# SHAME, SELF-ESTEEM, AND IDENTITY IN THE AFTERMATH OF ADVERSE CHILDHOOD EXPERIENCES: IMPLICATIONS FOR DEPRESSION AND POSTTRAUMATIC GROWTH IN EMERGING ADULTS

A thesis presented to the faculty of the Graduate School of Western Carolina University in partial fulfillment of the requirements for the degree of Master of Arts in Clinical Psychology.

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## ABSTRACT

# SHAME, SELF-ESTEEM, AND IDENTITY IN THE AFTERMATH OF ADVERSE CHILDHOOD EXPERIENCES: IMPLICATIONS FOR DEPRESSION AND POSTTRAUMATIC GROWTH IN EMERGING ADULTS

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Emerging adulthood (i.e., age 18 to 25-years; Arnett, 2000) is an important developmental period with unique demands (i.e., gaining independence from parents, finding one's true identity, navigating new and increasing responsibilities). Adverse childhood experiences (ACEs; including child maltreatment) may impede the process by which youth transition into adulthood (Davis, Dumas, & Roberts, 2018), and increase the risk of negative outcomes. In contrast, the Resilience Portfolio Model (RPM; Grych, Hamby, & Banyard, 2015) proposes that healthy adaptation and post-traumatic growth is possible, in part by relying on one's internal strengths (e.g., self-esteem and a strong sense of self). Similarly, the Self-Regulation Shift Theory (SRST; Benight, Shoji, & Delahanty, 2017) suggests that a stressor may push an individual over a threshold, and this, in turn, produce distortions in their self-perception. If the threshold is not reached, the person will not experience the aforementioned changes in self-perception, and therefore is likely to experience more typical adjustment. The role of self-perceptions, such as having a stable sense of self, have not been examined in the context of interpersonal trauma or with other variables that may influence outcomes in relation to ACEs. Thus, the present study examined previous assumptions about ACEs in relation to intrapersonal constructs (self-esteem,

identity, and shame), and explored also the relative contribution of ACEs, self-esteem, identity and two types of shame in the prediction of depression and post-traumatic growth in a sample of emerging adult college students (N = 220). Although shame failed to explain the association between ACEs and identity instability, results of two hierarchical regressions provide partial support that predictors (e.g., ACEs, self-esteem, and shame pertaining to negative selfevaluation) contribute uniquely to outcomes. Specifically, both ACEs and self-esteem were associated uniquely with emerging adults' depressive symptomatology. In contrast, self-esteem and Shame-negative self-evaluation were associated with post-traumatic growth. Overall, findings provide additional support for treatment modalities that emphasize a more accurate estimation of one's global sense of worth (i.e., self-esteem), especially in the context of ACEs. Additional implications, suggestions for future research, and limitations will be discussed.

#### CHAPTER ONE: INTRODUCTION

The study of adverse childhood experiences (ACEs), including child maltreatment and household dysfunctions, is a broader way of understanding the impact of stress and trauma in childhood (Felitti et al., 1998). In this context, child maltreatment (CM) typically encompasses sexual abuse, physical abuse, psychological abuse, and psychological neglect (Briere & Jordan, 2009) that is experienced by an individual under the age of 18-years (World Health Organization, 2016). In addition, household dysfunction may include substance abuse within the family, as well as parental separation or divorce, experiencing a family member with mental health difficulties, or experiencing domestic violence (Felitti et al., 1998; McDonnell & Valentino, 2016). While some types of CM may be declining (e.g., sexual abuse; Jones, Finkelhor, & Halter, 2006), the prevalence of child maltreatment ranges from 12 to 79.4 percent, depending on the sample and type of maltreatment (Murphy et al., 2014; Wildeman et al., 2014). Similarly, household dysfunction and substance abuse within the family are also common experiences, impacting nearly one in three women and one in four men (Centers for Disease Control and Prevention, 2016).

In addition to the alarming rates of ACEs, it is also important to note the robust association between these experiences and later drug and alcohol use, suicide attempts, and depression (e.g., Merrick et al., 2017). For example, CM has been linked to an increase in the risk of recurring and persistent depression (Nanni, Uher, & Danese, 2012), low self-esteem (Briere & Jordan, 2009), and with identity issues stemming from persistent shame (Feiring & Taska, 2005). In their longitudinal study, Feiring and Taska (2005) found that those who were high in shame at discovery of abuse remained so over time, leading to avoidance of processing the abuse. Such avoidance, in turn, may exacerbate problems and symptoms of depression (Feiring & Taska, 2005).

## **Theoretical Framework**

Although the aforementioned negative effects of ACEs are well understood by researchers and mental health professionals alike, there is little consensus as to the mechanism by which these potentially traumatic experiences results in adverse outcomes (McElroy & Hevey, 2014; Merians, Baker, Frazier, & Lust, 2018). In fact, several theories have sought to explain the adaptations that occur after these disruptions, but generally the focus is on a specific type of trauma (e.g., sexual abuse). A more general framework, the Resilience Portfolio Model (RPM; Grych, Hamby, & Banyard, 2015), captures a broader scope of experiences, including ACEs. This framework draws upon research on resilience, positive psychology, posttraumatic growth, and coping to explain how people adjust in the aftermath of a traumatic stressor. The RPM integrates character strengths such as perseverance to provide a comprehensive view of what leads to better functioning. Many of these character strengths are also key components of a person's identity, such as one's perceived ability to regulate emotions and behaviors and building interpersonal relationships.

Identity, in particular the process of knowing who one is and having a clear sense of self, is especially relevant in the developmental period known as emerging adulthood (i.e., between ages 18 to 25-years; Arnett, 2000). In other words, in order to make the successful transition into adulthood, emerging adults must embrace "the psychological task of individually forming a stable and viable identity" that can guide them through the process (Schwartz, Côté, & Arnett, 2005, p. 202). In addition, emerging adults must learn the tools and skills needed to navigate the roles and responsibilities of adulthood, and examine the qualities that are most important to them

(Arnett, 2000). Consequently, healthy identity formation and successful adaptations are essential during this time, but this process may be disrupted by past experiences of CM or other adverse events. For example, a recent study (Davis et al., 2018) found that ACEs corresponded with emerging adults' reports of instability and negativity, and with feeling less focused. This, in turn, may result in depression and other psychopathology.

In contrast, the RPM argues that posttraumatic growth (PTG) is also possible, such that some individuals experience "positive psychological change as a result of the struggle with highly challenging life circumstances" (Calhoun & Tedeschi, 1999; as cited in Tedeschi & Calhoun, 2004, p. 1). Specifically, PTG captures increases in maltreated individuals' "sense of personal strength, spiritual growth, adaptive coping, or ability to make meaning" (Hassija & Turchik, 2016, p. 125). This is different from the general concept of resilience, which is the ability to return back to healthy functioning after an adverse event or trauma (Grych, Banyard, & Hamby, 2015). In fact, PTG is the ability to "surpass what was present before the struggle with crises occurred" (Tedeschi & Calhoun, 2004, p. 4). It follows, then, that a person with a positive sense of self in the aftermath of trauma would be more likely to experience PTG. However, the mechanisms by which a person experiences PTG still remain, making this an important area for future study (Borja, Callahan, & Long, 2006; Kunst, Winkel, & Bogaerts, 2010; Ulloa, Guzman, Salazar, & Cala, 2016).

To further address the relationship between trauma and outcomes, a relatively new theory, the Self-Regulation Shift Theory (SRST; Benight, Shoji, & Delahanty, 2017), is worth noting. The SRST has sought to understand the key variables that contribute to a nonlinear systemic change in behavior over time. The SRST suggests that people have thresholds that, when reached, produces a distortion in a person's sense of self, as well as and other dramatic

changes in self-perception (Benight et al., 2017). This shift may contribute to a disruption in an individual's psychological adjustment, including an increase in their risk of developing depression. In the event of ACEs such as CM, it is plausible that shame or a shift in one's self-esteem may subsequently promote PTG, depression, or both. However, the assumptions of the SRST have not been tested in the context of interpersonal violence or CM (i.e., has only been applied to motor vehicle accident survivors), and thus its assumptions warrant further study.

Given the prevalence of ACEs and depression among emerging adults in college, as well as the importance of healthy identity formation during this developmental period (Arnett, 2000; Schwartz et al., 2005), the investigation of risk and resilience factors is a worthwhile undertaking. To that end, this study examined potential mechanism by which ACEs contribute to depressive symptoms and posttraumatic growth, respectively, with a focus on variables that can be targets for intervention (i.e., shame, sense of self, self-esteem).

#### CHAPTER TWO: LITERATURE REVIEW

As noted previously, adverse childhood experiences (ACEs) is an overarching term that includes child maltreatment (sexual and physical abuse, neglect) and household dysfunctions (e.g., substance abuse and domestic violence), and has been linked consistently to adverse outcomes across several domains (i.e., increased risk for psychopathology and physical problems/disease). Much of the literature regarding the impact of ACEs has focused on child maltreatment (CM), which encompasses sexual abuse, physical abuse, psychological abuse, and psychological neglect (e.g., Briere & Jordan, 2009). More specifically, CM can be defined as all forms of the aforementioned constructs (e.g., physical abuse, psychological abuse, sexual abuse, neglect) that results in actual or potential harm to a child's health and wellbeing (Krug, Dahlberg, Mercy, Zwi, & Lozano, 2002; Norman, Byambaa, De, Butchart, Scott, & Vos, 2012). Variations in the definition of CM occur across federal and state legislation (Children's Bureau, 2016), which may provide an explanation for the lack of a "consensus definition" in the research literature (Portwood, 1999). What the existing literature appears to agree on, however, is that CM is a type of ACE that most consistently results in an increased risk of negative outcomes, and more research is needed to better understand the mechanism by which CM disrupts a child's functioning. Some of the more commonly used definitions and prevalence rates of CM types are reviewed next.

#### **Sexual Abuse**

What constitutes sexual abuse can vary from state to state and depends on whether terms are derived from legal or research guidelines. For example, in the state of Arkansas, sexual abuse is defined as any sexual intercourse, attempted sexual intercourse, and/or indecent exposure by a person age 14 or older to a person younger than age 18 (Children's Bureau, 2016). However, in

the state of Connecticut, there is no listed age requirement (Children's Bureau, 2016). Typically, sexual abuse includes sexual assault or sexual exploitation of a person younger than 18-years. In the context of sexual assault, this is any action such as oral copulation, sexual penetration, and/or fondling of intimate parts to a victim (Negriff, Schneiderman, Smith, Schreyer, & Trickett, 2014). On the opposite side, sexual exploitation involves distributing obscene material depicting a minor in obscene acts (Negriff et al., 2014).

Given these varied definitions of sexual abuse, it is not surprising to find that prevalence rates also differ greatly. For example, a meta-analysis found that, globally, the lifetime prevalence of childhood sexual abuse (CSA) was estimated to be 11.8 percent (Stoltenborgh, van Ijzendoorn, Euser, & Bakermans-Kranenburg, 2011). In contrast, CSA prior to the age of 18years was experienced by 35.5 percent of women in college and 65.7 percent of incarcerated women (Asberg & Renk, 2013). Consistently, studies find that rates of sexual abuse are higher for women than men (18% vs 7.9%; Stoltenborgh et al., 2011), and these groups differ also on the types of sexual abuse they experience. For example, men typically report more incidences where they had to watch someone present their genitals, touch the genitals of others, and/or endured oral or anal penetration, while women are more likely to report being teased about sexual development, being touched in a sexual way (non-genital, unwanted touching), and/or experiencing coerced intercourse (Shevlin et al., 2017).

Although prevalence rates may vary, the negative outcomes associated with CSA are undisputed in the literature. For example, CSA has been linked to increased risk of women's involvement with the criminal justice system (e.g., incarceration; Asberg & Renk, 2013), more symptoms of depression, maladaptive coping (Ullman & Sigurvinsdottir, 2015), self-destructive behaviors, poor self-esteem, substance abuse, difficulty trusting others and a tendency for

revictimization (Browne & Finkelhor, 1986). Men, however, report symptoms related to masculinity, intense anger, and suicidality (O'Leary, Easton, & Gould, 2017). For this study, CSA will be defined as any unwanted sexual touching (genital or non-genital areas), exploitation, and attempted or completed ("successful") penetration that was experienced prior to age 18-years.

### **Physical Abuse**

About 25 percent of adults report being physically abused in childhood (World Health Organization, 2016). From a civil definition, physical abuse is any non-accidental physical injury that happens to a child (Children's Bureau, 2016). This definition can include striking, kicking, or any other physical impairment to a child (Children's Bureau, 2016). It can also include bruises or lacerations to broken bones or teeth or even death (Briere & Jordan, 2009). In some areas of the world, the experience of *corporal punishment* would meet the criteria for physical abuse. Specifically, corporal punishment is a controversial form of discipline that involves the "use of physical force with the intention of causing pain but not injury [to the child] for purposes of correction or control" (Straus & Yodanis, 1996, p. 826).

Many states in the US have adopted a view of corporal punishment which involves the use of 'reasonable force', while others have qualifiers that it must also be appropriate, moderate in nature, or necessary (Gershoff, 2002). Some countries banned corporal punishment in the late 1970s, and those areas of the world has seen a decrease in both the acceptability and prevalence of such practices (e.g., Scandinavian countries, see Ellonen, Jernbro, Janson, Tindberg, & Lucas, 2015, for a review). For the purpose of this study, corporal punishment will be included as a possible predictor of outcomes, as it has been linked to increases in low self-esteem, aggression, and child internalizing and externalizing problems (Gershoff & Grogan-Kaylor, 2016).

Similar to sexual abuse, physical abuse has been linked to adverse outcomes such as substance use (Lansford, Dodge, Pettit, & Bates, 2010), depression, and posttraumatic stress (Collin-Vezina, Coleman, Milne, Sell, & Daigneault, 2011). Moreover, some gender differences in outcomes related to physical abuse have been noted. For example, among children who experienced physical abuse during the first 5 years of their life, only girls were found to use substances in early adolescence (Lansford et al., 2010). Among men, depression was a mediator in the link between physical abuse and aggression, but this association was not found among women (Scarpa, Haden, & Abercromby, 2010).

## **Psychological Abuse**

Psychological Abuse, or emotional abuse, is any injury to the psychological or emotional stability of the child that causes observable changes in various functioning (Children's Bureau, 2016). In the state of North Carolina, emotional abuse is any situation where a parent, guardian, custodian, or caregiver creates or allows any serious emotional damage to the child. Serious emotional damage is based on the child's anxiety, depression, withdrawal, or aggressive behaviors towards the self or others (Children's Bureau, 2016). Emotional abuse is a more hidden form compared to the other types of child maltreatments and is often researched in tandem with the other types. On its own, emotional abuse has been associated with many adverse outcomes such as alcohol-related problems (i.e., binge drinking and other alcohol use disorders) among young adolescences (Shin, Lee, Jeon, & Wills, 2015). In addition, emotional abuse in childhood was also significantly associated with high levels of depression and suicidality in adulthood (Lee, 2015). In adults, emotional abuse has been found to be higher in women than in men (Chiu et al., 2013).

# **Psychological Neglect**

Psychological neglect of a child is one of the most common forms of maltreatment (Mennen, Kim, Sang, & Trickett, 2010). By civil definition, neglect is the failure of a parent or other guardian responsible for a child to provide necessary items that promote the child's wellbeing, such as food, clothing, shelter, medical care (Children's Bureau, 2016). In some civil definitions of neglect, the failure to educate a child as required by law is also included. Often, neglect cases are handled by Child Protective Services and include no involvement with law enforcement (Hélie & Bouchard, 2010; Kellogg, 2014). As with other forms of maltreatment, gender differences in outcomes associated with neglect have been found. Specifically, among individuals who experienced psychological neglect, men report more positive academic adjustment, social adjustment, and emotional adjustment relative to their female counterparts (Maples, Park, Nolen, & Rosén, 2014).

Overall, the differences in definitions of different types of CM, and the varying strength of associations between trauma and outcomes when other variables (e.g., gender, type of CM, context) are accounted for, the link between CM and risk of later maladjustment across a variety of domains is undisputed. Some of the most consistent findings related to CM and adverse outcomes will be discussed next.

#### **Child Maltreatment and Negative Outcomes**

Studies have found that survivors of child maltreatment are at increased risk for depression (Nelson, Klumparendt, Doebler, & Ehring, 2017), low self-esteem (Briere & Jordan, 2009), and persistent shame (Feiring & Taska, 2005) relative to their non-abused counterparts. The severity of these negative outcomes may vary depending on the type of maltreatment. For example, a meta-analysis showed that emotional abuse increases the risk of depression by a ratio of 3.06, whereas physical abuse increased depression by a ratio of 1.5 (Norman et al., 2012).

Moreover, the co-occurrence of the four types of maltreatment has been noted as common, such that 85 percent of victims experienced more than one type (Witt, Munzer, Ganser, Fegert, Goldbeck, & Plener, 2016). Noting exposures to multiple forms of childhood maltreatment is critical since co-occurring types of maltreatment are associated with worse outcomes. For example, individuals who experienced sexual abuse and other types of maltreatment were found to have higher rates of posttraumatic stress disorder relative to those with only one type of abuse (Witt et al., 2016).

**Other Considerations and Maltreatment Outcomes.** Another associated feature of child maltreatment is the perception of betrayal, which is not surprising given that maltreatment is commonly carried out by a family member or a person known to the child (Shevlin et al., 2017). Such violations by a trusted adult may influence how the child processes and remembers the abuse. Specifically, a child who is victimized by a family member will make sense of the experience differently than if it was perpetrated by someone not related to the child (Gobin & Freyd, 2009). This idea is the foundation of the betrayal trauma theory. The change in processing and recalling the abuse differently is said to create a betrayal blindness that impacts an individual. For example, high sense of betrayal was associated with lower levels of willingness to trust, and a higher risk for re-victimization, among undergraduate students (Gobin & Freyd, 2009). Although beyond the scope of this study, mistrust may also prevent a survivor from utilizing supports and other resources needed for adaptation.

## **Adaptation after Trauma**

The concept of personal adaptation is broad, and refers to an individual's self-adjustment in emotions, actions, and thoughts (Moreno-Manso, García-Baamonde, Guerrero-Barona, Blázquez-Alonso, Pozueco-Romero, & Godoy-Merino, 2017). If adaptation is not achieved,

people may experience maladaptive outcomes such as insecurities, feelings of blame, anxiety, inhibitions, and sadness (Moreno-Manso et al., 2017). Given the negative impact of CM, it is fair to assume that many CM survivors experience different types of adaptations and dysregulation. In fact, a study of physical neglect in 12- and 14-year olds found difficulties in several areas of psychosocial adaptation (Moreno-Manso et al., 2017). In particular, they experienced difficulty with adapting to their own lives, and were showing signs of undervaluing themselves, feelings of inferiority, and negative or pessimistic thoughts (Moreno-Manso et al., 2017). In addition to personal dysregulation, CM places children and adolescents at risks for severe problems in emotion regulation, interpersonal relationship, and control of impulsivity (D'Andrea, Ford, Stolbach, Spinazzola, & van der Kolk, 2012). Despite these dysregulations, there are theoretical frameworks that highlight internal and external resources to promote healthier adjustment. In particular, the Resilience Portfolio Model captures such positive adaptations for survivors of adverse outcomes.

The Resilience Portfolio Model. The Resilience Portfolio Model (RPM) is a theoretical framework that encompasses research on resilience, positive psychology, posttraumatic growth, and coping (Grych, Hamby, & Banyard, 2015). This model includes protective factors at external levels (e.g., individual, family, peer), and proposes processes through which they can increase resilience in victims of violence (Grych et al., 2015). This model describes what is done in the face of stress that encourages health and wellbeing for individuals rather than looking at qualities that individuals have. The RPM also defines many of the constructs as being transactional: people who have assets (characteristics that promote healthy functioning) and resources (sources outside of the person that provides support) to deal with adversity effectively will function better over time, while those who do not will become vulnerable to adversity.

Resilience, of course, is the hallmark of the RPM. Resilience refers to the ability to function or "bounce back" after exposure to significant adverse circumstances (Grych et al., 2015). Further included in the RPM are 3 higher-order functional categories of strength that are important for resilience to occur: regulatory, interpersonal, and meaning-making (Grych et al., 2015). Of the three, the meaning-making category is the most important in reference to this research, as it houses the concept of posttraumatic growth. Meaning-making represents an individual's ability to make sense of their experiences (Hamby et al., 2017). Meaning-making occurs when an individual has clear sets of beliefs, values, and goals that promotes the idea of life having meaning and purpose. Overall, this model lays the groundwork for what healthy adaptation looks like in the aftermath of trauma but may not completely account for the mechanism by which this adaptation occurs. In other words, the RPM does not point to factors that allow a person to utilize his or her resources after trauma, nor does it explain what may contribute to less effective adaptation. In lieu of this, another perspective – the Self-Regulation Shift Theory – may augment the RPM.

**Self-Regulation Shift Theory.** The Self-Regulation Shift Theory (SRST) is an extension of Bandura's (1997) Social Cognitive Theory model that seeks to understand the key variables that causes a nonlinear systemic change in behavior over time (Benight et al., 2017). This approach assumes that a system changes across time in a sporadic manner with threshold shifts from one organized state to another in an effort to maintain equilibrium (i.e., a steady state). This view consists of four components or assumptions, which are relevant to the current study. First, humans are self-aware beings that are constantly monitoring internal and external feedbacks in order to self-regulate, whether it be consciously or unconsciously. Second, all living systems shift from one organized state to another based on environmental and internal pressures. Third,

the intensity of coping responses after trauma is in relation to the perceived level of disequilibrium (distance away from feeling normal) and one's ability to manage this discrepancy (Benight et al., 2017). The feedback given during this step can either weaken or quicken systemic distress. The fourth and last component posits that everyone has a critical coping capacity threshold that is reached when inconsistency between perceived coping self-efficacy (ability to regain control) is beyond the perceived future ability to cope (Benight et al., 2017). When this threshold is hit, an organism changes into an "impaired self" (e.g., distorted self) that causes maladaptive coping, psychological distress, and changes in self-perception (Benight et al., 2017).

As noted earlier, the SRST has not been tested in the context of interpersonal violence or CM. However, the process of SRST offers an additional explanation in the deviations that are seen with CM. It opens the discussions on which predictors can push someone beyond equilibrium and cause a shift in self. Shame is typically referred to as a negative or emotional experience involving feelings of self-condemnation and a desire to hide the damaged self (Feiring & Taska, 2005). This "damaged self" involves the concept of the self being fundamentally bad. It is possible that with an increase in shame and a decrease in self-esteem, this will cause someone to reach the threshold where they change into an impaired self. Given the mechanism of SRST, it is plausible that either shame or self-esteem are the catalysts that influences the outcome of depression, or both are predictors of depression. Related to the notion of a "damaged self" is the concept of identity and identity stability, which has implications for adaptation. Identity formation and stability will be discussed next.

# The Link Between CM and Outcomes: Identity, Shame, and Self-Esteem

**Identity Formation.** Identity can be defined as having a sense of self and knowing who you are (Kaufman, 1974). During adolescence and through emerging adulthood, much focus is on identity development (Bang, 2015), or what Erikson (1968) referred to as stages of identity formation. Erikson (1968) further theorized that an individual develops the prerequisites needed to pass through each identity crisis, and, as each stage is mastered, the individual reemerges with an increased sense of inner unity (Erikson, 1968). From Erikson's (1968) theory, two concepts emerged that would lead to identity formation as described by Marcia (1966)—exploration and commitment (Kroger, & Marcia, 2011). In exploration, an adolescent begins to try out different roles, life plans, and alternatives to his or her social identity. Commitment, on the other hand, involves the degree of personal investment that the adolescent expresses as it relates to occupational choices and ideology. Through exploration and commitment, an individual refines their choices and arrives at a more stable identity, or a healthy identity status (i.e., identity achievement; Kroger & Marcia, 2011).<sup>1</sup> Unlike Erikson (1968) who assumed that everyone passes through each of his identity stages, Marcia (1968) proposed that adolescents may only experience one or two identity statuses before they have a stable identity.

Currently, Arnett's (2000) theory of emerging adulthood is the conceptual framework of identity formation. Arnett (2000) coined the term *emerging adulthood* as the period in life where there are many different possible directions for the future still available and no one "role" has been chosen. Independent exploration of possibilities is said to be the greatest during this period, especially in areas of love, work, and worldviews (Arnett, 2000). For example, emerging adults begin to question what work they find to be satisfying long term and

<sup>&</sup>lt;sup>1</sup> Marcia Identity Status Theory: Identity achievement (high exploration and high commitment); Foreclosure (little exploration, high commitment based on others' views); Moratorium (active pursuit of identity, but torn between alternatives, vague direction in life); Identity diffusion (little exploration, no commitment).

what they are good at, and emerging adults in college often explore various majors and potential career paths (Arnett, 2000)<sup>2</sup>. Although these are typical processes for adolescence, healthy identity formation can be significantly impacted by CM. For example, among those who experienced sexual abuse, many participants reported not knowing who they were after the event (Krayer, Seddon, Robinson, & Gwilym, 2015). Many participants also questioned if the adverse event changed their personality and felt like they would have been happier or more successful if the abuse did not happen (Krayer et al., 2015). Moreover, among those who disclosed their abuse, some felt that others had reduced them to a one-dimensional victim (Krayer et al., 2015), which may also result in a questioning of one's identity. Importantly, those who report stable identities score lower on measures of anxiety, depression, and hazardous alcohol use (Hardy, Francis, Zamboanga, Kim, Anderson, & Forthun, 2013). In other words, a stable identity or sense of self, even in the aftermath of trauma, may be important for psychological adjustment.

Shame. Another variable that is related to adjustment following trauma is shame. Shame has been defined as the feeling that one is fundamentally bad as a person (Kaufman, 1974). It has been linked to the development of PTSD symptoms and avoidance of processing the abuse (Feiring & Taska, 2005). Shame is different from guilt in the sense that shame encompasses the whole self and, unlike guilt, often motivates hiding, while guilt involves one specific aspect of the self that can motivate change for better outcomes in the future (Feiring & Taska, 2005). In turn, individuals with maltreatment histories who experience shame do not want others to see their perceived bad self. Shame is part of self-conscious emotions that are used to evaluate events and ourselves against our goals and standards (Feiring, 2005). For example, child maltreatment provides a context for victims to experience shame because perpetrators have broken goals and

<sup>&</sup>lt;sup>2</sup> Arnett argued that while identity formation might start in adolescence (as suggested by Erikson's model), few people actually reach identity achievement (the end goal of identity formation).

standards created by society (Feiring, 2005). Likewise, shame is often described in terms of losing self-respect, experiencing inconsistent self-esteem, and feeling degraded and/or humiliated (Czub, 2013), which prompts avoidance.

While shame can be a normal and common experience, early developmental factors such as experiencing invalidating or traumatic caregiving relationships can significantly increase the likelihood of experiencing shame (e.g., the development of shame proneness; Mills, 2005; Muris & Meesters, 2014). Specifically, people who have a high tendency to experience shame may be more vulnerable to social evaluation of their actions and thus, be more critical of themselves (Czub, 2013). These individuals may be more prone to having an unstable identity, causing them to constantly question their own decisions. Furthermore, shame has been found to erode at someone's sense of worth and influence their perception of social support (Dorahy & Clearwater, 2012). Among male survivors of childhood sexual abuse, many of them reported not deserving support from friends and family and questioning the genuineness of others (Dorahy & Clearwater, 2012). When these participants did allow themselves to socialize, they reported experiencing minimal happiness before the shame came back and reminded them of their difference from their peers. Through the fostering of a "shame" environment, it is plausible that shame adds to the creation of automatic negative thoughts which is common in depression.

**Self-Esteem.** As noted, shame is closely related to self-esteem, or an individual's subjective evaluation of their worth (Donnellan, Trzesniewski, & Robins, 2011). It is often conceptualized as global self-esteem or self-concept. Many studies have found an association between child maltreatment and low self-esteem (e.g., Shen, 2009). For example, in a nationwide study, global self-esteem was found to be a mediator between child maltreatment and psychopathology, and also child maltreatment and well-being (Greger, Myhre, Klöckner &

Jozefiak, 2017). In addition, lower self-esteem has also been associated with depression (Provencio-Vasquez, Mata, Tomaka, & De Santis, 2017). Overall, the negative impact of CM on an individual's sense of self and worth is undisputed, but the last two decades have seen an increased focus on other possible outcomes in the aftermath of CM and other types of traumatic events. One such outcome will be discussed next.

#### **Definition of Posttraumatic Growth**

Posttraumatic growth is the phenomena where someone experience positive psychological change in the aftermath of a traumatic event (Calhoun & Tedeschi, 1999). Three categories are typically reported by trauma survivors when assessing positive psychological change: change in self-perceptions, change in relationships with others, and change in philosophy of life (Tedeschi & Calhoun, 1996). Tedeschi and Calhoun (1996) found that, when it came to changes in self-perceptions, survivors of trauma reported the trauma making them a better person because it provided a great deal of information about self-reliance. In addition, survivors of trauma were more confident that they would be able to get over difficult situations since they had survived the trauma they experienced. Similarly, it was also noted that a shift occurred with previous relationships survivors had before their trauma. Many of these survivors reported learning from their victimization that they needed to make decisions in their best interests to protect themselves from future abuse. In addition, when they disclosed, survivors found themselves being able to grow closer to relationships they previous neglected.

Many women have described experiencing PTG in adulthood where they were finally able to make decisions and respond to the world in a way that would influence their coping (Hartley, Johnco, Hofmeyr, & Berry, 2016). Hartley et al. (2016) found that participants in their study attempted to make sense of and understand their abuse. The women described

changes in how they related to themselves and started to acknowledge positive aspects of themselves instead of the negative (e.g., feeling guilt, shame, self-blame and disgust; Hartley et al., 2016). Furthermore, the women were able to recognize personal achievements, positive qualities in themselves, soothe themselves, and deal with self-criticism (Hartley et al., 2016). Harley et al. (2016) also found that many of the survivors of CSA's belief system was influenced by the abuse. Women in this study reported feeling like they had to always please others and that they were somehow bad or damaged.

#### **Present Study**

Child maltreatment and other adverse experiences is a serious problem that needs to be addressed. Not only does CM contribute to many negative outcomes such as depression (Shin et al., 2015), it may cause disruptions in important developmental aspects such as identity (Krayer et al., 2015), increase shame (Feiring, 2005), and adversely impact self-esteem (Shen, 2009). Although researchers and mental health professionals alike are aware of these effects of CM, there is little consensus about the mechanism by which CM causes these disruptions. Further, although a connection between CM and these adverse outcomes has been made, not all instances of CM end in a negative outcome. For example, conceptual models (e.g., Resilience Portfolio Model) establishes ways in which individuals adapt after adverse experiences and possibly go beyond normal functioning (i.e., posttraumatic growth). Thus, examining the role of intrapersonal variables (i.e., shame, identity instability, and self-esteem) in the prediction of both negative outcomes (depression) and positive adjustment (posttraumatic growth) was a key aspect of this study.

Further, the RPM establishes several external factors but places less emphasis on intrapersonal factors (i.e., how an individual perceives themselves and their worth) after the

adverse experience. Overall, this points to a need for more research to account for intrapersonal variables, which can be harnessed for intervention purposes. Along those lines, a relativity new theory, Self-Regulation Shift Theory, has sought to bridge some of the gaps by pointing out the role of self and identity in the adaptation to trauma (i.e., motor vehicle accidents). This, however, has not been tested in the context of interpersonal violence and childhood maltreatment experiences.

Given the importance of healthy identity formation and adaptation to the demands of emerging adulthood (18-25-year-olds; Arnett, 2000), as well as the prevalence of CM and depression in the college-age population, the current study tested components of the RPM and SRST to identify intrapersonal factors that can result in more favorable outcomes. Specifically, this project studied the mechanism by which adverse childhood experiences may lead to depression and posttraumatic growth, respectively, with a focus on variables that can be targets for intervention (i.e., shame, identity, self-esteem).

# Hypotheses

Based on the aforementioned literature and assumptions of the RPM and SRST models of adjustment following interpersonal violence and trauma, the following hypotheses were derived:

**Hypothesis 1.** It is hypothesized that ACEs (measured as a continuous score) scores will correlate positively with shame (Feiring, 2005), as indicated by the Shame-negative self-image subscale and Shame-withdrawn subscale, respectively. Moreover, it is hypothesized that ACEs will correlate positively with identity instability (as measured by the Sense of Self Scale) (Krayer et al., 2015), and correlate negatively with self-esteem (Shen, 2009).

**Hypothesis 2**. It is hypothesized that Shame-negative self-evaluation and Shamewithdraw will be positively correlated with identity instability (i.e., weaker sense of self) and

negatively correlated with self-esteem (Czub, 2013). It is further hypothesized that identity instability should be negatively correlated with self-esteem scores on the Rosenberg Self-Esteem Scale (Provencio-Vasquez et al., 2017), such that a weaker sense of self corresponds with lower self-esteem.

**Hypothesis 3.** It is hypothesized that ACEs, identity instability, Shame-negative selfevaluation, Shame-withdraw, and self-esteem scores would correlate to depression scores on the Patient Health Questionnaire (Briere & Jordan, 2009; Dorahy & Clearwater, 2012; Krayer et al., 2015, Nelson et al., 2017) and posttraumatic growth scores from the Posttraumatic Growth Inventory (Hartley et al., 2016; Tedeschi & Calhoun, 1996).

**Hypothesis 4**. It is hypothesized that Shame-negative self-evaluation and Shamewithdraw will serve as a mediator of the association between participants' ACEs scores and identity instability scores. Specifically, given the nature of the SRST, Shame-negative selfevaluation and Shame-withdraw might serve as the mechanisms that explains the association between ACEs and identity instability (Benight et al., 2017).

**Hypothesis 5**. When taken together, ACEs, Shame-negative self-evaluation, Shamewithdraw, self-esteem, and identity instability was hypothesized to contribute uniquely to a model of PTG and depression, respectively (Czub, 2013; Hartley et al., 2016).

#### CHAPTER THREE: METHOD

# **Participants**

Following IRB approval, undergraduate students who were 18-years of age or older were recruited through Western Carolina University's Department of Psychology Research Participation System (SONA) and through announcements in upper-level psychology courses (with instructor's permission). Students from the participant pool were fulfilling course requirements for a general Psychology course and received half a credit for completing the survey. Students from other courses received extra credit or other compensation at the discretion of their instructor. The analyses focused on emerging adults (18-25-year-olds; Arnett; 2000), but students older than 25-years were allowed to participate. Although some of the questions in the survey were sensitive in nature, previous studies have found no negative effects on participants' mood or affect as a result of answering surveys about potentially adverse childhood experiences (e.g., sexual abuse; Yeater et al., 2012). In order to achieve adequate power for the regression analyses, 220 participants were recruited. Data from two participants were discarded due to not finishing the surveys, leaving a final sample of 218.

**Demographics.** Each participant completed a questionnaire regarding their age, sex, race/ethnicity, education level, and questions about past and/or current psychiatric services specifically with psychotherapy. The Demographics Information Sheet can be found Appendix A. The mean age for this sample was 19.23-years (SD = 2.39). The majority of the sample was rather homogeneous; 81.2% (n = 177) of the sample was female and 18.3% (n = 40) was male. In terms of race and ethnicity, the sample was composed mostly of Caucasian participants (74.3%, n = 162), while 12.8% of the sample were African American (n = 28), 6% were Hispanic (n = 13), 1.8% were Asian (n = 4), and 5% marked other (n = 11).

# Measures

In addition to a demographic questionnaire and consent form, participants completed the following measures in the study.

Adverse Childhood Experiences (ACEs) Questionnaire. Participants completed the 10-item Adverse Childhood Experiences Questionnaire (ACEs; Felitti et al., 1998) to assess different types of adversity experienced during the first 18 years of life. These adverse experiences included ten items inquiring about CM (i.e., emotional abuse, physical abuse, sexual abuse) and household dysfunctions (i.e., living with an alcoholic or substance abuser and having a depressed, mentally ill, or suicidal household member; (Teicher, Anderson, & Polcari, 2011). Responses were given on a scale from 0 (*No*) to 1 (*Yes*). Higher scores indicated higher adverse childhood experiences. The ACESs has been shown to have a Cronbach alpha of .88 (Murphy et al., 2014). In the current study, Cronbach alpha was .73. The ACEs Questionnaire can be found in Appendix B.

Sense of Self Scale. Participants completed the 12-item Sense of Self Scale (SOSS; Flury & Ickes, 2007) to assess for stable sense of self. The SOSS test four components of a weak sense of self: "difficulty in keeping one's own identity separate from that of others, a lack of knowledge about one's own opinions and personality, sudden shifts in feelings, values, and preferences, and lastly, the feeling of a tenuous existence" (Flury & Ickes, 2007, p. 285). Sample items reads, "I have a pretty good sense of what my long-term goals are in life" and "I tend to be very sure of myself and stick to my own preferences even when the group I am with expresses different preferences" (Flury & Ickes, 2007). Responses were given on a scale from 1 (*Strongly disagree*) to 5 (*Strongly agree*). Items 4, 7, and 12 are reverse scored. An average of the items was computed for a SOSS score; higher scores indicate a weaker sense of self (e.g., identity

instability). The SOSS has been shown to have a Cronbach alpha of .86 and test-retest reliability of .83 (Flury & Ickes, 2007). In the current study, the Cronbach alpha was .87. The Sense of Self Scale can be found in Appendix C.

Guilt and Shame Proneness Scale. Participants completed the 16-item Guilt and Shame Proneness Scale (GASP; Cohen, Wolf, Panter, & Insko, 2011) to assess individual differences in natural tendencies for guilt proneness and shame proneness based on a range of personal transgressions. The GASP contains 4 4-item subscales: Guilt-Negative, Guilt-Behavior, Guilt-Evaluation, Guilt-Repair and Shame-Negative, Shame-Self, Shame-Evaluation, Shame-Withdraw. The Shame-negative self-evaluation (Shame-NSE) describes feeling bad about oneself and Shame-withdraw describes the steps taken to hide or withdraw from public. Scores are produced by averaging the 4-items among the 4 subscales to produce a total score on that particular subscale. Participants rated how likely they are to response to the provided outcomes of the described situation for the questions. Responses were given on a scale from 1 (Very unlikely) to 7 (Very likely). Scores indicated higher tendencies for guilt proneness and shame proneness respectively. For the purposes of this study, the Guilt subscale scores and total score was not utilized. The Shame-NSE and Shame-withdraw subscales of the GASP has demonstrated good Cronbach alpha ( $\alpha$  = .80 and  $\alpha$  = .61; Straub, McConnell, & Messman-Moore, 2018). In the current study, the shame subscales alpha's ranged from .69 (shame-NSE) to .56 (shamewithdraw). The Guilt and Shame Proneness Scale can be found in Appendix D.

**Rosenberg Self-Esteem Scale**. Participants completed the 10-item Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965) to assess individual self-esteem. The self-esteem scale included items such as "At times I think I am no good at all" to "I am able to do things as well as most other people". Responses were given on a scale from 1 (*Strongly disagree*) to 4 (*Strongly* 

*agree*). Items 2, 5, 6, 8, and 9 are reversed coded. Higher scores indicated higher self-esteem. The RSES has been shown to have good Cronbach alpha ( $\alpha = .88$ ; Donnellan, Ackerman, & Brecheen, 2016). For the present study, Cronbach alpha was .91. The Rosenberg Self-Esteem Scale can be found in Appendix E.

Patient Health Questionnaire. Participants completed the 9-item Patient Health Questionnaire (PHQ-9; Kroenke, Spitzer, & Williams, 2001) to assess symptoms of depression. Responses were given on a scale from 0 (*Not at all*) to 3 (*Nearly every day*). A score between 0 to 9 is reported as minimal and mild depression range, while a score of 10 or higher is higher severity of depression. Among emerging adults, this measure has produced a mean score of 6.7 (racial/ethnic minority) and 6.3 (white; Miranda, Polanco-Roman, Tsypes, & Valderrama, 2013). A recent study found that PHQ-9's Cronbach alpha ranged from .86 to .93 (Keum, Miller, & Inkelas, 2018). Cronbach alpha for the PHQ-9 was .86 in the sample. The Patient Health Questionnaire can be found in Appendix F.

**Posttraumatic Growth Inventory**. Participants completed the 21-item Posttraumatic Growth Inventory (PTGI; Tedeschi & Calhoun, 1996) to assess positive outcomes reported by persons who have experienced traumatic events across five domains: New Possibilities, Relationships with Others, Personal Strength, Spiritual Change, and Appreciation of Life. Sample items included "I'm able to do better things with my life" and "Knowing I can handle difficulties" (Tedeschi & Calhoun, 1996). Responses were given on a scale from 0 (*I did not experience this change as a result of my crisis*) to 5 (*I experienced this change to a very great degree as a result of my crisis*). For the purposes of this study, only the total score of the PTGI was utilized. The PTGI has been shown to have a Cronbach alpha of .93 (Hassija & Turchik,

2016). The current study had a Cronbach alpha of .93. The Posttraumatic Growth Inventory can be found in Appendix G.

# Procedure

Participants were recruited through an online research participation system (SONA) and through announcements in other psychology courses at Western Carolina University. Participants who signed up for the study via SONA were invited to data collection sessions on campus while participants in other psychology courses completed the study on their own. Participants read the informed consent document that reviewed the risks, benefits, and general study information. Based on this information, participants indicated whether or not they wanted to participant in the study by agreeing to do so on the consent form. Given the fact that two measures in the study required participants to recall potentially traumatic experiences, participants were provided with resources to the counseling center. After participants given consent, participants completed a brief demographic survey via Qualtrics. Participants then completed all self-report measures also through Qualtrics.

In order to ensure confidentiality, participant's names were not included in any of the self-report measures. Following completion of the study, students who signed up for the study via SONA received a half credit (.5) after completion of the questionnaires, while students in other psychology courses received extra credit. Participants were also given a debriefing statement with contact information of the investigators and the IRB.

#### CHAPTER FOUR: RESULTS

Prior to assessing bivariate correlations, descriptive statistics for all study measures were examined (see Table 1 for descriptive statistics for all self-report measures and subscales). Next, hypothesis one was examined using a bivariate correlation matrix. Results revealed that ACE scores as measured by the Adverse Childhood Experience measure correlated significantly and positively with identity instability from the Sense of Self measure (r = .16, p < .05). However, ACE scores did not correlate significantly with the Shame-negative self-evaluation or the Shame-withdraw scores as measured by the GASP measure. Likewise, ACE scores did not correlate significantly with self-esteem as assessed by the Rosenberg Self-esteem measure. Thus, hypothesis one was only partially supported in that higher ACE scores corresponded with a more instability in terms of participants' identity and sense of self. See Table 2.

Hypothesis two was also partially supported. Specifically, Shame-negative selfevaluation subscale scores (r = .24, p < .001) and Shame-withdraw subscale scores (r = .17, p < .05) were significantly correlated with identity instability as measured by the Sense of Self scale. Moreover, self-esteem was significantly and negatively correlated with Shame-negative selfevaluation scores (r = .29, p < .001), but not Shame-withdraw scores (r = .10, p = .14). Lastly, identity instability was significantly and negatively correlated with self-esteem (r = .76, p < .001). In other words, a weaker sense of self (i.e., more instability) was associated with lower self-esteem, higher negative self-evaluation, and more need to be withdrawn. While higher selfesteem decreases negative self-evaluation, self-esteem had no bearing on being withdrawn. See Table 3. For hypothesis 3, bivariate correlations provided only partial support. Specifically, and as expected, participants' ACEs scores correlated positively with depressive symptoms (r = .20, p < .01). Likewise, identity instability (i.e., a more poor sense of self) correlated positively with depressives symptoms (r = .52, p < .001) and correlated negatively with posttraumatic growth (r = .22, p < .05). Also, Shame-negative self-evaluation (r = .20, p < .01) and Shame-withdraw scores (r = .16, p < .05) correlated positively with depression. Lastly, self-esteem correlated negatively with depression (r = .62, p < .001), and positively with posttraumatic growth (r = .37, p < .001). In other words, having an adverse childhood experience, a poorer sense of self, lower self-esteem, a negative view of oneself and wanting to hide it, all increases experiences of depression. However, higher self-esteem and greater sense of self were related to posttraumatic growth. Several correlations were not significant for this hypothesis, including Shame-negative self-evaluation and Shame-withdraw to posttraumatic growth. Similarly, ACEs scores did not correlate significantly with posttraumatic growth. See Table 4.

Next, Shame-negative self-evaluation and Shame-withdraw were examined as potential mediators of the association between participants' ACEs scores and their identity instability scores (hypothesis 4). Specifically, given that the GASP scale separates shame into two different constructs, two separate mediational analysis were run through PROCESS macro V3.0 (Hayes, 2017). Results from a simple mediation analysis indicated that Shame-NSE is not indirectly related to SOSS through its relationship with ACEs. Shame-NSE had no relationship with ACEs, (a = -0.015, p = .68). However, more Shame-NSE was subsequently related to more identity instability, (b = -0.170, p < .001). A 95% bias-corrected confidence interval based on 5,000 bootstrap samples indicated that the indirect effect (ab = -0.003) did include zero, 95% CI [-0.02, 0.01]. Moreover, there was greater reporting of SOSS after taking into account ACEs' indirect

effect through Shame-NSE, c' = 0.060, p = 01. Given the inclusion of zero in the indirect effect, this model suggests no mediation.

For the second analysis involving Shame-withdraw as a mediator, results indicated that Shame-withdraw is not indirectly related to SOSS through its relationship with ACEs. Shamewithdraw also had no relationship with ACEs, (a = 0.022, p = .53). However, more Shamewithdraw was subsequently related to more identity instability, (b = 0.115, p < .05). A 95% biascorrected confidence interval based on 5,000 bootstrap samples indicated that the indirect effect (ab = 0.003) did include zero, 95% CI [-0.01, 0.01]. Moreover, there was greater reporting of SOSS after taking into account ACEs' indirect effect through Shame-withdraw, c' = 0.055, p <.05. Taken together, hypothesis four was not supported (see Figures 1 and 2 for results of mediation).

To test hypothesis 5, two hierarchical regression equations were examined to assess the relative impact of ACEs, Shame-negative self-evaluation, Shame-withdraw, identity instability, and self-esteem on depression and posttraumatic growth, respectively. Hierarchical multiple regression is a way to demonstrate if variables of interests account for a statistically significant amount of variance in an outcome, or dependent variable (DV), after accounting for all other variables. Hierarchical multiple regression allows the process of adding and/or removing predictor variables from a regression model in steps to see individual variance on the dependent variable (Tabachnick & Fidell, 1996).

The first model accounted for 41 percent of the variance,  $R^2 = .41$ , F(5, 212) = 29.98, p < .001. In the first model, depression was regressed onto the predictors and individual predictors were further examined. First, and as predicted, the ACEs variable was positively and significantly associated with depression, B = .04, SE = .02,  $\beta = 0.12$ , t(212) = 2.28, p = .024,

95% CI [0.01, 0.06],  $r = .16^3$ . Likewise, self-esteem was negatively and significantly associated with depression, B = -.58, SE = .09,  $\beta = -0.54$ , t(212) = -6.60, p < .001, 95% CI [-0.75, -0.40], r= .41. None of the other predictors contributed significantly to the model. In sum, results indicated that those who report more adverse childhood experiences report more depression symptomology. Additionally, results indicated that those who report lower self-esteem experience more depression symptomology. See Table 7 for the results of the regression.

In the second model, posttraumatic growth was regressed onto the predictors. This model accounted for 18 percent of the variance,  $R^2 = .18$ , F(5, 207) = 9.29, p < .001. Self-esteem was positively and significantly associated with posttraumatic growth, B = 19.34, SE = 3.62,  $\beta = 0.53$ , t(207) = 5.34, p < .001, 95% CI [12.20, 26.48], r = .35. Interestingly, shame-negative self-evaluation was positively and significantly associated with posttraumatic growth, B = 3.02, SE = 1.31,  $\beta = 0.15$ , t(207) = 2.30, p = .022, 95% CI [0.44, 5.60 ], r = .16. In contrast, the ACEs variable was approaching significance, but did not reach significance in the context of other predictors. Similarly, identity instability (SOSS scores) and Shame-withdraw did not contribute significantly to the model. Results indicated that those who report more self-esteem and those experiencing shame that caused a negative self-evaluation in their image report experiencing more posttraumatic growth. (See Table 8 for the results of the regression). Taken together, hypothesis five was found to be partially supported.

<sup>&</sup>lt;sup>3</sup> Reporting Partial Pearson correlation as a measure of effect size for all regression analysis. The equation is r = square root (t2 / t2 + df). See Rosenthal, R., & Rosnow, R. L. (2007). Essentials of behavioral research: Methods and data analysis (3<sup>rd</sup> ed.). New York: McGraw-Hill for review.

### CHAPTER FIVE: DISCUSSION

Consistent with previous studies (e.g., Anders, Fraizer, Shallcross, 2012), traumatic events are common in the emerging adulthood population. A vast number of students in the current study (71.9%) reported experiencing at least one adverse childhood experience (ACEs), such as emotional abuse, parental abuse, or even having a parent with mental health issues. Given the striking number of negative outcomes associated with child maltreatment and other forms of ACEs, including depression (Briere & Jordan, 2009) and posttraumatic stress disorder (Witt et al., 2016), preventing and understanding of these adverse childhood experiences can be considered a priority. Furthermore, understanding how self-esteem and identity instability are impacted by child maltreatment have implications for interventions and prevention programming, especially among emerging adults in college (David et al., 2018). To that end, the present study examines the impact of adverse childhood experiences on posttraumatic growth and depression, while taking well-established predictors (e.g., identity instability, shame, and self-esteem) into account.

Similar to previous research (e.g., Davis et al., 2018), and as hypothesized, our findings suggested that adverse childhood experiences are associated with emerging adults' identity instability. Contrary to previous studies that found shame to be a significant predictor of ACEs (Payne et al., 2014), there was no association between adverse childhood experiences and the shame subscales of the Guilt and Shame Proneness Scale. It is possible that a lack of a relationship is due to the type of adverse childhood experience reported by the participants. For those who reported ACEs pertaining to household dysfunctions (e.g., death of a love one, parent with mental illness), the resulting emotion may not be shame, but rather grief (Manooglan,

Vandenbroeke, Ringering, Toray, & Cooley, 2018). It may be important, then, to differentiate between types of ACEs, in order to more accurately identify the role of shame.

Next, and not surprising given the lack of association between ACEs and shame, results of mediational models to examine shame as a mediator between ACEs and identity instability were not significant. Thus, these findings fail to provide support for the Self-regulation Shift Theory; a new theoretical approach in the literature. In other words, in this study, there is no evidence to suggest that ACEs leads to identity instability through shame, specifically. It is possible that a longitudinal study may more adequately capture the process by which trauma (ACEs) produces shame and ultimately results in instability. Given that this was a cross-sectional design, this study did not allow for this to be tested.

Moreover, our findings further support the role of ACEs as a predictor of outcomes, even in the context of other risk factors. In our sample, ACEs and self-esteem were both significant predictors of depressive symptomatology, while neither type of shame (Shame-negative selfevaluation and Shame-withdraw) nor identity stability scores contributed to emerging adults' depression symptoms in this sample. Taken together, as ACEs increases and self-esteem decreases, more depression is experienced by emerging adults in this sample. It is possible that participants' self-esteem overshadowed these other predictors in the model. Furthermore, findings suggest that self-esteem was the most robust predictor of post-traumatic growth, while Shame-negative self-evaluation also contributed to the model. In other words, as both selfesteem and shame-negative self-evaluation increases, so does posttraumatic growth scores. Interestingly, ACEs failed to contribute to the model of post-traumatic growth. Similarly, identity instability, and Shame-withdraw did not contribute significantly. Although not a part of the original statistical plan, a stepwise multiple regression was later used in order to determine

which predictors was truly significant in both of the models. The stepwise regression model revealed that for the first regression model, only self-esteem and ACEs were the stronger predictors for depression. For the second regression model, only self-esteem and shame-negative self-evaluation were truly significant. While the stepwise regression models produced lower beta and other statistics, they were not significantly different from the original hierarchical models that included insignificant predictors. Given these findings, future studies may benefit in examining how and why self-esteem seems to provide a buffer in experiencing depression and posttraumatic growth. Additionally, future studies may benefit in examining how shame-negative self-evaluation leads to increases in posttraumatic growth. Other studies should also not include these predictors in a simple hierarchical model but use a stepwise approach.

### Limitations

There are several limitations to the current study. First, the data on adverse childhood experiences was gathered retrospectively. While this may have increased response bias and inaccurate recall, research has suggested that retrospective reporting can still be reliable and accurate, especially about adverse childhood experiences (Dube, Williamson, Thompson, Felitti, & Anda, 2004). Secondly, due to the participants being from a convenient sample (undergraduate college students), the results of this study made not be able to generalize the results to other samples (e.g., clinical samples). Additionally, the data set was largely homogenous, with a vast majority of the sample being Caucasian and female. Because of this, results may not be as applicable to minorities and men with adverse childhood experiences. Future studies should address this limitation by opening up their sampling pool to participants outside of the emerging adulthood population and increasing not only racial diversity, but gender as well.

Similarly, given the mean age in the sample, it is possible that posttraumatic growth has not been fully experienced for everyone. Posttraumatic growth relies on getting over a traumatic experience and feeling that one has grown. In the current sample, only 21.5 percent of participants reported attending therapy in the past 6 months. Thus, it is quite possible that participants were using other ways to cope with traumatic experiences. Future research should examine other coping mechanism used by the emerging adulthood population, such as informal social supports (Zambianchi & Bitti, 2014). In addition, new measures that assess early stages of posttraumatic growth (i.e., measures that do not hinge on complete recovery from the traumatic experience) may be beneficial for the emerging adulthood population. In fact, it is possible that some emerging adults in this sample are still dealing with the adverse experiences, including emotional abuse or having a parent with mental illness. As such, posttraumatic growth may still be attainable. Alternatively, some of the ACEs that were measured (and prevalent in this sample) may not be as strongly associated with personal or post-traumatic growth as other forms of abuse or maltreatment, or emerging adults may not see these experiences as traumatic per se. The extent to which an experience is actually viewed as traumatic should be assessed in future research.

Despite the limitations noted above, the present study provided further information about the effects of adverse childhood experience, shame, and identity instability on depression and posttraumatic growth. To date, there is no known research that combines these predictors into a single model. The present study addressed further the need to identify the mechanism by which posttraumatic growth is experienced with the emerging adulthood population. Given the large number of emerging adults who have experienced at least one adverse childhood experience, the present study highlights the need to take these potentially traumatic experiences seriously. The

results of the current study could inform other researchers of the important of examining identity stability in the emerging adulthood and how exactly they cope with traumatic experiences in their lives. In addition, results of the present study support the need for future research to examine the mechanism by which components of the Self-regulation Shift Theory can explain the deviation or disruption that traumatic experiences can contribute to. Lastly, efforts should be made to develop a measure of posttraumatic growth that can be used with emerging adults, specifically. Developing a more complete understanding of posttraumatic growth as it relates to emerging adulthood – a period of immense change - will further facilitate psychologists' efforts to reduce the harmful impact of traumatic experiences and identify adaptive skills.

Μ	SD
2.21	2.15
2.80	.80
2.79	.61
5.32	1.30
5.71	.93
5.64	1.14
3.48	1.11
1.02	.64
60.03	22.43
19.82	8.60
13.63	6.47
12.82	5.02
4.95	3.51
8.95	3.95
	$\begin{array}{c} 2.21 \\ 2.80 \\ 2.79 \\ 5.32 \\ 5.71 \\ 5.64 \\ 3.48 \\ 1.02 \\ 60.03 \\ 19.82 \\ 13.63 \\ 12.82 \\ 4.95 \end{array}$

Table 1: Descriptive Statistics for all Self-Report Measures and Subscales

*Notes*. N = 218 participants.

Table 2	: Correlations Betwee	en ACE Tota	l Scores, Sha	me, and Self-e	esteem score	es	
Study	Variables	1.	2.	3.	4.	5.	
1.	ACES Total						
2.	SOSS Total	.16**					
3.	Shame-NSE	03	.24***				
4.	Shame-withdraw	.04	.17**	.21***			
5.	<b>RSES</b> Total	12	78***	29***	10		

\*\* Correlations significant at the 0.05 level

\*\*\* Correlations significant at the 0.01 level

- 1. ACEs total score as measured by the Adverse Childhood Experience measure
- 2. SOSS total identity instability as measured by the Sense of Self measure
- 3. Shame-NSE average negative self-evaluation shame score as measured by the Guilt and Shame Proneness measure
- 4. Shame-withdraw average withdraw shame score as measured by the Guilt and Shame Proneness measure
- 5. RSES total self-esteem score as measured by the Rosenberg Self-esteem measure

Table 3: Correlations Between Shame, Identity stability, and Self-esteem Scores

Study Variables	1.	2.	3.	4.
1. Shame-NSE				
2. Shame-withdraw	.21***			
3. SOSS Total	.24***	.17**		
4. RSES Total	29***	11	76***	

\*\* Correlations significant at the 0.05 level

\*\*\* Correlations significant at the 0.01 level

- 1. SOSS total identity instability as measured by the Sense of Self measure
- 2. Shame-NSE average negative self-evaluation shame score as measured by the Guilt and Shame Proneness measure
- 3. Shame-withdraw average withdraw shame score as measured by the Guilt and Shame Proneness measure
- 4. RSES total self-esteem scores as measured by the Rosenberg Self-esteem measure

Study Variables	1.	2.	3.	4.	5.	6.	7.
1. ACE Total							
2. SOSS Total	.16**						
3. Shame-NSE	03	.24***					
4. Shame-withdraw	.04	.17**	.21***				
5. RSES Total	12	76***	29***	10			
6. PH9 Total	.20***	.52***	.20***	.16**	62***		
7. PTGI Total	.06	22***	.04	.03	.38***	23***	

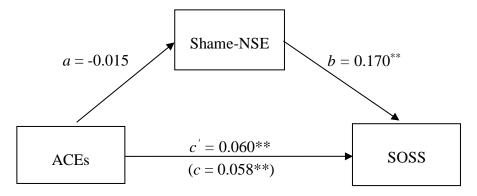
Table 4: Correlations Between ACE, SOSS, Shame, Self-esteem, Depression, and PTGI.

\*\* Correlations significant at the 0.05 level

\*\*\* Correlations significant at the 0.01 level

- 1. ACEs total score as measured by the Adverse Childhood Experience measure
- 2. SOSS total identity instability as measured by the Sense of Self measure
- 3. Shame-NSE average negative self-evaluation shame score as measured by the Guilt and Shame Proneness measure
- 4. Shame-withdraw average withdraw shame score as measured by the Guilt and Shame Proneness measure
- 5. RSES total self-esteem scores as measured by the Rosenberg Self-esteem measure
- 6. PH9 total depressive score as measured by the Patient Health Questionnaire
- 7. PTGI total posttraumatic growth score as measured by the Posttraumatic Growth Inventory

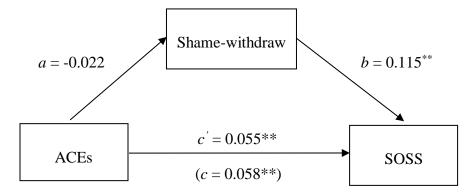
Figure 1: The mediating effect of shame-negative self-evaluation in the relationship between adverse childhood experiences and identity instability.



*Note:* \*\*p < .05, \*\*\*p < .01; All presented effects are unstandardized; a is effect of ACEs on Shame-NSE; b is effect of Shame-NSE on SOSS; c' is direct effect of ACEs on SOSS; c is total effect of ACEs on SOSS.

- 1. ACEs total score as measured by the Adverse Childhood Experience measure
- 2. SOSS total identity instability as measured by the Sense of Self measure
- 3. Shame-NSE average negative self-evaluation shame score as measured by the Guilt and Shame Proneness measure

Figure 2: The mediating effect of shame-withdraw in the relationship between adverse childhood experiences and identity instability.



*Note:* \*\*p < .05, \*\*\*p < .01; All presented effects are unstandardized; a is effect of ACEs on Shame-withdraw; b is effect of Shame-withdraw on SOSS; c' is direct effect of ACEs on SOSS; c is total effect of ACEs on SOSS.

- 1. ACEs total score as measured by the Adverse Childhood Experience measure
- 2. SOSS total identity instability as measured by the Sense of Self measure
- 3. Shame-withdraw average withdraw shame score as measured by the Guilt and Shame Proneness measure

						95% CI for <i>B</i>		Effect Size
	В	SE	β	t	p	Lower	Upper	r
ACEs	.04	.02	0.12	2.28	.02	0.01	0.06	.16
SOSS	.06	.07	0.07	0.84	.40	-0.08	0.19	.06
RSES	58	.09	-0.54	-6.60	.00	-0.74	-0.40	.41
Shame-NSE	.01	.03	0.02	0.28	.78	-0.05	0.07	.02
Shame-withdraw	.05	.03	0.08	1.48	.14	-0.02	0.11	.10

Table 5: Regression Analysis Predicting Depression from ACEs, SOSS, RSES, Shame-NSE, and Shame-Withdraw

*Note*: CI = confidence interval; SE = standard error

- 4. ACEs total score as measured by the Adverse Childhood Experience measure
- 5. SOSS total identity instability as measured by the Sense of Self measure
- 6. RSES total self-esteem score as measured by the Rosenberg Self-esteem measure
- 7. Shame-NSE average negative self-evaluation shame score as measured by the Guilt and Shame Proneness measure
- 8. Shame-withdraw average withdraw shame score as measured by the Guilt and Shame Proneness measure

						95% C	I for <i>B</i>	Effect Size
	В	SE	β	t	p	Lower	Upper	r
ACEs	1.17	.66	0.11	1.76	.08	-0.14	2.48	.12
SOSS	3.42	2.77	0.12	1.24	.22	-2.04	8.88	.09
RSES	19.34	3.62	0.53	5.34	.00	12.20	26.48	.35
Shame-NSE	3.02	1.31	0.15	2.30	.02	0.44	5.60	.16
Shame-withdraw	.50	1.32	0.03	0.38	.71	-2.11	3.11	.03

Table 6: Regression Analysis Predicting Posttraumatic Growth from ACEs, SOSS, RSES, Shame-NSE, and Shame-Withdraw

*Note*: CI = confidence interval; SE = standard error

- 1. ACEs total score as measured by the Adverse Childhood Experience measure
- 2. SOSS total identity instability as measured by the Sense of Self measure
- 3. RSES total self-esteem score as measured by the Rosenberg Self-esteem measure
- 4. Shame-NSE average negative self-evaluation shame score as measured by the Guilt and Shame Proneness measure
- 5. Shame-withdraw average withdraw shame score as measured by the Guilt and Shame Proneness measure

#### REFERENCES

- Aber, J. L., Brooks-Gunn, J., & Maynard, R. A. (1995). Effects of welfare reform on teenage parents and their children. *The Future of Children*, 5(2), 53–71. doi: 10.2307/1602357
- Anders, S.L., Fraizer, P.A., Shallcross, S.L. (2012). Prevalence and effects of life event exposure among undergraduate and community college students. *Journal of Counseling Psychology*, 59(3). doi:10.1037/a0027753
- Arnett, J. J. (2000). Emerging Adulthood: A theory of Development from the Late Teens Through the Twenties. *American Psychologist*, 55(5), 469-480. doi: 10.1037//0003-066X.55.5.469
- Asberg, K., & Renk, K. (2013). Comparing incarcerated and college student women with histories of childhood sexual abuse: The roles of abuse severity, support, and substance use. *Psychological Trauma: Theory, Research, Practice, and Policy*, 5(2), 167–175. doi: 10.1037/a0027162
- Bang, H. (2015). African American undergraduate students' wisdom and ego-identity development: Effects of age, gender, self-esteem, and resilience. *Journal of Black Psychology*, *41*(2), 95–120. doi: 10.1177/0095798413510176
- Benight, C.C., Shoji, K., & Delahanty, D. L. (2017). Self-regulation shift theory: A dynamic systems approach to traumatic stress. *Journal of Traumatic Stress*, 30(4), 333-342. doi: 10.1002/jts.22208
- Borja, S. E., Callahan, J. L., & Long, P. J. (2006). Positive and negative adjustment and social support of sexual assault survivors. *Journal Of Traumatic Stress*, 19(6), 905–914. doi: 10.1002/jts.20169

- Briere, J., & Jordan, C. E. (2009). Childhood maltreatment, intervening variables, and adult psychological difficulties in women: An overview. *Trauma, Violence, & Abuse, 10*(4), 375–388. doi: 10.1177/1524838009339757
- Browne, A., & Finkelhor, D. (1986). Impact of child sexual abuse: A review of the research. *Psychological Bulletin*, *99*(1), 66–77. doi: 10.1037/0033-2909.99.1.66
- Calhoun, L.G., & Tedeschi, R. G. (1999). Facilitating posttraumatic growth: A clinician's guide. Mahwah, NJ: Lawrence Eribaum Associates, Inc.
- Centers for Disease Control and Prevention (2016, June). About the CDC-Kaiser ACE study. Retrieved from https://www.cdc.gov/violenceprevention/acestudy/about.html
- Children's Bureau (2016, April). Definitions of child abuse and neglect. Retrieved from https://www.childwelfare.gov/pubPDFs/define.pdf
- Chiu, G. R., Lutfey, K. E., Litman, H. J., Link, C. L., Hall, S. A., & McKinlay, J. B. (2013).
  Prevalence and overlap of childhood and adult physical, sexual, and emotional abuse: A descriptive analysis of results from the boston area community health (BACH) survey. *Violence and Victims; New York*, 28(3), 381–402. doi: 10.1891/0886-6708.11-043
- Cohen, T. R., Wolf, S. T., Panter, A. T., & Insko, C. A. (2011). Introducing the GASP scale: A new measure of guilt and shame proneness. *Journal of Personality and Social Psychology*, 100(5), 947-966. doi: 10.1037/a0022641
- Collin-Vezina, D., Coleman, K., Milne, L., Sell, J., & Daigneault, I. (2011). Trauma experiences, maltreatment-related impairments, and resilience among child welfare youth in residential care. *International Journal of Mental Health and Addiction*, 9(5), 577–589. doi: 10.1007/s11469-011-9323-8

- Czub, T. (2013). Shame as a self-conscious emotion and its role in identity formation. *Polish Psychological Bulletin*, 44(3), 245–253. doi: 10.2478/ppb-2013-0028
- D'Andrea, W., Ford, J., Stolbach, B., Spinazzola, J., & van der Kolk, B. A. (2012). Understanding interpersonal trauma in children: Why we need a developmentally appropriate trauma diagnosis. *American Journal of Orthopsychiatry*, 82(2), 187– 200. https://doi.org/10.1111/j.1939-0025.2012.01154.x
- Davis, J. P., Dumas, T. M., & Roberts, B. W. (2018). Adverse childhood experiences and development in emerging adulthood. *Emerging Adulthood*, 6(4), 223-234.
- de Waal, M. M., Dekker, J. J. M., Kikkert, M. J., Kleinhesselink, M. D., & Goudriaan, A. E. (2017). Gender differences in characteristics of physical and sexual victimization in patients with dual diagnosis: A cross-sectional study. *BMC Psychiatry*, *17*. Retrieved from http://proxy195.nclive.org/login?url=https://search.ebscohost.com/login.aspx?direct =true&db=psyh&AN=2017-32612-001&site=ehost-live&scope=site
- Donnellan, M. B., Ackerman, R. A., & Brecheen, C. (2016). Extending structural analyses of the Rosenberg Self-Esteem Scale to consider criterion-related validity: Can composite selfesteem scores be good enough? *Journal of Personality Assessment*, 98(2), 169– 177. https://doi.org/10.1080/00223891.2015.1058268
- Donnellan, M. B., Trzesniewski, K. H., & Robins, R. W. (2011). Self-esteem: Enduring issues and controversies. In T. Chamorro-Premuzic, S. von Stumm, & A. Furnham (Eds.), *The Wiley-Blackwell handbooks of personality and individual differences. The Wiley-Blackwell handbook of individual differences* (pp. 718-746): Wiley-Blackwell.

- Dorahy, M. J., & Clearwater, K. (2012). Shame and guilt in men exposed to childhood sexual abuse: A qualitative investigation. *Journal of Child Sexual Abuse: Research, Treatment, & Program Innovations for Victims, Survivors, & Offenders, 21*(2), 155–175. doi: 10.1080/10538712.2012.659803
- Dube, S. R., Williamson, D. F., Thompson, T., Felitti, V. J., & Anda, R. F. (2004). Assessing the reliability of retrospective reports of adverse childhood experiences among adult HMO members attending a primary care clinic. *Child Abuse & Neglect*, 28(7), 729–737. https://doi.org/10.1016/j.chiabu.2003.08.009.
- Edwards, K. J., Hershberger, P. J., Russell, R. K., & Markert, R. J. (2001). Stress, negative social exchange, and health symptoms in university students. *Journal of American College Health*, 50(2), 75–79. doi: 10.1080/07448480109596010

Erikson, E. H. (1968). Identity: Youth and crisis. New York: Norton.

- Feiring, C., & Taska, L. S. (2005). The persistence of shame following sexual abuse: A longitudinal look at risk and recovery. *Child Maltreatment*, 10(4), 337–349. doi: 10.1177/1077559505276686
- Feiring, C. (2005). Emotional Development, Shame, and Adaptation to Child Maltreatment. *Child Maltreatment*, 10(4), 307-310. doi: 10.1177/1077559505281307
- Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., ...
  Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The adverse childhood experiences (ACE) study. *American Journal of Preventive Medicine*, *14*(4), 245–258. https://doi.org/10.1016/S0749-3797(98)00017-8
- Flury, J. M., & Ickes, W. (2007). Having a weak versus strong sense of self: The sense of self scale (SOSS). Self and Identity, 6(4), 281–303. doi:10.1080/15298860601033208

- Gershoff, E. T., & Grogan-Kaylor, A. (2016). Spanking and child outcomes: Old controversies and new meta-analyses. *Journal of Family Psychology*, 30(4), 453– 469. https://doi.org/10.1037/fam0000191
- Gershoff, E. T. (2002). Corporal punishment by parents and associated child behaviors and experiences: A meta-analytic and theoretical review. *Psychological Bulletin*, 128(4), 539–579. doi:10.1037//0033-2909.128.4.539
- Gobin, R. L., & Freyd, J. J. (2009). Betrayal and revictimization: Preliminary findings. *Psychological Trauma: Theory, Research, Practice, and Policy*, 1(3), 242– 257. https://doi.org/10.1037/a0017469
- Greger, H. K., Myhre, A. K., Klöckner, C. A., & Jozefiak, T. (2017). Childhood maltreatment, psychopathology and well-being: The mediator role of global self-esteem, attachment difficulties and substance use. *Child Abuse & Neglect*, 70, 122–133. doi: 10.1016/j.chiabu.2017.06.012
- Hardy, S. A., Francis, S. W., Zamboanga, B. L., Kim, S. Y., Anderson, S. G., & Forthun, L. F. (2013). The roles of identity formation and moral identity in college student mental health, health-risk behaviors, and psychological well-being. *Journal of Clinical Psychology*, 69(4), 364–382. https://doi.org/10.1002/jclp.21913
- Hartley, S., Johnco, C., Hofmeyr, M., & Berry, A. (2016). The nature of posttraumatic growth in adult survivors of child sexual abuse. *Journal of Child Sexual Abuse: Research, Treatment, & Program Innovations for Victims, Survivors, & Offenders, 25*(2), 201–220. https://doi.org/10.1080/10538712.2015.1119773
- Hassija, C. M., & Turchik, J. A. (2016). An examination of disclosure, mental health treatment use, and posttraumatic growth among college women who experienced sexual

victimization. Journal of Loss and Trauma, 21(2), 124-136. doi:

10.1080/15325024.2015.1011976

- Hayes, A. F. (2017). Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach. New York: Guilford Press.
- Hearn, J. (2011). Unmet needs in addressing child neglect: Should we go back to the drawing board? *Children and Youth Services Review*, *33*(5), 715–

722. doi:10.1016/j.childyouth.2010.11.011

- Hélie, S., & Bouchard, C. (2010). Recurrent reporting of child maltreatment: State of knowledge and avenues for research. *Children and Youth Services Review*, 32(3), 416–422. https://doi.org/10.1016/j.childyouth.2009.10.013
- Jones, L. M., Finkelhor, D., & Halter, S. (2006). Child maltreatment trends in the 1990s: Why does neglect differ from sexual and physical abuse? *Child Maltreatment*, 11(2), 107– 120. https://doi.org/10.1177/1077559505284375
- Jonson-Reid, M., Drake, B., & Kohl, P. L. (2009). Is the overrepresentation of the poor in child welfare caseloads due to bias or need? *Children and Youth Services Review*, 31(3), 422– 427. https://doi.org/10.1016/j.childyouth.2008.09.009
- Kaufman, G. (1974). The meaning of shame: Toward a self-affirming identity. *Journal of Counseling Psychology*, *21*(6), 568-574. doi: 10.1037/h0037251
- Kellogg, N. D. (2014). Working with Child Protective Services and Law Enforcement: What to Expect. *Pediatric Clinics of North America*, 61(5), 1037– 1047. https://doi.org/10.1016/j.pcl.2014.06.013

- Keum, B. T., Miller, M. J., & Inkelas, K. K. (2018). Testing the factor structure and measurement invariance of the PHQ-9 across racially diverse U.S. college students. *Psychological Assessment*. https://doi.org/10.1037/pas0000550
- Krayer, A., Seddon, D., Robinson, C. A., & Gwilym, H. (2015). The influence of child sexual abuse on the self from adult narrative perspectives. *Journal of Child Sexual Abuse: Research, Treatment, & Program Innovations for Victims, Survivors, & Offenders, 24*(2), 135–151. https://doi.org/10.1080/10538712.2015.1001473
- Kroenke, K., Spitzer, R. L., & Williams, J. B. W. (2001). The PHQ-9. *Journal of General Internal Medicine*, *16*(9), 606–613. doi: 10.1046/j.1525-1497.2001.016009606.x
- Kroger, J., & Marcia, J.E. (2011). The Identity Statuses: Origins, Meanings, and Interpretations. *Handbook of Identity Theory and Research*, 31-53. doi: 10.1007/978-1-4419-7988-9\_2
- Krug, E. G., Dahlberg, L. L., Mercy, J. A., Zwi, A., Lozano, R. (2002). World report on violence and health. Geneva: World Health Organization. Retrieved from http://apps.who.int/iris/bitstream/10665/42495/1/9241545615\_eng.pdf
- Kunst, M. J. J., Winkel, F. W., & Bogaerts, S. (2010). Posttraumatic growth moderates the association between violent revictimization and persisting PTSD symptoms in victims of interpersonal violence: A six-month follow-up study. *Journal of Social and Clinical Psychology*, 29(5), 527–545. doi:10.1521/jscp.2010.29.5.527
- Lansford, J. E., Dodge, K. A., Pettit, G. S., & Bates, J. E. (2010). Does Physical Abuse in Early Childhood Predict Substance Use in Adolescence and Early Adulthood? *Child Maltreatment*, 15(2), 190–194. https://doi.org/10.1177/1077559509352359

- Lee, M.-A. (2015). Emotional abuse in childhood and suicidality: The mediating roles of revictimization and depressive symptoms in adulthood. *Child Abuse & Neglect*, 44, 130– 139. https://doi.org/10.1016/j.chiabu.2015.03.016
- Maples, L. A., Park, S. S., Nolen, J. P., & Rosén, L. A. (2014). Resilience to childhood abuse and neglect in college students. *Journal of Aggression, Maltreatment & Trauma*, 23(10), 1001–1019. https://doi.org/10.1080/10926771.2014.964435
- Marcia, J. E. (1966). Development and validation of ego-identity status. *Journal of Personality* and Social Psychology, 3(5), 551-558. http://dx.doi.org/10.1037/h0023281
- Manooglan, M. M., Vandenbroeke, J., Ringering, A., Toray, T., & Cooley, E. (2018). Emerging adults' experiences of grandparent death. *Omega: Journal of Death and Dying*, 76(4), 351-372. doi: 10.1177/0030222817693140
- Merians, A. N., Baker, M. R., Frazier, P., & Lust, K. (2018). Outcomes related to adverse childhood experiences in college students: Comparing latent class analysis and cumulative risk. *Child Abuse & Neglect*, 87, 51-64. https://doi.org/10.1016/j.chiabu.2018.07.020
- Merrick, M. T., Ports, K. A., Ford, D. C., Afifi, T. O., Gershoff, E. T., & Grogan-Kaylor, A. (2017). Unpacking the impact of adverse childhood experiences on adult mental health. *Child Abuse & Neglect*, *69*, 10–19. https://doi.org/10.1016/j.chiabu.2017.03.016
- Mc Elroy, S., & Hevey, D. (2014). Relationship between adverse early experiences, stressors, psychosocial resources and wellbeing. *Child Abuse & Neglect*, 38(1), 65-75. doi: 10.1002/smi.2761

- McDonnell, C. G., & Valentino, K. (2016). Intergenerational effects of childhood trauma: Evaluating pathways among maternal ACEs, perinatal depressive symptoms, and infant outcomes. *Child Maltreatment*, 21(4), 317–326. doi: 10.1177/1077559516659556
- Mennen, F. E., Kim, K., Sang, J., & Trickett, P. K. (2010). Child neglect: Definition and identification of youth's experiences in official reports of maltreatment. *Child Abuse & Neglect*, 34(9), 647–658. https://doi.org/10.1016/j.chiabu.2010.02.007
- Mills, R. S. L. (2005). Taking stock of the developmental literature on shame. *Developmental Review*, 25, 26–63. doi:10.1016/j.dr.2004. 08.001
- Miranda, R., Polanco-Roman, L., Tsypes, A., & Valderrama, J. (2013). Perceived discrimination, ruminative subtypes, and risk for depressive symptoms in emerging adulthood. *Cultural Diversity and Ethnic Minority Psychology*, *19*(4), 395–403. doi: 10.1037/a0033504
- Moreno-Manso, J. M., García-Baamonde, M. E., Guerrero-Barona, E., Blázquez-Alonso, M.,
  Pozueco-Romero, J. M., & Godoy-Merino, M. J. (2017). Psychosocial adaptation of
  young victims of physical neglect. *Child Abuse Review*, 26(5), 364–
  374. https://doi.org/10.1002/car.2428
- Muris, P., & Meesters, C. (2014). Small or big in the eyes of the other: On the developmental psychopathology of self-conscious emotions as shame, guilt, and pride. *Clinical Child and Family Psychology Review*, *17*, 19–40. doi:10.1007/s10567-013-0137-z
- Murphy, A., Steele, M., Dube, S. R., Bate, J., Bonuck, K., Meissner, P., ... Steele, H. (2014).
  Adverse childhood experiences (ACEs) questionnaire and adult attachment interview
  (AAI): Implications for parent child relationships. *Child Abuse & Neglect*, *38*(2), 224–233. https://doi.org/10.1016/j.chiabu.2013.09.004

- Nanni, V., Uher, R., & Danese, A. (2012). Childhood Maltreatment Predicts Unfavorable Course of Illness and Treatment Outcome in Depression: A Meta-Analysis. *The American Journal of Psychiatry; Washington*, 169(2), 141–51.
- Nelson, J., Klumparendt, A., Doebler, P., Ehring, T. (2017). Childhood maltreatment and characteristics of adult depression: meta-analysis. *The British Journal of Psychiatry*, 201, 96-104. doi: 10.1192/bjp.bp.115.180752
- Negriff, S., Schneiderman, J. U., Smith, C., Schreyer, J. K., & Trickett, P. K. (2014).
  Characterizing the sexual abuse experiences of young adolescents. *Child Abuse & Neglect*, 38, 261–270. http://dx.doi.org/10.1016/j.chiabu.2013.08.021
- Norman, R. E., Byambaa, M., De, R., Butchart, A., Scott, J., & Vos, T. (2012). The Long-Term Health Consequences of Child Physical Abuse, Emotional Abuse, and Neglect: A Systematic Review and Meta-Analysis. *PLOS Medicine*, 9(11), e1001349. https://doi.org/10.1371/journal.pmed.1001349
- O'Leary, P., Easton, S. D., & Gould, N. (2017). The effect of child sexual abuse on men: Toward a male sensitive measure. *Journal of Interpersonal Violence*, *32*(3), 423–445. https://doi.org/10.1177/0886260515586362
- Payne, J. S., Galvan, F. H., Williams, J. K., Prusinski, M., Zhang, M., Wyatt, G. E., & Myers, H.
  F. (2014). Impact of childhood sexual abuse on the emotions and behaviours of adult men from three ethnic groups in the USA. *Culture, Health & Sexuality*, *16*(3), 231–245. https://doi-org.proxy195.nclive.org/10.1080/13691058.2013.867074
- Portwood, S. G. (1999). Coming to terms with a consensual definition of child maltreatment. *Child Maltreatment*, 4(1), 56-68. https://doi.org/10.1177/1077559599004001006

- Provencio-Vasquez, E., Mata, H. J., Tomaka, J., & De Santis, J. P. (2017). Depression, selfesteem, and childhood abuse among Hispanic men residing in the U.S.-Mexico border region. JANAC: Journal of the Association of Nurses in AIDS Care, 28(5), 795–806. http://dx.doi.org/10.1016/j.jana.2017.05.002
- Rosenthal, R., & Rosnow, R. L. (2007). Essentials of behavioral research: Methods and data analysis (3<sup>rd</sup> ed.). New York: McGraw-Hill.
- Rosenberg, M. (1965). Society and the adolescent self-image. Princeton, NJ: Princeton University Press.
- Scarpa, A., Haden, S. C., & Abercromby, J. M. (2010). Pathways linking child physical abuse, depression, and aggressiveness across genders. *Journal of Aggression, Maltreatment and Trauma*, 19(7), 757–776. https://doi.org/10.1080/10926771.2010.515167
- Schwartz, S. J., Côté, J. E., & Arnett, J. J. (2005). Identity and agency in emerging adulthood:
  Two developmental routes in the individualization process. *Youth and Society*, *37*(2), 201-229.
- Shen, A. C.-T. (2009). Self-esteem of young adults experiencing interparental violence and child physical maltreatment: Parental and peer relationships as mediators. *Journal of Interpersonal Violence*, 24(5), 770–794. https://doi.org/10.1177/0886260508317188
- Shevlin, M., Murphy, S., Elklit, A., Murphy, J., & Hyland, P. (2017). Typologies of Child Sexual Abuse: An Analysis of Multiple Abuse Acts Among a Large Sample of Danish Treatment-Seeking Survivors of Childhood Sexual Abuse. *Psychological Trauma: Theory, Research, Practice, and Policy*, 1-7. http://dx.doi.org/10.1037/tra0000268

- Shin, S. H., Lee, S., Jeon, S.-M., & Wills, T. A. (2015). Childhood emotional abuse, negative emotion-driven impulsivity, and alcohol use in young adulthood. *Child Abuse & Neglect*, 50, 94–103. https://doi.org/10.1016/j.chiabu.2015.02.010
- Stoltenborgh, M., van Ijzendoorn, M. H., Euser, E. M., & Bakermans-Kranenburg, M. J. (2011).
  A Global Perspective on Child Sexual Abuse: Meta-Analysis of Prevalence Around the
  World. *Child Maltreatment*, *16*(2), 79-101. doi: 10.1177/1077559511403920
- Straub, K. T., McConnell, A. A., & Messman-Moore, T. L. (2018). Internalized heterosexism and posttraumatic stress disorder symptoms: The mediating role of shame proneness among trauma-exposed sexual minority women. *Psychology of Sexual Orientation and Gender Diversity*, 5(1), 99–108. https://doi.org/10.1037/sgd0000263
- Straus, M. A., & Yodanis, C. L. (1996). Corporal punishment in adolescence and physical assaults on spouses in later life: What accounts for the link? *Journal of Marriage and the Family*, 58(4), 825–841. https://doi.org/10.2307/353973
- Tabachnick, B. G., & Fidell, L. S. (1996). Using Multivariate Statistics (3rd ed.). New York:Harper Collins College Publishers
- Tedeschi, R. G., & Calhoun, L. G. (2004). Target Article: "Posttraumatic Growth: Conceptual Foundations and Empirical Evidence." *Psychological Inquiry*, 15(1), 1– 18. https://doi.org/10.1207/s15327965pli1501\_01
- Tedeschi, R.G., & Calhoun, L. G. (1996). The Posttraumatic Growth Inventory: Measuring the Positive Legacy of Trauma. *Journal of Traumatic Stress*, 9(3), 455-471. doi: 10.1002/jts.2490090305

- Teicher, M. H., Anderson, C. M., & Polcari, A. (2011). Childhood maltreatment is associated with reduced volume in the hippocampal subfields CA3, dentate gyrus, and subiculum. *PNAS*, 109(9), 563-572. https://doi.org/10.1073/pnas.1115396109
- Ullman, S. E., & Sigurvinsdottir, R. (2015). Intimate partner violence and drinking among victims of adult sexual assault. *Journal of Aggression, Maltreatment & Trauma*, 24(2), 117–130. https://doi.org/10.1080/10926771.2015.996312
- Ulloa, E., Guzman, M. L., Salazar, M., & Cala, C. (2016). Posttraumatic growth and sexual violence: A literature review. *Journal of Aggression, Maltreatment & Trauma*, 25(3), 286–304. https://doi.org/10.1080/10926771.2015.1079286
- Wald, M. S. (2015). Beyond CPS: Developing an effective system for helping children in "neglectful" families: Policymakers have failed to address the neglect of neglect. *Child Abuse & Neglect*, 41, 49–66. https://doi.org/10.1016/j.chiabu.2015.01.010
- Waldfogel, J., Craigie, T.-A., & Brooks-Gunn, J. (2010). Fragile families and child wellbeing. *The Future of Children*, 20(2), 87–112. https://doi.org/10.1353/foc.2010.0002
- Wildeman, C., Emanuel, N., Leventhal, J.M., Putnam-Hornstein, E., Waldfogel, J., & Lee, H.(2014). The prevalence of confirmed maltreatment among US children, 2004 to 2011.*JAMA Pediatrics*, 168(8), 706-13.

Witt, A., Münzer, A., Ganser, H. G., Fegert, J. M., Goldbeck, L., & Plener, P. L. (2016).
Experience by children and adolescents of more than one type of maltreatment:
Association of different classes of maltreatment profiles with clinical outcome
variables. *Child Abuse & Neglect*, 57, 1–11. https://doi.org/10.1016/j.chiabu.2016.05.001

World Health Organization (2016, September). *Child maltreatment fact sheet*. Retrieved from http://www.who.int/mediacentre/factsheets/fs150/en/

- Yeater, E., Miller, G., Rinehart, J., & Nason, E. (2012). Trauma and sex surveys meet minimal risk standards: implications for institutional review boards. *Psychological Science*, 23(7), 780–787. https://doi.org/10.1177/0956797611435131
- Young, T. L., Riggs, M., & Robinson, J. L. (2011). Childhood sexual abuse severity reconsidered: A factor structure of CSA characteristics. *Journal of Child Sexual Abuse: Research, Treatment, & Program Innovations for Victims, Survivors, & Offenders, 20*(4), 373–395. https://doi.org/10.1080/10538712.2011.590124
- Zambianchi, M., & Bitti, P. E. R. (2014). The role of proactive coping strategies, time perspective, perceived efficacy on affect regulation, divergent thinking and family communication in promoting social well-being in emerging adulthood. *Social Indicators* Research, 116(2), 493-507. doi: 10.1007/s11205-013-0307-x

# APPENDIX A

# Demographic Information Sheet

Please complete the following information about yourself:

Age:

Sex (your "biological sex" assigned at birth)

\_\_\_\_\_ Male (0)

\_\_\_\_\_ Female (1)

\_\_\_\_\_ Other (2)

Ethnicity (choose one that apply):

\_\_\_\_ Caucasian (0)

\_\_\_\_\_ African-American (1)

\_\_\_\_\_ Hispanic-American (2)

\_\_\_\_\_ Asian-American (3)

\_\_\_\_\_ Other (please specify): \_\_\_\_\_\_ (4)

Please indicate your highest level of education obtained:

\_\_\_\_\_ High School Diploma or GED (0)

\_\_\_\_ Bachelor's degree (1)

\_\_\_\_ Master's degree (2)

Are you currently attending counseling or therapy or have you attended counseling in the past 6 months?

\_\_\_\_\_Yes (0)

\_\_\_\_\_ No (1)

# APPENDIX B

# Adverse Childhood Experience (ACE) Questionnaire

# While you were growing up, during your first 18 years of life:

1. Did a parent or other adult in the household often ...

Swear at you, insult you, put you down, or humiliate you?

OR

Act in a way that made you afraid that you might be physically hurt?

Yes No If yes, enter 1

2. Did a parent or other adult in the household often ...

Push, grab, slap, or throw something at you?

OR

Ever hit you so hard that you had marks or were injured?

Yes No If yes, enter 1

3. Did an adult or person at least 5 years older than you ever ...

Touch or fondle you or have you touch their body in a sexual way?

OR

Try to or actually have oral, anal, or vaginal sex with you?

Yes No If yes, enter 1

<sup>4.</sup> Did you often feel that ...

No one in your family loved you or thought you were important or special?

# OR

Your family didn't look out for each other, feel close to each other, or support each other?

Yes No If yes, enter 1

5. Did you often feel that ...

You didn't have enough to eat, had to wear dirty clothes, and had no one to protect you?

## OR

Your parents were too drunk or high to take care of you or take you to the doctor if you needed it?

Yes No

If yes, enter 1

6. Were your parents ever separated or divorced?

Yes No

If yes, enter 1 \_\_\_\_\_

7. Was your mother or stepmother:

Often pushed, grabbed, slapped, or had something thrown at her?

## OR

Sometimes or often kicked, bitten, hit with a fist, or hit with something hard?

OR

Ever repeatedly hit over at least a few minutes or threatened with a gun or knife?

If yes, enter 1

8. Did you live with anyone who was a problem drinker or alcoholic or who used street drugs?

Yes No

Yes

If yes, enter 1 \_\_\_\_\_

9. Was a household member depressed or mentally ill or did a household member attempt suicide?

Yes No

If yes, enter 1 \_\_\_\_\_

10. Did a household member go to prison?

Yes No

If yes, enter 1 \_\_\_\_\_

### APPENDIX C

### Sense of Self Scale

Below are a number of statements concerning your personal attitudes and characteristics. Please read each statement and consider the extent to which you agree or disagree with it. Then respond to the statement as accurately as possible by using the following scale to indicate how much you agree with it.

- 1 strongly disagree
   2 disagree somewhat
   3- neither agree nor disagree
   4 agree somewhat
   5 strongly agree
- 1. I wish I were more consistent in my feelings.
- 2. It's hard for me to figure out my own personality, interests, and opinions.
- 3. I often think how fragile my existence is.
- 4. I have a pretty good sense of what my long-term goals are in life. \_\_\_\_(R)
- 5. I sometimes wonder if people can actually see me.
- 6. Other people's thoughts and feelings seem to carry greater weight than my own.
- 7. I have a clear and definite sense of who I am and what I'm all about. \_\_\_\_\_(R)
- 8. It bothers me that my personality doesn't seem to be well defined.
- 9. I'm not sure that I can understand or put much trust in my thoughts and feelings.
- 10. Who am I? is a question that I ask myself a lot.

- 11. I need other people to help me understand what I think or how I feel.
- 12. I tend to be very sure of myself and stick to my own preferences even when the group I am

with expresses different preferences. \_\_\_\_\_ (R)

# SOSS SCORING:

Lack of understanding of oneself: 2, 4, 7, 8, 9, 10

Sudden shifts in feelings, opinions, and values: 1

Tendency to confuse one's feelings, thoughts, and perspectives with those of others: 9, 12

Feeling of a tenuous existence: 3, 5, 6

### APPENDIX D

### Guilt and Shame Proneness Scale

*Instructions*: In this questionnaire you will read about situations that people are likely to encounter in day-to-day life, followed by common reactions to those situations. As you read each scenario, try to imagine yourself in that situation. Then indicate the likelihood that you would react in the way described.

<u>1</u>	2	<u>3</u>	4	<u>5</u>	<u>6</u>	<u>7</u>
<u>Very</u>	<u>Unlikely</u>	<u>Slightly</u>	About 50%	<u>Slightly</u>	<u>Likely</u>	Very Likely
<u>Unlikely</u>		<u>Unlikely</u>	<u>Likely</u>	<u>Likely</u>		

<u>1.</u> After realizing you have received too much change at a store, you decide to keep it because the salesclerk doesn't notice. What is the likelihood that you would feel uncomfortable about keeping the money?

<u>2.</u> You are privately informed that you are the only one in your group that did not make the honor society because you skipped too many days of school. What is the likelihood that this would lead you to become more responsible about attending school?

<u>3.</u> You rip an article out of a journal in the library and take it with you. Your teacher discovers what you did and tells the librarian and your entire class. What is the likelihood that this would make you would feel like a bad person?

<u>4.</u> After making a big mistake on an important project at work in which people were depending on you, your boss criticizes you in front of your coworkers. What is the likelihood that you would feign sickness and leave work?

<u>5.</u> You reveal a friend's secret, though your friend never finds out. What is the likelihood that your failure to keep the secret would lead you to exert extra effort to keep secrets in the future?

<u>6.</u> You give a bad presentation at work. Afterwards your boss tells your coworkers it was your fault that your company lost the contract. What is the likelihood that you would feel incompetent?

<u>7.</u> A friend tells you that you boast a great deal. What is the likelihood that you would stop spending time with that friend?

8. Your home is very messy and unexpected guests knock on your door and invite themselves in. What is the likelihood that you would avoid the guests until they leave?

<u>9.</u> You secretly commit a felony. What is the likelihood that you would feel remorse about breaking the law?

<u>10.</u> You successfully exaggerate your damages in a lawsuit. Months later, your lies are discovered, and you are charged with perjury. What is the likelihood that you would think you are a despicable human being?

\_\_\_\_\_\_11. You strongly defend a point of view in a discussion, and though nobody was aware of it, you realize that you were wrong. What is the likelihood that this would make you think more carefully before you speak?

<u>12.</u> You take office supplies home for personal use and are caught by your boss. What is the likelihood that this would lead you to quit your job?

<u>13.</u> You make a mistake at work and find out a coworker is blamed for the error. Later, your coworker confronts you about your mistake. What is the likelihood that you would feel like a coward?

<u>14.</u> At a coworker's housewarming party, you spill red wine on their new creamcolored carpet. You cover the stain with a chair so that nobody notices your mess. What is the likelihood that you would feel that the way you acted was pathetic?

<u>15.</u> While discussing a heated subject with friends, you suddenly realize you are shouting though nobody seems to notice. What is the likelihood that you would try to act more considerately toward your friends?

<u>16.</u> You lie to people but they never find out about it. What is the likelihood that you would feel terrible about the lies you told?

GASP SCORING: The GASP is scored by averaging the four items in each subscale.

Guilt–Negative-Behavior-Evaluation (NBE): 1, 9, 14, 16

Guilt–Repair: 2, 5, 11, 15

Shame–Negative-Self-Evaluation (NSE): 3, 6, 10, 13

*Shame–Withdraw*: 4, 7, 8, 12

## APPENDIX E

### Rosenberg Self-Esteem Scale

Instructions: Below is a list of statements dealing with your general feelings about yourself. Please indicate how strongly you agree or disagree with each statement. 1. On the whole, I am satisfied with myself. Strongly Agree Disagree Agree Strongly Disagree 2. At times I think I am no good at all. Strongly Agree Agree Disagree Strongly Disagree 3. I feel that I have a number of good qualities. Strongly Agree Agree Disagree Strongly Disagree 4. I am able to do things as well as most other people. Disagree Strongly Agree Agree Strongly Disagree 5. I feel I do not have much to be proud of. Strongly Agree Agree Disagree Strongly Disagree 6. I certainly feel useless at times. Strongly Agree Agree Disagree Strongly Disagree

7. I feel that I'm a person of worth, at least on an equal plane with others. Strongly Agree Agree Disagree Strongly Disagree 8. I wish I could have more respect for myself. Strongly Agree Agree Disagree Strongly Disagree 9. All in all, I am inclined to feel that I am a failure. Strongly Agree Agree Disagree Strongly Disagree 10. I take a positive attitude toward myself. Strongly Agree Disagree Agree Strongly Disagree Scoring: Items 2, 5, 6, 8, 9 are reverse scored. Give "Strongly Disagree" 1 point, "Disagree" 2 points,

"Agree" 3 points, and "Strongly Agree" 4 points. Sum scores for all ten items. Keep scores on a continuous scale. Higher scores indicate higher self-esteem.

# APPENDIX F

# Patient Health Questionnaire (PHQ-9)

Over the last 2 weeks, how often have you been bothered by any of the following problems?

		Not at all	Several days	More than half the days	Nearly every day
1.	Little interest or pleasure in doing things	0	1	2	3
2.	Feeling down, depressed, or hopeless	0	1	2	3
3.	Trouble falling or staying asleep, or sleeping too much	0	1	2	3
4.	Feeling tired or having little energy	0	1	2	3
5.	Poor appetite or overeating	0	1	2	3
6.	Feeling bad about yourself-or that you are a failure or have let yourself or your family down	0	1	2	3
7.	Trouble concentrating on things, such as reading the newspaper or watching tv.	0	1	2	3
8.	Moving or speaking so slowly that other people could have noticed. Or the opposite- being so fidgety or restless that you have been moving around a lot more than usual	0	1	2	3
9.	Thoughts that you would be better off dead, or of hurting yourself.	0	1	2	3

# APPENDIX G

# Post Traumatic Growth Inventory

Indicate for each of the statements below the degree to which this change occurred in your life as a result of the crisis/disaster, using the following scale.

0 = I did not experience this change as a result of my crisis.

1 = I experienced this change to a very small degree as a result of my crisis.

2 = I experienced this change to a small degree as a result of my crisis.

3 = I experienced this change to a moderate degree as a result of my crisis.

4 = I experienced this change to a great degree as a result of my crisis.

5 = I experienced this change to a very great degree as a result of my crisis.

Possible Areas of Growth and Change	0	1	2	3	4	5
1. I changed my priorities about what is important in life.						
2. I have a greater appreciation for the value of my own life.						
3. I developed new interests.						
4. I have a greater feeling of self-reliance.						
5. I have a better understanding of spiritual matters.						
6. I more clearly see that I can count on people in times of trouble.						
7. I established a new path for my life.						
8. I have a greater sense of closeness with others.						
9. I am more willing to express my emotions.						
10. I know better that I can handle difficulties.						

11. I am able to do better things with my life.			
12. I am better able to accept the way things work out.			
13. I can better appreciate each day.			
14. New opportunities are available which wouldn't have been otherwise.			
15. I have more compassion for others.			
16. I put more effort into my relationships.			
17. I am more likely to try to change things which need changing.			
18. I have a stronger religious faith.			
19. I discovered that I'm stronger than I thought I was.			
20. I learned a great deal about how wonderful people are.			
21. I better accept needing others.			
		•	

### APPENDIX H

### Post Traumatic Growth Inventory Scoring

The Post Traumatic Growth Inventory (PTGI) is scored by adding all the responses. Individual factors are scored by adding responses to items on each factor. Factors are indicated by the Roman numerals after each item below. Items to which factors belong are not listed on the form administered to clients.

### **PTGI Factors**

Factor I: Relating to Others

Factor II: New Possibilities

Factor III: Personal Strength

Factor IV: Spiritual Change

Factor V: Appreciation of Life

- 1. I changed my priorities about what is important in life. (V)
- 2. I have a greater appreciation for the value of my own life. (V)
- 3. I developed new interests. (II)
- 4. I have a greater feeling of self-reliance. (III)
- 5. I have a better understanding of spiritual matters. (IV)
- 6. I more clearly see that I can count on people in times of trouble. (I)
- 7. I established a new path for my life. (II)
- 8. I have a greater sense of closeness with others. (I)
- 9. I am more willing to express my emotions. (I)
- 10. I know better that I can handle difficulties. (III)

- 11. I am able to do better things with my life. (II)
- 12. I am better able to accept the way things work out. (Ill)
- 13. I can better appreciate each day. (V)
- 14. New opportunities are available which wouldn't have been otherwise. (II)
- 15. I have more compassion for others. (I)
- 16. I put more effort into my relationships. (I)
- 17. I am more likely to try to change things which need changing. (II)
- 18. I have a stronger religious faith. (IV)
- 19. I discovered that I'm stronger than I thought I was. (III)
- 20. I learned a great deal about how wonderful people are. (I)
- 21. I better accept needing others. (I)