor within the recorded sessions (Ryan & Bernard, 2003; Yin, 2003). Detailed instructions that were used to train the coders can be found in the Coding Manual (Appendix A). The coders met weekly to discuss their individual coding decisions and then reach consensus regarding the coding of the data. After the coding for each session was completed, the coders shared the coded transcription and audit trail with the auditor, who reviewed the documents and provided feedback and suggestions for the coders to consider in reaching a final consensus. This process sometimes involved several discussions between the coders and auditor. Including the practice sessions, the coding process took approximately eight months to complete.

Human subjects/ethical considerations. The researchers for this study were highly committed to protecting the confidentiality and rights of the participants and to maintaining ethical standards for their treatment. The research methodology used was non-invasive and data was taken from an archival database (i.e., did not involve direct engagement with the participants). However, several precautions were taken to ensure the potential research participants for this study were treated ethically. Each of the therapists at the community clinics reviewed confidentiality issues and limitations for therapy services as well as inclusion in the research database with their clients in the process of obtaining informed consent. Additionally, each of the participants in this study provided written consent for their clinical records (i.e., written, audio, and video materials) to be included in the research database before receiving therapy services (Appendix G). All of

the therapists whose records were included in this study also provided similar written consent (Appendix H). Once therapy had terminated, research assistants created a research file for each client and redacted all identifying information from both their and their therapists' written documents to maintain the confidentiality of all individuals when the information was entered and transferred into the database. Every client and therapist included in the database was allotted a research identification number to track cases without the use of identifying information (Mertens, 2009). All individuals who participated in entering clinical data into the research database also completed an online Institutional Review Board (IRB) certification course.

In an effort to ensure that the participants' confidentiality was maintained and that their data was treated in an ethical manner, the researcher/coders and transcribers also signed confidentiality statements (Appendices I and J) and completed an IRB certification course (Appendix K) in addition to a certification course on the Health Insurance Portability & Accountability Act of 1996 (HIPAA; Appendix L). As previously mentioned, confidentiality was also protected by excluding cases in which any of the researchers personally knew either the therapist or client.

Data Analysis Approach

As previously stated, the current study used a naturalistic, directed content analysis method (Hsiu-Fang & Shannon, 2005). Existing theory and prior research on humor was reviewed and used as the basis for the coding categories. Initial coding categories and operational definitions for each are described in the Instrumentation section and the Coding Manual (Appendix A).

In addition, the data analysis steps described below delineate the specific elements of analysis, as suggested by Stiles et al., 1999 and presented in the Research Design section. Specifically, this study analyzed clients' [target of measurement] verbal [channel of communication] expressions of humor in single, individual [modality of treatment] psychotherapy sessions [scoring unit] by examining transcriptions [format of data collection] and creating nominal coding categories [format of measurement]. This study analyzed both the semantic meaning of the clients' verbalizations of humor [dimension of coding measures] and related nonverbal behaviors as part of a contextual examination. The theoretical orientation of the therapist was included in any analyses. Data analysis was consistent with the guidelines set forth by Hsiu-Fang and Shannon (2005) and included the following steps:

Step 1: Transcription. Selected videotapes containing client discussions of trauma were transcribed in their entirety by research assistants (see Procedure section for selection criteria). Transcriptions included not only verbal information, but also nonverbal behaviors, including gestures, sighs, yawns, body movements, and pauses.

Step 2: Highlighting. The researchers next reviewed videotaped sessions and read accompanying transcripts to ensure their accuracy. They then highlighted, based on first impression, all text that appeared to characterize an expression of humor. As part of assessing accuracy, the researchers ensured that nonverbal behaviors that might impact the meaning of an expression of humor (e.g., a client rolled his eyes while making a joke) was included in the transcription.

Step 3: Coding selected text. The researchers then coded all highlighted passages using the predetermined codes detailed in the Instrumentation section. Data that did not

fall under one of the predetermined categories of expressions of humor was coded as an Expression of Humor Not Otherwise Specified (H5). Coders 1, 2, and 3 all examined the data independently before meeting as a group to discuss each other's coding choices and reach a consensus. This study used multiple coders to allow for the inclusion of diverse opinions and perspectives, avoid individual biases, and to accurately capture the complexity of the data (Hill et al., 1997). Each coder retained both a copy of his or her initial codes (which were developed independently) as well as the codes that were agreed upon by the group; this was expected to avoid potential group bias or consensual observer drift in the coding process (i.e., modification of a coder's recorded ratings to be more consistent with another's with whom they had compared; Harris & Lahey, 1982). When inter-rater disagreement did occur during group discussions, coders documented the rationale for each decision that was made so that the coder judgment process was made clear to the auditor (Orwin, 1994).

Inter-rater reliability amongst the three coders, prior to group discussions, was calculated using Fleiss' kappa coefficient (K; Fleiss, 1971). Table 2 summarizes the K score for each code, in addition to the average for each code across participants. This statistical measure was conducted in order to assess whether the agreement between coders exceeded what would be expected by chance (e.g., if coders assigned ratings completely randomly; Gwet, 2010). Fleiss' kappa was appropriate for this study, as it used nominal-scale ratings and more than two raters (Fleiss, Cohen, & Everitt, 1969).

Although no generally agreed upon measure of significant exists for K values, Landis and Koch's (1977) guidelines suggest that $K < 0$ represents poor agreement, $0.01 < K < 0.20$ slight agreement, $0.21 < K < 0.40$ fair agreement, $0.41 < 0.60 <$ moderate

agreement, 0.61 < 0.80 substantial agreement, and 0.81 < K < 1.00 indicates almost perfect agreement. A negative K value is indicative of agreement that is worse than what would be expected by chance.

As seen below, the coders had an average pre-group discussion agreement of 1(almost perfect) for F1, H1, H2, H5, L1, L2, and TL, and an average pre-group discussion agreement of greater than .99 for F2 (almost perfect), .98 for H3 (almost perfect), greater than .99 for H4 (almost perfect), .98 for D1 (almost perfect), and .87 for D2 (almost perfect). That is, the average pre-group discussion agreements were almost perfect for all of the codes.

Table 2

Inter-rater Reliability Coefficients with Three Coders (Pre-Group Discussions)

Code	Fleiss' Kappa	Observed Agrmt.	Expected Agrmt.	Code	Fleiss' Kappa	Observed Agrmt.	Expected Agrmt.
F1				H5			
1	1	1	.99	1	1	1	.97
2	N/A	1	1	2	1	1	.98
3	N/A	1	1	3	1	1	.97
4	N/A	1	1	4	1	1	.99
5	N/A	1	1	5	N/A	1	1
Avg.	1*	1	1	Avg.	1*	1	.98
F2				D1			
1	.98	>.99	.81	1	1	1	.86
2	1	1	.92	2	.98	>.99	.86
3	1	1	.96	3	1	1	.96
4	1	1	.94	4	.99	>.99	.89
5	1	1	.92	5	.92	>.99	.94
Avg.	>.99	>.99	.91	Avg.	.98	>.99	.90

(continued)

Code	Fleiss' Kappa	Observed Agrmt.	Expected Agrmt.	Code	Fleiss' Kappa	Observed Agrmt.	Expected Agrmt.
H1				D2			
1	1	1	.97	1	1	1	.97
2	N/A	1	1	2	.60	>.99	.99
3	N/A	1	1	3	1	1	.98
4	1	1	.99	4	.94	>.99	.97
5	N/A	1	1	5	.82	>.99	.98
Avg.	1*	1	.99	Avg.	.87	>.99	.98
H2				L1			
1	1	1	.94	1	1	1	.93
2	1	1	.99	2	1	1	.97
3	1	1	.99	3	1	1	.99
4	1	1	.97	4	1	1	.97
5	1	1	.94	5	1	1	.98
Avg.	1	1	.96	Avg.	1	1	.97
H3				L2			
1	.92	.99	.93	1	1	1	.89
2	1	1	.97	2	1	1	.88
3	N/A	1	1	3	1	1	.96
4	1	1	.98	4	1	1	.87
5	1	1	.97	5	1	1	.94
Avg.	.98	>.99	.97	Avg.	1	1	.91
H4				TL			
1	.99	>.99	.88	1	1	1	.94
2	1	1	.94	2	1	1	.98
3	1	1	.99	3	1	1	.99
4	1	1	.97	4	1	1	.87
5	1	1	.96	5	1	1	.96
Avg.	>.99	1	.95	Avg.	1	1	.95

Note. Coefficients marked with an asterisk (*) indicate average inter-rater reliability values across those sessions that included the code. Definitions of abbreviations are as follows: Agrmt. = Agreement; Avg. = Average.

As previously described, after independent coding was completed for the transcripts, the researchers met as a group to reach consensus regarding final codes before submitting their findings to the auditor of the study. Data that was determined not to fall under one of the predetermined categories of expressions (i.e., was coded as an

Expression of Humor Not Otherwise Specified, H5) was reviewed to determine whether they represented a subcategory of an existing code or an entirely new category (Hsiu-Fang & Shannon, 2005). None of the data that was originally coded as an Expression of Humor Not Otherwise Specified was later determined to fall under an existing or new category. The coders also reflected upon and discussed how biases could have potentially influenced the coding process, and the primary researcher documented any potential biases or personal assumptions that may have impacted coding decisions. Because the primary researcher values the use of humor in her own life and recognizes her tendency to find humor in circumstances that others do not always find amusing, her predisposition to be overly inclusive of potential verbal expressions of humor was constantly monitored. Specifically, the primary researcher found that she had a propensity to view more verbal expressions of humor than the other coders as being representative of Self-Deprecatory Humor, perhaps as a result of her own tendency to use humor in such a manner.

Another area of potential bias included determining whether a situation was deemed to be "serious" or "difficult" for the purposes of coding laughter. Due to her conservative nature and strengths-based approach to clinical work, the primary researcher tended to code topics which the other coders considered to be "difficult" as "benign." Despite these biases, having 3 different coders and an auditor, all with their own perspectives that were shared through group discussions, helped to maintain a balanced and diverse view of the construct of humor.

Step 4: Submission of codes to auditor. Next, codes were submitted to the auditor. The researchers clearly communicated the research process or "audit trail" to the auditor so that she was able to accurately and effectively audit the data, as a clear and

thorough account of the research process should include decisions about the research design as well as data collection, analysis, and reporting (Lincoln & Guba, 1985).

The technique of bracketing was also used to attempt to avoid researcher assumptions from imposing on and shaping the data collection process (Ahern, 1999). Thus, information related to the personal expectations of each of the researchers was recorded in the electronic transcriptions of the selected therapy session, along with the individual coding decisions. More specifically, recorded information included the following: (a) assumptions regarding gender, race, and position in power hierarchies, as related to the research study; (b) personal values and specific areas in which the researcher was aware of his or her subjectivity; (c) any potential areas of role conflict; (d) the interests of gatekeepers and the extent to which they were favorably disposed towards the study; and (e) any feelings that may signify lack of neutrality (Ahern, 1999). Each coder and the auditor shared related thoughts in group discussions during the coding process.

Step 5: Reaching consensus on final codes. Once the codes were submitted to the auditor, the researchers/coders communicated with the auditor via email, who reviewed and verified the team's decisions. Together, the group decided upon the final codes; discussions regarding coding decisions and rationales were communicated via the audit trail, in the form of a *Google Docs* Word document.

Table 3 details the post-group discussion Kappa (K) scores, across participants, for each code; the average for each code across participants is also included. As illustrated below, and similar to the pre-group discussion agreements, the average post-group discussion agreements were almost perfect for all of the codes. Specifically, K =

1.00 for F1, F2, H1, H2, H4, H5, L1, L2, and TL; K = >.99 for H3, .98 for D1, and .88 for D2.

Table 3

Inter-rater Reliability Coefficients with Three Coders (Post-Group Discussions)

Code	Fleiss' Kappa	Observed Agrmt.	Expected Agrmt.	Code	Fleiss' Kappa	Observed Agrmt.	Expected Agrmt.
F1				H5			
1	1	1	.99	1	1	1	.97
2	N/A	1	1	2	1	1	.98
3	N/A	1	1	3	1	1	.97
4	N/A	1	1	4	1	1	.99
5	N/A	1	1	5	N/A	1	1
Avg.	1*	1	1	Avg.	1*	1	.98
F2				D1			
1	1	1	.80	1	1	1	.86
2	1	1	.92	2	.98	>.99	.86
3	1	1	.96	3	1	1	.96
4	1	1	.94	4	1	1	.87
5	1	1	.92	5	.92	>.99	.94
Avg.	1	1	.91	Avg.	.98	>.99	.90
H1				D2			
1	1	1	.97	1	1	1	.97
2	N/A	1	1	2	.60	>.99	.99
3	N/A	1	1	3	1	1	.98
4	1	1	.99	4	1	1	.97
5	N/A	1	1	5	.82	>.99	.98
Avg.	1*	1	.99	Avg.	.88	>.99	.98
H2				L1			
1	1	1	.94	1	1	1	.93
2	1	1	.99	2	1	1	.97
3	1	1	.99	3	1	1	.99
4	1	1	.97	4	1	1	.97
5	1	1	.94	5	1	1	.98
Avg.	1	1	.96	Avg.	1	1	.97

(continued)

Code	Fleiss' Kappa	Observed Agrmt.	Expected Agrmt.	Code	Fleiss' Kappa	Observed Agrmt.	Expected Agrmt.
H3				L2			
1	.98	>.99	.92	1	1	1	.89
2	1	1	.97	2	1	1	.88
3	N/A	1	1	3	1	1	.96
4	1	1	.98	4	1	1	.87
5	1	1	.97	5	1	1	.94
Avg.	>.99	1	.97	Avg.	1	1	.91
H4				TL			
1	1	1	.89	1	1	1	.94
2	1	1	.94	2	1	1	.98
3	1	1	.99	3	1	1	.99
4	1	1	.97	4	1	1	.87
5	1	1	.96	5	1	1	.96
Avg.	1	1	.95	Avg.	1	1	.95

Note. Coefficients marked with an asterisk (*) indicate average inter-rater reliability values across those sessions that included the code. Definitions of abbreviations are as follows: Agrmt. = Agreement; Avg. = Average.

Step 6: Evaluation of the coded data. The researcher tracked the frequency of the different forms of verbal expressions of humor and laughter. She examined the data for any patterns (e.g., patterns of humor use by trauma type) or additional contextual information that could shed light on variables such as cultural factors or the potential functions of humor (e.g., avoidance, affiliative) in sessions that involved trauma discussions.

Step 7: Presentation of findings. Finally, the primary researcher presented the findings from the data analysis by rank order of frequencies of the coded data. That is, the forms of humor expressed most often in sessions involving discussions of traumatic experiences were presented before those forms of humor expressed less often. These findings helped to reveal how often and in what form client-participants expressed humor

within the context of therapy sessions including trauma discussions. Furthermore, these frequencies were used to identify patterns of expressions of humor as it is related to types of trauma. The frequency of certain forms of expressions of humor commonly discussed in the literature (e.g., aggressive humor) was compared with ones that had been identified through the data analysis process. In order to provide a deeper understanding of the ways in which clients might express or use humor in therapy sessions involving a discussion of trauma, the researcher also presented sample quotations. Lastly, the researcher also discussed any inferences regarding the potential function and value of expressions of humor during the therapy session.

Chapter III. Results

This chapter presents the results of the qualitative content analysis of expressions of humor in therapy with clients who have experienced trauma. The goal of the analysis was to explore the ways in which therapy clients who have experienced trauma express humor in therapy in general, and in particular when coping with difficult or traumatic events. In order to gain a rich understanding of humor use in psychotherapy among trauma survivors, expressions of humor were coded across entire psychotherapy sessions in which trauma discussions took place, rather than specifically and solely during discussions of traumatic events. The following coding system, which was developed by the researcher based on existing literature on humor use and psychology (see methods section and coding manual in Appendix A for further descriptions and operational definitions), was used to identify both verbal expressions of humor and laughter in five transcribed psychotherapy sessions: (a) Reactive Humor (F1); (b) Productive Humor (F2); (c) Benign Humor (H1); (d) Aggressive Humor (H2); (e) Self-Deprecatory Humor (H3); (f) Dark Humor (H4); (g) Expression of Humor Not Otherwise Specified (NOS) (H5); (h) Laughter in the Context of Serious or Difficult Topics (D1); (i) Laughter in the Context of Benign or Positive Topics (D2); (j) Laughter Accompanied by a Coded Verbal Expression of Humor (L1); and (k) Laughter not Accompanied by Coded Verbal Expression of Humor (L2).

This chapter reviews the findings of the directed content analysis, including both across and within-session results. Coding frequencies are presented to organize and categorize the data, but are not intended to imply relative importance or otherwise justify the results. Examples of coded expressions of humor are offered throughout the chapter

in order to illustrate the findings. All quotations included in this section were taken from the video-recorded psychotherapy sessions that were selected and used for this study. Please note that ellipses (i.e., …) are used throughout the chapter to indicate that irrelevant material was omitted from sample quotations.

Content Analysis

The content analysis of expressions of humor in transcribed psychotherapy sessions with trauma survivors generated a total of 636 codes within the 2,738 total talk turns. Put another way, an expression of humor code occurred in 23% of all (both client-participant and therapist) talk turns. Within each session, the total number of humor codes ranged from 45 to 308, with a mean of 127.20 (*SD* = 103.65). The sessions ranged from 184 to 418 client-participant talk turns and from 368 to 836 total talk turns, with means of 274 (*SD* = 95.92) and 547.6 (*SD* = 181.77), respectively. These totals include data from the three different categories of humor that were coded (i.e., verbal expressions of humor, client-participant laughter, and therapist laughter). A breakdown of this data according to these major categories is discussed below below.

The total number of (client-participant) coded verbal expressions of humor (VEH) within each session ranged from 6 to 49, with a total of 82 and a mean of 16.2 (*SD* = 18.5). In other words, VEH occurred in 6% of client-participant talk turns. Of the 82 codes, 79 (98%) were coded as being *Productive* (F2), and only 2 (2%) as *Reactive* (F1). Among the 82 VEH codes, 42 (52%) were further coded as *Dark Humor* (H4), 29 (36%) as *Aggressive Humor* (H2), 26 (32%) as *Self-Deprecatory Humor* (H3), 13 (16%) as *Expression of Humor Not Otherwise Specified* (H5), and 7 (9%) as *Benign Humor* (H1).

The total number of client-participant laughter codes within each session ranged from 14 to 81, with a total of 183 codes across sessions and a mean of 36.6 for each session (*SD* = 25.85). That is to say, client-participant laughter occurred in 7% of total talk turns (183 out of 2738). Of the 183 codes, 149 (81%) were further coded as *Laughter in the Context of Serious or Difficult Topics* (D1), and 33 (18%) as *Laughter in the Context of Benign of Positive Topics* (D2). Among the 183 client-participant laughter codes, 130 (71%) were also coded as *Laughter not Accompanied by a Coded Verbal Expression of Humor* (L2), and 52 (29%) as *Laughter Accompanied by a Coded Verbal Expression of Humor* (L1).

The total number therapist laughter codes within each session ranged from 3 to 28, with a total of 73 codes across sessions and a mean of 14.6 for each session (*SD* = 11.59). Put another way, *Therapist Laughter* (TL) occurred in 3% of total talk turns (73 out of 2738). Frequency totals within and across each participant (i.e., session) are presented in Table 4 below, including broader coding categories and specific codes for (client-participant) verbal expressions of humor and (client-participant and therapist) laughter.

Table 4

Frequency Data for Humor Codes Within and Across Sessions

C-P #	1	2	3	4	5	Total (Across)
C-P VEH						
F1	2	0	0	0	0	2
F2	47	8	6	6	12	79
Total VEH	*49*	*8*	*6*	*6*	*12*	*81*

(continued)

C-P #	1	2	3	4	5	Total (Across)
Form of VEH						
H1	6	0	0	1	0	7
H2	14	1	2	3	9	29
H3	17	3	0	2	4	26
H4	26	6	1	3	6	42
H5	6	2	4	1	0	13
C-P Laughter						
Diff. Topic?						
D1	65	29	11	26	18	149
D2	16	1	3	7	6	33
With VEH?						
L1	32	5	3	6	7	53
L2	49	25	11	27	18	130
Total C-P Laughter	*81*	*30*	*14*	*33*	*25*	*183*
Therapist Laughter						
TL	28	3	4	25	13	73
Total Codes	308	83	45	107	93	636
Total C-P TT	418	189	277	184	300	1,368
Total TT	836	378	555	368	601	2,738

Note. C-P = Client-Participant; VEH =Verbal Expressions of Humor; TT = Talk Turns; Diff = Difficult

Findings across participants. In this section, frequencies and examples of all humor codes (including verbal expressions of humor, client-participant laughter, and therapist laughter) are presented across participants. Expressions of humor were also compared as they related to type of trauma (e.g., sexual abuse versus medical trauma) and timing of humor use across sessions. Across the 5 client-participants, verbal expressions of humor were most frequently coded as *Productive* (F2; 79 codes) versus *Reactive* (F1; 2 codes), and accounted for 98% of all client verbal expressions of humor. That is, the

client-participants deliberately produced and used humor in the selected sessions in situations that did not appear to be inherently humorous markedly more often than they recognized and responded to humorous stimuli in the environment. An example of *Productive Humor (F2)* was found in Client-Participant 5's session, in which she responded to the therapist's question about the nature of her current relationship with her mother by sarcastically stating "Well, considering that she is absolutely clueless, I would say it's pretty good" (C242). Client-Participant 2 also used *Productive Humor* in the following description:

> And [my friend and I] were laughing when [client points to left inner wrist] I left last week. I bent my arm that night (C187)…and I had a big white bandage there [client smiles, laughs, and scratches head] and I was giggling because, I said "Ok, I just filled out that form," I said, "and I talked to, probably in an hour, in four different ways was asking if I had any suicidal thoughts or anything, and here [client motions to wrist while smiling] it looks like I've slashed my wrist and I was gonna go in with my white bandage on." (C188)

In this statement, the client found and expressed humor in a situation that did not appear to be inherently humorous. More specifically, she described the incongruence between denying suicidal ideation on questionnaires, but then walking into her therapy session with bandages on her wrists (which might occur with someone who has recently cut their wrists in a suicide attempt) as humorous.

Reactive Humor (F1) was only coded twice, both times in Client-Participant 1's session. For example, at one point, while playing a game intended

for use in psychotherapy, the client-participant stated "…Don't get three please…" (C46), while shaking a pair of dice. Immediately after saying this, she rolled a three, and then joked "…Oh gosh, oh no I'm leaving [therapist laughs]" (C6). In this situation, the client-participant rolling a three served as a humorous stimulus in the environment, as she explicitly and verbally wished otherwise.

Within the coded verbal expressions of humor (both *Productive* and *Reactive*), the form of humor that was coded most frequently was *Dark Humor* (H4, 42 codes; 52% of all coded VEH). As discussed in the methods section and coding manual, *Dark Humor* was defined as using humor in a way that makes fun of situations ranging from difficult/challenging to terrifying/life-threatening or to treat serious, dark, or painful subject matter in a light manner. Examples of this form of humor were found in the transcribed therapy session for Client-Participant 1, whose session contained 60% of all verbal expressions of humor coded across the five client-participants. During the selected session with Client-Participant 1, the therapist and client played a game in which, at one point, the client was instructed to talk about a time when she felt sad, to which the client responded "Gah-lee [client playfully slaps air with hand], I mean that happens a lot [therapist laughs]…" (C138). Later in the session, the client was asked to answer the question "What would you do if you were told you were going to die soon," (T335) to which she responded "…I would pray my ass off [client laughs]…" (C345). Similarly, in Client-Participant 2's session, the client-participant described a major eye surgery that she needs to undergo, to which the therapist noted "It sounds very scary to me" (T81); in response, Client-Participant 2 stated "It sounds even scarier when it is your eyeball [client laughs]…" (C82).

Aggressive Humor (H2, 29 codes; 36% of all coded VEH) represented the second most frequently coded form of humor, which included client verbal expressions of humor that were hostile or demeaning to others, including to the therapist or another person not present in the therapy room. For example, Client-Participant 5 discussed her desired frequency of individual therapy sessions versus couples therapy sessions (with her husband), and expressed her preference to skip a week of couples therapy rather than individual therapy: "I'd rather skip a week with him like twice a month or something (C15)…than go back to one with ours (C16)…Cause I mean, you know, he's just my husband [client and therapist laugh]" (C18). In this example, the client uses humor (sarcasm) in a way that is demeaning to her husband and his importance or level of priority in her life.

The next most frequently coded form of humor was *Self-Deprecatory* (H3, 26 codes; 32% of all coded VEH), which included verbal expressions of humor that were used in a way that was self-disparaging or appeared to attempt to entertain the therapist by saying or doing things at a one's own expense. For example, Client-Participant 5 described her father's college degree as being in "something requiring…too many brain cells for me to think about [client laughs]" (C56) In another example, Client-Participant 2 discussed her process of becoming more independent and capable of engaging in activities of daily living on her own after suffering from a series of medical problems. She described the following:

> And it took an hour, an hour and a half of coaxing but I [walked two steps]. And within probably a month I could get up from the chair and walk to the bathroom without my walker, or I could walk to the kitchen and make a cup of tea, without

my walker. I couldn't carry the cup of tea, but I could make it [client laughs] (C107).

In this case, the client is joking about her progress and her ability to make a cup of tea, but not carry it. In addition to being self-disparaging, this expression of humor also fit the criteria for *Dark Humor*, as she was making light of her medical challenges.

In fact, there were frequent co-occurrences among *Dark Humor* (H4), *Aggressive Humor* (H2), *and Self-Deprecatory Humor* (H3) across participants. More specifically, *Dark Humor* only occurred on its own in 24% or 10 of the 42 total H4 codes, *Aggressive Humor* in 38% or 11 of the 29 total H2 codes, and *Self-Deprecatory Humor* in 23% or 6 of the 26 total H3 codes. The most frequent overlap occurred between *Dark Humor* and *Aggressive Humor* (31% of all H4 codes co-occurred with H2; 45% of all H2 codes co-occurred with H4) and *Self-Deprecatory Humor* and *Dark Humor* (58% of all H3 codes co-occurred with H4; 38% of all H4 codes co-occurred with H3). *Aggressive Humor* and *Self-Deprecatory Humor* co-occurred less frequently (7% of all H2 codes co-occurred with H3; 8% of all H3 codes co-occurred with H2). Last, all three of these forms of humor co-occurred a total of three times across the five session, among three of the client-participants (10% of all H2 codes, 12% of all H3 codes, 7% of all H4 codes).

Expressions of Humor Not Otherwise Specified represented the fourth most frequently coded form of humor (H5, 13 codes; 16% of all coded VEH). As previously discussed, this code was warranted when a client used a form of humor or referred to humorous stimuli in a way that was not captured by any of the other codes (e.g., second-hand or vague references to humor). For example, Client-Participant 2's comment "…And we were laughing…" (C187), Client-Participant 1's expression "…I always

joke…" (C215), and Client-Participant 3's statement "…I think it's funny now…" (C246) all fell under this category. The codes that fell into this category did not appear to cluster around any particular theme, and thus no new coding categories were generated.

The form of humor that was coded the least was *Benign Humor* (H1, 7 codes; 9% of all coded VEH). That is, client verbal expressions in which humor was used in a playful, benign manner (with no apparent aggressive, self-deprecatory, or dark elements) were coded the least. In fact, this code was only used by two of the five client-participants (CP1 and CP4). For example, Client-Participant 4 shared pictures of her daughters with the therapist and described them by saying "…I have a 5 [year-old and] an 18-month-old that looks just like her. Mini me [client laughs]…" (C20). That is, the client used playful and benign language to joke about the striking similarities between her two daughters. Similarly, while playing a game with the therapist, Client-Participant 1 joked "Oh man! I should be sitting over in that chair [client and therapist laugh]…" (C123) after the therapist landed on a game space that the client was hoping to land. In both of these cases, there were no verbal or nonverbal indications of aggressive, self-deprecatory, or dark elements. Among the 7 coded instances of benign humor, 2 of them co-occurred with both therapist and client laughter, 2 occurred with only therapist laughter and 3 did not occur with any laughter at all.

With regard to behavioral expressions of humor, laughter (in any context; 183 codes total), was coded more frequently than verbal expressions of humor (in any form; 81 codes total). That is, client-participants laughed more often than they produced a verbal expression of humor. Furthermore, laughter was more often coded *in the Context of Serious or Difficult Topics* (D1, 149 codes) than *in the Context of Benign or Positive*

Topics (D2, 33 codes). That is, 81% of the laughter that was coded across all participants (not just Client-Participant 1) was determined to occur in the context of subject matter ranging from serious or difficult to painful or traumatic. An example of this was found in Client-Participant 2's following statement "…It's scary [*client smiles and laughs briefly*]..." (C9), in reference to her loss of eyesight. Client-Participant 1 also demonstrated this form of laughter when she was asked by the therapist to "…talk about something [she would] never forget," (T48) to which she responded, "Well, the first thing that popped in my head was, the molestation [*client laughs*]" (C48). In both of these examples, the client-participants laughed after discussing events that have caused them significant distress and for which they have identified as reasons for seeking therapy.

Conversely, an example of *Laughter in the Context of Benign or Positive Topics* (D2) was found in Client-Participant 4's session, in which she discussed plans to spend time with a friend and stated "…I am blessed…" (C155), which was in reference to her social support system. In response, the therapist stated "Wonderful, then our work will be all that much easier [*client laughs*]." In this case, the client laughed in the context of a discussion of a positive and potentially protective factor in her life.

Among all of the expressions of client laughter that were coded (183 codes), most were coded as *Laughter Not Accompanied by a Coded Verbal Expression of Humor* (L2, 130 codes; 71%). That is, client laughter often did not take place in the context of a coded verbal expression of humor. For example, in the session with Client-Participant 3, the therapist stated "…So it sounds like you're saying…you're different from your family" (T171), to which the client responded, "You know, thank God, I think I am [*client laughs*]" (C171). In this situation, the laughter was coded as being in the context of a

serious or difficult topic (D1), as the client-participant had reported significant conflict within her family and associated distress, but it was not accompanied by a verbal expression of humor.

Still, there were a total of 53 coded instances of client *Laughter Accompanied by a Coded Verbal Expression of Humor* (L1, 29%). For example, Client-Participant 5 described the following sentiment: "Like, I would never want to depend fully on someone else (C67)…because apparently I don't trust people [*client laughs*]" (C68). In this example, the client laughed after deliberately producing humor in a situation that did not appear to be humorous (F2) and used the humor in a self-deprecatory manner (H3), as well as in a way that made light of an identified problem or difficult situation (i.e., her inability to trust; H4, D1).

As previously discussed, therapist laughter was also tracked and coded. Across the five sessions, therapist laughter was coded 73 times. Overall, therapist laughter occurred less frequently (73 codes total) than client-participant laughter (183 codes total). An example of therapist laughter occurred when Client-Participant 5 stated, "And I know that sounds weird, but I don't like people," (C131) to which the therapist responded "[*therapist laughs*] Tell me about that" (T132). Although therapist laughter was not formally coded according to additional contextual elements (e.g., difficulty level of the topic being discussed), the following disclosure (by Client-Participant 4) is illustrative of therapist laughter in the context of a difficult topic:

> My father's father molested me when I was seven. I have a very strange dynamic. My mother dated my father's father prior to ever knowing my father. He was

gone to the service (C38)…My mom had a relationship [*therapist laughs*]…yeah, it's very tangled, umm, my grandfather who molested me is now deceased (C39).

Although therapist laughter often co-occurred with client-participant laughter (34 co-occurrences, 47% of all TL codes) or a client-participant verbal expression of humor (19 co-occurrences, 26% of all TL codes), that was not always the case (as demonstrated in the above examples). More specifically, 37% (or 27) of all TL codes (73 total) occurred on their own (i.e., outside the context of client-participant expressions of humor). However, even instances of therapist laughter that did not formally co-occur with client-participant expressions of humor (verbal or behaviors) often occurred within several talk turns of one. Additional examples of both mutual and independent laughter are provided below.

Across the five sessions, coded verbal expressions of humor (6 codes), client laughter (16 codes), and therapist laughter (9 codes) tended to occur at the very beginning and/or end of the session, as the client-participants and therapists were making light conversation, discussing fee payments, or scheduling the next appointment. For example, Client-Participant 2's session included four coded verbal expressions of humor and four coded instances of laughter after the therapist stated "We have to stop [the session]…" (T159). In the session with Client-Participant 4, the first 22 talk turns were spent discussing the intake paperwork and session fees. Within those talk turns, there was one coded verbal expression of humor, three coded instances of client laughter, and four coded instances of therapist laughter, three of which took place in the context of a discussion about the session fee. At one point, the therapist even joked about "[taking the client's] last pennies [therapist laughs]" (T13) as the client looked through her wallet to

see if she had enough cash to pay for the session. At the end of the session, after Client-Participant 4 said "…thank you" (C169) to the therapist and they began to discuss scheduling the next appointment, there were two instances of coded client laughter and one instance of coded therapist laughter.

Among the five client-participants, four (Client-Participants 1, 3, 4, and 5) had experienced childhood sexual abuse, and one (Client-Participant 2) had experienced medical trauma (i.e., a stroke and consequent loss of eyesight). In addition to childhood sexual abuse, Client-Participants 3 and 5 also indicated that they had experienced childhood physical abuse; Client-Participant 5 also reportedly experienced domestic violence. In reviewing the frequencies and forms of humor used across participants, Client-Participant 2 (who had experienced medical, but not interpersonal trauma), used the fewest coded instances of Aggressive Humor (one code). However, as there were only five client-participants, and humor use can be influenced by numerous variables (e.g., individual differences, personality traits, situational/environmental factors; see "The state-trait debate" in Chapter 1), this difference cannot be clearly attributed to the type of trauma experienced. No other patterns in the data were found related to trauma type.

Findings within participants. This section presents both quantitative data (e.g., code frequencies) as well as qualitative descriptions of codes (e.g., examples of specific statements that characterize different verbal expressions of humor) for each transcribed client-participant session. Each session that was transcribed and coded included a discussion of trauma; however, the entire transcribed session, and not solely the portion comprising the discussion of trauma, was coded for client expressions of humor. As nonverbal behaviors were crucial in providing contextual information in the identification

of client expressions of humor, significant nonverbal characteristics of each client-participant are also presented. Tone of voice and intonation, mannerisms, body posture, prosody, and the reaction of the therapist (e.g., therapist laughter) were all taken into account when coding client verbal expressions of humor.

Client-Participant 1. As detailed in the methods session, Client-Participant 1 was a 28-year-old, heterosexual, Christian, African-American woman who reported being raped by her uncle when she was in third grade. To the coders, Client-Participant 1 presented, to the coders, as a vivid, playful, and highly expressive woman who spoke rapidly and with a theatrical style; she appeared to be "entertaining" the therapist at times, which was consistent with her stated desire to become involved in the entertainment industry. Client-Participant 1 laughed easily and frequently throughout the session, almost regardless of the content being discussed.

In the session that was selected to be coded, Client-Participant 1 and her therapist played a psychotherapy board game in which they were both asked to answer questions ranging from light (e.g., "Share a discovery that you have made recently that has improved your life," T31) to serious (e.g. "Talk about a time when you felt sad" C137). During the course of the game, Client-Participant 1 discussed a range of topics, including her dating history, current difficulties with her boyfriend, sexual abuse history, and current interpersonal concerns.

The selected session for Client-Participant 1 consisted of 418 talk turns, which were reviewed for verbal expressions of humor and laughter. All together, 49 client verbal expressions of humor were coded for Client-Participant 1, comprising approximately 12% of the total client-participant talk turns during the session. However,

this data should be interpreted in light of the fact that more than one VEH was sometimes coded within the same talk turn. Of these codes, 47 of them (or 96%) represented *Productive Humor* (F2) and only 2 (or 4%) *Reactive Humor* (F1). Unless otherwise specified, all examples below are representative of *Productive Humor*. Among the coded VEH for Client-Participant 1, the frequency hierarchy for the forms of humor used was as follows: *Dark Humor* (26 codes, 53% of coded VEH); *Self-Deprecatory Humor* (17 codes, 35% of VEH); *Aggressive Humor* (14 codes, 29% of coded VEH); *Benign Humor* and *Expression of Humor NOS* (6 codes each, 12% of coded VEH).

Dark Humor (H4) was coded most frequently in the selected session with Client-Participant 1, with a total of 26 codes. An example of this code was found when Client-Participant 1 was discussing conflict between her and her boyfriend, which she attributed in part to him having had a child with an ex-girlfriend:

> [Client sighs] It's, I just don't like it. I don't know what's going on. It's like I don't know, it's like they invading my life. It's like you're going perfect, perfect, perfect. [Then] here comes a [client uses playful tone of voice while stating the following] *big-ass mountain* out of nowhere in the middle of the road [client laughs] (C289).

In this example, Client-Participant 1 made a humorous metaphor relating her boyfriend's ex-girlfriend and their daughter to a "big-ass mountain," which she then laughed about. Particularly since Client-Participant 1 had come into therapy to address difficulties within her romantic relationship, this issue was determined to be a difficult situation for her.

Another example of Client-Participant 1's use of *Dark Humor* occurred in the following talk turn: "Yay [client picks up game card and reads it]. Ok, if you have ever

felt broken hearted- aww that sucks [client brings hand to face and laughs; therapist laughs]. Hey, ok [client laughs and slaps thigh], I don't know which time [client smiles]" (C25). In this example, Client-Participant 1 again joked about a different difficult situation, specifically being emotionally hurt in the context of a romantic relationship. As she also playfully mocked herself and the (presumably high) number of times that she has had her heart broken in this talk turn, the expression was also coded as *Self-Deprecatory Humor* (H3), which was the second most frequently coded form of humor (17 codes total). In fact, of the 26 *Dark Humor* codes, 13 of them (50%) co-occurred with *Self-Deprecatory Humor* codes.

Another example of (co-occurring) *Self-Deprecatory Humor* and *Dark Humor* was found when Client-Participant 1 discussed how challenging it can be for her to ask for help from others; specifically, she stated "…I just don't like asking people for stuff…" (C117). She went on to describe the following:

> …So, plus I mean, it's just that, and a whole lot of, you know, you know a black [client makes air quotations] beggin' black woman [client rests cheek on hand]. You know what I'm saying? It's like I don't want to be one of those [client readjusts herself in chair]. I'm not [client shakes her head and laughs]" (C118).

In this statement, Client-Participant 1 joked about not wanting to fit what she perceived to be a negative stereotype of an African-American woman with financial challenges. Her amused tone of voice and non-verbal behaviors were further illustrative of humor. In addition to *Self-Deprecatory Humor*, this expression was also coded as *Dark Humor* due to the fact that it occurred in the context of a discussion about a negative experience in which Client-Participant 1 needed to ask someone for help.

Aggressive Humor (H2) represented the third most commonly coded form of humor in Client-Participant 1's session, with a total of 14 codes. For example, after being "dumped" for another woman by a previous boyfriend (in high school), Client-Participant described getting "revenge" on him:

> …but years down the road, [the woman whom client's ex-boyfriend dumped her for] was all fat and all this. So I'm like 'Yeah, yeah, oh I still like you' and all this, blah blah. He went on board, so I just wrote him a letter and just dumped him [client laughs and rubs her hands together mischievously] and I was laughing. He was crying and I was happy [client smiles and laughs] (C27).

In this example, Client-Participant 1 explicitly expressed her pleasure and perceived humor at the expense of her ex-boyfriend.

Both *Playful Humor* (H1) and *Expression of Humor NOS* (H5) were the two least frequently coded forms of humor in the selected session with Client-Participant 1, each with 6 codes. An example of Playful Humor occurred when the therapist picked up and read a card stating "If you want to get away, board the sailboat…" (T44), and then stated "Umm, yeah, I do feel like getting away" (T45)… "I guess on a vacation [therapist smiles]" (T46). In response to this, Client-Participant 1 humorously and dramatically stated "Man, I do too [client and therapist laugh]…" (C46). As this desire to "get away" was not discussed in the context of any identified serious or difficult situations, but rather represented a seemingly benign and playful reference to wanting to take a vacation, it was coded as *Playful Humor*. An example of an *Expression of Humor NOS* took place after Client-Participant 1 discussed a situation in which her heart was broken and then

made a vague reference to humor, stating, "…it's been years ago and it's funny now…" (C27).

With regard to laughter, there were a total of 81 coded instances of client laugher, comprising approximately 10% of the total talk turns within the session. Of those codes, 65 of them (or 80%) were determined to be *in the Context of Serious or Difficult Topics* (D1), while the remainder (16 codes, 20%) were coded at being *in the Context of Benign or Positive Topics* (D2). Further, 49 (or 61%) of the 81 total coded client expressions of laughter were *Not Accompanied by a Coded Verbal Expression of Humor* (L2); 32 (or 40%) were *Accompanied by a Coded Verbal Expression of Humor* (L1). Last, Therapist Laughter (TL) was coded 28 times within the session, which comprised 3% of total talk turns.

Client laughter occurred most frequently *in the Context of Serious or Difficult Topics* (D1), with a total of 65 codes. For example, consider the following exchange:

> T95: I mean, like, you know, clients who have been molested [therapist nods head] when they were a child, umm, what you're saying is, is something that a lot of them have…
>
> C95: Oh really? [*client laughs*]
>
> T96: Yeah, because you know they want, it's obvious that the uncle said "I've done these things for you" [therapist points to client]
>
> C96: Yeah.
>
> T97: And therefore you have to pay up…

In this dialogue, Client-Participant 1 laughed in the context of an explicit discussion about childhood sexual abuse, and also in the absence of a verbal expression of humor (L2).

Similarly, when asked by the therapist (based on the game card she selected) to "…talk about something you will never forget…" (T48), Client-Participant 1 responded with the following: "[Client sighs] What, something I'll never forget, well, I guess I could say two things, but I guess I should say the real thing. Well, the first thing that popped into my head was, the molestation [*client laughs*]…" (C48). Client-Participant 1 laughed two additional times during this particular discussion of trauma, and both times this laughter was *Not Accompanied by a Coded Verbal Expression of Laughter*.

At another point in the session, the therapist asked Client-Participant 1 whether she ever fantasized about harming her boyfriend's ex-girlfriend, to which she responded "Yes [*client laughs* and looks down at the ground" (C256). That is, Client-Participant 1 laughed after acknowledging having fantasies about inflicting harm upon someone else. Later in the session, when Client-Participant 1 was reflecting upon a recent, upsetting situation related to looking for a job, she stated "So I felt sad [*client laughs*]" (C145), in which case there was a notable incongruence between her statement of feeling sad and her behavioral expression of laughter.

Client laughter occurred less frequently *in the Context of Benign or Positive Topics* (D2), with a total of 16 codes. For example, when the therapist asked Client-Participant 1 how old her mother was, she initially responded with "I forgot [therapist laughs]. She's probably happy I forgot. But she had me when she was 26" (C206). The therapist then noted "So she's around 54" (T208), to which the client responded "Oh,

she's older than I thought [*client laughs*]" (C 208). This appeared to constitute a neutral topic that did not elicit any negative emotions from Client-Participant 1, and again took place in the absence of an accompanying coded verbal expression of humor (L2).

Although laughter was most frequently coded as *Not being Accompanied by a Coded Verbal Expression of Laughter* (L2, 49 codes total), as illustrated in the above examples, there were also 32 instances of client laughter that were *Accompanied by a Coded Verbal Expression of Humor* (L1). For example, at one point, Client-Participant 1 reported feeling jealous of and somewhat angry towards her boyfriend's daughter, whom client viewed as being a source of conflict between her and her boyfriend; she then joked about feeling jealous of the five-year-old girl, stating: "How can you tell that to your friends? [*Client laughs*] My cousin, she would just be like 'Are you stupid?' Like, what do you think that's gonna do? Competing with a five-year-old…" (C302). In this case, the client's laughter is accompanied by a coded verbal expression of humor. More specifically, the VEH was coded as *Productive Humor* (F2) that represented *Self-Deprecatory Humor* (H3) as well as *Dark Humor* (H4) and *in the Context of Serious or Difficult Topics* (D1).

Therapist Laughter (TL) was coded 28 times during the selected session with Client-Participant 1. At times, this was in response to Client-Participant 1's VEH. For example, at one point, the client described her boyfriend's ex-girlfriend as being "super jealous" of her, and noted that this woman currently works with [Client-Participant 1's] cousin and often asks about her: "…so she'll always be trying to be like so, uh, asking questions like 'does she ever visit?' and 'what's she doing?' and I'll be like, not thinking about you [client and *therapist laugh*]…" (C29). In this example, the therapist responded

to Client-Participant 1's VEH, here in the form of *Productive* and *Aggressive Humor* that is *in the Context of Benign or Positive Topics*.

Other times, the therapist laughed outside of the context of a VEH; for example, the therapist laughed at one point in the session when she landed on a particular space of the game, which she was evidently hoping to get: "…[Therapist moves her game piece three spaces] 1, 2, 3. [Therapist lands on comment space] Comment, yes! [Therapist throws hands in the air and *laughs*]" (T123). Client-Participant 1 further responded to the therapist's laughter and playful nature with the following verbal expression of humor: "Oh man! [*therapist laughs*] I should be sitting over in that chair!..." (C123). That it, Client-Participant 1 joked about wanting to sit in the therapist's chair, as the therapist consistently landed on a particular game space that the client presumably wanted to land on. As this VEH was in response to the therapist's humorous expression, it constituted one of the two *Reactive* forms of humor that were coded across all sessions (see "Findings across Participants" section for other example). In another example, the therapist laughed after reading a game card that stated "Say something about child abuse…" (T155). In this case, the laughter was very incongruent with the serious and difficult nature of the content.

Client-Participant 2. Client-Participant 2 was a 47-year-old, single, heterosexual, European-American woman. She reported suffering a stroke about one year prior to seeking therapy, after which point she began losing her eyesight. Client-Participant 2 further identified her loss of eyesight as being a trigger for her recent compulsive and problematic scratching behaviors (for which no medical basis had been found). Client-Participant 2 was soft-spoken and mild-mannered and was described as "pleasant and

friendly" and "positive" by her therapist in the intake evaluation form. Client-Participant 2 appeared to the coders as docile and agreeable; she frequently smiled and laughed quietly throughout the session. The selected session was spent primarily discussing Client-Participant 2's scratching behavior, medical problems/physical limitations, her and social support system.

The selected session for Client-Participant 2 consisted of 189 talk turns, which were reviewed for expressions of humor. All together, 8 client verbal expressions of humor were coded for Client-Participant 2, comprising approximately 4% of the total client-participant talk turns during the session. All 8 of these codes (100%) represented *Productive Humor*. Among these VEH, the frequency hierarchy for the forms of humor used was as follows: *Dark Humor* (6 codes, 75% of coded VEH); *Self-Deprecatory Humor* (3 codes, 38% of VEH); *Expression of Humor NOS* (2 codes, 25% of coded VEH); *Aggressive Humor* (1 code, 13% of coded VEH); *Benign Humor* (0 codes).

Similar to Client-Participant 1, *Dark Humor* (H4) was coded most frequently in the selected session with Client-Participant 2, with a total of 6 codes. An example of this code was found when Client-Participant 2 playfully described one of her friends as being her "Florence Nightingale" (C114) for providing client with assistance after the client broke her toe and endured potentially dangerous medical complications. Another example of *Dark Humor* occurred when Client-Participant 2 discussed her living situation with the therapist (Client-Participant 2 lived with her friend and her friend's son at the time that the session took place); she described the following:

> It is generally me and [friend's son] at the weekends. [Friend] has a boyfriend and she, [client uses right hand to make a hand gesture indicating the past] kind of

> what we used to do. Umm, years ago. If she wants to go out and I am in then it is no problem. Now [friend's son] is 16 and he doesn't need a babysitter so to speak but he likes having [client scratches nose; therapist nods] company, and she likes to know there's a [client smiles and rolls her eyes] responsible adult in the house [client laughs]. So you know, he keeps an eye on me. He's been- he is very much aware of what I – where I am, what I am doing and what I need to do… (C43).

As this discussion took place in the broader context of Client-Participant 2's presenting problems (e.g., compulsive scratching, physical limitations and inability to function independently) and she referenced her friend's son as "[keeping] an eye on [her]," it was coded as *Dark Humor* (H4). The client also rolled her eyes and mocked the idea of her being considered a "responsible adult," presumably because her emotional and medical difficulties had interfered with her ability to take care of herself, let alone another person; this warranted an additional code of *Self-Deprecatory Humor*.

In fact, the second most frequently coded form of humor for Client-Participant 2 was *Self-Deprecatory Humor*, which was coded 3 times throughout the session. All three instances of *Self-Deprecatory Humor* codes for Client-Participant 2 co-occurred with *Dark Humor* codes.

Expression of Humor NOS (H5) represented the third most commonly coded form of humor for Client-Participant 2, with a total of 2 codes. This code included vague references to humor such as "…And we were laughing…" (C187) and "…It made me laugh…" (C189), neither of which qualified as any of the other established forms of humor according to the coding system.

The fourth most frequently coded form of humor was *Aggressive Humor* (H2), which was coded once during the selected session with Client-Participant 2. At the end of the session, Client-Participant 2 informed her therapist that her brother was coming to visit, and she went on to explain the following:

> …Which is very interesting [client nods and smiles], yes. And when I told my mother [client laughs] [that] my brother was coming, she was upset that that side of the family hadn't made a visit before he did, so that just gives you an indication of [client looks at therapist knowingly and laughs]… (C182).

Although Client-Participant 2 did not complete the last sentence, what she did say, combined with her nonverbal behaviors, indicated that she was poking fun at the dysfunctional nature of her family members, and thus met the criteria for *Aggressive Humor*. This statement was further coded as representing *Dark Humor*, due to her long-standing family problems and associated emotional difficulties (as detailed in her treatment records). As previously noted, there were no instances of *Benign Humor* (H1) in this session, which thus represented the least frequently coded form of humor.

With regard to laughter, there were a total of 30 coded instances of client laugher, comprising approximately 7.94% of the total talk turns within the session. Of those codes, 29 of them (or 97%) were determined to be *in the Context of Serious or Difficult topics* (D1), while the remainder (1 code, 3%) was coded at being *in the Context of Benign or Positive Topics* (D2). Further, 25 (or 83%) of the 30 total coded client expressions of laughter were *Not Accompanied by a Coded Verbal Expression of Humor* (L2); 5 (or 17%) were *Accompanied by a Coded Verbal Expression of Humor* (L1). Last,

Therapist Laughter (TL) was coded 3 times within the session, which comprised 1% of the (378) total talk turns.

Again, client laughter occurred most frequently *in the Context of Serious or Difficult Topics* (D1), with a total of 29 codes. For example, when discussing her loss of eyesight, Client-Participant 2 stated "It's scary [*client smiles and laughs briefly*]…I don't like what [her loss of eyesight has] done or how it has curtailed my activities that were already curtailed anyway [*client smiles and laughs*]" (C9). Another example occurred when Client-Participant 2 was discussing an upcoming eye surgery and her fears about the outcome of it. If the surgery was not successful, she noted that she might have to move to a place where she would be able to receive assistance "'…til the end of my days…however long that is [*client laughs*]…" (C27). At the end of the session (and as previously discussed in the "Findings across Sessions" section), Client-Participant 2 also described laughing about the fact that she was wearing bandages on her wrist as if she had attempted to kill herself, and noted "…And it made me laugh, it probably shouldn't have done, but it did, so [client stands to leave] I'll take anything that makes me laugh these days" (C189). In this last statement, Client-Participant 2 explicitly expressed her desire to find and use humor in her life, which was currently full of problems and challenges.

Client laughter occurred less frequently, and only once, *in the Context of Benign or Positive Topics* (D2). This occurred at the end of the session, when the therapist apologized for not returning the client's recent phone call. In response, Client-Participant 2 stated "No Problem," (C162) and she went on to describe calling the clinic and speaking with someone earlier in the day to confirm her appointment time. In recalling

this, Client-Participant 2 stated "[Client smiles] I'm like is it one [o'clock]? Is it two [o'clock]? We would have just been here at one [*client laughs*]" (C165). This neutral conversation about confirming her appointment time met the criteria for a *Benign or Neutral Topic* (D2).

Laughter was most frequently coded as *Not being Accompanied by a Coded Verbal Expression of Laughter* (L2, 30 codes total), as in the above example. However, there were also 5 instances of client laughter which were *Accompanied by a Coded Verbal Expression of Humor* (L1). For example (and as described earlier), at one point Client-Participant 2 joked about a surgery she planned to have, stating "It sounds even scarier when it is your eyeball [*client laughs*]" (C82). In this case, the client laughter is *Accompanied by a Verbal Expression of Humor* (L1), and is *in the Context of a Serious or Difficult Topic* (D1, H4).

Therapist laughter was coded 3 times during the session with Client-Participant 2. An example of therapist laughter was found after Client-Participant 2 described the following strategy to prevent her scratching behaviors: "Umm, sitting on my hands worked quite well, but then I'll do something. I'll have to use my hands and then forget to sit on them…[*therapist smiles and laughs*, client briefly laughs as well]" (C70).

As previously indicated, there were four coded verbal expressions of humor and four coded instances of client laughter at the very end of the session, after the therapist stated "We have to stop [the session]…" (T159). For example, Client-Participant 2 laughed as she talked about being unsure of her appointment time for the present session as well as having financial support from her friends. Before leaving the room, she also

joked and laughed about wearing a “big white bandage,” which she thought made her look like she “slashed her wrist” (C188).

Client-Participant 3. Client-Participant 3 was a 21-year-old married, Hispanic, Christian woman who immigrated to the United States from El Salvador at the age of 19. She reported experiencing extensive physical and emotional abuse by her biological mother and grandmother in addition to two instances of sexual assault. Client-Participant 3 presented as generally serious and tearful throughout the session. Client-Participant 3 spoke with an accent, as English was her second language. Although treatment records indicated that she spoke English fluently, the therapist sometimes translated words or phrases into Spanish. The selected session primarily revolved around Client-Participant 3’s physical abuse history and family concerns.

The selected session for Client-Participant 3 consisted of 278 talk turns, which were reviewed for expressions of humor. All together, 6 client verbal expressions of humor were coded for Client-Participant 3, comprising approximately 2% of the total client-participant talk turns. All 6 of these codes (100%) represented Productive Humor. Among these VEH, the frequency hierarchy for the form of humor used was as follows: *Expression of Humor NOS* (4 codes, 67% of coded VEH); *Aggressive Humor* (2 codes, 33% of coded VEH); *Dark Humor* (1 code, 17% of coded VEH); *Self-Deprecatory Humor* and *Benign Humor* (0 codes each).

Expressions of Humor NOS (H5) were coded most frequently in the selected session with Client-Participant 3, with a total of 4 codes. For example, Client-Participant 3 stated the following in reference to her aunt, in which she makes a vague reference to humor/laughter: “…She say sometimes and some things are real stupid or she talk about

me and when I'm in front of her she just look at me and she laugh like she's crazy…" (C225). Later in the session, she again made a vague reference to humor, stating the following

> …my family, especially my grandma, she was like say that I'm stupid, that I'm mean and stupid, she always calls me stupid for some reason, [client scratches face with right hand] she say that I'm dumb, she say, you know that's kinda bad, I think it's funny now, but back then I used to cry a lot (C246).

Although it did not represent a VEH, at the end of this statement, Client-Participant 3 reflected upon finding a situation that used to elicit negative emotions as "funny" now.

The second most frequently coded form of humor was *Aggressive Humor* (H2), with a total of 2 codes. An example of this was found when Client-Participant 3 stated "…I'm gonna cook with my mother-in-law, she not a good cook but she's really nice [client laughs]" (C274). Although only mildly aggressive, this humorous statement poked fun at her mother-in-law's cooking abilities.

Dark Humor (H4) represented the third most commonly coded form of humor for Client-Participant 2, which was coded once during the session. During the session, Client-Participant 3 discussed her perception of marriage as being unhealthy, due to the high rate of domestic violence that she witnessed in El Salvador (her country of origin). She described the following:

> When…my husband and he propose me to get married with him and everything I didn't [know if I wanted to say yes] because, you know [client points to therapist] in my country, you see, people get married, like you see this one with their big

> eye [client points to eye with right hand and laughs, therapist nods], you see them purple all over sometime, they say 'no I just fell,' this and that, right? (C254).

In this VEH (which also represented *Aggressive Humor*), Client-Participant 3 used humor to make light of the effects of domestic violence and her resulting view of marriage. *Self-Deprecatory* (H3) and *Benign Humor* (H1) were the two least frequently coded forms of humor, and no instances of either were coded in the transcribed session with Client-Participant 3.

With regard to laughter, there were a total of 14 coded instances of client laugher, comprising approximately 3% of the total talk turns within the session. Of those codes, 11 of them (or 79%) were determined to be *in the Context of Serious or Difficult Topics* (D1), while the remainder (3 codes, 21%) were coded at being *in the Context of Benign or Positive Topics* (D2). Similarly, 11 (or 79%) of the 14 total coded client expressions of laughter were *Not Accompanied by a Coded Verbal Expression of Humor* (L2), and 3 (or 21%) were *Accompanied by a Coded Verbal Expression of Humor* (L1). Last, *Therapist Laughter* (TL) was coded 4 times within the session, which comprised 1% of total talk turns.

Client laughter occurred most frequently *in the Context of Serious or Difficult topics* (D1), with a total of 11 codes. An example of this was found when Client-Participant 3 expressed concern for the safety and well-being of her sisters, who were currently under the care of their grandmother. Client-Participant 3 described her grandmother as "kinda mean…but at the same time, she take care of them better than my mom" (C101). She continued on, stating "Anything [is] better than my mom [*client laughs*]" (C102). In this case, client laughter was *in the Context of Serious or Difficult*

Topics (i.e., family conflict and concerns for safety), but was *Not Accompanied by a Verbal Expression of Humor* (L2). Client laughter occurred less frequently *in the Context of Benign or Positive Topics* (D2), with a total of 3 codes. For example, regarding her grandparents, Client-Participant 3 stated "They are pretty old [*client smiles and laughs*]" (C119).

As in the above example, laughter was, once again, most frequently coded as *Not Accompanied by a Coded Verbal Expression of Laughter* (L2, 11 codes total), although there were 3 instances of client *Laughter Accompanied by a Coded Verbal Expression of Humor* (e.g., Client-Participant 3's laughter accompanying her joke about her mother-in-law's bad cooking; L1).

Therapist Laughter (TL) was coded 4 times during her session with Client-Participant 3. For example at the beginning of the session, the therapist informed the client of the following: "We don't have to be in the kid's room [*therapist laughs*]. Let's find us a real one this time [therapist and client enter the room; therapist laughs and client smiles" (T1). At the very *end* of the session, the therapist responded to Client-Participant 3's joke about her mother-in-law being nice but "not a good cook" (C275) by stating "I remember you saying that [*therapist laughs*]. Well at least the nice part…helps, right?" (T276) as they stand up to leave the room.

With regard to the timing of expressions of humor, at the very beginning of the session (in the first talk turn), the therapist laughed when discussing the room they would be using; soon thereafter (i.e., T12), Client-Participant 3 laughed when filling out a fee abatement form and discussing her husband's income. At the end of the session, as Client-Participant 3 reached into her wallet to pay for the session, the therapist asked her

what she was doing for Thanksgiving, which the client responded to with a verbal expression of humor and laughter, to which the therapist laughed in response.

Client-Participant 4. Client-Participant 4 was a 39-year-old married woman and mother of 4 children who identified as being of Black, American Indian, and Caucasian descent. Upon seeking therapy, she had recently found out that one of her daughters (whom she had guardianship over, but was not biologically related to) had likely been molested by her own father four years ago. Client-Participant 4 had been sexually molested herself by her paternal grandfather when she was 7 years old. The coders found Client-Participant 4 to present as forthcoming, earnest, and emotionally expressive, demonstrating a broad range of affect throughout the session. The therapist described Client-Participant 4 as "alert and eager to be helpful in questioning and responding" in her intake evaluation. As the selected session was an intake, it was spent gathering information related to Client-Participant 4's presenting problem, which concerned her recent discovery about the potential abuse of her daughter by her father. Although much of the session was spent discussing Client-Participant 4's distress related to this recent discovery, some time was also spent discussing her own trauma history and associated difficulties

The selected session for Client-Participant 4 consisted of 184 talk turns, which were reviewed for expressions of humor. All together, 6 client verbal expressions of humor were coded for Client-Participant 4, comprising approximately 3% of the total client-participant talk turns during the session. This session contained the fewest client verbal expressions of humor, all 6 of which (100%) represented *Productive Humor* (F2). Among these VEH, the frequency hierarchy for the form of humor used was as follows:

Dark Humor and *Aggressive Humor* (3 codes each, 50% of coded VEH); *Self-Deprecatory Humor* (2 codes, 33% of VEH); *Benign Humor* and *Expression of Humor NOS* (1 code each, 17% of coded VEH).

Dark Humor (H4) and *Aggressive Humor* (H2) were both coded most frequently in the selected session with Client-Participant 4, with a total of 3 codes each. Furthermore, these codes co-occurred in all 3 coded expressions. For example, in discussing her father, Client-Participant 4 stated the following:

> At the assisted living place he's had some flirtatious bantering going on with the receptionist, who has told me that she is completely uncomfortable around him, has always asked the male caregiver when she even sees his car to please stay here, so just boundary issues up the, *up the wazoo* [client emphasizes the last few words; client and therapist both laugh] (C45).

In this example, Client-Participant 4 used playful language to make fun of her father's inappropriate and reportedly upsetting behavior, creating a humorous juxtaposition between the two. Accordingly, this was coded as containing both *Dark* and *Aggressive Humor*.

Later in the session, Client-Participant 4 described a problem with her husband (more specifically, that she did not feel understood by him with regard to her current emotional difficulties) and used humor in a similar manner:

> …and I told him too, I start to communicate with you and you give me this look, this puzzled look, this look and I feel like an idiot and I shut down, because I feel stupid, because you are not getting it and you *can't even fake it well* [client says these last few words in a playful and drawn-out manner; client laughs] (C161).

In this case, Client-Participant 4 was poking fun at her husband's inability to even "pretend" as if he understood what she was trying to communicate to him, which is a source of conflict between them. Again, this statement represented both *Dark* and *Aggressive* forms of humor.

The third most frequently coded form of humor was *Self-Deprecatory Humor* (H3), with a total of 2 codes. One example of this was found in Client-Participant 4's response to the therapist's question about her ethnic background. She described "I'm a *mutt* [client emphasizes this word and therapist laugh together]. I have Black, you know, I have Indian in me, I have German in me, I'm a mutt. I have a little bit of everything" (C103). In this statement, Client-Participant uses a playful and self-deprecatory word that is not usually used to describe humans (i.e., "mutt") to explain her ethnic identification. Another example of *Self-Deprecatory Humor* (in addition to *Dark* and *Aggressive Humor*) was found in reference to Client-Participant 4's financial situation, regarding which she stated the following: "[client's guardianship daughter] came to us and she thought that we were rich, and we're *so* paycheck to paycheck. You know [client laughs]" (C70)…"*we're not rich, honey* [continuing laughter]" (C71). Client emphasized the end of this sentence and used a sarcastic and condescending tone of voice.

Benign Humor (H1) and *Expression of Humor NOS* (H5) represented the two least frequently coded forms of humor, each with 1 code. As previously discussed, Client-Participant 4 used *Benign Humor* when she playfully described her daughter as a "Mini-me" (C20) of her other daughter. An example of an *Expression of Humor NOS* was found in the following statement, regarding her guardianship daughter: "…she swears she's not gonna have, she says she's gonna give me a pet for a grandkid [client and therapist

laugh]" (C85). In this example, Client-Participant 4 is re-telling a humorous story rather than producing it herself, thus warranting an NOS code.

With regard to laughter, there were a total of 33 coded instances of client laugher, comprising approximately 9% of the total talk turns within the session. Of those codes, 26 of them (or 79%) were determined to be *in the Context of Serious or Difficult Topics* (D1), while the remainder (7 codes, 21%) were coded at being *in the Context of Benign or Positive Topics* (D2). Further, 27 (or 82%) of the 33 total coded client expressions of laughter were *Not Accompanied by a Coded Verbal Expression of Humor* (L2), and 6 (or 18%) were *Accompanied by a Coded Verbal Expression of Humor* (L1). Last, *Therapist Laughter* (TL) was coded 25 times within the session, which comprised 7% of total talk turns.

Once again, client laughter occurred most frequently *in the Context of Serious or Difficult Topics* (D1), with a total of 26 codes. For example, consider the context of the following statement, which was in reference to Client-Participant 4's grandmother, whom the client takes care of:

> And it angers me so much, and I'm the one that does everything for [client's grandmother]. Like, I'm not working right now but I feel like I am 'cause I'm over here all the time with you. And I got a baby on my hip, I'm trying to make phone calls for you. And put your laundry away and fuck [*client laughs*], and I don't want to abandon her but God damn it don't expose me to [client's father], don't do it, you know, so I have all that. I have a lot going on (C59).

In this example, the client explicitly discussed current stressors and the overwhelming sense of responsibility she felt, which she laughs about while describing. Furthermore,

immediately following this disclosure by Client-Participant 4, the therapist laughed in the absence of any identified humorous stimuli.

Another example of client *Laughter in the Context of Serious or Difficult Topics* (D1) was found in the following exchange:

> C35: [The disclosure about the potential abuse of client's guardianship daughter by her father] happened around the beginning of February, like the second week, first of second week of February.
>
> T36: Oh ok, very recently then.
>
> C36: Yeah, yeah, yeah, yeah [client lowers her head, sighs slightly, *laughs,* looks down, then touched her head and covers her eyes].

In this example, Client-Participant 4's laughter again occurs in the context of a discussion about a clearly identified difficult topic.

Client laughter occurred less frequently *in the Context of Benign or Positive Topics* (D2), with a total of 7 codes. For example, as she was finishing the intake paperwork, Client-Participant 4 noted "…This is the most thorough comprehensive intake I've ever experienced [*client and therapist laugh*]" (C8). Another example was found in the following exchange, which took place after Client-Participant 4 was informed that she could not pay for the session using a credit card, and she reported being unable to pay with cash:

> C15: It can be billed to the next session?
>
> T15: Yeah, we can bill it for the next session.
>
> C16: [Client looks at therapist] And you do take checks, right?
>
> T16: We definitely take checks, checks or cash.

C17: I'll give you what I have.

T17: I'm sorry about that [*therapist laughs*].

C18: Do I give that to you now [*client and therapist laugh*]?

T18: Sure [Client hands money to therapist].

As the issue of payment was not clearly identified as being serious or difficult, and could fall under the category of "general discussions of therapy," it was coded as *Laughter in the Context of Benign or Positive Topics* (D2). Despite this constituting a typical therapy topic, the issue of money can be a source of discomfort in therapy and will be discussed further in the discussion section.

Laughter was most frequently coded as *Not Accompanied by a Coded Verbal Expression of Laughter* (L2, 33 codes total), and less frequently coded as being *Accompanied by a Verbal Expression of Humor* (L1, 6 codes total). An example of the former can be found in the previous example about payment; an example of the latter occurred after Client-Participant 4's humorous expression about being "a mutt" (C103), also described earlier.

Therapist Laughter (TL) was coded 25 times during the session with Client-Participant 4. Although therapist laughter often occurred in response to a VEH, there were also many instances in which the therapist laughter appeared unwarranted. For example, consider the following client expression and therapist response: "[Client's guardianship daughter] was very, she's always been a very quiet kid. Kind of a person that represses her feelings, she's not like me where you know what I'm thinking and feeling [*therapist laughs*]." Another example of therapist laughter in the absence of any apparent humor occurred in the following therapist statement:

> Yeah, so if we, you mentioned you wanted to work on some relaxation techniques, we'll definitely do that and it's an area, my background expertise [is] in research, so we'll look at all these things and we'll purge them slowly but surely and find ways to organize them psychologically and deal with them physically [*therapist laughs*], also we're gonna, we're gonna make it better (T85).

At the end of the session, as the therapist and Client-Participant 5 were discussing payment, the therapist stated the following: "I think you said that your husband makes about $50,000 a year for the whole family? Four dependents, five, so six, so endless pennies" (T177), to which the client responded with laughter. Although not formally coded as such, this appeared to represent a therapist VEH, as she was joking about how little Client-Participant 5's husband made given the number of children/dependents they have. As previously discussed, there was also one coded verbal expression of humor, three coded instances of client laughter, and four coded instances of therapist laughter at the beginning of the session, most of which took place in the context of a discussion about the session fee.

Client-Participant 5. Client-Participant 5 was a 28-year-old heterosexual, Caucasian, Protestant woman with two children. She reported a history of childhood sexual abuse, by a neighbor, which lasted several years, in addition to being sexual abused by her father and neglected by her mother. Client-Participant 5 also reported experiencing domestic violence in her relationship with her husband, with whom she had a tenuous relationship. The coders noticed that client spoke slowly, expressed very minimal emotion throughout the session, and presented with an extremely dry and sardonic sense of humor. In the intake evaluation, the therapist described Client-

Participant 5 as "extremely intelligent," but noted that this client often "smirked" when discussing painful past events. The selected session involved discussions about Client-Participant 5's history of abuse and neglect and current interpersonal difficulties (including with her husband).

The selected session for Client-Participant 5 consisted of 301 talk turns, which were reviewed for expressions of humor. All together, 12 client verbal expressions of humor were coded for Client-Participant 5, comprising approximately 4% of the total client-participant talk turns during the session. Again, all 12 of these codes (100%) represented *Productive Humor* (F2). Among these VEH, the frequency hierarchy for the form of humor used was as follows: *Aggressive Humor* (9 codes, 75% of coded VEH); *Dark Humor* (6 codes, 50% of coded VEH); *Self-Deprecatory Humor* (4 codes, 33% of VEH); *Benign* and *Expression of Humor NOS* (0 codes for either).

Aggressive Humor (H2) was coded most frequently in the selected session with Client-Participant 5, with a total of 9 codes. For example, Client-Participant 5 described her ability to successfully control others' thoughts and behaviors; "…when I was a kid, I could make anybody do anything, and them think they thought it up themselves" (C151). She went on to reminisce about her influencing others "for fun" when she was a teenager, and described thinking "Like, [client laughs], what can we make people do today?" (C154). In this expression, Client-Participant jokes about and makes light of her past behaviors. Furthermore, the therapist responded to this VEH with laughter.

Early in the session, Client-Participant 5 also discussed conflict between her and her husband with regard to their finances. She noted that one of the "stipulations" for them getting back together involved him contributing a certain amount of money to their

expenses on a monthly basis. When the therapist asked whether her husband was following through on these conditions, Client-Participant 5 responded with "So far so good. A little bit late, which I have had the good fortune of being able to gently rub in [client says this with a sarcastic tone of voice]" (C71). This statement was also coded as taking the form of *Dark Humor*, as it was in the context of a discussion about her marital problems.

Another example of *Aggressive Humor* (H2), also in the context of marital conflict about money, took place later in the session. Client-Participant 5 described how her husband was interested in attending a "cool marriage retreat" and shared what her response to him regarding this was: "…well I said, 'Well, yeah, we can do that. I can afford that. Ooo [client pauses and says the reminder of the sentence in a drawn out, sarcastic manner] expect I have to pay the rent '" (C102). Again, this also qualified as *Dark Humor* (H4), which represented the second most frequently coded form of humor (total of 6 codes).

Self-Deprecatory Humor (H3) represented the third most commonly coded form of humor for Client-Participant 5, with a total of 4 codes. For example, Client-Participant 5 joked "…I don't have any enemies" (C135)…"because I'm not that special [client laughs]" (C137). Client-Participant 5 also used this form of humor in the following statement: "Like, I would never want to depend fully on someone else…because apparently I don't trust people, but…[client laughs]" (C68). In this example, Client-Participant 5 lightly mocked herself and her difficulties trusting people, which, according to her treatment records, she attributed in part to her abuse history. Accordingly, this was also coded as using humor to treat difficult or challenges subject matter in a light manner

(i.e., *Dark Humor*; H4). Similarly, Client-Participant 5 later stated "I'm always the one that has to make something happen [in client's marriage]" (C85)…"because that's my function in life, I guess [said in acerbic but amused tone of voice]" (C86). This was also coded as *Aggressive* (towards her husband) and *Dark*, as it involved marital conflict. Neither *Benign Humor* nor *Expression of Humor NOS* were coded in the selected and transcribed session with Client-Participant 5, and they thus represented the least frequently coded forms of humor.

With regard to laughter, there were a total of 25 coded instances of client laugher, comprising approximately 4% of the total talk turns within the session. Of those codes, 18 of them (or 72%) were determined to be *in the Context of Serious or Difficult Topics* (D1), while the remainder (6 codes, 24%) were coded at being *in the Context of Benign or Positive Topics* (D2). One instance of laughter did not reach agreement for D1 or D2, and was thus not coded as either. Further, 18 (or 72%) of the 25 total coded client expressions of laughter were *Not Accompanied by a Coded Verbal Expression of Humor* (L2); 7 (or 28%) were *Accompanied by a Coded Verbal Expression of Humor* (L1). Last, *Therapist Laughter* (TL) was coded 13 times within the session, which comprised 2% of total talk turns.

Client laughter occurred most frequently *in the Context of Serious or Difficult Topics* (D1), with a total of 18 codes. For example, Client-Participant 5 described having thoughts and actually making a plan to end her life as a child (due to the distress associated with her experiences with abuse and neglect), and described the following:

C220: …I [client smiles] I was almost eight years old, I sat down and figured out how many days until I turned eighteen. And actually before excel was ever invented [*client smiles and laughs*] I actually put it on a spreadsheet.

T221: Mm-hmm [therapist nods head].

C221: [I] wrote it out spreadsheet-style by hand [client makes writing motions in air with left hand] and that was the day I decided that I wanted to die, because I couldn't live that long [client shakes head back and forth].

T222: And you did [therapist nods]

C222: I did, to my absolute shock [*client smiles and laughs quietly*].

In this example, both instances of client laughter were *Not Accompanied by a Coded VEH* (L2), and were expressed *in the Context of a Serious or Difficult Topic* (D1).

Although less frequently, client laughter was coded 6 *times in the Context of Benign or Positive Topics* (D2). An example of this was found when Client-Participant 5 recalled playing a practical joke on her parents and reported doing it "'Cause I, [*client laughs*] I thought it'd be fun" (C175). As with all of the other client-participants, Client-Participant 5's laughter was most frequently coded as *Not Accompanied by a Coded Verbal Expression of Laughter* (L2, 25 codes total). However, there were 7 instances of client laughter which were *Accompanied by a Coded Verbal Expression of Humor* (e.g., her earlier reference to not having any enemies because she is "not that special").

Therapist Laughter (TL) was coded 13 times during her session with Client-Participant 5. For example, after Client-Participant 5 stated "I know that sounds weird, but I don't like people" (C131), the therapist laughed as she asked the client to "tell [her] about that" (T132). The following exchange also involved therapist laughter:

T148: It's interesting also because you had so little control in your childhood and, almost in, in this subversive way, you were taking the reins.

C148: Oh yeah.

T149: Mm-Hmm.

C149: You had to survive somehow.

T150: Mm-Hmm.

C150: Oh yeah, yeah.

T151: [*Therapist laughs*]

With regard to the timing of humor use, Client-Participant 5 laughed during the first talk turn, as she showed her therapist a piece of paper that she had brought in, perhaps a homework assignment from the previous session. At the end of the session, after the therapist said "…I wanted to stop [the session] a little bit early [to complete follow-up self-report questionnaires]" (T290), there were four coded instances of client laughter and two coded instances of therapist laughter.

Chapter IV. Discussion

Although existing research suggests that humor can be a useful coping tool in the face of stressful or traumatic events, there is minimal research on how therapy clients who have experienced trauma actually express humor in therapy, and in particular in the context of difficult or traumatic subject matter. Accordingly, the current study sought to explore client expressions of humor in therapy to see how humor was used in therapy sessions by trauma survivors. In order to address this issue, the researcher created a coding system based on existing literature on humor and psychology, and employed a qualitative content analysis to examine the deductively coded verbal expressions of humor and laughter in psychotherapy sessions with trauma survivors.

First and foremost, the findings from this study illustrated the rich and complex nature of humor and provided additional support for the conceptualization of humor as a multidimensional phenomenon involving cognitive, emotional, behavioral, and motivational elements (Schachter & Wheeler, 1962; Martin, 2007). The results suggest that clients do deliberately find, use, and respond to humor both verbally and in the form of laughter in psychotherapy sessions, and often do so in the context of serious (e.g., relationship problems), difficult (e.g., financial stressors), or traumatic (e.g., childhood sexual abuse) topics. In fact, client verbal expressions of humor rarely took the form of *Benign Humor*, but more often represented different combinations of *Dark*, *Aggressive*, and/or *Self-Deprecatory Humor*. Client-participants were also found to laugh almost twice as often as they produced a verbal expression of humor, with their therapists laughing along with them roughly half the time. Surprisingly, therapists infrequently

responded to client verbal expressions of humor with laughter, but more often laughed outside the context of any identifiable humor, including verbal humor or laughter.

These findings have implications for clinical training as well as the development of programs intended to teach individuals to develop and use humor in their daily life. It is hoped that this study will raise awareness around the issue of client humor use in therapy, humor use in coping with stressful or traumatic events, and cultural variations in humor use. In addition, these findings shed light on the use of potentially maladaptive forms of humor, an area of study that has been almost entirely neglected.

This chapter begins with a discussion of the coded expressions of humor, including both verbal expressions of humor and laughter. Patterns found in the data, both across and within participants, are discussed in the context of current literature. Limitations of the study are then presented, followed by a discussion of the contributions from this study and implications for future research in the area.

Findings Related to Verbal Expressions of Humor Codes

Although some researchers and clinicians suggest that client use of humor in psychotherapy is inappropriate and should be minimal, others propose that humor has its place in therapy and can, in fact, advance therapeutic goals (Franzini, 2001; Garrick, 2005; Marcus, 1990; Vereen et al., 2006). The present study added to the need for literature examining actual frequency rates of humor in psychotherapy. Across the five transcribed psychotherapy sessions with trauma survivors, client verbal expressions of humor comprised 7% of total client-participant talk turns, although the frequency varied by participant, with 12% of the total talk turns representing verbal expressions of humor for Client-Participant 1, 4% for Client-Participant 2, 2% for Client-Participant 3, 3% for

Client-Participant 4, and 4% for Client-Participant 5. Overall, client-participants (with the exception of Client-Participant 1) used verbal expressions of humor fairly infrequently in the selected therapy sessions, which is generally consistent with the (minimal) literature that exists on the frequency of verbal humor in therapy (Gregson, 2009; Killinger, 1987). However, studies looking more specifically at group art therapy interventions with children, adolescents, and adults (Silver, 2002, 2007) and with war veterans (Kopytin & Lebedev, 2013), found that humorous responses ranged from representing 9% to 45% of overall client responses to therapeutic interventions. Therapy modality and other methodological differences may account for the wider range of humor rates in these art therapy studies compared to the current one involving individual psychotherapy.

Across the five sessions, Client-Participant 1's session contained 60% of all coded verbal expressions of humor, and there could be a number of different explanations for this finding. First, Client-Participant 1 spoke rapidly, and her session was almost fifteen minutes longer than the other sessions, thus providing more time and opportunities for humor to occur. In addition, Client-Participant 1's humor use was also consistent with her stated desire to become involved in the entertainment industry, suggesting that her more frequent use of humor may be deliberate and a manifestation of her interests. According to the literature (See "state-trait debate" in Chapter 1; Lehman, Burke, Martin, Sultan, & Czech, 2001; Martin, 2007), her humor use is also likely influenced by a combination of innate personality traits, environmental factors (e.g., family environment growing up, history of abuse, therapist factors) and cultural variables (e.g., African-American culture). For example, from a cultural perspective, her humor use could be illustrative of the social conditions of African Americans historically, and of the significance of humor use for

empowerment and comic relief during difficult times (Vereen et al., 2006; Watkins, 2012). From an environmental perspective, Client-Participant 1's humor use may have been elicited in part by the use of a therapeutic game in session, which could have served as a stimulus for verbal and behavioral expressions of humor.

In addition to the wide range in frequency of humor use seen in this and other studies on humor in psychotherapy, the nature of client-participant humor appeared to vary with regard to their relation to treatment goals. Besides being more frequent than the other client-participants, Client-Participant 1's use of humor also often appeared to be inconsistent with her therapy goals; for example, her intake report identified the exploration of her trauma history and learning how to identify and communicate her emotions to others as goals for therapy, but Client-Participant 1 often used humor in the context of topics that typically elicit negative emotions (e.g., her trauma history), suggesting that she was perhaps not expressing her true feelings. In fact, research has found trauma survivors with PTSD (specifically veterans) to be less emotionally expressive and less disclosing than those without the diagnosis, which may be the result of the impact of past trauma on emotional numbing (Cook et al., 2004). Although Client-Participant 1 was not formally diagnosed with PTSD at intake, it may be the case that her trauma history has contributed to difficulties in emotional expressiveness. Similarly, Kopytin and Lebedev (2013) suggested that the high frequency of humor responses they received from (primarily male) veterans in response to a group art therapy intervention was related to their resistance to art therapy, which many of them reported viewing as "childish," ineffective, or "not men's business." Thus, for both Client-Participant 1 and the veterans in the Kopytin and Lebedev (2013) study, the nature of the humor used may

have represented an effort to exert self-control when asked to express emotional experiences. Conversely, Client-Participant 2 used verbal humor less frequently during her therapy session, and perhaps more aligned with her stated goals of learning how to relax and experience more positive (rather than negative) emotions.

Consistent with the multifaceted conceptualization of humor described in the literature (Martin, 2007), verbal expressions of humor were coded within each of the different humor categories. That it, verbal expressions of humor varied from usage of playful, benign language (e.g., Client-Participant 4's description of her daughter as a "mini-me") to more explicit mocking of others (e.g., Client-Participant 3's joke about her mother-in-law's terrible cooking) or one's own misfortunes (e.g., Client-Participant 1's humorous reference to not wanting to be a "beggin' black woman"). Among the total 82 VEH codes, 42 (52% of total coded VEH) were coded as *Dark Humor*, indicating that the client-participants frequently expressed humor within the context of challenging and dark subject matter, including past traumatic events. *Aggressive Humor* was coded 29 times (36% of total coded VEH) and *Self-Deprecatory Humor* 26 times (32% of total coded VEH). Last, 13 (16% of total coded VEH) represented an *Expression of Humor Not Otherwise Specified*, and 7 (9%) *Benign Humor*. Although there appears to be very minimal existing research on the most common forms of client humor used in therapy, one study on the therapeutic effects of group art therapy found "negative" humor, and "disparaging" (i.e., *Aggressive Humor*) and self-disparaging humor, in particular, to occur more frequently than "positive" humor, among a group of 888 adults (ages 20-65 years old, race/ethnicity not specified; Silver, 2002, 2007). These findings were generally

consistent with the results of this study, with *Benign Humor* occurring much less frequently than *Dark*, *Aggressive*, and *Self-Deprecatory Humor*.

Verbal expressions of humor also often consisted of a combination of the different forms of humor (e.g., *Aggressive* and *Dark Humor*), as has been found in other studies attempting to categorize expressions of humor (Bell, 2009; Martin et al., 2003; Kopytin & Lebedev, 2013; Silver, 2002, 2007) However, these previous studies focused on general humor use in a classroom setting (Bell, 2009), validating a self-report measure for assessing individual differences in humor (HSQ; Martin et al., 2003), and the therapeutic effects of group art therapy (Kopytin & Lebedev, 2013; Silver, 2002, 2007), rather than examining humor use in the context of therapy or specifically in coping with difficult or traumatic events. Furthermore, these studies did not examine the overlaps between different forms of humor in a systematic or comprehensive manner, but rather simply noted the presence of overlapping types, particularly with regard to functionality (e.g., humor serving an affiliative function with one person, while simultaneously aggressive towards another).

Also consistent with other studies examining laughter in therapy (Mahrer & Gervaize, 1984), humorous communication in the classroom (Bell, 2009), and humor responses to group art therapy interventions (Kopytin & Lebedev, 2013; Silver, 2002, 2007), the coded verbal expressions of humor in this study rarely took the form of overt jokes, comedy routines, puns, one-liners, or insults, but rather the use of wordplay, sarcasm, or anecdotes. Due to the often subtle nature of these expressions, examination of nonverbal behaviors (including client's tone of voice, mannerisms, smiles, and laughter) and therapist reactions to client-participant expressions assisted in identifying verbal

expressions of humor, as these factors often, but not always (e.g., as with Client-Participant 1, discussed further below) illuminated humorous intent and/or impact. Verbal expressions of humor were accompanied by a range of nonverbal behaviors across client-participants; for example, Client-Participant 1 demonstrated frequent smiles, laughter, and playful hand gestures, whereas Client-Participant 5 generally presented with a deadpan expression and minimal positive affect.

This section discusses the different forms of humor found across participants in the context of relevant literature, including: *Productive Humor* versus *Reactive Humor*, *Dark Humor*, *Aggressive Humor*, *Self-Deprecatory Humor, Expression of Humor Not Otherwise Specified,* and *Benign Humor.*

Productive versus reactive humor. Consistent with research that has found clients much more likely to initiate use of humor in therapy than therapists (Marci, Moran, & Orr, 2004), coded verbal expressions of humor overwhelmingly took the form of *Productive Humor* (79 codes, 98%), versus *Reactive Humor* (2 codes, 2%). That is, the client-participants frequently deliberately produced and used humor in situations or topics in therapy that did not appear to be inherently humorous, but rarely recognized or responded to humorous stimuli in the environment (e.g., therapist or situational humor). This discrepancy does not necessarily suggest that the client-participants *failed* to respond to humor in their environment, but rather that there were perhaps few opportunities for such humor to take place (e.g., due to limited instances of therapist humor).

In fact, only one client-participant (C-P 1) was coded as using *Reactive Humor*, and the context of her therapy session involved the use of a game, which may have

facilitated more opportunities for situational humor to occur than in a typical therapy session. For example, Client-Participant 1 responded to unintentional humor in the environment early in selected the session; immediately after stating "…Don't get three please…" (C46), she rolled a three, to which she jokingly responded by saying "…Oh no, I'm leaving [therapist laughs]" C46). Later in the session, Client-Participant 1 responded to the therapist's humorous expression and playful nature with a verbal expression of humor. This humorous response was indicative of Client-Participant 1's ability to perceive, appreciate, and respond to humor in the environment, rather than simply her ability to *produce* it (Martin, 2007; Ruch, 1992).

Productive Humor was used by the client-participants during both neutral and difficult discussions, including benign daily activities, histories of sexual or physical abuse, medical problems, financial issues, cultural or ethnic identification, and both positive and harmful relationships with family members and friends. For example, consider Client-Participant 2's playful description of her inability to walk due to her vision problems, when she stated "I couldn't carry the cup of tea, but I could make it [client laughs]" (C107). The fact that Client-Participant 2 was unable to carry her cup of tea was not inherently humorous, but she found irony in the fact that she was physically capable of making the tea, but not actually carrying it. Based on existing research on humor, stress, and coping with trauma, this type of humor may have allowed for a more positive reframing of a threat (Cann & Etzel, 2008). That is, the cognitive shift created by humor may have allowed Client-Participant 2 to distance herself from the stressful nature of her medical conditions, which could potentially allow her to cope more effectively. Her ability to produce such humor also suggests that she has the "creative and ideational

fluency skills, along with performance competencies" (Craik & Ware, 1998, p. 92) necessary to use *Productive Humor*.

According to the literature, creating humor (whether *Productive* or *Reactive*) represents the "cognitive" dimension of humor, which has to do with an individual's ability to put things in a funny context (Martin, 2007, Peterson & Seligman, 2004). Thus, humor creation often illustrates the cognitive-perceptual elements of humor and is consistent with "incongruity theories" of humor.

Dark humor. Across participants, *Dark Humor* (H4; i.e., humor used to treat serious, dark, or painful subject matter in a light manner) represented the form of humor that was coded most frequently, characterizing over half of all verbal expressions of humor across participants (42 codes; 52% of all VEH), as well as the predominant form of humor used for three of the five participants (Client-Participants 1, 2, and 4). Consistent with existing research on humor and coping (Lefcourt & Thomas, 1998; Martin, 2007; McGhee, 2010; McGraw et al., 2012), the client-participants used *Dark Humor* in the context of situations ranging from mildly difficult or painful (e.g., Client-Participant 1 playfully referencing past "heart-breaks") to life-threatening or traumatic (e.g., Client-Participant 4 making a joke during a discussion about the suspected sexual abuse of her daughter by client's own father). The *Dark Humor* category in this study also included forms of humor that might have been labeled and coded as "lethal" or "morbid" humor in other studies assessing humor in (art) therapy (Kopytin & Lebedev, 2013; Silver, 2002, 2007)

However, *Dark Humor* occurred on its own in only 24% of the total H4 codes, more often co-occurring with *Self-Deprecatory Humor* (38% of all H4 codes), and almost

as frequently with *Aggressive Humor* (31% of all H4 codes). All three (H2, H3, and H4) of these forms of humor co-occurred in 7% of the *Dark Humor* codes. Findings related to these co-occurring codes are later discussed in more detail in the context of relevant literature. In this section, the potential mechanisms and functions of *Dark Humor* (both beneficial and maladaptive) are discussed in the context of specific examples with the client-participants for this study, based on existing theories and research in the literature.

Research suggests that *Dark Humor* can allow an individual to remain aware of stressful or dangerous situations, while simply experiencing diminished (negative) emotional reactions (Lefcourt et al., 1995; May, 1953). In particular, *Dark Humor* has been found to help individuals with a wide range of medical and health-related difficulties to make light of their problems, maintain a sense of optimism, and emotionally distance oneself from thoughts about their own death (Martin, 2007). Client-Participant 2, for example, who suffered from a stroke and consequent loss of eyesight, expressed humor in the context of these difficult topics. Consider the following instances of *Dark Humor* used by Client-Participant 2 (previously described in more detail): "It sounds even scarier when it is your eyeball [client laughs]..." (C82) and "…[client's friend] likes to know there's a [client smiles and rolls her eyes] responsible adult in the house [client laughs]…" (C43). Client-Participant 2 generally demonstrated appropriate affect throughout the session (e.g., expressed sadness and fear in relation to upcoming surgeries and in reflecting upon previous challenging or painful experiences), but occasionally joked about her difficulties. Thus, use of *Dark Humor* might have allowed Client-Participant 2 to occasionally distance herself from the fear and sadness associated with her medical conditions, as well as to maintain a sense of hope.

From a cognitive perspective, humor is purported to buffer the effects of mood on daily life stressors as a result of a cognitive mechanism or shift that allows one to gain distance from a situation, view the situation from different perspectives, and consequently perceive ominous situations in a less threatening manner (Dixon, 1980; Kuiper et al., 1993; Martin, 1996; Peterson & Seligman, 2004). The distance that humor creates could also allow individuals to use active-problem-solving coping efforts (Kuiper et al., 1993; Martin, 1989; Mauriello & McConatha, 2007). For example, consider Client-Participant 4, who recently discovered the potential sexual abuse of her daughter by the client's own father. At one point in the session, Client-Participant 4 joked about her father having "boundary issues up the, up the wazoo [client and therapist laugh]" (C45). This use of humor may have served to distance Client-Participant 4 from the distressing situation and reminders of her own abuse and allowed her to develop effective ways of addressing the situation (e.g., offering support to daughter, seeking social support of her own). These potential responses and problem-solving efforts were also discussed in the transcribed therapy session with Client-Participant 4.

As previously discussed at length, *Dark Humor* is also often used within different cultural groups in an effort to cope with oppression, discrimination, or the experience of race-based stressors (Martin, 2007). Examples of *Dark Humor* used in the context of cultural or race-based issues were found when Client-Participant 1 joked about not wanting to be "…a beggin' black woman" (C118) and when Client-Participant 3 humorously discussed her perception of the high rate of domestic violence in her country of origin (i.e., El Salvador). Thus, *Dark Humor* may have been used by these client-participants as a way to gain perspective on their distress (e.g., financial stressors, threats

to safety) and preserve a sense of identity in light of past and current experiences of social injustice (Martin, 2007). Together, these findings reinforce the idea that *Dark Humor* may be beneficial due to a combination of cognitive, emotional, and liberational elements.

Despite the potential benefits of *Dark Humor*, it can also serve in a defensive and potentially detrimental manner, particularly when used in an effort to avoid dealing with difficult or traumatic situations and associated emotions. Client-Participant 1, for example, who had faced childhood sexual abuse, frequently expressed humor verbally throughout the selected psychotherapy session, and often in the context of difficult of traumatic topics. In fact, a total of 49 verbal expressions of humor were coded in Client-Participant 1's session, 26 of which represented *Dark Humor*. For example, consider the following example, in which the client jokes about conflict between her and her boyfriend as a result of him having had a child with an ex-girlfriend "…It's like you're going perfect, perfect, perfect. [Then] here comes a [client uses playful tone of voice while stating the following] *big-ass mountain* out of nowhere in the middle of the road [client laughs] (C289). Client-Participant 1's frequent, and perhaps excessive, use of *Dark Humor*, may be indicative of humor use as an avoidance strategy. Although *Dark Humor* may have been helpful for Client-Participant 1 in temporarily relieving the distress associated with difficult situations, research suggests that a reliance on avoidance coping strategies for dealing with trauma is associated with distress and PTSD symptoms (Littleton et al., 2007; Matthews, Harris, & Cumming, 2009).

Aggressive humor. *Aggressive Humor* (H2; i.e., client verbal expressions of humor that were hostile or demeaning to others, including to the therapist or another

person not present in the therapy room) represented the second most frequently coded form of humor (29 codes; 36% of all coded VEH). All client-participants were coded as using *Aggressive Humor* at least once in their sessions. Again, however, *Aggressive Humor* only occurred on its own in 38% of all H2 codes, and more frequently co-occurred with *Dark Humor* (45% of all H2 codes), and less frequently with *Self-Deprecatory Humor* (7% of all H2 codes). All three (H2, H3, and H4) of these forms of humor co-occurred in 10% of the *Aggressive Humor* codes.

Verbal expressions of humor in this study that represented *Aggressive Humor* included references that poked fun at individuals such as past and current significant others, friends, family members, acquaintances, and even the therapist. Consistent with existing research (e.g., Martin, 2007), *Aggressive Humor* was also found to be directed towards broader groups or structures that were perceived as a threat. For example, Client-Participant 5 joked about how she viewed and treated "everybody" in her life when she was a child, in an effort to gain some control over her life, while also minimizing the likelihood of eliciting anger or retaliation from others:

> C139: …When [anyone] told me something and I said, "I really appreciate you caring enough to express your opinion and I really appreciate your input and I will definitely consider what you said."
>
> T140: [Therapist laughs] How old were you when you said that?
>
> C140: And then I'd do whatever I want anyway [client laughs as she says this]
>
> T141: Mm-hmm.
>
> C141: Oh, I started saying that when I was probably about seven.

As described in more detail in Chapter 1, *Aggressive Humor* has been regarded by some theorists and researchers as a beneficial way to vent feelings of hostility or refuse to be defeated by situations that pose a threat to one's well-being (Bergin, 1998; Freud, 1928, 1983), and by others as a maladaptive form of humor resulting in pathological symptoms and interpersonal difficulties (Kuiper et al., 2004). Taking a more balanced approach, Martin et al. (2003) noted that the inclusion of "mildly aggressive elements" (p. 53) in humor does not necessarily make it maladaptive, and they recognized that "given the overlap between these benign and potentially deleterious forms of humor, it may be impossible to disentangle them completely" (p. 53). Consistent with this view, the coded expressions of *Aggressive Humor* in this study ranged from mild teasing to overt hostility, although it was often difficult to determine where the line between the two fell. On the milder side, consistent with "friendly teasing and playfully poking fun at others" (Martin et al., 2003, p 53), consider the following example, in which Client-Participant 1 tells her therapist about a recent conversation with a man she used to be interested in romantically: "…And he's like *dang*, you look good, and I'm like 'Oh, thanks, I didn't then?' [client laughs]" (C197). In this example, Client-Participant joked about teasing a man for commenting on her current attractiveness, a response that seems to have also been accompanied by surprise. A more moderate example of *Aggressive Humor* may include when Client-Participant 1 talked about feeling reluctant to confront her boyfriend about issues within their relationship, and she described "You can't tell him, cause then he'll cry [client points away from self]. Well not actually cry. He'll [client makes air quotation marks] 'man cry' and not say anything and look sad [client laughs]…" (C312). Last, consider the following, more explicitly aggressive, expression by Client-Participant

5 about the status of her current relationship with her mother: “Well, considering that she is absolutely clueless, I would say it’s pretty good” (C242).

Although it was not possible to determine whether *Aggressive Humor* was used by the client-participants with the intention of “disparaging” (Silver, 2002, 2007) or belittling others (which has been found to be associated with negative outcomes; Martin et al, 2003), an assessment of the frequency with which *Aggressive Humor* was used may help to determine whether it is helpful or harmful. More specifically, Martin et al. (2003) asserted that such humor can be maladaptive when used *excessively*. For example, Client-Participant 5’s frequent use of *Aggressive Humor* (47.37% of her coded verbal expression of humor) was consistent with coders’ observations of her dry and generally sarcastic demeanor, as well as the therapist’s description of Client-Participant 5 “smirking” rather than “smiling” during the intake session. Throughout the selected session, Client-Participant 5’s sarcastic comments towards her husband, in particular (e.g., about his inability to contribute to the family’s finances, his priority level in her life), received *Aggressive Humor codes*.

Particularly given that Client-Participant 5 reported being the victim of domestic violence, it is possible that she used humor to express the anger and resentment she felt towards her husband, but did not feel safe enough to express in others ways. In fact, one longitudinal study on negative life events and marital interactions found anger to help to facilitate adjustment to life events in wives (75% of participants were White, average age of 24), as evidenced by a decrease in depressive symptoms and an increase in marital satisfactions 18 months later (Cohan & Bradbury, 1997). However, this study did not look specifically at anger as expressed through humor, and also did not examine the role

of domestic violence in the expression of anger or long-term outcomes. Still, combined with the results from the current study, these findings suggest that the expression of anger through *Aggressive Humor* may have the potential to facilitate adjustment to stressful life events.

Although Client-Participant 5 may obtain short-term benefits of such humor use in enhancing feeling of personal well-being, some researchers consider excessive use of *Aggressive Humor* to be "unhealthy" due to the fact that it can eventually lead to the alienation of others and long-term negative consequences in interpersonal relationships (Martin, 1998, 2007). More specifically, Martin (1998), suggested that an individual who presents with a dry and sardonic sense of humor could be viewed as being high on the cognitive aspects of humor, but low on the emotional/affective dimension, and "toward the 'unhealthy' pole of the motivational dimension" (p. 59). Similarly, Campbell, Martin, and Ward (2008) found that individuals whose romantic partner used more affiliative and less aggressive humor during a conflict discussion task were more satisfied with their relationship and reported feeling closer to their partner and more capable of resolving the problem following the discussion. Thus, Client-Participant 5's use of *Aggressive Humor* may be interfering with her stated difficulties in developing healthy relationships.

Client-Participant 5's frequent use of humor in the context of discussions about her husband and other difficult topics may also be surprising, given that individuals diagnosed with PTSD (specifically veterans, primarily male) have been found to demonstrate fewer expressions of humor than their intimate partners during conflict discussions (Miller et al., 2013). However, the same study found individuals with PTSD to also demonstrate more hostility and dysphoria than their partners during these

interactions. Thus, Client-Participant 5's frequent use of *Aggressive Humor* may represent a manifestation of hostility and discontent that can occur in individuals suffering with PTSD and/or victims of domestic violence, as previously discussed. Of all the client-participants, only Client-Participant 5 was formally diagnosed with PTSD at intake, which may help to explain the ways in which she used humor in therapy (e.g., no instances of *Benign Humor*; *Aggressive Humor* as being most frequent). However, it is important to note that Miller et al.'s (2013) study used participants that were veterans (90% male; 81% White, 20% Hispanic/Latino; 10% Black, 9% American Indian/Alaskan Native, 2% Asian; 1% Hawaiian/Pacific Islander; 7% unknown), and examined humor use within the context of videotaped conflict discussions between veterans (not necessarily victims of domestic violence) and their partners, rather than in therapy.

The literature also suggests that seemingly *Aggressive Humor* can serve an adaptive function in traditionally oppressed populations in countering experiences of stigmatization, discrimination, and oppression (Cardeña, 2003). For example, Client-Participant 1, who identified as African-American, joked at one point about how others may not want to talk to her or may "judge" her if she were to tell them that she lived in Compton, a working class city in Los Angeles known for gang violence; she stated "So now, do you not want to talk to me, now I live in Compton [said sarcastically, client laughs]" (C13). Similarly, Client-Participant 3, who identified as El-Salvadorian, used *Aggressive Humor* to make light of the domestic violence and victimization of women she witnessed in her country of origin. According to the literature, *Aggressive Humor* may serve a potentially adaptive function for such individuals, who identify with cultural and ethnic groups that have faced systemic subjugation and oppression. Furthermore, it

may be possible for humor to be aggressive and prosocial/liberating at the same time (De Koning & Weiss, 2002; Mindess, 1971) or for Aggressive Humor to be maladaptive in certain cultural groups, but adaptive in another (Cardeña, 2001; Maples et al., 2001).

Self-deprecatory humor. The third most frequently coded form of humor was *Self-Deprecatory* (H3; 26 codes, 32% of all coded VEH), which included verbal expressions of humor that were used in a way that was self-disparaging or appeared to attempt to entertain the therapist by saying or doing things at a one's own expense. Client-participants joked about their intelligence, interpersonal difficulties, financial instability, racial/cultural backgrounds, physical limitations, and their experiences of negative emotions. *Self-Deprecatory Humor* occurred on its own in only 23% of the total codes, but more often co-occurred with *Dark Humor* (58% of all H3 codes), and less frequently with *Aggressive Humor* (8% of all H3 codes). All three (H2, H3, and H4) of these forms of humor co-occurred in 12% of the *Self-Deprecatory Humor* codes.

A mild example of *Self-Deprecatory Humor* was found in the transcribed session with Client-Participant 1. After picking up a card that stated "What comes to your mind when you think about your childhood" (C188), she dramatically and playful stated "Why? Why, why me?? [therapist laughs]" (C188). In this case, the client is joking about her misfortune in picking a card that asked about her (difficult) childhood. Furthermore, she joked in dramatic manner and appeared to be attempting to entertain the therapist - which was successful, judging by the therapist's laughter. When it is not used excessively, such *Self-Deprecatory Humor* can be useful, as "individuals who are able to gently poke fun at their own faults and who do not take themselves too seriously may be perceived by others as more likable and less threatening" (Martin et al., 2003, p. 53).

Similar to the literature on *Aggressive Humor*, some researchers have found self-ridicule or self-defeating humor to be associated with negative effects such as lower self-esteem and greater anxiety and depression (Janes & Olson, 2000; Kuiper et al., 2004), while other have regarded *Self-Deprecatory Humor* as an adaptive defense mechanism and a sign of health and maturity (Allport, 1961; Vaillant, 1977). For example, Client-Participant 1's joke about being a "mutt," in response to the therapist's question about her ethnic background, could perhaps be indicative of either insecurity/anxiety or maturity related to her ethnic identity. At present, there does not appear to be any existing research on the role or function of humor as it relates specifically to ethnic identity, making it difficult to draw any conclusions regarding the function or effects of humor in this context.

Martin et al. (2003) also differentiated between the broad category of *Self-Deprecatory Humor* and "self-defeating" humor, with the latter being characterized by *excessive* self-disparagement, perhaps used in an attempt to gain approval of others. Self-defeating humor is regarded as a defensive denial or a maladaptive attempt to hide negative feelings, cover social and personal anxieties, or avoid facing problems (Martin et al., 2003). Consider the following exchange between Client-Participant 1 and her therapist:

> C316: [client moves game piece forward two spaces] 1, 2. [client reads off board]. "If you feel peaceful now, relax." I am. Yay! [client moves game piece]
>
> T317: You are feeling peaceful?
>
> C317: Yes, and this is probably the dumbest comment that you've heard all day [client slaps her thighs and laughs]…"

At another point in the session, Client-Participant 1 again referred to herself as "stupid" and dumb; after the therapist answered the question "What would you do if you were told you were going to die soon" (T335), she asked the client "What kind of things were you thinking?" (T338), to which the client responded "I don't wanna say it, stupid stuff, I don't want to share, it's dumb. You're gonna laugh. It wasn't as good as yours [client laughs throughout saying this, therapist laughs]" (C338). Although Client-Participant 1's use of *Self-Deprecatory Humor* may make her appear less "threatening" to others, it does not appear to fully cover up her negative feelings and personal insecurities, and her frequent use of it may serve to avoid facing problems.

Co-occuring dark, aggressive, and self-deprecatory humor. As previously discussed, there was frequent overlap between *Dark Humor*, *Aggressive Humor*, and *Self-Deprecatory Humor* codes. As previously discussed, the high frequency of these potentially "negative" forms of humor found in this study was consistent with results from another study that found negative client humor (e.g., "disparaging" or "self-disparaging" humor) to occur more frequently than positive humor in (art) therapy (Silver, 2002).

The recurrent overlap between these categories is not necessarily surprising, given that all of these forms of humor are often used to help an individual to avoid becoming overwhelmed by various life demands and constraints and to gain a sense of freedom or perceived mastery over limitations (Martin, 1998; Mindess, 1971). For example, when Client-Participant 1 was discussing conflict between her and her boyfriend as a result of feeling jealous towards her boyfriend's daughter from a previous girlfriend, Client-Participant 1 described the following:

> …[my boyfriend is], like, "well that's crazy." He's like "I don't even know if she's mine," and blah blah, and "I won't do that, ya'll are two different people. Like, she's five." And I'm like, "Ok, thanks, you make me feel great [client laughs]. Like, you gonna tell the five-year-old now so she can laugh too?" (C302)

This expression involved difficult and challenging subject matter (i.e., feelings of jealousy and anger, conflict with boyfriend) and included Aggressive elements (i.e., sarcasm directed towards boyfriend) as well as a Self-Deprecatory quality (i.e., due to the fact that this occurs in the context of a discussion in which the client jokes about how "stupid" it is for her to "[compete] with a five-year-old"). Although *Dark Humor*, in and of itself, is not inherently harmful, when used concurrently and regularly with *Aggressive Humor* and/or *Self-Deprecatory Humor*, its use can pose a number of potential risks, including social alienation and low self-esteem (Kuiper et al., 2004). However, in developing the Humor Styles Questionnaire, Martin et al. (2003) also noted that "coping humor" and "gallows humor" can be "self-enhancing" and "affiliative" in nature (i.e., serve an adaptive function), despite sometimes containing aggressive or self-deprecatory elements. Accordingly, a number of factors must be taken into account when determining whether use of these combined forms of humor is potentially helpful or detrimental.

Although it occurred less frequently, the overlap or co-occurrence of *Aggressive Humor* with *Self-Deprecatory Humor* may not be surprising, given that literature on *Aggressive Humor* often refers to Self-Deprecation as a subcategory of the former (Martin et al., 2003). From a superiority theory, *Aggressive Humor* is the result of a sense of superiority gained from the disparagement of another person, while *Self-Deprecatory Humor* results from a sense of superiority gained from the disparagement of one's own

mistake. Consider an example that was previously discussed, in which Client-Participant 1 talked about running into a man whom she used to be romantically interested in: "…And I'm like, I used to like you, but I ain't telling. And he's like dang, you look good, and I'm like oh thanks, I didn't then" [client laughs]…" (C197). This statement contains mild aggression (towards the client's former love interest, in the form of teasing) as well as mild self-deprecation regarding Client-Participant 4's appearance or attractiveness in the past. According to the literature, this statement could have helped Client-Participant 1 to feel superior to the man she used to be interested in, as well as above her own perceived weaknesses or past insecurities. Again, however, the use of such humor is complex and can have potential benefits as well as long-term disadvantages.

Expression of humor NOS. *Expressions of Humor Not Otherwise Specified* represented the fourth most frequently coded form of humor (13 codes, 16% of all coded VEH). Although this category was originally intended to include various verbal forms of humor not captured by any of the other humor codes (i.e., Benign, Aggressive, Self-Deprecatory, Dark), the majority of the verbal expressions of humor coded as an *Expression of Humor NOS* (92%) represented vague references to humor (e.g., client-participants using words associated with humor and laughter, but not necessarily creating humor themselves) or second-hand stories with humorous content. Examples of vague humor references included when Client-Participant 2 described "…And we were laughing when I left last week…" (C187) and "And it made me laugh…" (C189). Similarly, Client-Participant 1 stated "I always joke about R. Kelly" (C215), "…we've been laughing all morning" (C317), and "people be laughing at that comment" (C377). Client-Participant 3 stated "that's funny" (C254), and, regarding her aunt, noted "…she

laugh like she's crazy" (C225). Also falling under this category was the example of Client-Participant 4's second-hand story about a joke her daughter made: "…she says she's gonna give me a pet for a grandkid [therapist and client laugh]" (C85). There does not appear to be any research on the use or potential functions of such vague references to humor.

A minority (23%) of the coded verbal expressions of humor that fell under this category included vague references to humor that involved finding humor in situations or events that were previously stressful or upsetting for the client-participants. For example, after reflecting on a time when she felt 'heart-broken," Client-Participant 1 noted "it's been years ago and it's funny now" (C27). Later in the session, after talking about having unreciprocated romantic feelings towards another man, Client-Participant 1 again stated "it's funny now that it's like hey, after all these years he's still cute [client laughs]…" (C203). Another example of this [what] was found in the following description from Client-Participant 3:

> …my family, especially my grandma, she [would], like, say that I'm stupid, she always calls me stupid for some reason, she say that I'm dumb, she say, you know, that's kinda bad, I think it's funny now, but back then I used to cry a lot… (C-P 3, C246).

Consistent with existing research on humor and coping, these findings suggest that psychological distance (temporal, in this case) may have allowed Client-Participants 1 and 3 to reappraise situations that previously elicited negative emotions from a new, humorous, and less threatening perspective (Lefcourt et al., 1995; McGraw et al., 2012). These examples could also potentially illustrate humor use as promoting freedom from

life demands and constraints (Mindess, 1971); for example, Client-Participant 3 may now feel less negatively influenced or constrained by her grandmother's verbal abuse as a result of the distance created by humor. These findings illustrate a potential *function* of humor, rather than a type or form.

It may also be important to note that the majority of the verbal expressions of humor for Client-Participant 3 fell under this NOS category (4 codes, 57% of all coded VEH) and generally represented vague references to humor. Because English is not Client-Participant 3's first language, she may have had a more difficult time expressing verbal humor in ways that represented the identified categories. Indeed, researchers suggest that humor use and appreciation is impacted by language proficiency (Bell, 2009). Although there may be some "universal" forms of humor, culture-based humor and linguistic humor may be more difficult for less advanced language speakers to appreciate and use (Schmitz, 2002). Due to the fact that Client-Participant 3 and her therapist occasionally spoke Spanish in the selected session, often in a clarifying manner, it may be the case that Client-Participant's language skills may have impacted her ability or tendency to use humor when speaking English.

Only one of the 13 codes in this category represented verbal expressions of humor that could have potentially fallen under one of the other forms of humor (i.e., Benign, Aggressive, Self-Deprecatory, Dark), but did not include enough information to clearly do so. For example, when Client-Participant 1 rolled a three (while playing the therapeutic game with her therapist), she joked "Oh gosh…oh no, I'm leaving [therapist laughs]" (C46). In this case, there was not enough information to determine whether this was *Benign Humor* or whether she was possibly referencing wanting to "leave" because

she landed on a space that was going to ask her to reflect upon a difficult topic. Overall, however, it appeared that the coding system appeared to clearly and adequately capture the major forms of verbal expressions of humor.

Benign humor. *Benign Humor*, which was characterized as humor used in a playful, benign manner (with no apparent aggressive, self-deprecatory, or dark elements) was the least-frequently coded form of humor across all client-participants (9% of all coded VEH). Furthermore, *Benign Humor* was only coded in two sessions (7 codes total), 6 of which were coded in Client-Participant 1's session. The fact that *Benign Humor* was coded so infrequently may not be surprising given that clients generally seek therapy to discuss their problems and associated distress, rather than benign or positive topics (Heppner et al., 1994). Other studies attempting to categorize humor responses in (art) therapy have found playful/benign and "positive" humor to range from 4% (Silver, 2002) to 44% (Kopytin & Lebedev, 2013) of all humor responses.

As previously shared, an example of *Benign Humor* occurred when Client-Participant 1 playfully stated "Oh man, his crazy little self" (C183) in reference to Little John (a famous musician), in the context of a discussion about pleasant activities such as going to concerts. The fact that Client-Participant 1's session contained 60% of all of the verbal expressions of humor that were coded in this study is consist with her presentation to the coders as being very playful and entertaining. As research suggests that benevolent and non-hostile forms of humor may be more effective than aggressive or mean-spirited forms of humor in increasing positive emotions and decreasing negative emotions (Samson & Gross, 2012), such instances of *Benign Humor* may be indicative of adaptive and healthy humor.

Of the 7 coded instances of *Benign Humor*, 4 co-occurred with *Therapist Laughter*, suggesting that the therapist recognized and responded to the client's humor. Findings related to client and therapist laughter are discussed next in the context of relevant literature.

Findings Related to Client Laughter

Client-participant laughter was coded 183 times across the five sessions (7% of total talk turns)**,** and was most often identified in the context of discussions about difficult, and sometimes traumatic, events (D1; 149 codes, 81% of all coded client laughter) as compared to *Laughter in the Context of Benign of Positive Topics* (D2; 33 codes, 18% of all coded client laughter). Although coded more than twice as often as client verbal expressions of humor, laughter also occurred fairly infrequently among the client-participants (with the exception of Client-Participant 1). These results were consistent with existing research that found laughter to occur about twice every five minutes in therapy sessions, with clients laughing more than twice as often as their therapists (Marci, Moran, & Orr, 2004). The findings from the current study were also similar to those of Falk and Hill (1992), who found laughter to occur at least 14 times in therapy sessions, and generally of mild form; however, the Falk and Hill (1992) study deliberately employed the use of humorous interventions by therapists to elicit client laughter.

This finding also appears consistent with literature indicating that client laughter sometimes occurs in psychotherapy in general (Marcus, 1990) as well as in the context of difficult (Folkman & Moskowitz, 2000) or traumatic (Bonanno et al., 2007) events. The writings of Freud (1928, 1983) and more recent studies have suggested that laughter can

release built up emotions and reverse negative emotions (e.g., anger, sadness) by arousing mirth or amusement when facing a stressful or traumatic situation (Lefcourt et al., 1995; Martin, 1989; McGhee, 2010). For example, Client-Participant 2 explicitly referenced her desire to laugh in the face of adversity in the following statement: "And it made me laugh. It probably shouldn't have, but it did so [client stands] I'll take anything that makes me laugh these days" (C189).

The stress-buffering effects of humor are likely related at least in part to the physiological mechanisms associated with laughter (e.g., muscle relaxation and associated release of psychological tension), particularly according to arousal theories of humor (De Koning & Weiss, 2002; Martin, 2007; McGhee, 2010). Similar to theories on the benefits of verbal humor in coping with stress or trauma, laughter is presumed to help as a result of the psychological distance or dissociation from distress it provides (Keltner & Bonanno, 1997). That is, people often appear to be able to manage stressful situations or events that are perceived as threatening by turning them into something that can be laughed at. For example, Client-Participant 4 laughed several times during discussions about her father's potential sexual abuse of client's daughter. According to the literature, this laughter may have provided Client-Participant 4 with some distance from the threatening event and allowed for the release of associated tension. Existing research also suggests that certain "levels" of laughter can have a positive impact on health, although such benefits can vary based on sociocultural factors (Hasan & Hasan, 2009). For example, in one study, moderate laughter was found to have a beneficial effect on health among participants in both Canada and India, although "excess" laughter was found to be

damaging to one's health (e.g., the development of bronchial asthma) in participants from Canada, but not India (Hasan & Hasan, 2009).

However, laughter is not only caused by humorous stimuli (e.g., tickling, embarrassment) and does not always indicate satisfaction or feelings of amusement. In fact, in the present study, most coded client laughter occurred outside the context of a coded verbal expression of humor. More specifically, 130 (71%) of the 183 codes qualified as *Laughter not Accompanied by a Coded Verbal Expression of Humor* (L2), and 52 (29%) as *Laughter Accompanied by a Coded Verbal Expression of Humor* (L1). Overall, the high frequency of laughter that occurred outside the context of explicit humor could signify various things, including incongruity or surprise, anxiety, distress, and/or avoidance. Thus, client laughter in therapy may be meaningful, but not necessarily advantageous (Mahrer & Gervaize, 1984).

Laughter sometimes results simply from surprise or a perceived incongruity (Attardo, 1994; Nilsen & Nilsen, 2000; Zara, Jeffrey, & Lawrence, 2009). For example, when the therapist asked Client-Participant 1 how old her mother was, she initially responded with "I forgot [therapist laughs]. She's probably happy I forgot. But she had me when she was 26" (C206). The therapist then noted "So she's around 54" (T208), to which the client responded "Oh, she's older than I thought [*client laughs*]" (C 208). In this case, client laughter appeared to be tied to surprise. During Client-Participant 2's session, the therapist suggested that the client write down her feelings in a journal when she is feeling upset, and the client responded by saying "Okay. Well right now it would be interesting for me to write because you [client smiles and laughs] wouldn't be able to read what I was writing…" (C53). In this example, Client-Participant 2's laughter may be

the result of her perceived incongruity between writing and her eyesight problems, or perhaps as a result of surprise or embarrassment that her therapist would suggest that she write something down, given that the client's loss of eyesight has been a focus of therapy.

Laughter could also result from the experience of anxiety (e.g., nervous laughter; Marcus, 1990). With clients who have experienced trauma, in particular, humor can be used to avoid or distance oneself from the emotional pain associated with past events (e.g., childhood abuse; Garrick, 2005). For example, Client-Participant 1 laughed several times during discussions of her past sexual abuse. For her, laughter could be considered an emotion-focused coping response in which distressing emotions are avoided by resorting to laughter (Lefcourt & Thomas, 1998). Although using laughter in this way can allow clients to remain in their comfort zone and feeling safe, it may be damaging if used excessively. Although it is difficult to determine what qualifies as "excessive," Client-Participant 1 frequently laughed in the context of serious and difficult content, perhaps as a way to avoid her emotional pain. In one study, survivors of childhood sexual abuse who expressed positive emotions such as laughter in the context of describing their history of abuse had poorer long-term social adjustment, suggesting that laughter in this context may have social risks (Bonanno et al., 2007). However, in the same study, laughter expressed in the context of a discussion of a distressing event other than childhood sexual abuse was associated with better long-term social outcomes (Bonanno et al., 2008). Laughter could also signify low self-esteem or a lack of confidence (Marcus, 1990), and this is particularly relevant to Client-Participant 1 given her frequent references to being "dumb" and "stupid" throughout the session.

The extent to which positive emotions were expressed in the selected therapy sessions, as well as the particular style of laughter displayed, varied across client-participants. Although laughter can be indicative of therapeutic progress (e.g., a positive shift in one's self-concept, development of a warm and accepting therapeutic relationship, movement towards a desirable affective state; Mahrer & Gervaise, 1984), research suggests that "desirable'" and potentially beneficial laughter has several specific qualities. For example, Nichols and Bierenbaum (1978) found beneficial laughter to be generally distinctive and singular, rather than a stylistic or characteristic feature of a client's consistent manner of behavior (Nichols, 1974; Nichols & Bierenbaum, 1978). Therapeutic client laughter has also been found to be distinguished by high energy, uninhibited expressive openness, and vigor, rather than restrained or mild expressiveness and low energy (Nichols, 1974; Nichols & Bierenbaum, 1978). As discussed previously, a more recent study found moderate amounts of laughter to be beneficial to health, although such effects may be dependent on one's cultural background (Hasan & Hasan, 2009).

When applied to Client-Participant 1, the implications of such findings were mixed, as her laughter was a consistent and characteristic feature of her behavior (which could be indicative of something other than therapeutic progress), but she demonstrated high energy and positive emotional expressiveness (which can be indicative of therapeutic client laughter). Client-Participant 5, however, appeared generally serious and unemotional and also presented to the coders as restrained and apathetic in her display of humor and positive emotion. According to the literature, then, her laughter may not have been considered "therapeutic" or beneficial. However, her dispassionate presentation was

consistent with her diagnosis of Depersonalization Disorder (which is characterized by a detachment from one's own thoughts or emotions; American Psychiatric Association, 2000), and may also be related to her chronic history of trauma, as some trauma survivors feel as though they need to take everything in life seriously, or believe that they do not deserve to experience positive emotions (Martin, 2007). However, additional and more recent research on what qualifies as "therapeutic laughter," as similar to or different from laughter studied in medical contexts, is much needed.

A final key finding related to client laughter involved the high occurrence of laughter at the very beginning and end of therapy, during light conversations and discussions regarding fees and scheduling. Such laughter could indicate discomfort or embarrassment, as exchange of money and issues related to fees can cause anxiety, competition, shame, worthlessness in therapy and thus be considered a "taboo" topic for discussion (Aron & Hirsch, 1992). Client laughter during light discussions was also sometimes, but not always, accompanied by a verbal expression of humor and/or therapist laughter. For example, at the end of the session with Client-Participant 3, the therapist casually asked the client about her Thanksgiving plans. Client-Participant 3 responded by making a joke about her mother-in-law's cooking and laughing; the therapist then responded by saying "…well at least the nice part is, it helps, right? [therapist laughs]" (T276). Similarly, at the end of the session with Client-Participant 5, the client noted that she needed to get a full-sized refrigerator (to replace the small version she had been using), which both the client and therapist laughed about. After finishing a therapy session in which the client-participants discussed and likely experienced difficult emotions, it may be the case that laughter was used to release

tension and gain distance from threatening material (Keltner & Bonanno, 1997) in order to prepare to transition back to their daily activities and life outside of the therapy room.

Findings Related to Therapist Laughter

Although not a central focus of the present study, therapist laughter was examined to better understand the use of humor in therapy by trauma survivors, given implications for clinical practice. Therapist laughter was coded 73 times across the five sessions (3% of total talk turns), with each session ranging from 3 to 28 coded instances of therapist laughter. Again, this is consistent with existing research that found therapist laughter to occur half as frequently as client laughter as well as most frequently in response to client (rather than therapist) verbalizations (Marci, Moran, & Orr, 2004).

Therapists were found to laugh along with client-participant laughter (within one talk turn) roughly half the time (47% of all TL codes), which may illuminate the use of humor in facilitating social relationships and allowing for mutual feelings of pleasure, while also reducing anxiety (Freud, 1928, 1983). The fact that therapists responded to client-participant laughter with laughter of their own more often than they laughed in response to a verbal expression of humor may not be surprising given that laughter has been found to be contagious (Provine, 1992). In addition, laughter can serve a social function and be viewed as a form of communication (e.g., of emotional information, to stimulate similar emotions in others).

In addition to shared laughter, there were also times when the therapist laughed in response to a client-participant verbal expression of humor (e.g., therapist laughter in response to Client-Participant 4's joke about her father having "boundary issues up the…wazoo"). However, therapist laughter co-occurred with a client-participant verbal

expression of humor (within one talk turn) fairly infrequently (26% of all TL codes). When it did occur, such shared humor between client and therapist may have helped to establish and maintain a close relationship (Martin, 2007; Provine, 2000).

Therapist laughter in response to a client-participant verbal expression of humor appeared by the coders to be more appropriate than what tended to occur more often, which was therapist laughter outside of the context of client VEH or laughter (36% of all TL codes occurred on their own). Such laughter could be indicative of discomfort, anxiety, avoidance, or genuine amusement. For instance, when Client-Participant 5 stated "And I know that sounds weird, but I don't like people" (C131), the therapist responded with the following: "[therapist laughs] Tell me about that" (T132). In some of these cases, therapist laughter appeared to be inappropriate, perhaps the result of the novice therapists' defense against anxiety (Jacobs, 2009). For example, therapist laughed was coded when Client-Participant 4 talked about the "strange dynamic" within her family, in that her mother dated her husband's father prior to meeting her husband. The same therapist also laughed when Client-Participant 4 talked about feeling overwhelmed by her responsibilities and feeling angry towards her grandmother for allowing her father to visit her nursing home. Although the client herself laughed in the latter example, the statement did not appear to contain any humor, and the therapist's laughter thus seemed inappropriate. Similarly, in the session with Client-Participant 1, the therapist laughed after reading a game card that asked the client to talk about child abuse. These findings further clarify the importance of being cautious in applying and responding to humor in therapy, particularly for a novice therapist (Jacobs, 2009). Franzini (2001) further noted that client expressions of humor can represent critical transition points in the therapeutic

process, and encouraged therapists to be sensitive to such efforts and genuine in their responses to client humor.

Again, although not formally coded, there were also several examples of what appeared to qualify as a verbal expression of humor by therapists. For example, Client-Participant 4's therapist sarcastically joked about the client's husband making "…endless pennies…" (T177) and Client-Participant 1's therapist playfully and dramatically exclaimed "Comment, yes! [therapist laughs]" (T123) after landing on a game space that she was presumably excited about. The latter example was consistent with descriptions of therapeutic humor techniques in the literature as including intentional or spontaneous uses of extreme exaggerations or humorous observations of current events (Franzini, 2001), while the former appeared to contain potentially aggressive elements. Although Maples et al. (2001) warned therapists to be careful not to use humor in a way that may present oneself as unprofessional or lacking maturity when working with Latino clients (which none of the client-participants identified as), in particular, it may also be the case and such humor could potentially impede the development of a healthy working relationship with other cultural groups.

The therapists in this study demonstrated few of the recommendations set forth in the literature for addressing humor in therapy (Ochberg, 1991) and specifically in working with trauma survivors (Garrick, 2005; Bryant-Davis, 2005). For example, although therapist laughter in response to client humor (e.g., therapist laughed after Client-Participant 4 joked about her daughter giving her "a pet for a grandkid") may suggest that the therapists were acting as a "good audience" for the spontaneous use of client humor, as suggested by Ochberg (1991), the therapists did not appear to follow

Garrick's (2005) recommendation that therapists explicitly explore what humor means to their client and help trauma survivors to understand that their sense of humor can be helpful in coping with their experiences and negative emotions. In addition, although the importance of validating and accepting a client's sense of humor was emphasized by Garrick (2005), Bryant-Davis (2005) stated that clinicians should also pay attention for the use of self-disparaging humor that could be detrimental and perpetuate feelings of shame and self-blame in trauma survivors. Thus, when Client-Participant 5 laughed and joked about her inability to trust people, it was unclear whether the therapist's laughter was validating the client's use of humor in coping, or perhaps reinforcing a potentially damaging form of humor. Thus, this study highlights the importance of therapist responses to use of client humor, particularly with trauma survivors.

Limitations

There were several limitations to this study and the use of a directed content analysis approach. First, the nonrandom purposeful sampling procedure and small sample size limited the generalizability of the results. However, from a qualitative perspective, each participant has a uniquely valuable experience or perspective, and the findings from this study can provide a more comprehensive understanding of the unique and multidimensional nature of humor use in psychotherapy with trauma survivors through detailed analyses and descriptions (Creswell, 2009; Merriam, 2002; Mertens, 2005).

Despite efforts to remain neutral towards the data, the researcher and coders inevitably approached the coding process with biases that may have influenced the coding decisions. For example, the coders sometimes differed with regard to whether they considered a particular topic to be "difficult" or "serious," presumably based on their

own experiences and assumptions. For example, the coders (and auditor) did not reach consensus on one code for Client-Participant 5, as the decision was split, with half of the researchers viewing a particular issue as "serious, difficult, challenging, or traumatic," and the other half as "neutral, benign, light, or positive." Similarly, the primary researcher found that she more often viewed verbal expressions of humor as being representative of Self-Deprecatory Humor than the other coders. However, detailed guidelines and definitions in the coding manual minimized the impact of such biases, and inter-rater reliability was found to be almost perfect, even for these codes.

Additionally, focusing on existing theories and research on humor may have led the researchers to overlook certain elements of the phenomenon (Hsiu-Fang & Shannon, 2005). For example, much of the research on humor is focused on the use and effects of overt jokes or puns; however, the forms of humor found in this study were often more subtle, and thus required the analysis of contextual and nonverbal elements of expressions of humor (e.g., tone of voice, hand gestures, therapist response). For example, Client-Participant 1 spoke very quickly and expressively throughout the session, and it was sometimes difficult to differentiate an expression of humor from her general playful manner of speaking. As previously discussed, her playful nature could be attributed to the use of a therapeutic game in the session and/or associated with cultural and historical elements of African Americans and humor use (Dance, 1998; Vereen et., 2002). With Client-Participant 1, in particular, even the nonverbal and contextual information required to identify verbal expressions of humor was also often quite subtle and, at times, difficult to gleam from the videotaped session. In addition, this study did not examine how therapists may have prompted client humor, as has been done in other

studies (Mahrer & Gervaize, 1984; Falk & Hill, 1992), as this question was outside the scope of the current study.

Another limitation of this study had to do with the fact that demographic and sociocultural information related to the therapists was unknown and not included in the research database. For this reason, it was impossible to more fully explore the interpersonal and transactional nature of humor in therapy sessions with trauma survivors. However, examining the different personal variables and unique contributions of individuals within a given humorous interaction could shed light on the forms and functions of an expression of humor (De Koning & Weiss, 2002). For example, humor use in Client-Participant 1's session might be understood differently if it were known that her therapist also identified as African-American, versus Caucasian. Given the challenges (e.g., systemic oppression, racism) that African Americans have historically faced, it would not be unusual if she were to feel more comfortable using humor authentically with an African American therapist, whom she might be able to more easily view as an ally than a Caucasian therapist (Dance, 1998; Vereen et., 2002). However, due to the fact that there are many individual differences and variables that could influence humor use, simply knowing the demographic and sociocultural information related to the therapist would still not allow one to make definitive conclusions regarding these complex issues. Still, as the literature suggests that humor can serve as a form of social communication that can be heavily influence by cultural variables (Cardeña, 2003; Martin, 2007), further information regarding therapist factors could have shed more light on the social aspects of humor generally, as well as within the context of psychotherapy.

Due to the complex and multidimensional nature of humor, the coded material did not always fit perfectly into certain categories or the coding scheme, contributing to the subjective nature and potential for researcher biases to impact the data coding and analyses. These issues of neutrality, objectivity, and confirmability of trustworthiness posed challenges to the naturalistic paradigm (Hsiu-Fang & Shannon, 2005). However, an audit trail (as suggested by Hsiu-Fang and Shannon, 2005) and bracketing were used to identify, discuss, and correct for potential researcher biases. As a result of the time-consuming and intensive nature of the coding discussions, weekly conference calls were also limited to 2 hours in order to reduce coder fatigue and potential drift.

Additionally, due to the small sample size, the client participants used in this study were limited in the extent to which they represented culturally diverse populations and, in fact, consisted of all females. After the potential client-participants were narrowed down based on discussions of trauma, the researchers sought cases that appeared culturally and ethnically diverse, as indicated on clinic forms. However, as only five client-participants met the selection criteria, there was not an opportunity to further select cases based on cultural diversity. Four of the five client-participants selected and used for the study had also experienced childhood sexual abuse, thus limiting the diversity of traumatic events that were experienced. Analyses of diversity factors were further limited by the fact that there were few existing studies on humor use in diverse populations as well as research on trauma and posttraumatic responses using participants who had experienced a medical/internal trauma.

Although this study helped to shed light on humor use among trauma survivors during therapy sessions involving an explicit trauma discussion, due to the fact that

humor use in therapy with non-trauma survivors was not also coded and analyzed, it was difficult to determine whether the findings (e.g., the high frequency of *Dark Humor*) were actually specific to the experience of trauma. That is, without collecting or using baseline data on the form and frequency of humor use in therapy with clients presenting with a range of problems (and not solely trauma), it is difficult to capture or understand the unique function that humor may serve among trauma survivors. Similarly, the current study was limited in its ability to determine whether its findings were trauma-specific because it did not compare humor use within the context of a trauma discussion to humor use during other discussions or sessions in which there was no trauma discussion at all.

In addition, due to missing documentation in the research database, the exact timing of the selected therapy sessions in the course of treatment was unknown for most of the client-participants (e.g., whether it was the second session in a course of ten sessions or the fortieth session in a course of forty-five sessions). Particularly since the therapeutic relationship, the focus of therapy, and level of client distress can change as therapy progresses, having this information could have helped to provide more context regarding the intent or function of humor use.

Last, the majority of existing research on humor as a coping tool involves the use of questionnaires (e.g., the CHS, HSQ). However, the use of an archival database prevented the researchers from being able to obtain self-report measures of humor that could help determine the predominant forms and functions of humor participants used. In addition, although nonverbal behaviors were examined in the context of psychotherapy sessions, more formal behavioral observation methods (e.g., to differentiate between Duchenne and non-Duchenne smiling and laughter) were not used, as they were beyond

the scope of the current study. Also, the researcher could not directly interview the client participants. However, the qualitative methodology used in this study allowed for an in-depth understanding of the forms of humor used by trauma survivors.

Potential Contributions

There has been an abundant amount of research with regard to humor from various perspectives within the field of psychology. However, existing theories and findings remain somewhat ambiguous and disconnected. This study aimed to bridge the gap between these areas, particularly humor and psychotherapy research and practice with trauma survivors. A multidimensional definition of humor (i.e., including cognitive, affective, behavioral, and motivational elements) was applied to examine humor use in therapy with trauma survivors. The coding system developed for this study was comprehensive, integrating existing theories and research on potentially beneficial and detrimental forms of humor, as well as reliable ($K > .81$ for all codes), and could potentially be used in futurestudies involving humor use.

This study also shed light on the actual ways that therapy clients who have experienced trauma express humor in therapy, specifically in coping with the trauma. The findings from this study supported previous literature demonstrating the multidimensional nature of humor and illustrated the different ways in which verbal expressions of humor and laughter may be expressed in therapy sessions with trauma survivors. In particular, humor use in therapy was more frequently found to take the form of subtle wordplay, sarcasm, and/or anecdotes, rather than overt jokes, puns, or one-liners. Also consistent with existing research in the area, this study found that humor was often used in the context of difficult, and occasionally traumatic, topics. Such humor use

could represent a deliberate or unconscious effort to cope with distress and negative emotions, although these coping efforts have both the potential to benefit (e.g., by eliciting positive emotions, fostering relationships) or harm (e.g., avoidance of feelings) individuals. Thus, humor use can help trauma survivors to create some emotional distance from negative emotions and allow them to cope with stress, although the effectiveness of such efforts depend on contextual factors and the specific forms of humor that are used.

The current study also found that potentially detrimental forms of humor (particularly when used excessively) such as *Aggressive Humor* and *Self-Deprecatory Humor* were used fairly commonly in the selected therapy sessions with trauma survivors, and often co-occurred with *Dark Humor*. Furthermore, the findings from this study illustrated the different ways in which humor may take the form of *Aggressive*, *Self-Deprecatory*, or *Dark Humor*, ranging from mild or minor use to explicitly hostile, self-ridiculing, or gallows humor. Due to the wide range of potential use within these categories, and the relatively common and benign nature of milder forms of such humor use, therapists should not assume that all humor that falls under these potentially negative forms of humor is necessarily harmful. As there is minimal existing research on the use of these forms of humor, particularly in the context of therapy, it is hoped that this study will raise awareness of the potential functions and potential risks of this type of humor use, and promote additional research with clients who have experienced trauma.

Another key finding involved the expression of what appeared to be inappropriate therapist laughter, often outside of the context of any client humor or other identifiable humorous stimuli. According to the literature, such laughter could indicate surprise,

anxiety, distress, and/or avoidance, and could have an impact on the nature of the therapeutic relationship and client progress, although assessing relationships with such variables was outside the scope of the present study. Because the therapists in this study were students in training, this finding has implications for the importance of providing training for novice therapists on the potential risks (e.g., humor use being perceived as masked hostility) and benefits (e.g., building rapport and a strong therapeutic alliance) of humor use in therapy. The high occurrence of client laughter that was found at the very beginning and end of the majority of the selected therapy sessions (primarily during light conversations and discussions regarding fees and scheduling) also suggests that laughter may serve a distinct function in this context, perhaps in releasing tension and gaining distance from any difficult or threatening material that a client is anticipating or has just discussed.

In sum, this study sought to raise general awareness of use of humor, a subject that is often regarded as "taboo" in psychotherapy, as a potential tool within the therapeutic context. The findings from this study also have implications for training therapists on the risks and benefits of using and responding to client humor in therapy.

Directions for Future Research

In order to more fully understand the forms and functions of humor use in therapy with trauma survivors, continued research in several areas is suggested. First, research should continue to focus on understanding and assessing different forms of humor, and particularly those that are used in psychotherapy and could serve as a potential coping tool. Refinements to the current approach could include the use of more advanced behavioral observation methods. For example, the Emotion Facial Action Coding System

(EMFACS; Ekman & Rosenberg, 1997) could be used to differentiate between genuine Duchenne versus non-Duchenne smiling and laughter, as has been done in other studies evaluating the expression of positive emotion (Bonnano et al., 2007). Similarly, the Specific Affect Coding System (SACS) has been used to assess negative and positive affect, including humor (Cohan & Bradbury, 2007). In addition to coding these different facial expressions or signals of positive emotions, the EMFACS or SACS could also be used to code and differentiate between various negative emotional signs, including shame, anger, fear, disgust, and sadness. The 6-point scale that Falk and Hill (1992) developed to measure the intensity of client laughter (by observing the length, and strength of laughter, smiling, and bodily involvement such as hunching over) could also be used. Use of these methods could help to determine whether a humor response (VEH or laughter) is accompanied by genuine positive emotions.

Behavioral observation methods that focus on "global" humor use across a particular interaction period, rather than the detailed and microlevel approach of the EMFACS, SACS, or the coding system developed for the current study, have also provided valid and reliable data, and could be used in future studies. Campbell et al. (2008), for example, used such an approach in their observational study on humor use in conflict resolution among dating couples; they discussed the different humor styles of interest (e.g., affiliative, aggressive) in detail with the raters for their study, provided them with written descriptions of how they could be identified and distinguished from one another, and then asked the raters to code ten conflict discussions between dating couples, simply by looking for examples of each style of humor. This method could be

efficiently carried out, and could be used to study the relationships between humor styles or frequently used forms of humor and outcomes such as self-reported symptom distress.

In additional to using more advanced behavioral observation methods, future studies exploring humor use in the context of difficult or traumatic topics could also be enhanced by actually interviewing participants on their perceptions and experiences of humor use. For example, similar to in Bonanno et al.'s (2007) study, participants could be asked to reflect upon a distressing event, which would later be coded for verbal and behavioral expressions of laughter. Afterwards, the participant could be interviewed and asked questions about their recollection of any humor use during the disclosure, in addition to the function it may have served, in order to gain a better sense of humorous intention and impact.

The humor coding system developed for the present study could also be validated and refined. Specifically, the current scheme was based on forms of humor that have been discussed in the literature, drawing on various theoretical perspectives and empirically-based conceptualizations of humor (Cardeña, 2003; Dozois et al., 2009; Garrick, 2005; Lehman et al., 2001; Martin et al., 2003; Martin, 2007; Nilsen & Nilsen, 2000; Thorson & Powell, 1993; Ruch, 1992). Using the current scheme to examine new data would provide confirmatory evidence that it effectively captures the range of humorous expressions exhibited in this context. If important constructs that are as yet unaccounted for are observed, they could be incorporated into the scheme; conversely, if currently present elements are rarely observed, the scheme could be streamlined for greater efficiency of use. In addition, collecting new data would enable the inclusion of other existing humor measures, such as the HSQ (Martin et al., 2003), which would allow the

relationship between self-reported humor styles and behavioral expressions of humor to be examined, thus providing data on convergent/divergent validity for the current scheme. Last, the use of additional coders (including, notably, coders trained in the scheme but naïve to the study objectives) would strengthen the reliability of the results. Although the current coding system produced near-perfect inter-rater reliability for this study, consistent areas of disagreement involved differentiating between "serious or difficult" and "benign or positive" topics. Accordingly, additional coders and validation may help to refine the criteria for these categories.

Notably, as the results from this study were based on only five participants, future research could benefit from similar studies using a larger number of socioculturally diverse participants (including both men and women) who have experienced a wider range of traumatic events (e.g., medical, combat, natural disaster, physical, or sexual abuse) or no trauma at all. With more participants, it may be possible to assess differences in humor use based on the type of trauma experienced (or whether trauma was experienced at all) and to gain a deeper understanding of cultural differences in humor use. Similarly, it could also be helpful to compare humor use (e.g., the most frequent forms of humor used) in the context of a traumatic discussion in therapy to humor use during other discussions in therapy or sessions in which there is no discussion of trauma at all, and in sessions with those who never reported experiencing trauma. Such inquiries could help to further clarify whether certain elements of humor (e.g., frequent use of *Dark Humor*) are a function of the experience of trauma and associated thoughts and feelings. With enough participants, it may even be possible to assess changes in humor use as time from trauma discussion increases.

Future studies should also take into account demographic and sociocultural factors related to the therapist, as well as the timing of the selected session in the overall course of therapy. For example, having demographic and sociocultural information related to the therapists would allow for a more comprehensive examination of the transactional and social nature of humor, including the potential impact of similar versus dissimilar therapist and client factors (e.g., same or different racial/ethnic background) on humor use. Similarly, having information regarding when the selected therapy session took place in the course of therapy would provide additional contextual information that could shed light on the forms and functions of humor (e.g., client humor use very early in the course of therapy could potentially indicate nervousness or discomfort). Future studies could then compare the forms and frequencies of humor used at different points during the course of therapy, or between therapists and clients of the same or different racial/ethnic groups.

Beyond this descriptive work, future investigations could focus on the effects of humor in therapy. Specifically, the relation between humor use in therapy (as observed and coded from videotaped sessions) and the strength of the therapeutic alliance (as reported on self-report measures throughout the course of therapy) could be examined. Perceived progress in therapy (as reported on self-report measures by client-participants at the end of therapy) could also be assessed. Including these measures in a longitudinal design would provide insight into the potential risks and benefits of different forms of humor and impact on the therapeutic relationship. Due to the fact that much of the research on the potential stress-moderating effects of humor is over ten years old (e.g., Martin, 2001), continued research in this area is needed.

In particular, existing research generally only examines and supports the short-term mood effects of humor and laughter. Accordingly, future research could look at the relationship between humor use in stressful situations (e.g., as measured by coded humor during an induced stressful situation or the CHS) and psychological symptoms and distress (e.g., self-reported) five years later. Similar to Bonnano et al.'s (2007) study, long-term outcomes could also be assessed by asking participants to discuss a distressing event, coding for verbal humor and laughter during the disclosure, and later (e.g., 5 or 10 years in the future) assessing psychological symptoms and distress, again using a self-report questionnaire. In particular, future studies on the effectiveness of humor use in coping with stress should include diverse participants in order to better understand cultural differences and potential variations in effectiveness.

Another possible direction for future research involves the development of guidelines for therapist regarding humor use in therapy. More specifically, a manual for therapists could be developed, based on existing literature (e.g., Garrett et al., 2005; Dozois et al., 2009), including: (a) How to identify and respond to potentially maladaptive forms of humor; (b) How to help facilitate and maximize client use of beneficial forms of humor; and (c) The risks and benefits of therapeutic humor. This manual could then be tested for effectiveness. For example, a study could be conducted to compare outcomes (e.g., self-reported psychological symptoms and/or therapeutic alliance) using this newly developed manual to treatment as usual. Training programs could then use this to help trainee therapists to recognize when it is appropriate to invite clients to bring laughter, fun, and positive emotions into the therapy room, and whether and how to facilitate it themselves. This research is particularly important in clinical work

with trauma survivors, where safety is an important concern, and use of humor carries the risk of invalidating client experiences or facilitating avoidance of negative emotions.

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APPENDIX A

Coding Manual

RESEARCH PROJECT CODING MANUAL

This training manual is intended to describe the methods of participant selection, transcription, and coding that will be utilized for the team's dissertation research projects. The specific videotaped therapy sessions will be of clients and therapists at Pepperdine University GSEP clinics selected based on inclusion/exclusion criteria (e.g. individual adult clients representing diverse ethnicities, genders, religions, and presenting issues). Rebecca Dragosits, Celine Crespi-Hunt, and Christopher Ogle will be using this data for their respective dissertations to gain a more in-depth understanding of how clients who have experienced a trauma express/discuss humor, social supports, and cultural worldviews in psychotherapy. Research assistants will also assist in the participant selection and transcription processes, including the identification of discussions of trauma within videotaped psychotherapy sessions.

I. PARTICIPANT SELECTION AND IDENTIFICATION OF TRAUMA DISCUSSION: INSTRUCTIONS

Participant Selection Procedures

Step 1: Obtain a list of potential participants. The researchers should first obtain a comprehensive list of research records for clients who are no longer receiving therapy services and whose clinical records are already de-identified and entered into the research database.

Step 2: Narrowing the list based on demographic inclusion criteria. Next, researchers should narrow down the list to include clients who are at least 18 years of age, are English-speaking, and have engaged in individual therapy.

Step 3: Narrowing the list based on experiences of trauma. The list of potential research participants should then be limited only to those individuals who have experienced trauma, as noted in clinical records included in the database. For the purposes of these studies, traumatic events will be defined as:

> direct personal experience of an event that involves actual or threatened death or serious injury, or other threat to one's physical integrity; or [directly] witnessing an event that involves death, injury, or a threat to the physical integrity of another person. (APA, 2000, p. 463)

In order to meet these criteria, an individual must have directly witnessed or experienced a traumatic event and responded in fear, horror, or helplessness, as indicated on clinical records/instruments described below. Common examples of traumatic events include serious accidents or fire, life threatening combat experiences, rape or physical assault, life threatening major disasters, and seeing another person being killed or badly hurt (First et

al., 2002). This definition also includes forms of trauma related to cultural or race-based factors (e.g., hate crimes involving threatened or actual assault).

Several data instruments should be used to help determine whether a potential participant has experienced a traumatic event that meets the above definition. The researchers should first look at the information presented under the Family Data section of the Client Information Adult Form (Appendix B). In this section, the client is asked to indicate "Which of the following have family members, including yourself, struggled with," and is provided with a comprehensive list of distressing and potentially traumatic situations. The researchers should look to see if the client marked "Yes- This Happened" in the "Self" column for stressors such as discrimination (e.g., hate crimes), death and loss, physical abuse, sexual abuses, rape/sexual assault, injury, debilitating illness, or disability.

Additional information from the Telephone Intake Form (Appendix C), the Intake Evaluation Summary (Appendix D), and the Treatment Summary (Appendix E) will be used to determine whether clients have experienced trauma. On the Telephone Intake Summary, for example, the Reason for Referral portion describes the client's rationale for seeking therapy; the researchers should examine this portion to see if the client reports seeking therapy for reasons associated with the experience of trauma. Various sections of the Intake Evaluation Summary will also be examined for any reference to a trauma history, including: Presenting Problem/Current Condition (Section II), History of Presenting Problem and Other Psychological Conditions (Section III), Psychosocial History (Section IV), DSM-IV-TR Multiaxial Diagnosis (Section VIII), and Treatment Recommendations (Section X). In addition, the Treatment Summary will also be reviewed for any indication that a trauma-related diagnosis had been considered or that the course of therapy involved discussing or processing trauma. The researchers must all agree that at least one of these forms clearly indicate the experience of trauma for a given client before moving on to the next step. The researchers will also use an Excel spreadsheet to track information regarding a client history of trauma found on clinic forms (see Appendix F).

Step 4: Narrowing selection based on discussions of trauma. To be included in this study, clients must openly discuss their traumatic experience(s) with their therapist in at least one recorded therapy session. The researchers for these studies should review each video recording of potential participants' therapy sessions to determine whether such a discussion took place. Based on definitions used in the literature regarding disclosures, discussions of trauma will be classified as client verbalizations that consist of the following: (a) descriptions of a traumatic event; (b) evaluative content about the traumatic event (e.g., beliefs, thoughts, attitudes); and (c) affective content (e.g., feelings and/or emotions regarding the traumatic event; Chelune, 1979; Cozby, 1973; Jourard, 1971; Omarzu, 2000; Pennebaker, Zech, & Rimé, 2001). Sessions in which discussions of trauma did take place will later be transcribed and coded. If there is more than one recorded therapy session in which a client participant engages in a discussion of trauma, only one should be chosen for transcription and analysis. That session should be selected based on the length of time in session spent discussing the trauma; that is, the session in

which the client discussed the trauma for the longest length of time (compared to other sessions in which trauma was discussed) should be chosen.

Step 5: Narrowing selection based on cultural diversity. The researchers should attempt to choose culturally and demographically diverse participants who vary in age, gender, religion, and race/ethnicity. Specifically, there should be no more than four clients that identify with each of these demographic categories/groups. The researchers will determine participant's demographic and cultural characteristics using multiple clinic forms. Specifically, the researchers should check clients' age and gender that are indicated in the Telephone Intake (Appendix C). Clients may self-indicate religion/spirituality, ethnicity or race, and disability status in the Social Cultural (Optional) section of the Client Information Adult Form (Appendix B); researchers should examine this section for information about the client's identification in these areas. Finally, researcher should look at cultural information that may be included in the Cultural Factors & Role of Religion in Client's Life portion (section F) of the Intake Evaluation Summary (Appendix D).

Procedures for Identifying Trauma Discussion

The start time should be noted on the transcription by writing the word Start and then the time in bold, highlighted (in green) brackets. When the discussion changes to a topic other than a trauma discussion, again pause the video and write the word Stop and then the time in bold, highlighted (in red) brackets.
Example: I have had a difficult marriage Start **[1:14]**. Most of the time my husband hits me. Sometimes he even throws things at me… Stop **[1:45**

Introduce following sample transcription

MASTER TRAUMA TRANSCRIPTION

Laura S. Brown Therapy Session from APA Series III-Specific Treatments for Specific Populations – Working with Women Survivors of Trauma and Abuse

Confidentiality: The following is a confidential document, which may contain information that could be detrimental if used by untrained individuals. Nonconsensual disclosure by individuals not associated with Pepperdine University and the Positive Psychology PARC lab is prohibited.

Therapist:	Dr. Laura Brown	Session Number:	1
Client:	Ms. M.	Date of Session:	xx/xx/xxxx

Introduction: This session was included in a training video for APA, entitled, "Series II-Specific Treatments for Specific Populations," and was hosted by Jon Carlson, PsyD, EdD. The session that follows was transcribed verbatim, for the purposes of coder training for Pepperdine University as a part of the Positive Psychology PARC Lab supervised by Susan Hall, JD, PhD. This format will be followed for future transcribed sessions to be utilized in the actual research.

T = Therapist; C = Client

CONFIDENTIAL VERBATIM TRANSCRIPT

Verbatim Transcript of Session	**Initial Coding Impressions**
T1: Ms. M, I want to start by thanking you for being here this afternoon. And we talked a little bit before the cameras came on about what you want to talk about with me today. So, why don't you tell me about that, let's start from there [therapist used open hand gesture inviting client to share].	
C1: Well, um, [client scratching under nose as talking], I have, um [client looking down], I have dealt with a lot of issues in therapy, um, but one of the issues that I really haven't talked about or really dealt with in therapy [client briefly looking off] is my relationship with my sister. She's my younger sister, um, she's three years younger than me. Um, we really are not talking. We haven't been talking [client briefly looking up] since, I think, the year 2000, since my mother passed away. We haven't, we haven't really spoken. We talk but it's very business-related when things have to get done but I really don't talk to her and I [client looking down], um, I really don't have any desire to have a relationship with her. I liked to, a part of me wants to but a part of me, um, doesn't want to because she is, um, she gets really angry, and I sense that I really can't be myself around her, um, that she, for some reason, I don't know, it might be the past that she's angry and I have no idea because I don't know [client clearing throat] and I have a sense that she doesn't know either why she's angry with me. But, um [client looking down and taking a deep sigh], she was, um, we never really got along when we were growing up. We fought a lot [client looking away and down]. I spent a lot of time with her. I grew up in a family of seven. And, um, she was very, she was always fighting with all of us. She was very angry.	
T2 : [therapist nodding] Fighting physically or	

verbally or both?	
C2: Start **[1:42]** Sometimes it was physical with my brothers, and, but it was verbal with me because I wouldn't I wouldn't get into fights with her because I was afraid of her because I watched how angry she would get with my brothers and my brothers were (2) they were pretty, violent too, and, um, one of my brothers, one of my younger bothers was in a gang, was a gang member, and she would fight with him. [therapist nodding] She, I saw her one time, um, put an iron right to his chest and when I saw these things happening, I just I grew really afraid of her. And so when we would argue I knew what she was capable of so, I I would stay clear of any like physical, anything physical with her. I would try to talk my talk my way out of it.	
T3: [therapist nodding] Mm-hmm. Were there ever times where she was physically violent with you?	
C3: Well, there was one time when we got into it and my mom was there and my father was there. Um [client sighs deeply], my mother immediately got between us [therapist nodding] and she just got us both together and said she was going to hit both of us. Um [client pressed lips], that was the only time that we were rolling on the floor and really nothing happened.	
T4: Mm-hmm [therapist nodding]	
C4: She just was, we were pulling each other's hair, and actually I was mo—I was mostly like trying to get her away from me, trying to get her off of me.	
T5: Mm-hmm [therapist nodding]	
C5: Um, but that was the only time that we got into it. I never, after that, wanted to get into any physical. I don't, I don't know why I just-she really scared me.	
T6: Yeah I kind of get a sense, and tell me if I'm reading this accurately, that it's like you saw her as having no fear…	
C6: Right [client slowly nods]	
T7: …as having no limits [slowly nodding] to what she would be willing to do.	

C7: Right [Client nods]. And that scared me.	
T8: Mm-hmm [therapist nodding]	
C8: And the verbal things that she would say to me were really scary. Like, "I'm gonna stab you, I'm gonna—" she would tell me all these things that she was gonna do to me.	
T9: Mm-hmm [therapist nodding]	
C9: And they were very detailed.	
T10: Mm-hmm [therapist nodding]	
C10: And that scared me. And the things that I saw I mean I saw her doing [client takes a deep breath in and out] being a, not being afraid of my brothers who were violent themselves. Um who were gang members who fought with weapons and that didn't scare her [client swallows]. They didn't scare her. So to me I thought she would, she would, there would be no limits to what she would do. That she…	
T11: So it sounds like [therapist scrunches up her face and squints] she feels dangerous to you [therapist nodding].	
C11: Yeah [client nods]. To this day she feels dangerous to me. And [licks lips] I had— I would go back and forth with having relationship with her. My sister has a really sweet personality. And then on the other hand, when you say something, and she interprets it as being, like she has to get on the defense…	
T12: Mm-hmm [therapist nodding]	
C12: …she, she can get really violent. And it happened more with me [client scrunches up face inquisitively] I sensed, than with more-- I, I she was real sensitive with me. Um, well that's what my nieces say that it was something historically with us.	
T13: Mm-hmm [therapist nodding]	
C13: [Client looks down] Um, but she recently had an altercation with my [client points to the side] my niece. And my niece confirmed to me that [client looks up at therapist] it wasn't me that it was my sister. And my sister has had a past with [client scratches chin] violence, like she has had a past with her husband with, with um, hitting her husband [client nods]. And I've seen her doing it.	
T14: So you know she's capable of being	

physically violent.	
C14: Mm-hmm	
T15: You know she has these really violent fantasies about what [client nods] she might do to you. She's had them over the years…	
C15: Mm-hmm [client nodding]	
T16: …and you experience her as not having any internal limits [therapist's hands gesture toward middle of her body], no sense of [therapist nodding] something that will stop her even when she might actually be in danger.	
C16: Mm-hmm [client nods] that's right, that's correct.	
T17: So it does sound like she's a pretty scary person.	
C17: [client nodding] Yeah, although, um, for a lot, [client looks up at ceiling] for a long time and still [client looks down at floor], other family members, um, that were close to her [client looks back up at therapist] didn't want to believe that about her. And so I always thought that it was me. I always felt that it was me because I, we were really close [client looks down at ground], um,	
T18: Thought that it was you like [therapist scrunches up face, squints, and puts hand up in the air] you were overreacting or—	
C18: Yeah that I was overreacting or that my sister just didn't like me for whatever reason…	
T19: Mm-hmm [therapist nodding]	
C19: …and it was— but I also sensed that they kind of protected her too. Um, (3) the, she can be really sweet she has a nice she has a really good disposition. Um, but once you get to know her she gets pretty scary and (3) [client gazes up in the air] we don't— she doesn't have a relationship really with any of my brothers [client gazes towards the floor] and my sister- my older sister who passed away they didn't get along either (3) so—	
T20: So it's not as if she really relates to anybody in the family [therapist gestures at middle of body with both hands as speaks]	
C20: [client nodding] Right, right now she does, she's not— [client gestures with both hands as speaks] she's kind of isolated, um,	

each family member throughout the years and for me it happened very early because I grew up with her and I had experience with her.	
T21: So, it seems like what you're saying is [therapist gestures with both hands as speaks] so here you are now today an adult and this person is still being really scary for you. [therapist nodding]	
C21: [client nods head in agreement] Yeah, she is and that bothers me. [both therapist and client nod heads in agreement]	
T22: It bothers you because—	
C22: It bothers me because [client gazes down toward the floor away from the therapist] uh, she can't hurt me. [client looks directly at therapist] I mean, she can't do anything to me now. I mean, if she laid a hand on me, [client looks around the room] I know that I'd be able to call the co- call the police or— [therapist nodding] um, there'd be somebody there to defend me or I could defend myself. Stop **[7:52]**	

II. TRANSCRIPTION INSTRUCTIONS
(adapted from Baylor University's Institute for Oral History - http://www3.baylor.edu/Oral_History/Styleguiderev.htm)

Research assistants will transcribe verbatim each therapy session to be included in the research to provide a format for more in-depth analysis of therapist and/or client statements to then be coded. Attached at the end of this section is a template that you will use for your transcriptions. After reading this manual and discussing questions during training, you will be asked to practice transcribing an excerpt from a Motivational Interviewing tape by William Miller. At the end of the practice, we will review with you a completed transcript to check your work and address any questions.

A good transcription should reflect as closely as possible the actual words, speech patterns, and thought patterns of the speakers. The speakers' word choice, including his/her grammar, nonverbal gestures including sighs, yawning, body movement (e.g., adjusting positions, posture etc), and speech patterns should be accurately represented. The transcriber's most important task is to render as close a replica to the actual event as possible. Accuracy, not speed, is the transcriber's goal.

When identifying who is speaking, us a "**T**" to indicate the therapist is speaking and a "**C**" to indicate the client is speaking. In addition, please use numbers to indicate how many times each person is speaking. For example, the first time the therapist speaks

represent it as T1: and the second time as T2, T3, etc., and vice versa for the client (C1, C2, C3, etc.)

In addition to capturing the actual words, speech patterns and thought patterns of the speakers, we would like to try and capture some of the more important non-verbal behaviors/communication taking place between the therapist and client. In order to do so, please use parentheses with numbers inside of them to indicate pauses in a speaker's response. For example, use (3) to represent a three second pause or (10) for a ten second pause. Use this whenever there are significant pauses or moments of silence between the speakers.

When attempting to capture non-verbal behaviors/movements that are significant to the therapeutic interaction taking place, use brackets [ ] to indicate these movements and clearly state which person—the therapist or client—is performing the movement and what specifically he/she does. For example, [Client turned away from the therapist and looked down at the ground] or [Client laughs] or [Therapist sighed deeply and looked away briefly]. Only note hand gestures that have meaning. For example, the therapist gestures toward her heart when asking about how the client feels, or gestures hands toward self when asking client to say more. Do not note hand gestures that do not carry meaning, such as simply moving hands in the air while talking. Also use brackets to indicate the inability to hear/understand a word or sentence: [Unintelligible] or [Inaudible]. Please make every effort to hear and understand what is said. Sometimes you can figure out a word by the context of what the speaker is saying. If you can make an educated guess, type the closest possible approximation of what you hear, underline the questionable portion, and add two question marks in parentheses.

Example: I went to school in <u>Maryville</u> (??) or <u>Maryfield</u> (??).

If you and those you consult (i.e., other RA's) cannot make a guess as to what is said, leave a blank line and two question marks in parentheses.

Example: We'd take our cotton to Mr. _____(??)'s gin in Cameron.

If a speaker lowers his/her voice, turns away from the microphone, or speaks over another person, it may be necessary to declare that portion of tape unintelligible.

Example: When he'd say that, we'd— [unintelligible].

While there is some merit in having an absolutely verbatim tape, which includes all the feedbacks (such as Um-hm and Yeah), too many interruptions in the flow of the therapist's remarks make for tedious transcribing now and exhaustive reading later. Knowing when to include feedback sounds and when to omit them calls for very careful judgment. Usually the therapist's noises are intended to encourage the client to keep talking. Look at your transcript. If every other line or so is a therapist's feedback, go back and carefully evaluate the merit of each feedback. Don't include every feedback, especially if it interrupts the client's comments in midstream. Only if the feedback is a

definite response to a point being made by the client should you include it. When in doubt, please ask the research team.

Type no more than two crutch words per occurrence. Crutch words are words, syllables, or phrases of interjection designating hesitation and characteristically used instead of pauses to allow thinking time from the speaker. They also may be used to elicit supportive feedback or simple response from the listener, such as: you know?, see?, or understand?

Use of *Uh*: The most common word used as a crutch word is *uh*. When *uh* is used by the narrator as a stalling device or a significant pause, then type *uh*. But sometimes a person will repeatedly enunciate words ending with the hard consonants with an added "uh," as in and-uh, at-uh, did-uh, that-uh, in-uh. Other examples are to-uh, of-uh, they-uh. In these instances, do **not** type *uh*.

Guggles are words or syllables used to interrupt, foreshorten, or end responses, and also as sounds of encouragement. Guggles are short sounds, often staccato, uttered by the therapist to signal his/her desire to communicate. They may be initial syllables of words or merely *oh, uh, ah*, or *er*. Spelling of specific guggles: Agreement or affirmation: uh-huh, um-hm; Disagreement: unh-uh.

For consistency, use **only** the following for exclamations:

- Uh
- Um
- Uh-huh
- Mm-hmm
- Unh-uh

Do **not** use ah, oh, er, and so forth. Pick from the list above and use what seems closest to what is being uttered.

Incomplete sentences are familiar occurrences in oral history because of its conversational nature. They are best ended with an em dash (—). Use one dash (-) for an incomplete word that is then continued (e.g., mo- mother). Interruptions should be indicated using an ellipsis (…).

Similarly, an ellipsis should be used when the person who was interrupted continues their sentence after the interruption.

Example: Interruption

T1: Do you feel like he was ignoring you or…
C2: No, I just felt like he wasn't understanding what I was saying.

Interruption and continuation

T1: He was coming toward me and I felt, I felt…
C2: Scared?
T2: …scared and confused.

Quotation Marks:

1. When a direct expression is spoken by one person (I, he, she), set apart the expression with commas, use opening and closing quotation marks, and capitalize the first letter of the first word quoted.

Example: She said, "I am going to graduate in May."

2. When a direct expression is spoken by more than one person (we, they), do not use quotation marks, but do set apart the expression with commas and do capitalize the first letter of the first word quoted.

Example: They said, What are you doing here?

3. When a thought is quoted, do not use quotation marks, but do set the thought apart by commas and capitalize the first letter of the first word quoted.
Example: I thought, Where am I?
When you have completed the transcription, please go through the session one time to make sure you have captured all the spoken data, and an additional time to ensure you have noted all the significant non-verbal behaviors.

TRANSCRIPTION TEMPLATE

CONFIDENTIAL VERBATIM TRANSCRIPT

Confidentiality: The following is a confidential document, which may contain information that could be detrimental if used by untrained individuals. Nonconsensual disclosure by individuals not associated with Pepperdine University and the Positive Psychology PARC lab is prohibited.

Session Number: Coder:
Client #: Date of Session:

C = Client
T = Therapist

Verbatim Transcript of Session	**Initial Coding Impressions**
T1:	
C1:	
T2 :	

C2:	
T3:	
C3:	
T4:	
C4:	

VERBATIM TRANSCRIPT FOR CODING TRAINING

William Miller Therapy Session from APA Series III-Behavioral Health and Counseling

Therapist: Dr. William Richard Miller Session Number: 1
Client: Ms. S Date of Session: xx/xx/xxxx

Introduction: This session was included in a training video for APA, entitled, "Behavioral Health and Health Counseling: William Richard Miller, PhD, Drug and Alcohol Abuse," and was hosted by Jon Carlson, PsyD, EdD. The session that follows was transcribed verbatim, for the purposes of coder training for Pepperdine University as a part of the Positive Psychology PARC Lab supervised by Susan Hall, JD, PhD. This format will be followed for future transcribed sessions to be utilized in the actual research.

T = Therapist; C = Client

Verbatim Transcript of Session	
T1: Ok, Well now that we're settled in just a little bit, um, I understand that what you wanted to talk about was alcohol and perhaps some other drugs and how that fits into some of the other things that you are dealing with in your life, so fill me in a little, what's happening?	
C1: Well, as far as the alcohol and drugs I've been in and out of recovery since 1995. I used to be basically a social drinker. I lived in Chicago 32 years and moved to California and that's when the heavy use started.	
T2: Uh-huh. [Head nodding]	
C2: A lot of that had to do with, I think, the change in lifestyle. Out there, especially where I lived, it was the Palm Springs area. A lot of people, a lot of partying, a lot of drugs. And I just kind of got into it because the people were	

in the environment where I was living, it—um, that's what everybody did. C2.1: I actually started cuz I was going to college, and I wanted, a girl who I was a neighbor suggested I try speed to keep me awake. She used it as a waitress and it helped her and I thought, well, and that's how I got started into that part of it. C2.2: I had been smoking marijuana for the longest time, since the eighties, but I had done nothing else. And then when I moved to California, I started drinking because I hung out with younger people, and we would drink, I don't mean just beers, we'd drink hard liquor.	
T3: Yeah, you get thrown along with the lifestyle	
C3: Exactly, and that was also a problem because I have an addictive personality and it's, I believe it's hereditary and it's part of other problems that I have. C3.1: It just manifested itself very quickly. I did in perhaps one year, what some people would do 3, 4, 5 years. I just crammed it all together. I got started with the speed, and then I switched to cocaine. Now, people call it crack or rock, whatever you want to call it. Free, the freebasing. You buy the, buy it in the rock form or in the powdered form, and I spent, I spend $7000 in 3 months on that.	
T4: So you're very efficient about the drug use, packing it into a short period of time.	
C4: Well I packed it in, unfortunately, I don't know if it's good or it's bad, I went from buying it from people I didn't really, trying to get what I could from wherever, to climbing up the ladder to finding the main source, so to speak. C4.1: And I was one of those people, who I'm always proud to say, I never did any sex or anything for drugs or anything like that. Now, I didn't do any, anything… prostitution, or there was a lot of girls that would, a lot of women that would do that.	
T5: [Head nodding] So it was very common.	
C5: And, I was the kind of person, I got my nose broken because I wouldn't sleep with	

somebody's; this one fella wanted me to sleep with him when his girlfriend was at work and I wouldn't do it so he busted my nose. That's the kind of person I am. I don't believe in, that the two have to meet. My love was drugs. I didn't need a man, I didn't need relationships. If I had the money, if I didn't have the money, I had a way to get, you know, get it through people. I had, I didn't just party you know. I partied with uh--	
T6: Contacts.	
C6: Yeah, people who used to be in the show business industry, so to speak. You know, or who were related, A girl that was related to a guitarist in a famous rock star's band, and I'm not gonna name names, and she unfortunately—she died of AIDS but she had the money and she had, always, there was always partying going on with her. We'd go to the hotel and party, party, party.	
T7: And you got caught up in that very quickly.	
C7: Oh, very quickly, and it's easy to I guess, if you have the personality for it, you know. And I didn't have any, and I was at a point in my life where I didn't really care about anything. And I wasn't young either. I was 32.	
T8: So it sort of felt natural to you.	
C8: It felt fun, it felt, actually, it felt good, you know. I was trying to, as they say, chase that next high. It got fun, but when I started running out of the money and I don't know how I had the stamina for it because I actually still worked, paid rent, kept a job, I did everything, well, which a lot of people can do, but for the amount of drugs and drinking I did--	
T9: Pretty remarkable--	
C9: Some people would probably not even be able to get out of bed. I'm not bragging about it. C9.1: Now, ten years later, I feel like I'm physically, I'm just kind of burnt out, you know, C9.2: I stopped doing cocaine in '95, and then I admitted myself into rehab in California that same year, and I've done it still on occasion,	

but I'm on medication which, thank goodness, doesn't make it where the drug has addictive properties.	
T10: Really?	
C10: Ya, I found it very interesting. I could do cocaine and put it down and not go back to it.	
T11: Which was new?	
C11: Which is something new to me, I mean, this is as recent as moving back to Chicago. [Therapist's head nodding] You know, I haven't been able, I've struggled in and out of sobriety, you know, I feel like Robert Downey, Jr. sometimes. [Therapist laughs] C11.1: It's like okay, but I've not, I've never gotten arrested for drugs, or for selling, you know, one of those people who was too smart to keep it in the house and you know, I even though I never had money I had the common sense of well, you don't keep it in the house, don't drive around with it, you don't drink and drive, you don't drink and use. You know, why ask yourself for trouble? C11.2: One time I had drank and drove, and that was because I was at my boyfriend's, we were out, I had an argument, and we both went our separate ways. So, I ended up having to go home inebriated. And, um, fortunately nothing happened so I was pretty lucky. C11.3: And um, I've been in and out of recovery with AA and NA and, although I love the program and I espouse to do it, they say anonymity in AA, but I think that the condition in a situation like this, it's…well, it's part of talking about recovery and addiction. And, I've worked in and out of the program, I was clean, and sober for 3 years until I moved back to Chicago. Because I had gotten myself surrounded by people in recovery. Yet, when I moved back here, I was not surrounded by people in recovery and I discovered that I was staying clean and sober for the wrong reasons. I was doing it for other people, not for myself. I was doing it to help my mother, because my mother was dying of cancer, so I tried to, I wanted to…	
T12: So the change again of, of moving--	

C12: Right, they say geographics, you are running away from yourself. But I left California for many reasons. And uh.	
T13: And coming back here in a way set off--	
C13: It set off, right. It set off everything because I felt like I had the freedom. There was nobody there, I had no sponsor, no clean and sober neighbor, nobody checking up on me so to speak to make sure I was still, I was still smoking pot. I hadn't quit marijuana and, but the alcohol was the one that really got to me. I had been, I had quit marijuana for about a 7-8 months after I got out of recovery, but ended up getting back into that situation when I moved in, uh, out of sober living and I ended up eventually moving in keeping a roommate who was a friend of mine from my drinking and using days who was dying of AIDS. But he needed someone to take care of him. And I was going back to school at night plus working, so basically, my drug use was limited to marijuana and alcohol, sometimes doing coke or whatever. I never liked speed really because I saw people, the more they did that their teeth would rot out and, you know, it's Drain-o or rat poison, it comes in so many different colors. I've noticed it's not that big here in Illinois, in Chicago.	
T14: So when you say your in and out of recovery now, its alcohol and marijuana your talking about—and every now and then cocaine.	
C14: Right, ya, well the cocaine, basically I've stopped, ah, pretty much avoided that because the individual who introduced me to that again, I avoid seeing him at all costs…which I do for my own well being. I don't want to ride the dragon again. I don't want to go there, even though I know that if I do, I'm not going to be going there again every day. I won't be getting loaded every day because of the medication I take. But, and, he was paying for it, but I realized it was just something that I wasn't even enjoying.	
T15: So why do it?	
C15: Right, you know, to me, everybody, I	

believe has an addiction. We all have addictions be it food, sex, drugs, alcohol, gambling, family life, work. You know, whatever it may be, I think everybody has one, one thing at least that they crave and that in the back of their mind that they focus on and they really desire.	
T16: And you said you think you have an addictive personality--someone who easily gets drawn into things	
C16: Yeah, well right, I have been. I'm an artist, freelance artist as well, and my addiction used to just be drawing. As a child, I would just come home and draw, you know.	
T17: So whatever you do like that you do it intensely	
C17: Yeah, I wish I could do it to make money and do it, you know. [Therapist laughs] Get a money making idea and do like that, I'd probably be rich, it's just um, but not able to find a proper substitute, you know. At this time, I'm trying to get back into drawing and being more creative, and my personal life, though I feel so mentally, emotionally, and physically exhausted after all I've been through in my life, that all I want to do is almost not do anything. I'm trying not to focus on any addictions. I'm at the point where I'm getting tired. You almost get tired of it physically. Like, if I drink I feel, I don't get the hangovers cuz I won't even allow myself to drink enough, but physically the next day, I feel, I ache, you know I feel the hangover with the headache would manifest itself with my body aches, and I don't want to, want to get up on the…you feel as vital and I've just done so much that I'm burning out.	
T18: And you've used up your chances, huh?	
C18: Yeah, pretty much. And being single all my, which, since 1990 and not having…being blessed without having children, which I never wanted, thank God, I'm not a kid lover. I chose not to have kids also because of my husband and that was one of the reasons we also parted ways. I was happy. I'm lucky enough to where I've had my own life and I've not had to drag	

anybody, drag anybody down with me, you know. It did affect family members. Anytime you're, you have an addiction, people who care about you, it will, but eventually they turn you away too.	
T19: Now what is recovery for you besides not using alcohol or marijuana?	
C19: To me recovery would be going to meetings, having a sponsor, working a twelve step program, um, I still try to incorporate 12 step beliefs and behaviors in my life as far as, "Let go, Let God," the use the steps, resentment, a lot of people say if you're drinking and using you cannot work the steps, but I think you can use them in a behavior, method of behavior modification if you're, instead of turning to getting loaded or anger or what have you, when you have a problem in life, try to do something positive, call somebody, read if you have an AA Big Book or an NA Big Book, pick something up in there and try to read it. Try to keep yourself as close to the, that behavior as you can because it helps you to get…the closer I try to stay to meetings, even if I'm drinking, if I go to meetings it helps me from not wandering too far off track to where I'll say drink more, or just stop totally leaving in that whole lifestyle or that whole belief process.	
T20: There's a piece here which were missing before we go, which is what are you wanting to move toward? What do you--	
C20: What I want to move toward is to just be able to totally not have to drink or use. And at this point--	
T21: Which is doing nothing.	
C21: Right. Well, at this point I still enjoy my pot. I'll be the old person sitting out there smoking a joint on the steps with all my cats around me, you know, and that's okay with me, but I don't want to drink. That's what I'm trying to avoid, and I'll be, I'll go a couple weeks without drinking and then maybe I'll drink again. But it's getting to where I want it less and less again.	

III. CODING OVERVIEW

The third step of the process involves the researcher-participants engaging in the coding processes, specifically for expressions of humor (A), social support (B), and cultural worldviews (C). Operational definitions and relevant codes are discussed in this section.

A. **Expressions of Humor**

The first step of the coding process involves the researcher-participants coding client expressions of humor. Humor will be defined broadly to refer to "anything that people say or do that is perceived as funny and tends to make others laugh, as well as the mental processes that go into both creating and perceiving such an amusing stimulus, and also the affective response involved in the enjoyment of it" (Martin, 2007, p 5). For the purposes of the current dissertation, verbal expressions of humor and laughter (a behavioral expression of humor) will be coded in the context of psychotherapy sessions in which a discussion of trauma occurs. Verbal expressions of humor can include, but are not limited to, jokes, anecdotes, wordplay, or use of irony.

Verbal Expressions of Humor

Humor codes and their definitions and examples are presented in the table below for the researcher-participant to use in coding transcribed sessions. Due to the complex and multidimensional nature of humor, expressions of humor will be coded along various dimensions. For example, each humorous verbalization should first be coded as either (a) Reactive or (b) Productive. Expressions of humor should then be further coded as one of the following: (a) Benign; (b) Aggressive; (c) Self-deprecatory; (d) Dark; or (e) Expression of humor not otherwise specified. Additionally, these categories are not completely mutually exclusive and it may be possible for an expression of humor to be assigned to multiple categories (e.g., aggressive *and* dark humor).

Coding System for Identifying Verbal Expressions of Humor

	Reactive Humor (Code F1) ***The client recognizes and responds to humorous stimuli in the environment (e.g., reaction to therapist humor or situational/unintentional humor in environment).***	**Productive Humor** (Code F2) ***The client deliberately produces and uses humor in a situation that does not appear to be inherently humorous.***
Benign Humor (Code H1) ***The client uses humor in a playful, benign manner,***	**Example:** [Session takes place on a stormy day; client walks in with an umbrella]	**Example:** C: "I'm sorry for crying so much today." T: "No need to

containing no apparent aggressive, self-deprecatory, or dark elements.	T: "Beautiful day out, huh?" C: "Oh yes, days like this really make me appreciate living in Southern California!"	apologize, I think it's important for you to freely express your emotions in here." C: "Yeah, well, thank goodness the red-eyed look is totally in this season."
Aggressive Humor (Code H2) ***The client expresses humor in a way that is hostile or demeaning to others, including the therapist or regarding another person not present in the therapy room (e.g., sarcasm, satire, ridicule, teasing).***	**Example:** C: "My wife and I have been getting along better because we have decided to put aside our differences and focus on being responsible for the kids' sake." T: "Maybe you should share some of your secrets with Congress." C: "I think my kids have a better shot at raising themselves than that group of idiots does at learning to cooperate."	**Example:** T: "So is this [activity/intervention] something you want to try? C: "Oh, *definitely*, doc, I'm sure it will totally cure me. You're a genius.
Self-Deprecatory Humor (Code H3) ***The client uses humor in a way that is self-disparaging or appears to attempt to entertain the therapist by saying or doing things at his or her own expense. Client targets his or herself as the object of humor or makes fun of him/herself (e.g., to put listener at ease or ingratiate him or herself to listener, to demonstrate modesty). This form of humor can range from subtle and/or playful mocking of oneself to more obvious and/or self-disparaging expressions.***	**Example** T: "So the prostitution- I mean prosecution- is going well?" C: [a lawyer, in the midst of an important case] "Prosecution is going well, but prostitution is probably not an option for me- I don't think women would sleep with me even if I offered *them* money."	**Example** T: "So you were hurt when your wife called you two-faced?" C: "Well, maybe more confused than hurt- if I were two-faced, do you really think I'd choose to wear this one?" **Example of multiple codes (H4 & H3):** C: "I certainly have a lot of work to do in therapy! I'll have lots of material to keep us busy with, that's for sure [client laughter]."

Dark Humor (Code H4) ***The client uses humor in a way that makes fun of situations ranging from difficult/challenging to terrifying/life-threatening; humor is used to treat serious, dark, or painful subject matter in a light manner. Furthermore, the situation/topic/context in which humor is used should be clearly identified as being difficult, challenging, serious, dark, or painful. Humorous expressions in reference to a client's presenting problem(s) will generally fall under this category.***	**Example:** T: "So how was your recent hospital stay? Just delightful, I'm sure." C: [recently diagnosed with a terminal form of cancer] "Oh yes, a total blast. It's a shame I couldn't stay longer. You know, I've decided that I'm no longer afraid to die- I just don't want to be there when it happens."	**Example:** T: "So how was your trip home?" C: "Well, as disasters go, it was better than the Titanic, but worse than the Hindenburg. My brother is back in rehab, my parents are getting divorced, and my favorite family dog just died." **Example of multiple codes (H4 & H3):** C: "I certainly have a lot of work to do in therapy! I'll have lots of material to keep us busy with, that's for sure [client laughter]."
Expression of Humor Not Otherwise Specified (Code H5) ***The client uses a form of humor or refers to humorous stimuli in a way that is not captured by any of the aforementioned codes. Second-hand and vague references to humorous expressions also generally fall under this category.***	**Example:** T: "You have a unique sense of humor, you know that?" C: "Oh yeah? You're pretty funny yourself."	**Example** C: "I have been getting along with my roommate much better lately" T: "Really?" C: "Yeah, the other day he told me this joke about this duck who crossed the road. He totally cracked me up." **Example** C: "It's funny that he was in my dream, because I haven't thought about him in years!"

<u>Laughter/Behavioral Expression of Humor</u>

In addition to verbal expressions of humor, laughter (a behavioral expression of humor) will also be coded as either: (a) Laughter Accompanied by a Coded Verbal Expression of Humor or (b) Laughter not Accompanied by a Coded Verbal Expression of Humor.

Expressions of laughter will further be coded as occurring either: (a) In the Context of a Serious or Difficult Topics; or (d) In the Context of Benign or Positive Topics. All Instances of therapist laughter, regardless of context, should also be identified and coded. Please refer to the following coding systems for definitions and examples.

Coding System for Laughter

	Laughter in the Context of Serious or Difficult Topics (Code D1) ***Client's laughter occurs in the context of subject matter ranging from serious/difficult to painful/traumatic. The topic/context in which laughter is evident should be clearly identified as being serious, difficult, challenging, dark, traumatic, or otherwise explicitly regarded by client as eliciting negative emotions or as being difficult, challenging, etc. Laughter accompanied by verbal expressions of humor that are coded as H2, H3, or H4 will generally fall under this category.*** **Examples of D1 topics:** • **Daily stressors** • **Ruptures or conflict within the therapeutic relationship** • **Traumatic event(s) (e.g., physical or sexual abuse)** • **Uncertainty with regard to client's coping abilities** • **Discussions of therapy that are directly related to issues/topics that are clearly identified by client as being distressing or problematic.**	**Laughter in the Context of Benign or Positive Topics** (Code D2) ***Client's laughter occurs in the context of subject matter ranging from neutral/benign to positive. Laughter accompanied by verbal expressions of humor that are coded as H1 will generally fall under this category. Laughter in the context of topics that don't appear to elicit any negative emotions from the client will also generally fall under this category. If a topic is not explicitly regarded as being negative, difficult, or challenging by the client, or cannot be clearly identified as being serious, difficult, challenging, dark or traumatic, then it should be coded D2.*** **Examples of D2 subject matter:** • **Client successes** • **Client hobbies (e.g., discussion regarding a television show)** • **Stories about benign, daily activities (e.g., cooking dinner)** • **Second-hand stories or vague discussions about others.**

		• **General discussions of therapy**
Laughter Accompanied by a Coded Verbal Expression of Humor (Code L1) ***Client's laughter is accompanied by a (coded) verbal expression of humor.***	**Example:** T: "So how was your recent hospital stay? Just delightful, I'm sure." C: [recently diagnosed with a terminal form of cancer] "Oh yes, a total blast [client laughter]. It's a shame I couldn't stay longer."	**Example:** [Session takes place on a stormy day; client walks in with an umbrella] T: "Beautiful day out, huh?" C: "Oh yes [client laughter], days like this really make me appreciate living in Southern California!"
Laughter *not* Accompanied by a Coded Verbal Expression of Humor (Code L2) ***Client's laughter is not accompanied by a (coded) verbal expression of humor***	**Example:** [Client is in the middle of a messy divorce] C: "I just don't understand how he could leave me [client laughter]. You know?"	**Example:** C: "I wish I had a vacation planned for this summer, but I don't think I have the time! Plus I might just prefer to relax at home [client laughter]."

Therapist laughter (Code TL)	**All instances of therapist laughter, regardless of context, should be coded as TL.**

<u>B. Social Support</u>

The next step in the coding process consists of the researcher-participants coding client-participant expressions of social support. For the purposes of this study, which focuses on clients' trauma experiences, social support can be defined as the interpersonal networks that are experienced, sought, or needed by an individual during or in the aftermath of traumatic events that provide, or attempt to provide, that person with tangible and/or emotional help and that are expected to contribute, either positively or negatively, to his

or her posttraumatic experience. Expressions of social support are those explicit verbal statements made by client-participants to describe, discuss, explain, or reflect on their personal experiences of social support. Because this study will include only psychotherapy sessions in which discussions of trauma occur, all expressions of direct social support experiences (those experienced personally by the client) within the selected sessions will be coded and analyzed in the context of the session. Therefore, for the purposes of coding client expressions of social support in this study that may not concern a threat to physical integrity, social support will also be defined as personal/direct client experiences within or beliefs about interpersonal networks and relationships that are anticipated, needed or desired, offered or received to provide him or her with either positive or negative helping behaviors. Thus, all statements that clients make about their own social support experiences (e.g., types and functions of support) will be coded. Additionally, each instance of coded support content should be followed by brackets containing the identified individual discussed.

Social support codes and their definitions and examples are presented in the table below for the researcher-participant to use in coding transcribed sessions. However, given the conceptual overlap that occurs amongst constructs of social support, it is likely that many expressions of social support may be coded in more than one category. Once identified, expressions of social support should be placed in any of the applicable following categories (they are not mutually exclusive): (a) Received support; (b) Perceived support; (c) Extended support; (d) Support needs; (e) Support functions; (f) Support content [**including identified support resource**]; (g) Other.

Coding System for Identifying Client Expressions of Social Support In Psychotherapy Sessions that Involve Discussions of Trauma

Client Expressions of Social Support: *Received Support*

Codes	**Descriptions**	**Examples**
Positive received support: (Code RS1)	The client reports on support (naturally occurring helping behaviors) that was given or provided to the client from another person(s) or entity (an exchange took place) and describes it as positive (e.g., helpful, beneficial, or useful).	C: "My sister's help was such a blessing!" C: "It was so helpful to hear those comforting words from my rabbi."
Negative received support (Code RS2)	The client describes support (naturally occurring helping behaviors) that was given or provided to the client from another person(s) or entity (an exchange took place) and describes it as negative (e.g., unhelpful, unwanted, or damaging).	C: "My brother said he would take care of the kids but he never showed up." C: "She was supposed to help, but what she said really

		offended me”
Received support: Not Otherwise Specified (Code RS3)	The client discusses support (naturally occurring helping behaviors) that was given or provided to the client from another person(s) or entity (an exchange took place) and describes it as neither positive or negative (e.g., ambivalent, impartial).	C: “The church gave us food and clothes.” C: “My social worker called to check in on me.”

Client Expressions of Social Support: *Perceived Support*

Positive perceived support (Code PS1)	The client speaks about beliefs about support to be received, that are positive and may stem from previous support experiences (e.g., expectations for future support to be available and effective).	C: “I just know my friends will always be there for me, ready to help me out.”
Negative perceived support (Code PS2)	The client describes beliefs about support to be received, that are negative or lacking and may stem from previous support experiences (e.g., expectations that future support will not be available or will not be effective).	C: “I can’t rely on anyone and I doubt I ever will.”
Perceived support: Not Otherwise Specified (Code PS3)	The client reports beliefs about support to be received, that are neither positive nor negative or unspecified beliefs about future support that may stem from previous support experiences.	C: “Sometimes you can count on your friends and sometimes you can’t.”

Client Expressions of Social Support: *Extended Support*

Codes	**Descriptions**	**Examples**
Positive extended support: (Code ES1)	The client reports on an explicit indication of support (e.g., doing something for someone else), or beliefs about support, that he or she provided, or will provide, to others and describes the experience as positive (e.g., beneficial, fulfilling, meaningful) for the client.	C: “It felt so good to be needed for once! I was the person she talked to and counted on.” C: “I’m good at taking care of people. It just comes naturally to me.”
Negative extended support (Code ES2)	The client describes an explicit indication of support (e.g., doing something for someone else), or beliefs about support, that he or she gave to others, or will give to others, and	C: “Everyone is always relying on me for everything. I have to do everything! I’m so sick

	describes it as negative (e.g., unhelpful, burdensome, or stressful) for the client.	of constantly taking care of everyone else." C: "She is too sick. I'm just not cut out to take care of her. I'll mess everything up!"
Extended support: Not Otherwise Specified (Code ES3)	The client discusses an explicit indication of support (e.g., doing something for someone else), or beliefs about support, that he or she provided to others, or will provide to others, and does not distinctly specify the quality of the experience (e.g., mixed feelings, ambivalence, vague descriptions, factual or non-emotional descriptions) for the client.	C: "I got so annoyed that I had to help him but I felt better after doing it." C: "I took over the childcare duties for them." C: "I see myself as the caretaker in my family. I'll always take care of them."

Client Expressions of Social support: *Support Needs*

Codes	Descriptions	Examples
Support needs: From others (Code SN1)	The client discusses the need, desire, or longing for support from others (as opposed to actual support experiences; e.g., the need for information rather than received information, or beliefs about such support). This may also include clear statements of what is *not* needed, wanted, wished for, or desired from others.	C: "I just wish someone would tell me what will happen." C: "Please just tell me it will get better." C: "I don't want those church ladies coming around here and getting involved in my business!"
Support needs: To others (Code SN2)	The client notes the desire, wish, longing or need to provide others with support instead of actual support rendered to others. This may also include clear statements of what the client does *not* need, want, wish, or desire to provide others with.	C: "I knew I would feel better if I helped them in some way." C: "I wanted to be able to tell them it would be ok." C: "I just don't want to have to cook for everyone."

Support needs: Not otherwise specified (Code SN3)	The client reported on some need, wish, longing, or desire for support that is ambiguous, hypothetical, or is not better characterized by perceived support, and is not clearly subsumed by support needs *from* others or *to* others. This may also include clear statements of what is *not* needed, wanted, wished for, or desired.	C: "I went to the church because I just needed to be around people." C: "I would feel better if I had someone to talk to." C: "I just can't stand to be around anyone right now."

Client Expressions of Social Support: *Support Functions*

Codes	Descriptions	Examples
Support function: Esteem (Code F1)	The client reflects on words of encouragement or communication from others intended to enhance self-esteem, self-efficacy, or self-worth.	C: "Receiving that card from her let me know how special I am."
Support function: Emotional (Code F2)	The client shares that others acknowledged or otherwise were responsive to his/her affective experience and expressions.	C: "He was just so understanding when I cried."
Support function: Advice/informational (Code F3)	The client acknowledges/listens to or discusses guidance, instructions, directions, or specific information received from others.	C: "She told me that what happened was illegal and I should talk to a lawyer." C: "He told what happened while I was in the hospital."
Support function: Feedback (Code F4)	The client talks about others' evaluations of his/her progress.	C: "My best friend told me I'm getting better every day."
Support function: Instrumental (Code F5)	The client reports on material aid or task offered and/or provided by others.	C: "My mother let us stay at her place and borrow her car."
Support function: Social companionship (Code F6)	The client describes the affiliation, belongingness, or time spent with others.	C: "When we were at the beach and laughing together, I totally forgot

		about how bad everything has been."
Support function: Not otherwise specified (Code F7)	The client describes relationship functions that are not captured by any of the aforementioned support content codes.	C: "I talked and she listened."

*Note: support functions should be coded in instances where the client-participant discusses functions that were provided to or experienced by the client.

Client Expressions of Social Support: *Support Content*

Codes	Descriptions	Examples
Support content: Primary kin (Code C1)	The client describes experiences with members of his/her family of origin, adoptive family, spouse/partner (coded as C1 only rather than C5), or children.	C: "I have a hard time talking to my parents about it." C: "My husband is my biggest support."
Support content: Secondary kin (Code C2)	The client speaks about experiences with members from his/her extended family system (e.g., aunts, uncles, cousins, in-laws).	C: "My wife's parents stayed with us after the accident."
Support content: Primary friend (Code C3)	The client discusses platonic relationships which he or she considers to be significant (e.g., close friends).	C: "My three closest friends are the guys I grew up with." C: "My best friend just 'gets' me."
Support content: Other friend (Code C4)	The client discusses experiences in platonic relationships that are distal, unspecified, or not otherwise stated (e.g., acquaintances).	C: "It was nice to talk to a friend." C: "I never really talked about personal stuff with the other moms at the playgroup."
Support content: Sexual/Romantic (Code C5)	The client talks about experiences in relationships that are sexual or romantic (note that spouse/partner is coded only as C1).	C: "I've been dating this girl for about six months." C: "My boyfriend was always the person I went to when things got bad."

Support content: Affiliative (Code C6)	The client reflects on experiences in relationships that stem from group organizations and affiliation (e.g., religious, political, recreational, professional).	C: "The people in my hiking group have been so understanding when I've had to cancel."
Support content: Mutual aid (Code C7)	The client reports on experiences in relationships that were established specifically to exchange support (e.g., support/self-help groups; relationships with other survivors that did not pre-exist the traumatic event(s)).	C: "The women in my support group have shared so much."
Support content: Service (Code C8)	The client describes experiences in relationships with professional service providers.	C: "I just didn't connect with my previous therapist."
Support content: Not otherwise specified (Code C9)	The client describes experiences in relationships that are not captured by any of the aforementioned support content codes.	C: "This guy just listened to me and let me cry." C: "I told the woman that I didn't care."

*Note: all mentions of support content should be coded as indicated by a direct relationship to the client (e.g., all mention of "friends" should be coded whereas "my sister's friend" would not be coded unless the client stated a clear relationship between her/himself and the other individual).

*Note: when the same individual/group support content is referenced multiple times within a single talkturn, that support code should be coded only once. However, the same content code may be used multiple times within a talkturn when various support contents from the same category are referenced within the talkturn. For example, when only one cousin is referenced multiple times within a talkturn, "C2 [cousin]" would be coded whereas when more than one cousin are clearly stated and referenced as support content, it would be coded as "C2 [cousin A], C2 [cousin B], C3 [cousin C]" or "C2 [cousin A], C2 [cousins], ect."

*Note: in cases where only pronouns are used to reference support content in a talkturn, the content should be coded if it is clear who the participant is referring to from the context of the transcript. In instances where it cannot be clearly determined to whom the participant is referring, no content should be coded. For example, C1: "My mom never came to visit me in the hospital." T1: "That must have been hard." C2: "Yeah, well, she could never really deal with seeing me sick or hurt, so it wasn't surprising." C1 would be coded as C1 [mom] (content only) and C2 would be coded as C1 [mom] (content only). Whereas, C: "They only care about themselves." would not be coded for content unless the context of the discussion indicated who "they/themselves" were. However, unspecified individuals/groups that are indicated by words or phrases other than pronouns (e.g., "people," "others," "nobody," "the fellow," ect.) should be coded as C9. At times when a client uses "you" and it is clearly in direct reference to the therapist, it should be

coded as C8 [therapist]. At other times, it may be used euphemistically or not in clear and direct reference to the therapist, in which case it would not be coded.

Client Expressions of Social Support: *Other*

Codes	Descriptions	Examples
Expression of social support not otherwise specified (Code SS)	The client expresses or discusses experiences of social support in a way that is not captured by any of the aforementioned codes (may be positive, negative, factual statements, mixed feelings, ambivalence, or unclear expressions).	C: "Even though my mother passed away, I still get so much strength from thinking of and talking to her." C: "We get along well." C: "Even though he's my brother and I love him, we've really never gotten along."

C. Cultural Worldviews

The third step of the coding process involves the researcher-participants coding client discussions of cultural worldviews. In this study, *Cultural Worldview* is defined as*:* A humanly constructed symbolic conception of reality that imbues life with order, permanence, and stability; a set of standards through which individuals can attain a sense of personal value; and some hope of either literally of symbolically transcending death for those who live up to these standards of value (Pyszczynski, Greenberg, & Solomon, 1999, p. 835).
Cultural worldview codes and their definitions and examples are presented in the table below for the researcher-participant to use in coding trauma discussions in the transcribed sessions: (a) Religion, (b) Ethnicity, (c) Political Affiliation, (d) Nationality, and (e) Other.

Coding System for Identifying Client Discussions of Cultural Worldviews

Identifying Discussions of Cultural Worldviews: *Religion*

Codes	Descriptions	Examples
Religious Group or Denomination (Code R1)	The client refers to his or her religious identification	C: "As a Christian, I feel that giving to charity is important."
Religious Practice (Code R2)	The client discusses an event or practice that he or she engages	C: "I am fasting because it's Ramadan."

	in for religious purposes	
Vague Reference to Religion (Code R3)	The client uses a generic term when referring to his or her religious ideology	C: "I am thankful for my faith because I feel like it has helped me get through this hard time."
Others' Religion (Code R4)	The client discusses the religious identification or practices of others in a neutral or positive manner	C: "My friend and his family believe in reincarnation."
Religious Derogation (Code R5)	The client speaks negatively about the religious views or practices of others	C: "I think people who believe in God are just unintelligent and easily manipulated."
Religious Discussion Not Otherwise Specified (Code R6)	The client discusses religion in a way that is not captured by any of the aforementioned codes	C: "Lately, I have found myself intrigued by various religions."

*Note: This study is interested in discussions concerning religion rather than spirituality. However, some statements could be considered discussions of beliefs or practices that are both spiritual and religious (e.g. prayer). Client statements that seem to convey a belief or practice that is both religious and spiritual will be coded with the appropriate religious code.

Identifying Discussions of Cultural Worldviews: *Ethnicity*

Codes	**Descriptions**	**Examples**
Ethnic Identification (Code E1)	The client references his or her ethnic group or identification	C: "Since I am an African American, I feel like I have had to work hard to overcome certain stereotypes."
Ethnic Cultural Practice (Code E2)	The client discusses an event or practice that he or she engages in because he or she is a member of a specific ethnic group	C: "I am excited to visit my family for our annual Chinese New Year celebration."
Vague Reference to Ethnicity (Code E3)	The client uses a generic word or term when referring to his or her ethnic group	C: "My people have been through so many struggles that continue to affect our behaviors."
Others' Ethnicity	The client discusses other ethnic	C: "I visited my friend, and

(Code E4)	populations in a neutral or positive manner	she is Native American and makes really good traditional fry bread."
Ethnic Derogation (Code E5)	The client speaks negatively about an ethnic group or groups that are different from the client's ethnic identification	C: "Those people (referring to an ethnic group) are responsible for most of the crime in this country."
Ethnic Discussion Not Otherwise Specified (Code E6)	The client discusses ethnicity in a way that is not captured by any of the aforementioned codes	C: "I wish people could see past the color of a person's skin."

Identifying Discussions of Cultural Worldviews: *Political Affiliation*

Codes	**Descriptions**	**Examples**
Political Party or Identification (Code P1)	The client references his or her political party or identification	C: "As a libertarian, I think the government should be limited."
Political Action or Practice (Code P2)	The client discusses an event or practice that he or she engages in for political purposes	C: "I am planning to attend the governor's rally this weekend."
Vague Reference to Political Affiliation (Code P3)	The client uses a generic word or term when referring to his or her political affiliation	C: "All of us on the left are upset over the plan to decrease spending on education."
Others' Political Affiliation (Code P4)	The client discusses the political identification of others in a neutral or positive manner	C: "My dad is an independent so he doesn't really tend to have extreme political views."
Political Derogation (Code P5)	The client speaks negatively about the political parties or affiliations of others	C: "If it wasn't for the democrats trying to corrupt the values that we group up with, this country would be in a better place."
Political Affiliation Discussion Not Otherwise Specified (Code P6)	The client discusses politics in a way that is not captured by any of the aforementioned codes	C: "I have been arguing with my wife a lot because I am very pro-life and she is pro-choice."

Identifying Discussions of Cultural Worldviews: *Nationality*

Codes	Descriptions	Examples
Nationality Identification (Code N1)	The client references his or her nationality	C: "I am proud to be an American and to have certain freedoms that people in other countries might not have."
Nationalistic Practice (Code N2)	The client discusses an event or practice that he or she engages in because he or she seems connected to a particular country	C: "I will visit my family in Mexico to celebrate Cinco De Mayo."
Vague Reference to Nationality (Code N3)	The client uses a generic word or term when referring to his or her nationality	C: "It will be nice to go home and spend time with some other Kiwis."
Others' Nationality (Code N4)	The client discusses other nationalities in a neutral or positive manner	C: "In general, I found the Canadians to be very polite and friendly."
Nationalistic Derogation (Code N5)	The client speaks negatively about nationalities that are different from the client's nationalistic identification	C: "After the terrorist attacks, I don't think we should let anyone from Afghanistan into our country."
Nationality Discussion Not Otherwise Specified (Code N6)	The client discusses nationality in a way that is not captured by any of the aforementioned codes	C: "I love watching the Olympics and seeing most of the world's countries come together in sport."

Identifying Discussions of Cultural Worldviews: *Other (Explicit)*

Codes	Descriptions	Examples
Geographic Region (Code OE1)	The client refers to a region within a country as a cultural characteristic	C: "I'm from the South, so I was raised to always hold the door for women."
Occupational Affiliation (Code OE2)	The client refers to a job, career, or occupation as a cultural characteristic	C: "Us psychologists always seem to have a hard time avoiding treating our loved ones like

		clients."
Institutional Affiliation (Code OE3)	The client refers to an affiliation with and organized institution as a cultural characteristic	C: "All the students at State University are only in school for the parties."
Gender (Code OE4)	The client refers to gender as a cultural characteristic	C: "I was taught from a very early age that men are supposed to be strong and not cry."
Sexual Orientation (Code OE5)	The client refers to sexual orientation as a cultural characteristic	C: "Since I'm gay, I am expected to be more sensitive and effeminate."
Cultural Affiliation Not Otherwise Specified (Code OE6)	The client refers to any cultural characteristic not captured by any of the aforementioned codes as a way of seems consistent with the study's definition of a cultural worldview	C: "People on my planet think it's ridiculous that you earthlings feel the need to work 40 hours a week."

* Note: Other (Explicit) codes are to be used only when the client refers to an affiliation as a cultural characteristic rather than simply mentioning a demographic variable that does not imply shared cultural experiences with others. For example, if a client says, "Being a full time student has ruined my marriage" no OE code would be assigned because this is simply a statement of a personal experience rather than a cultural characteristic.

Identifying Discussions of Cultural Worldviews: *Other (Implicit)*

Codes	**Descriptions**	**Examples**
Physical Universe (Code OI1)	The client refers to a belief about the ontology or purpose of the physical universe or the cosmos	C: "I was walking outside on a clear night and felt very small as I looked up at the stars and thought about how we all started from the same cosmic event."
Communalism (Code OI2)	The client refers to a belief about the roles of individuals and their communities or families in influencing each other's welfare or that of society at large	C: "It's my responsibility to succeed in as much as I can so I can honor my family." C: "Families are only expected to be supportive until the child turns 18, and then he or she should be independent."

Mortality (Code OI3)	The client refers to a belief about the afterlife or the spiritual soul after life on earth	C: "Even though she passed away, I know my mother is looking down on me from somewhere and she is proud of me."
Human Nature (Code OI4)	The client refers to a belief about the essence of human nature	C: "People are born good, and they learn evil ways from the world around them."
Meaning of Life (Code OI5)	The client refers to a belief about life's purpose or an explanation of the nature of the world	C: "I think life is just a series of random events, and I don't believe in destiny."
Implicit Cultural Worldview Not Otherwise Specified (Code OI6)	The client refers to any implicit cultural beliefs not captured by any of the aforementioned codes	C: "Any negative or evil energy in the world is originally created by kittens."

*Note: Other (Implicit) codes are not to be used when a code from any of the other coding categories is assigned.

Coding Steps for Researcher-Participants

1. Watch the selected videotaped session containing a trauma discussion(s) and read the transcript entirely to make sure that the transcript is accurate. Familiarize yourself with the content and process of the session.

2. When coding, try to balance attention to details with an ability to think abstractly and see the bigger picture. It is also important to maintain focus by pacing yourself carefully. It is difficult to code accurately when you are rushed or code in binges. In the discussion meetings, it helps to present your questions and confusions and to agree with others only when the consensus makes sense. Coding requires an openness and flexibility but not acquiescence.

3. While coding and analyzing the data, the researchers should provide a detailed account of the analysis process so that the auditor can best assess the reliability of the study (Lincoln & Guba, 1985). This meticulous description of the research process, or audit trail, should include accounts of the decision processes regarding the research design and data collection procedures as well as the actions taken when analyzing and reporting the data. The following information should be included in the audit trail as recommended by Halpern (1983; as cited in Lincoln & Guba, 1985): raw data, products of data reduction and analysis (e.g. notes and qualitative summaries), data synthesis and reconstruction notes (e.g. definitions and themes of emerging categories), reports on literature supporting decisions, process notes (e.g. methodological notes and rationale), and trustworthiness notes.

4. Each of the researchers should also record their personal expectations and potential biases using a technique for qualitative research known as bracketing. Bracketing is used to minimize the influence of personal assumptions on the data collection and analysis processes by reflecting and recording potential foreseen biases (Ahern, 1999). As part of the bracketing process, the researchers should keep reflective journals which may include the following: (a) potential assumptions regarding demographic variables such as race, gender, age, and socioeconomic status; (b) his or her personal values that are thought to potentially interfere with objectivity; (c) issues regarding potential role conflict; (d) his or her interests in the data and the extent to which these interests may dispose him or her to interpret findings favorably; and (e) personal feelings that may suggest a lack of neutrality (Ahern, 1999).

5. Depending on whether you are coding expressions of humor, social support, or cultural worldviews, familiarize yourself with the corresponding coding system(s). Then, begin the coding process, simultaneously reading the written session transcriptions and watching the corresponding session videotape.

6. Individually, read the transcript again in detail by looking at each statement (C1, C2, etc.) and write your coding impressions on the right hand column of the transcript sheet.

7. Meet with team of coders to discuss codes and determine inter-rater reliability. Codes that meet (66%) agreement will be chosen as final codes and recorded on data tracking sheet.

8. Provide auditor with final codes to determine whether the data reflective of the codes has been adequately captured by the coders. Also provide the auditor with audit trail materials and reflective journals (described in steps 3 and 4). The auditor will facilitate discussion with the coders regarding discrepancies that arise with the team's judgment and any potential biases that have been noted in reflective journals and will provide suggestions for changes.

9. Final codes will be entered into a qualitative analysis software program.

Appendix B

Client Information Adult Form

ID # _____

CLIENT INFORMATION **ADULT FORM

THIS FORM IS INTENDED TO SAVE YOU AND YOUR INTAKE INTERVIEWER TIME AND IS IN THE INTEREST OF PROVIDING YOU WITH THE BEST SERVICE POSSIBLE. ALL INFORMATION ON THIS FORM IS CONSIDERED CONFIDENTIAL. IF YOU DO NOT WISH TO ANSWER A QUESTION, PLEASE WRITE "DO NOT CARE TO ANSWER" AFTER THE QUESTION.

TODAY'S DATE_____

FULL NAME_____

HOW WOULD YOU PREFER TO BE ADDRESSED?_____

REFERRED BY:_____

MAY WE CONTACT THIS REFERRAL SOURCE TO THANK THEM FOR THE REFERRAL? ☐ YES ☐ NO

IF YES, PLEASE PROVIDE CONTACT INFORMATION FOR THIS PERSON/AGENCY

_____

_____

Personal Data

ADDRESS:_____

_____

TELEPHONE (HOME): _____ BEST TIME TO CALL: _____

(WORK): _____ BEST TIME TO CALL: _____

AGE: _____ DATE OF BIRTH _____ CAN WE LEAVE A MESSAGE ? ☐ Y ☐ N

CAN WE LEAVE A MESSAGE ? ☐ Y ☐ N

MARITAL STATUS:

☐MARRIED ☐SINGLE HOW LONG? _____

☐DIVORCED ☐COHABITATING PREVIOUS MARRIAGES? _____

☐SEPARATED ☐WIDOWED HOW LONG SINCE DIVORCE? _____

LIST BELOW THE PEOPLE LIVING WITH YOU:

NAME	RELATIONSHIP	AGE	OCCUPATION

PERSON TO BE CONTACTED IN CASE OF EMERGENCY:

NAME: _____

ADDRESS: _____

TELEPHONE: _____

RELATIONSHIP TO YOU: _____

Medical History

CURRENT PHYSICIAN: _____

ADDRESS: _____

CURRENT MEDICAL PROBLEMS: _____

_____

MEDICATIONS BEING TAKEN: _____

_____

PREVIOUS HOSPITALIZATIONS (MEDICAL OR PSYCHIATRIC)

DATE

_____

_____

_____

OTHER SERIOUS ILLNESSES

DATE

_____

_____

_____

_____

PREVIOUS HISTORY OF MENTAL HEALTH CARE (PSYCHOLOGIST, PSYCHIATRIST, MARRIAGE COUNSELING, GROUP THERAPY, ETC.)

DATE

_____

_____

_____

Educational and Occupational History

HIGHEST LEVEL OF EDUCATION ATTAINED:

- ☐ ELEMENTARY/MIDDLE SCHOOL: LIST GRADE_____
- ☐ HIGH SCHOOL: LIST GRADE_____
- ☐ GED
- ☐ HS DIPLOMA
- ☐ VOCATIONAL TRAINING: LIST TRADE_____
- ☐ COLLEGE: LIST YEARS_____
- ☐ GRADUATE EDUCATION: LIST YEARS OR DEGREE EARNED _____

☐ CURRENTLY IN SCHOOL? SCHOOL/LOCATION:

_____

CURRENT AND PREVIOUS JOBS:

JOB TITLE EMPLOYER NAME & CITY DATES/DURATION

_____

_____

HOUSEHOLD INCOME:

☐ UNDER $10,000

☐ $11,000-30,000 OCCUPATION:_____

☐ $31,000-50,000

☐ $51,000-75,000

☐ OVER $75,000

Family Data

IS FATHER LIVING?

YES ☐ IF YES, CURRENT AGE: _____

RESIDENCE (CITY): _____ OCCUPATION: _____

HOW OFTEN DO YOU HAVE CONTACT? _____

NO ☐

IF NOT LIVING, HIS AGE AT DEATH: _____ YOUR AGE AT HIS DEATH: _____

CAUSE OF DEATH: _____

IS MOTHER LIVING?

YES ☐ IF YES, CURRENT AGE: _____

RESIDENCE (CITY): _____ OCCUPATION: _____

HOW OFTEN DO YOU HAVE CONTACT? _____

NO ☐

IF NOT LIVING, HER AGE AT DEATH: _____ YOUR AGE AT HER DEATH: _____

CAUSE OF DEATH: _____

BROTHERS AND SISTERS

NAME AGE OCCUPATION RESIDENCE CONTACT HOW OFTEN?

_____

_____

_____

LIST ANY OTHER PEOPLE YOU LIVED WITH FOR A SIGNIFICANT PERIOD DURING CHILDHOOD.

NAME RELATIONSHIP TO YOU STILL IN CONTACT?

THE FOLLOWING SECTION WILL HELP US UNDERSTAND YOUR NEEDS AND FACTORS THAT MAY IMPACT YOUR LIFE OR TREATMENT. BELOW IS A LIST OF EXPERIENCES WHICH MAY OCCUR IN FAMILIES. PLEASE READ EACH EXPERIENCE CAREFULLY. PLEASE INDICATE WHETHER ANY OF THESE EXPERIENCES HAVE HAPPENED TO YOU OR YOUR FAMILY. SOME OF THESE MAY HAVE BEEN TRUE AT ONE POINT FOR YOU OR IN YOUR FAMILY BUT NOT TRUE AT ANOITHER POINT. IF THE EXPERIENCE NEVER HAPPENED TO YOU OR SOMEONE IN YOUR FAMILY, PLEASE CHECK THE "NO" BOX. IF YOU ARE UNSURE WHETHER OR NOT THE EXPERIENCE OCCURRED FOR YOU OR IN YOUR FAMILY AT SOME TIME, PLEASE CHECK THE "UNSURE" BOX. IF THE EXPERIENCE HAPPENED TO YOU OR IN YOUR FAMILY AT ANY POINT, PLEASE CHECK THE "YES" BOX.

WHICH OF THE FOLLOWINIG HAVE FAMILY MEMBERS, *INCLUDING YOURSELF*, STRUGGLED WITH:	SELF			FAMILY			PLEASE INDICATE WHICH FAMILY MEMBER(S)
	NO- NEVER HAPPENED	UNSURE	YES- THIS HAPPENED	NO- NEVER HAPPENED	UNSURE	YES- THIS HAPPENED	
SEPARATION/DIVORCE	☐	☐	☐	☐	☐	☐	
FREQUENT RE-LOCATION	☐	☐	☐	☐	☐	☐	
EXTENDED UNEMPLOYMENT	☐	☐	☐	☐	☐	☐	
ADOPTION	☐	☐	☐	☐	☐	☐	
FOSTER CARE	☐	☐	☐	☐	☐	☐	
MISCARRIAGE OR FERTILITY DIFFICULTIES	☐	☐	☐	☐	☐	☐	
FINANCIAL STRAIN OR INSTABILITY	☐	☐	☐	☐	☐	☐	
INADEQUATE ACCESS TO HEALTHCARE/OTHER SERVICES	☐	☐	☐	☐	☐	☐	
DISCRIMINATION (INSULTS, HATE CRIMES, ETC.)	☐	☐	☐	☐	☐	☐	
DEATH AND LOSS	☐	☐	☐	☐	☐	☐	
ALCOHOL USE OR ABUSE	☐	☐	☐	☐	☐	☐	
DRUG USE OR ABUSE	☐	☐	☐	☐	☐	☐	
ADDICTIONS	☐	☐	☐	☐	☐	☐	
SEXUAL ABUSE	☐	☐	☐	☐	☐	☐	
PHYSICAL ABUSE	☐	☐	☐	☐	☐	☐	
EMOTIONAL ABUSE	☐	☐	☐	☐	☐	☐	
RAPE/SEXUAL ASSAULT	☐	☐	☐	☐	☐	☐	
HOSPITALIZATION FOR MEDICAL PROBLEMS	☐	☐	☐	☐	☐	☐	
HOSPITALIZATION FOR EMOTIONAL/PSYCHIATRIC PROBLEMS	☐	☐	☐	☐	☐	☐	
DIAGNOSED OR SUSPECTED MENTAL ILLNESS	☐	☐	☐	☐	☐	☐	
SUICIDAL THOUGHTS OR ATTEMPTS	☐	☐	☐	☐	☐	☐	
SELF HARM (CUTTING, BURNING)	☐	☐	☐	☐	☐	☐	
DEBILITATING ILLNESS, INJURY, OR DISABILITY	☐	☐	☐	☐	☐	☐	

PROBLEMS WITH LEARNING	☐	☐	☐	☐	☐	☐	_____
ACADEMIC PROBLEMS (DROP-OUT, TRUANCY)	☐	☐	☐	☐	☐	☐	_____
FREQUENT FIGHTS AND ARGUMENTS	☐	☐	☐	☐	☐	☐	_____
INVOLVEMENT IN LEGAL SYSTEM	☐	☐	☐	☐	☐	☐	_____
CRIMINAL ACTIVITY	☐	☐	☐	☐	☐	☐	_____
INCARCERATION	☐	☐	☐	☐	☐	☐	_____

Current Difficulties

PLEASE CHECK THE BOXES TO INDICATE WHICH OF THE FOLLOWING AREAS ARE CURRENT PROBLEMS FOR YOU AND REASONS FOR COUNSELING. PLACE TWO CHECK MARKS TO INDICATE THE MOST IMPORTANT REASON(S).

- ☐ FEELING NERVOUS OR ANXIOUS
- ☐ UNDER PRESSURE & FEELING STRESSED
- ☐ NEEDING TO LEARN TO RELAX
- ☐ AFRAID OF BEING ON YOUR OWN
- ☐ FEELING ANGRY MUCH OF THE TIME
- ☐ DIFFICULTY EXPRESSING EMOTIONS
- ☐ FEELING INFERIOR TO OTHERS
- ☐ LACKING SELF CONFIDENCE
- ☐ FEELING DOWN OR UNHAPPY
- ☐ FEELING LONELY
- ☐ EXPERIENCING GUILTY FEELINGS
- ☐ FEELING DOWN ON YOURSELF
- ☐ THOUGHTS OF TAKING OWN LIFE
- ☐ CONCERNS ABOUT EMOTIONAL STABILITY
- ☐ FEELING CUT-OFF FROM YOUR EMOTIONS
- ☐ WONDERING "WHO AM I?"
- ☐ HAVING DIFFICULTY BEING HONEST/OPEN
- ☐ DIFFICULTY MAKING DECISIONS
- ☐ FEELING CONFUSED MUCH OF THE TIME
- ☐ DIFFICULTY CONTROLLING YOUR THOUGHTS
- ☐ BEING SUSPICIOUS OF OTHERS
- ☐ GETTING INTO TROUBLE
- ☐ DIFFICULTY WITH SCHOOL OR WORK
- ☐ CONCERNS ABOUT FINANCES
- ☐ TROUBLE COMMUNICATING SOMETIMES
- ☐ CONCERNS WITH WEIGHT OR BODY IMAGE
- ☐ FEELING PRESSURED BY OTHERS
- ☐ FEELING CONTROLLED/MANIPULATED
- ☐ PRE-MARITAL COUNSELING
- ☐ MARITAL PROBLEMS
- ☐ FAMILY DIFFICULTIES
- ☐ DIFFICULTIES WITH CHILDREN
- ☐ DIFFICULTY MAKING OR KEEPING FRIENDS
- ☐ BREAK-UP OF RELATIONSHIP
- ☐ DIFFICULTIES IN SEXUAL RELATIONSHIPS
- ☐ FEELING GUILTY ABOUT SEXUAL ACTIVITY
- ☐ FEELING CONFLICTED ABOUT ATTRACTION TO MEMBERS OF SAME SEX
- ☐ FEELINGS RELATED TO HAVING BEEN ABUSED OR ASSAULTED
- ☐ CONCERNS ABOUT PHYSICAL HEALTH
- ☐ DIFFICULTIES WITH WEIGHT CONTROL
- ☐ USE/ABUSE OF ALCOHOL OR DRUGS
- ☐ PROBLEMS ASSOCIATED WITH SEXUAL ORIENTATION
- ☐ CONCERNS ABOUT HEARING VOICES OR SEEING THINGS

ADDITIONAL CONCERNS (IF NOT COVERED ABOVE):

_____

Social/Cultural (Optional)

1. RELIGION/SPIRITUALITY: _____
2. ETHNICITY OR RACE: _____
. DISABILITY STATUS? _____

APPENDIX C

Telephone Intake Form

ID#_____

A copy of this form should be included in the client's chart

Pepperdine Community Counseling Center
Telephone Intake Interview

Caller Information

INTERVIEWER: _____ DATE OF TELEPHONE INTAKE: _____ TIME: _____

WHAT IS YOUR NAME?: _____

WHO IS THIS APPOINTMENT FOR? _____ ❑ M ❑ F DOB: _____ AGE: ____

_____ ❑ M ❑ F DOB: _____ AGE: ____

IF THE POTENTIAL CLIENT IS NOT THE CALLER, ASK, "WHAT IS YOUR RELATIONSHIP TO (CLIENT'S NAME)"?: _____

WHAT IS (CLIENT'S) ADDRESS?: _____

_____

WHAT IS (CLIENT'S) PHONE NUMBER(S): _____(H)_____(W)_____(CELL OR PAGER)

IS IT OK THAT WE LEAVE A MESSAGE AT ANY OR ALL OF THE NUMBERS, IDENTIFYING OURSELVES AS BEING FROM THIS COUNSELING CENTER? ❑ **Y** ❑ **N**

HOW DID YOU HEAR ABOUT US? *(LIST NAME AND NUMBER)*: _____

MAY WE CONTACT THEM TO THANK THEM FOR REFERRING YOU? ❑ **Y** ❑ **N**

WHO DOES (CLIENT) LIVE WITH? ❑ **SELF** ❑ **OTHERS -**

LIST: _____

DOES (CLIENT) HAVE CHILDREN?: _____

_____

WHO IS INCLUDED IN (CLIENT'S) SUPPORT SYSTEM? _____

_____

sample

ADDRESS CONFIDENTIALITY AND LIMITS TO CONFIDENTIALITY BEFORE PROCEEDING WITH THE PHONE INTAKE:

"I'd like to find out about your situation and for what reason you're seeking help. This will help me figure out how our counseling center might be of assistance/service. But before we begin I need to explain about confidentiality and its limits. Here at the Pepperdine Counseling Center we pride ourselves on guarding our clients' privacy, and on creating an environment where people can feel comfortable about discussing very personal matters. With that said, we want you to know that everything you describe to me is confidential, however, if I begin to understand that your's or someone else's life is in danger, or when there are significant concerns about a child or elder person's safety, I may need to break that confidentiality and take steps to assure that everyone is safe. Do you have any questions about this?....if not, let's proceed"

Type of Service

What type of appointment is being requested? *Check all that apply*

☐ Therapy	☐ Child	☐ Individual
☐ Assessment	☐ Adolescent	☐ Couple (Ask if there has been any domestic violence)
☐ Don't know or unsure	☐ Adult	☐ Family
	☐ Don't know or unsure	☐ Group
		☐ Don't know or unsure

8/7/08 1

ID#_____

Is there a preference for a particular type of therapist (i.e. gender, sexual orientation)?
Why?_____

Reason for Referral

PLEASE TELL ME A BIT ABOUT YOUR REASON FOR CALLING TODAY?:_____

sample

ARE THERE ANY PAST OR CURRENT LEGAL PROBLEMS?: ☐ Y ☐ N _____

IS THERE A COURT ORDER THAT REQUIRES TREATMENT? ☐ Y ☐ N

FOR WHAT REASON?_____

CLIENT TOLD LIMITS REGARDING COURT ORDERS? ☐ Y ☐ N

ARE THERE ANY PAST OR CURRENT DRUG AND/OR ALCOHOL PROBLEMS?: ☐ Y ☐ N

_____

ANY CURRENT THOUGHTS OF HURTING YOURSELF?: ☐ Y ☐ N _____

ANY PREVIOUS THOUGHTS OR ATTEMPTS AT HURTING YOURSELF?: ☐ Y ☐ N _____

IF SO, WHEN WAS THE LAST TIME YOU *THOUGHT* ABOUT HURTING YOURSELF?: _____

WHEN WAS THE LAST TIME YOU *ATTEMPTED* TO HURT YOURSELF?: _____

DO YOU FEEL OR HAVE OTHERS SUGGESTED THAT YOU HAVE A "BAD TEMBER" OR THAT YOU GET MAD EASILY?: ☐ Y ☐ N

IF SO, PLEASE PROVIDE EXAMPLES:_____

ANY PAST VIOLENCE TOWARDS OTHERS?: ☐ Y ☐ N _____

ID#_____

ARE YOU CURRENTLY OR HAVE YOU EVER SEEN A PSYCHIATRIST, PSYCHOLOGIST, OR COUNSELOR?:

IF SO, ASSESS WHEN, WHERE, HOW LONG, TYPE (INPATIENT/HOSPITALIZATION OR OUTPATIENT)

_____

_____

_____

_____

_____

ARE YOU CURRENTLY OR HAVE YOU EVER TAKEN PSYCHIATRIC MEDICATION?:

IF SO, LIST:_____

DO YOU HAVE ANY SCHEDULE CONSTRAINTS OR TIME/DAY REQUESTS?_____

_____

If Treatment is for a Minor (Under 18 Years Old)

WHO IS THE CHILD'S PRIMARY CAREGIVER?: _____

WHO HAS LEGAL CUSTODY OF THE CHILD?: _____

IF CALLER/PARENT INDICATES EITHER JOINT OR SOLE CUSTODY OF CHILD, ASK:

IS THERE DOCUMENTATION AVAILABLE (IN CUSTODY PAPERS ABOUT WHO IS RESPONSIBLE FOR HEALTH CARE) THAT YOU CAN BRING TO THE INTAKE SESSION? ❑ Y ❑ N

IS THERE AGREEMENT AMONG CAREGIVERS REGARDING SEEKING TREATMENT FOR THE CHILD? ❑ Y ❑ N

WHO WILL BE BRINGING THE CHILD TO THE CLINIC?: _____

DOES YOUR CHILD KNOW THAT HE/SHE WILL BE COMING FOR THERAPY/ASSESSMENT SERVICES? ❑ Y ❑ N

IS YOUR CHILD COMING VOLUNTARILY/WILLINGLY? ❑ Y ❑ N

Sample

Occupation and Fees

ARE YOU CURRENTLY WORKING OR GOING TO SCHOOL? ❑ Y ❑ N

WOULD YOU LIKE TO KNOW WHAT YOUR FEE RANGE WILL BE? ❑ Y ❑ N

IF YES, ASK: WHO WILL BE PAYING FOR THE SERVICES RECEIVED HERE?: _____

WHAT IS (CLIENT'S) OCCUPATION?:_____

WHAT IS (CLIENT'S) APPROXIMATE GROSS FAMILY INCOME?_____ FEE RANGE QUOTED: _____

Intake Interviewer Checklist

- ☒ I INFORMED THE POTENTIAL CLIENT OF LIMITS OF CONFIDENTIALITY FOR THE PHONE INTERVIEW
- ☐ I INFORMED THE POTENTIAL CLIENT OF THE NONREFUNDABLE $25.00 INTAKE SESSION FEE.
- ☐ I INFORMED THE POTENTIAL CLIENT THAT CLINIC THERAPISTS ARE UNLICENSED GRADUATE STUDENTS WHO ARE SUPERVISED BY LICENSED PROFESSIONALS (CLINICAL PSYCHOLOGISTS AND/OR MARRIAGE FAMILY THERAPISTS)

ID#_____

- ☐ I INFORMED THE POTENTIAL CLIENT THAT AS PART OF THEIR TRAINING, THERAPISTS ARE ASKED TO PRESENT VIDEO (AND SOME TIMES AUDIO) TAPED SAMPLES OF THEIR SESSIONS DURING SUPERVISION.
- ☐ **(PER CLINIC POLICY)** I ASKED THE POTENTIAL CLIENT FOR PERMISSION TO HAVE THE INTAKE THERAPIST GIVE THEM A CALL PRIOR TO THE INTAKE SESSION
- ☐ I INFORMED THE POTENTIAL CLIENT THAT THE INTAKE SESSION IS 2.5 HOURS IN LENGTH AND THAT THIS SESSION HELPS THE THERAPIST AND HIS/HER SUPERVISOR GAIN A BETTER UNDERSTANDING OF THE POTENTIAL CLIENT'S PRESENTING PROBLEMS. GATHERING THE INFORMATION DURING THIS FIRST SESSION IS CRUCIAL FOR TREATMENT PLANNING. I ALSO INFORMED THE POTENTIAL CLIENT OF THE IMPORTANCE OF ARRIVING PROMPTLY FOR THE SESSION.
- ☐ I INFORMED THE POTENTIAL CLIENT THAT FOLLOWING THE INTAKE SESSION, THE THERAPIST WILL PROVIDE HIM/HER WITH FEEDBACK AND MAKE TREATMENT RECOMMENDATIONS WHICH MAY BE FOR CONTINUED TREATMENT IN OUR CLINIC OR MAY BE A REFERRAL TO ANOTHER CLINIC.
- ☐ I INFORMED THE CLIENT THAT THEIR PLACEMENT WITH A THERAPIST IS SOMEWHAT DEPENDENT ON THE POTENTIAL CLIENT'S TIME FLEXIBILITY.
- ☐ **(PER CLINIC POLICY)** I CREATED A CLIENT FILE AND PLACED THE TELEPHONE INTAKE INTERVIEW IN IT.
- ☐ **(PER CLINIC POLICY)** I PROVIDED THE CLINIC DIRECTOR WITH THE TELEPHONE INTAKE INTERVIEW.
- ☐ **(PER CLINIC POLICY)** I ASSIGNED THE POTENTIAL CLIENT TO A THERAPIST.
  THERAPIST:_____
- ☐ I INFORMED THE POTENTIAL CLIENT ABOUT THE CLINIC LOCATION AND PARKING ARRANGEMENTS.
- ☐ I CONTACTED THE RFERRAL SOURCE AND THANKED THEM.
- ☐ **(PER CLINIC POLICY)** I SCHEDULED THE INTAKE SESSION.
  DATE:_____
  TIME:_____
  THERAPIST:_____

sample

APPENDIX D

Intake Evaluation Summary

Pepperdine Psychological and Educational Clinic

Client: _____Intake Therapist:_____

Intake Date(s):_____Date of Report:_____

I Identifying Information

(Name, age/D.O.B., gender, marital status, # of children, occupation/employment status, education, ethnicity, and current living arrangements)

II Presenting Problem/Current Condition

(Description of client's current difficulties, and why s/he is seeking help at this time; describe symptoms and impact on current functioning, including onset, frequency and duration)

III History of the Presenting Problem & History of Other Psychological Issues

(Trace development of present problem, including previous psychological treatment, hospitalizations, medication; discuss other significant psychological difficulties and prior treatment. Address history of substance abuse, suicidal ideation/attempts, & aggressive/violent behavior)

IV Psychosocial History

A Family History

(Family constellation, family of origin and current family, family dynamics, domestic violence/abuse; Include family psychiatric, medical and substance abuse history)

B Developmental History

(Note progression of development milestones, as well as particular strengths or areas of difficulty)

C Educational/Vocational History

(Highest grade completed, strengths/weaknesses, learning issues/interventions; Work history, including any work related difficulties)

D Social Support/Relationships

(Current social support network; Intimate relationships and their history, especially as related to presenting problem)

E Medical History

(When was client last seen by a doctor? Describe current/past medical conditions, injuries, medications, procedures/surgeries)

F Cultural Factors and Role of Religion in the Client's Life

(Cultural group identification/identity, acculturation issues relevant to presenting problems/therapy)
(Religious affiliations, strength of commitment to and/or involvement in religion, view of spirituality and its role in emotional problems/suffering and intervention)

G Legal History

(Arrests, incarcerations, parole/probation, current lawsuits, child custody. Is the client court ordered into therapy?)

V Mental Status Evaluation

Hygiene & grooming:

Interpersonal presentation/behavioral observations:

Orientation (person, place, time, situation):

Speech (pitch, pace, tone):

Motor Activity (calm, restless, agitated, retarded):

Mood (euthymic, dysphoric, elevated, irritable, anxious):

Affect (appropriate/inappropriate to mood, labile, expansive, blunted, flat):

Thought Process (associations may be logical, tight & coherent, or loose & tangential):

Thought Content (appropriate; delusions; odd ideations):

Perceptual Disturbances (hallucinations):

Cognitive Functioning (intellectual functioning, fund of knowledge):

Concentration, Attention & Memory:

Judgment & Insight (intact, good, fair or poor/impaired):

VI Client Strengths

(Intelligence, personality, internal resources, coping skills, support system, talents and abilities, motivation, education/vocational skills, health)

VII Summary and Conceptualization

(Summarize your understanding of the client's central issues/symptoms, how these developed, and factors that maintain them. Present differential diagnosis, with justification for diagnosis given):

VIII DSM-IV TR Multiaxial Diagnosis

Axis I:

Axis II:

Axis III:

Axis IV:

Axis V: Global Assessment of Functioning (GAF) Scale:

Current GAF:

Highest GAF during the past year:

IX Client Goals

X Treatment Recommendations

Be as specific as possible. Note: suggested therapy modalities and frequency of contact, issues to be addressed, adjunctive services such as psychological testing or medication evaluation. Recommendations should be connected to presenting problem and diagnoses

_____ _____

Intake Therapist Supervisor

_____

Date

APPENDIX E

Treatment Summary

TREATMENT SUMMARY

Identifying Information:

Treatment Information (***date of initial evaluation, number of sessions, treatment modality [e.g., individual or conjoint], date of termination***):

Course of Treatment (***conceptualization of client's difficulties, therapy orientation, client's response to treatment, emergency/crisis issues. Be sure to connect this with the client's presenting problem, nature of therapeutic relationship, etc***):

sample

Revised 4-15-2009

Diagnosis at Termination:

Axis I: _____

Axis II: _____

Axis III: _____

Axis IV: _____

Axis V: _____

Disposition (***state whether the case has been transferred or terminated, and give reasons why***):

_____

sample

Recommendations for Follow-Up (***If the case is being transferred, list specific treatment recommendations for the next therapist, including what worked and did not work with the client(s).***):

_____

Student Therapist _____ **Supervisor** _____

Date _____ **Date** _____

Revised 4-15-2009

APPENDIX F

Participant Selection Tracking Sheet

Research ID	Total # of Sessions	Experience of Trauma (Ct Info- Adult Form; Intake; Tx Summary; Phone Intake)	Death/Loss; SA; PA; Rape/Sexual Assault; Illness/Injury/Disability; Culturally-based trauma	Trauma Discussion Session #	Other Demographic Factors

APPENDIX G

Client Consent Form

Pepperdine University
Counseling and Educational Clinics
Consent for Services

INITIALS

Welcome to Pepperdine University's Counseling and Educational clinics. Please read this document carefully because it will help you make an informed decision about whether to seek services here. This form explains the kinds of services our clinic provides and the terms and conditions under which services are offered. Because our clinic complies with the Health Insurance Portability and Accountability Act (HIPAA), be sure to review the Privacy Rights pamphlet that was also given to you today. It is important that you understand the information presented in this form. If you have any questions, our staff will be happy to discuss them with you.

Who We Are: Because the clinic is a teaching facility, graduate students in either the Clinical Psychology Doctorate Program or the Masters in Marriage and Family Therapy Program provide the majority of services. Our graduate student therapists are placed in the clinic for a time-limited training position, which typically lasts 8-12 months. In all cases, all therapists are supervised by a licensed clinical psychologist or a team that includes a licensed mental health professional. The clinic is housed in Pepperdine University and follows the University calendar. As a general rule, the clinic will be closed when the University is not in session. No psychological services will be provided at those times.

- I understand and agree that my services will be provided by an unlicensed graduate student therapist who will be working under the direct supervision of a licensed mental health professional.
- I understand and agree that, as required by law, my therapist may disclose any medical, psychological or personal information concerning me to his/her supervisor(s).
- I confirm that I have been provided with information on how to contact my therapist's supervisor(s) should I wish to discuss any aspects of my treatment.

I understand and agree with the above three statements. _____

Services: Based on the information you provided in your initial telephone interview, you have been referred to the professional service in our clinic appropriate to your concern. The clinic provides the following professional psychological services:

Psychotherapy: The first few sessions of therapy involve an evaluation of your needs. At the end of the evaluation phase, a determination will be made regarding whether our services appropriately match your mental health needs. A determination will also be made regarding whether to continue with services at our clinic, or to provide you with a referral to another treatment facility more appropriate to your needs. As part of your services, you will be asked to complete questionnaires during your intake session, at periodic intervals (e.g., every fifth session), and after you have completed treatment. Psychotherapy has both benefits and risks. Risks sometimes include being asked to discuss unpleasant aspects of your life and experiencing uncomfortable feelings like sadness, guilt, anger, frustration, loneliness, and helplessness. Sometimes decisions are made in therapy that are positive for one family member and can be viewed negatively by another family member. On the other hand, psychotherapy has also been shown to have many benefits. Therapy often leads to better relationships, solutions to specific problems, and significant reduction in feelings of distress. But there are no guarantees of what you will experience. In order for therapy to be effective, a commitment to regular attendance is necessary. Frequent cancellations or missed therapy appointments may result in termination of services or a referral to an alternative treatment setting. Unless otherwise arranged, therapy sessions are scheduled once a week for 50 minutes. Educational Therapy is also offered in some of our clinics. This is an intervention that focuses on learning difficulties by addressing how circumstances in a person's life contribute to these difficulties. Educational therapy combines tutoring as well as attention to socio-emotional issues that affect learning.

Psychological Assessment: The clinic provides psychological and psychoeducational assessments. These assessments may be initiated by you, your therapist or a third party. Assessment sessions are longer than therapy sessions and can take several hours to complete. The number of sessions required for conducting the assessment will be determined based on the nature and number of tests administered. You have the right to request a copy of your assessment report and test data. You also have the right to receive feedback regarding your assessment results. However, there are some situations in which we may not be able to release test results, including test data, to you: a) When such a disclosure may cause substantial harm or misuse of the test results and test data, and/or b) When you were notified and agreed in advance and in writing that the assessment was ordered and/or paid for by a third party and that we would release your results only to that third party. The benefits of psychological assessment include a clearer understanding of your cognitive and emotional functioning. Although the risks of participating in a psychological assessment are generally no greater than the risks of counseling, test results may reveal information that may be painful and/or difficult to accept. If that is the case, we recommend that you review with the examiner options for addressing your concerns.

Consent to Video/audiotaping and Observations: It is standard procedure at our clinic for sessions to be audiotaped and videotaped for training/teaching and/or research purposes. **It should be noted that videotaping for teaching/training**

purposes is a prerequisite for receiving services at our clinic. In addition, sessions may be observed by other therapists and/or supervisors at the clinic through the use of a one-way mirror or direct in-session observation.

- For Teaching/Training purposes, check all that apply:
  I understand and agree to _____ Video/audiotaping _____
  _____ Direct Observation

Psychological Research: As a university based clinic, we engage in research activities in order to determine the effectiveness of our services, including client satisfaction, as well as to better understand assessment and therapy practices. Participation in research is totally voluntary and means that the forms you complete as a part of your treatment will be placed in a secure research database. Clinic staff will remove any of your identifying information (e.g., name, address, date of birth) from the written materials before they are placed in the database. You may also consent to have your taped sessions included in the research database, and if so these tapes will be used and stored in a confidential manner. Only those professors and graduate students who have received approval from the Clinic Research Committee, and who have signed confidentiality agreements, will be granted access to the database in order to conduct scholarly research. If any information from the database is involved in a published study, results will be discussed in reference to participant groups only, with no personally identifying information released. Your services do not depend on your willingness to have your written and/or taped materials included in our research database. You may also change your mind about participation in the research database at any time. While there is no direct benefit to you to have your materials placed in the database, your participation may provide valuable information to the field of psychology and psychotherapy.

Please choose from the following options (confirm your choice by initialing in the margin).

- I understand and agree that information from my services will be included in the Research Database (check all that apply).
  _____ Written Data
  _____ Videotaped Data
  _____ Audiotaped Data

OR

- I do not wish to have my information included in the Research Database. _____

- I understand and agree that I may be contacted in the future about the opportunity to participate in other specific research programs. _____

- I do not wish to be contacted in the future about the opportunity to participate in other specific research

programs. _____

Fees: The fee for the initial intake is nonrefundable.
Payment for services is due at the time the services are rendered. You're on going fee will be based on your income (for minors: the income of your parents) or upon your ability to pay. Once an appointment is scheduled, you will be expected to pay for it unless you provide 24-hour notice of cancellation prior to the appointment time. Please notify us of your cancellation via phone. Please do not use E-mail since we cannot guarantee a secure and confidential correspondence. Failure to pay for services may result in the termination of treatment and/or the use of an outside collection agency to collect fees. In most collection situations, the only information released is your name, the nature of services provided and amount due.
Payment for psychological assessment services: The intake fee is due at the time of the first appointment. Following this appointment, the full cost of the psychological testing will be determined. Payment in full for the psychological testing is required prior to the completion of the testing. Feedback from the testing as well as a test report will be provided after payment has been made in full. Fees for psychological testing cover: initial interview, test administration, scoring and interpretation, oral feedback of test results, and a written test report. Any additional services requested will be billed separately.

_____

After Hours and Emergency Contact: Should you need to reach your therapist during or after business hours you may leave a message on the clinic's voice-mail. The therapist will most likely return your call by the next day. Should you need to contact your therapist for an urgent matter, you may use the clinic's pager number, provided to you, to get in touch with the on-call therapist. Please be aware that the clinic is not equipped to provide emergency psychiatric services. Should you need such services, during and/or after business hours, you will be referred to more comprehensive care centers in the community.

_____

Confidentiality & Records: All communications between you and your therapist are strictly confidential and may not be disclosed to anyone outside the clinic staff without your written authorization. However, there are some situations in which disclosure is permitted or required by law, without your consent or authorization:

- Your therapist may consult with other mental health professionals regarding your case. The consultants are usually affiliated with Pepperdine University. Your therapist may also discuss your case in other teaching activities at Pepperdine, such as class discussions, presentations and exams. Every effort is made to avoid revealing your identity during such teaching activities.
- If the situation involves a serious threat of physical violence against an identifiable victim, your therapist must take protective action, including notifying the potential victim and contacting the police.
- If your therapist suspects the situation presents a substantial risk of physical harm to yourself, others, or property he/she may be obligated to

seek hospitalization for you or to contact family members or others who can help.

- If your therapist suspects that a child under the age of 18, an elder, or a dependent adult has been a victim of abuse or neglect, the law requires that he/she file a report with the appropriate protective and/or law enforcement agency.
- If you are involved in a court proceeding and a request is made for information about the services provided to you, the clinic cannot provide any information, including release of your clinical records, without your written authorization, a court order, or a subpoena.
- If you file a complaint or lawsuit against your therapist and/or the clinic, disclosure of relevant information may be necessary as part of a defense strategy.
- If a government agency is requesting the information pursuant to their legal authority (e.g., for health oversight activities), the clinic may be required to provide it for them.
- If the clinic has formal business associates who have signed a contract in which they promise to maintain the confidentiality of your information except as specifically allowed in the contract or otherwise required by law.

If such a situation arises, your therapist will make every effort to fully discuss it with you before taking any action. Disclosure will be limited to what is necessary for each situation.

_____

Your Records: The clinic keeps your Protected Health Information in your clinical records. You may examine and/or receive a copy of your records, if you request it in writing, except when: (1) the disclosure would physically or psychologically endanger you and/or others who may or may not be referenced in the records, and/or (2) the disclosure includes confidential information supplied to the clinic by others.

HIPAA provides you with the following rights with regard to your clinical records:

- You can request to amend your records.
- You can request to restrict from your clinical records the information that we can disclose to others.
- You can request an accounting of authorized and unauthorized disclosures we have made of your clinical records.
- You can request that any complaints you make about our policies and procedures be recorded in your records.
- You have the right to a paper copy of this form, the HIPAA notice form, and the clinic's privacy policies and procedures statement.

The clinic staff is happy to discuss your rights with you.

Treatment & Evaluation of Minors:

As an unemancipated minor (under the age of 18) you can consent to services subject to the involvement of your parents or guardians.

- Over the age of 12, you can consent to services if you are mature enough to participate in services and you present a serious danger to yourself and/or others or you are the alleged victim of child physical and/or sexual abuse. In some circumstances, you may consent to alcohol and drug treatment.
- Your parents or guardians may, by law, have access to your records, unless it is determined by the child's therapist that such access would have a detrimental effect on the therapist's professional relationship with the minor or if it jeopardizes the minor's physical and/or psychological well-being.
- Parents or guardians will be provided with general information about treatment progress (e.g., attendance) and they will be notified if there is any concern that the minor is dangerous to himself and/or others. For minors over the age of 12, other communication will require the minor's authorization.
- All disclosures to parents or guardians will be discussed with minors, and efforts will be made to discuss such information in advance.

My signature or, if applicable, my parent(s) or guardian's signature below certifies that I have read, understood, accepted, and received a copy of this document for my records. This contract covers the length of time the below named is a client of the clinic.

_____	and/or	_____
Signature of client, 18 or older (Or name of client, if a minor)		Signature of parent or guardian
		_____ Relationship to client
		_____ Signature of parent or guardian
		_____ Relationship to client

_____ please check here if client is a minor. The minor's parent or guardian must sign unless the minor can legally consent on his/her own behalf.

_____	_____
Clinic/Counseling Center Representative/Witness	Translator

_____
Date of signing

APPENDIX H
Therapist Consent Form

INFORMED CONSENT FOR THERAPIST PARTICIPATION IN PEPPERDINE CLINICS RESEARCH DATABASE PROJECT

1. I, _____ , agree to participate in the research database project being conducted under the direction of Drs. Eldridge, Ellis, and Hall, in collaboration with the clinic directors. I understand that while the study will be under the supervision of these Pepperdine GSEP faculty members, other personnel who work with them may be designated to assist or act in their behalf. I understand that my participation in this research database is strictly voluntary.

2. One purpose of research at the Pepperdine University GSEP Clinics and Counseling Centers is to examine the effectiveness of new clinic policies and procedures that are being implemented. This is being done through standard internal clinic practices (headed by the clinic directors and the Clinic Advancement and Research Committee) as well as through the construction of a separate research database (headed by Drs. Eldridge, Ellis, and Hall). Another purpose of this research project is to create a secure database from which to conduct research projects by the faculty members and their students on other topics relevant to clinical practice.

3. I have been asked to participate in the research database project because I am a student therapist or intern at a GSEP Clinic or Counseling Center. Because I will be implementing the new clinic policies and procedures with my clients, my input (or participation) will provide valuable data for the research database.

My participation in the research database project can involve two different options at this point. I can choose to participate in any or neither of these options by initialing my consent below each description of the options.

First, my participation in the research database project will involve being asked, from time to time, to fill out questionnaires about my knowledge, perceptions and reactions to clinic trainings, policies and procedures. In addition, my participation involves allowing questionnaires that I complete about my clients (e.g., treatment alliance) and/or tapes from my sessions with clients to be placed into the database.

<u>Please choose from the following options by placing your initials on the lines.</u>

- I understand and agree that the following information will be included in the Research Database (check all that apply).
  _____ Written questionnaires about my knowledge, perceptions and reactions to clinic trainings, policies and procedures
  _____ Written Data about My Clients (e.g., Therapist Working Alliance Form)
  _____ Video Data of sessions with my clients (i.e., DVD of sessions)
  _____ Audio Data of sessions with my clients (i.e., CD or cassette tapes of sessions)

OR

- I do not wish to have any/all of the above information included in the Research Database.

  _____

Please choose from the following options by placing your initials on the lines.

- I understand and agree that I may be contacted in the future about the opportunity to participate in other specific research programs at the GSEP Clinic or Counseling Center.

  _____

  OR

- I do not wish to be contacted in the future about the opportunity to participate in other specific research programs at the GSEP Clinic or Counseling Center.

  _____

4. My participation in the study will last until I leave my position at the GSEP Clinic or Counseling Center.

5. I understand that there is no direct benefit from participation in this project, however, the benefits to the profession of psychology and marriage and family therapy may include improving knowledge about effective ways of training therapists and implementing policies and procedures as well as informing the field about how therapy and assessments are conducted in university training clinics.

6. I understand that there are certain risks and discomforts that might be associated with this research. These risks include potential embarrassment or discomfort at having faculty review materials about my clinic practices, which may be similar to feelings about supervisors reviewing my work ; however this risk is unlikely to occur since the written materials will be coded to protect your identity. Sensitive video data will be also coded to protect confidentiality, tightly secured (as explained below), and reviewed only by those researchers who sign strict confidentiality agreements.

7. I understand that I may choose not to participate in the research database project.

8. I understand that my participation is voluntary and that I may refuse to participate and/or withdraw my consent and discontinue participation in the research project at any time without prejudice to my employment in the GSEP Clinics and Counseling Centers. I also understand that there might be times that the investigators may find it necessary to end my study participation (e.g., if my client withdraws consent for participation in the research study).

9. I understand that the investigators will take all reasonable measures to protect the confidentiality of my records and my identity will not be revealed in any publication that may result from this project.

10. The confidentiality of my records will be maintained in accordance with applicable state and federal laws. Under California law, there are exceptions to confidentiality, including suspicion that a child, elder, or dependent adult is being abused, or if an individual discloses an intent to harm him/herself or others. I understand there is a possibility that information I have provided regarding provision of clinical services to my clients, including identifying information, may be inspected and/or photocopied by officials of the Food and Drug Administration or other federal or state government agencies during the ordinary course of carrying out their functions. If I participate in a sponsored research project, a representative of the sponsor may inspect my research records.

11. The data placed in the database will be stored in locked file cabinets and password-protected computers to which only the investigators, research team members and clinic directors will have access. In addition, the information gathered may be made available to other investigators with whom the investigator collaborates in future research and who agree to sign a confidentiality agreement. If such collaboration occurs, the data will be released without any personally identifying information so that I cannot be identified, and the use of the data will be supervised by the investigators. The data will be maintained in a secure manner for an indefinite period of time for research purposes. After the completion of the project, the data will be destroyed.

12. I understand I will receive no compensation, financial or otherwise, for participating in study.

13. I understand that the investigators are willing to answer any inquiries I may have concerning the research herein described. I understand that I may contact Dr. Kathleen Eldridge at (310) 506-8559, Dr. Mesha Ellis at (310) 568-5768, or Dr. Susan Hall at (310) 506-8556 if I have other questions or concerns about this research. If I have questions about my rights as a research participant, I understand that I can contact the Chairperson of the Graduate and Professional Schools IRB, Pepperdine University at (310) 568-5600.

14. I will be informed of any significant new findings developed during the course of my participation in this research which may have a bearing on my willingness to continue in the study.

15. I understand to my satisfaction the information regarding participation in the research project. All my questions have been answered to my satisfaction. I have received a copy of this informed consent form which I have read and understand. I hereby consent to participate in the research described above.

_____ _____

Participant's signature Date

_____
Participant's name (printed)

I have explained and defined in detail the research procedure in which the participant has consented to participate. Having explained this and answered any questions, I am cosigning this form and accepting this person's consent.

_____ _____
Researcher/Assistant signature Date

_____
Researcher/Assistant name (printed)

Appendix I

Researcher Confidentiality Statement - Coder

As a research coder appointed by Susan Hall, J.D., Ph.D., I understand that I am expected to abide by specific principles and responsibilities to ensure effective and proper participation in the research. I understand that coders must be sensitive to working with highly confidential material and act with appropriate discretion. Although participant numbers are used as the only method of subject identification, coders may hear names or other identifying information during the course of observing videotapes. I understand that I am prohibited from discussing any information seen or heard in the videotapes or audiotapes except with other coders and researchers involved with the study. In addition, I will only speak to research staff about information on the videotapes in a confidential environment and never in a public location. I will limit such disclosures to the minimum information that is necessary and sufficient for the purposes of communication. I also understand that coders may not discuss participant-related or other confidential material even after their involvement with the research is complete. I will also not remove any material related to the study from the office(s) of Dr. Hall or the Pepperdine Applied Research Center. In the highly unlikely event that I recognize one or more people on a videotape, I will stop the videotape immediately and inform Dr. Hall. I will commit to _____ hours per week (to be specified by Dr. Hall) and attend all relevant coding meetings. First, I will learn a coding system so that I can use it reliably. Then, I will observe tapes and code them for research purposes. Due to the intensity of training, I agree to remain a coder on the research project for _____ months (to be specified by Dr. Hall). I have been appointed by Susan Hall, J.D., Ph.D., to code videotaped and/or audiotaped material related to research at Pepperdine University, Graduate School of Education and psychology. The expectations of this position have been explained to me by Dr. Hall or a research assistant working with her. I understand the expectations outlined above, and agree to abide by them.

Coder Signature: _____

Date: _____

Witness Signature: _____

Date: _____

Appendix J

Research Assistant Confidentiality Agreement – Transcriber

As a research assistant (RA) appointed by Susan Hall, J.D., Ph.D. and co-supervised by her dissertation students, Rebecca Dragosits, Ed.M., Celine Crespi-Hunt, M.A., and Christopher Ogle, M.A., I understand that I am expected to abide by specific principles and responsibilities to ensure effective and proper participation in the research program designed to investigate trauma disclosure in psychotherapy. I understand that RAs must be sensitive to human subjects issues involved with working with highly confidential material and act with appropriate discretion. Although participant numbers are used as the only method of subject identification, RAs may hear names or other identifying information during the course of observing videotapes. I understand that I am strictly prohibited from discussing any information seen or heard in the videotapes, audiotapes or transcripts except with others involved with the study. In addition, I will only speak to research staff about information on the videotapes in a confidential environment and never in a public location. I will limit such disclosures to the minimum information that is necessary and sufficient for the purposes of communication. I also understand that RAs may not discuss participant-related or other confidential material even after their involvement with the research is complete. I will also not remove any material related to the study from the office(s) of Dr. Hall or the Pepperdine Applied Research Center or clinic. In the highly unlikely event that I recognize one or more people on a videotape, I will stop the videotape immediately and inform Dr. Hall. I will commit to _____ hours per week and attend all relevant coding meetings. First, I will complete human subjects and HIPAA training required by Pepperdine University's Graduate and Professional Schools Institutional Review Board, and submit my certificates of completion to Dr. Hall. Subsequently, I will learn a transcription procedure and/or coding system so that I can use it reliably. Then, I will observe and transcribe tapes and/or code them for research purposes. Due to the intensity of training, I agree to remain a RA on the research project for _____ months. By signing this Confidentiality Agreement, you are stating your commitment to upholding research participants' privacy and confidentiality and your RA responsibilities, which involves a commitment to maintaining professional demeanor and adhering to the highest ethical standards. The expectations of my position as a RA with the Pepperdine Applied Research Center at Pepperdine University, Graduate School of Education and Psychology has been explained to me by Dr. Hall, her dissertation student(s), or another research assistant working with her. Should I have any questions whatsoever regarding my position and its expectations; I agree to discuss these with Dr. Hall. I understand the expectations outlined above, and agree to abide by them.

Printed Transcriber Name:_____

Transcriber Signature:_____

Date:_____

Witness Signature:_____

Date:_____

Appendix K

Health Insurance Portability and Accountability Act Certification

Certificate of Completion

This is to certify that

Rebecca Dragosits

---

has completed the
HIPAA Training
on

Tuesday, May 04, 2010

Reference No: 107935

Appendix L

Protecting Human Research Participants Certification

Certificate of Completion

The National Institutes of Health (NIH) Office of Extramural Research certifies that **Rebecca Dragosits** successfully completed the NIH Web-based training course "Protecting Human Research Participants".

Date of completion: 05/04/2010

Certification Number: 442927

Appendix M

IRB Approval Form

PEPPERDINE UNIVERSITY

Graduate & Professional Schools Institutional Review Board

October 17, 2011

Rebecca Dragosits
9016 Pointsettia Court
Culver City, CA 90232

Protocol #: P1011D04
Project Title: ***On Humor and Healing: A Qualitative Analysis of Expressions of Humor in Therapy with Clients who have Experienced Trauma***

Dear Ms. Dragosits:

Thank you for submitting your application, *On Humor and Healing: A Qualitative Analysis of Expressions of Humor in Therapy with Clients who have Experienced Trauma*, for exempt review to Pepperdine University's Graduate and Professional Schools Institutional Review Board (GPS IRB). The IRB appreciates the work you and your faculty advisor, Dr. Susan Hall, have done on the proposal. The IRB has reviewed your submitted IRB application and all ancillary materials. Upon review, the IRB has determined that the above entitled project meets the requirements for exemption under the federal regulations (45 CFR 46 - http://www.nihtraining.com/ohsrsite/guidelines/45cfr46.html) that govern the protections of human subjects. Specifically, section 45 CFR 46.101(b)(4) states:

> (b) Unless otherwise required by Department or Agency heads, research activities in which the only involvement of human subjects will be in one or more of the following categories are exempt from this policy:
>
> **Category (4) of 45 CFR 46.101**, research, involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are publicly available or if the information is recorded by the investigator in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects.

Your research must be conducted according to the proposal that was submitted to the IRB. If changes to the approved protocol occur, a revised protocol must be reviewed and approved by the IRB before implementation. For any proposed changes in your research protocol, please submit a **Request for Modification Form** to the GPS IRB. Because your study falls under exemption, there is no requirement for continuing IRB review of your project. Please be aware that changes to your protocol may prevent the research from qualifying for exemption from 45 CFR 46.101 and require submission of a new IRB application or other materials to the GPS IRB.

A goal of the IRB is to prevent negative occurrences during any research study. However, despite our best intent, unforeseen circumstances or events may arise during the research. If an unexpected situation or adverse event happens during your investigation, please notify the GPS IRB as soon as possible. We will ask for a complete explanation of the event and your response. Other actions also may be required depending on the nature of the event. Details regarding the timeframe in which adverse events must be reported to the GPS IRB and the appropriate form to be used to report this information can be found in the *Pepperdine University Protection of Human Participants in Research: Policies and Procedures Manual* (see link to "policy material" at http://www.pepperdine.edu/irb/graduate/).

Please refer to the protocol number denoted above in all further communication or correspondence related to this approval. Should you have additional questions, please contact me. On behalf of the GPS IRB, I wish you success in this scholarly pursuit.

6100 Center Drive, Los Angeles, California 90045 ▪ 310-568-5600

Sincerely,

Jean Kang, CIP
Manager, GPS IRB & Dissertation Support
Pepperdine University
Graduate School of Education & Psychology
6100 Center Dr. 5th Floor
Los Angeles, CA 90045
jean.kang@pepperdine.edu
W: 310-568-5753
F: 310-568-5755

cc: Dr. Lee Kats, Associate Provost for Research & Assistant Dean of Research, Seaver College
Ms. Alexandra Roosa, Director Research and Sponsored Programs
Dr. Yuying Tsong, Interim Chair, Graduate and Professional Schools IRB
Ms. Jean Kang, Manager, Graduate and Professional Schools IRB
Dr. Susan Hall
Ms. Cheryl Saunders