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Posttraumatic Growth in Female Sexual Assault Survivors

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I am submitting herewith a dissertation written by Jessica Renee Mason entitled "Posttraumatic Growth in Female Sexual Assault Survivors." I have examined the final electronic copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Psychology.

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Posttraumatic Growth in Female Sexual Assault Survivors

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DEDICATION

This dissertation is dedicated to all survivors of sexual assault and the participants who took the time to open up and share their experiences with others.

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I would like to thank my advisor, Brent Mallinckrodt, for his mentorship and support over the few years. I would also like to thank my committee for their valuable input and guidance in this process. I would like to thank my research team members, Christy Beck, Shivani Goyal, and Crystal Wilson for all of their hard work and dedication to the study and helping to make it become a reality. I would also like to thank all of the sites that helped me with recruiting and allowing me to recruit from their agencies. Last, but certainly not least, I would like to thank my parents, family, and friends for always believing in me, being there to support me through this process, and helping to keep me sane.

ABSTRACT

This study examined factors associated with the development of posttraumatic growth following sexual assault in 11 female survivors, six months to five years after the assault. To broaden our understanding of how survivors cope with the effects and impacts of their assault and how this ultimately leads to the development of posttraumatic growth, this study used grounded theory methodology to develop a causal model of how growth can occur following sexual assault. A mixed-methods qualitative study (utilizing some quantitative features) was used. The data analysis team concluded that participants described a process consisting of four super-clusters that subsumes nine major domains. The four super-clusters were: *Preexisting Traits, Responses or Impact from Assault, Coping Strategies, and Growth and Outcomes*. Within those super-clusters the nine major domains were: (a) *Traits Prior to Sexual Assault*, (b) *Negative Affective Responses*, (c) *Symptom Reactions*, (d) *Negative Relationship Impact*, (e) *Negative Coping Strategies*, (f) *Adaptive Coping Strategies*, (g) *Seeking Support*, (h) *Positive Personal Growth*, and (i) *Increasing Knowledge and Speaking Out*. Based on our model of posttraumatic growth development and quantitative analyses, sexual assault survivors appear to rely more on avoidance coping or maladaptive coping strategies immediately following their assault and then tend to turn to more approach coping or adaptive coping strategies. Most participants also described seeking social support as an important domain for making positive changes or developing growth in their lives, except those who described preexisting traits that tended to prevent them from opening up to others (i.e., introversion) or those who were treated negatively by others after their assault (e.g., others responded with disbelief or judgment). All participants reported some growth and/or positive changes as a result of coping with their assault. Implications for research on posttraumatic growth and sexual assault and treatment

considerations based on these findings are discussed.

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CHAPTER I
INTRODUCTION

Sexual assault is a major problem in the United States and has become one of the most common violent crimes that occurs on college campuses (The Higher Education Center, 2011). Although sexual assault is prevalent nationwide, women on college campuses are even more at risk of becoming victims of sexual assault. It is speculated that this is due to the close daily interaction that occurs between males and females in a variety of social situations on college campuses. National epidemiological research suggests that one in six women will be sexually assaulted at some point in their lifetime (Rape, Abuse, & Incest National Network [RAINN], 2009). Other estimates of lifetime incidence suggest that one in four women have been victims of sexual assault (Fisher, Cullen, & Turner, 2000), and that half of all college women experience some type of sexual victimization (White, Donat, & Bondurant, 2001).

Effects of Sexual Assault

The effects of sexual assault for many victims can be devastating and long lasting, and the response can vary depending on the victim. Research has found that being the victim of sexual assault appears to have more impact on the victim than other attempted or completed crimes because it ultimately leads to more severe post-assault symptoms and mental health problems (Kilpatrick et al., 1985). The response from a victim of sexual assault can vary, and often includes emotional, psychological, and physical symptoms. Previous research has focused on the link between sexual assault and the negative responses or effects that may result, such as Post-Traumatic Stress Disorder (PTSD). Research suggests that about 12 million American women suffer from PTSD at some point in their lives due to sexual assault, which means that the majority of all persons with PTSD in the United States are female sexual assault survivors

(Rothbaum, Astin, & Marsteller, 2005; Steketee & Foa, 1987). [A note on terminology: In this paper, the term *survivor* is used to emphasize the coping processes of people who have experienced sexual assault. However, when referring to the relatively immediate effects of sexual assault the term *victim* will be used.]

In addition to PTSD symptoms, some of the most prominent and persistent post-sexual assault reactions are often intense fears of associated situations and general diffused anxiety (Steketee & Foa, 1987). Other emotional and psychological experiences of sexual assault victims may include shock, humiliation, depression, increased substance abuse, loss of self-esteem, distrust of others, social isolation, hostility, fear of sexually transmitted diseases, guilt, self-blame, fear of sex or other sexual dysfunctions, poor concentration, intrusive thoughts, and obsessive-compulsive symptoms (RAINN, 2009; Steketee & Foa, 1987; Yeater & O'Donohue, 1999). Sexual assault victims are more likely than victims of other crimes to attempt suicide, with estimates of one in five victims of sexual assault subsequently attempting suicide (Kilpatrick et al., 1985; Steketee & Foa, 1987). Sexual assault victims are also more likely to experience higher levels of cocaine use, heavy smoking, high risk drinking, drinking and driving, suicidal ideation, disordered eating, and self-injurious behavior (RAINN, 2009; Silverman, Raj, Mucci, & Hathaway, 2001; Ullman & Najdowski, 2010).

Victims of sexual assault also frequently experience a variety of physical responses post-assault. In addition to the physical injuries (e.g., bruises, scratches, black-eyes, swelling, or chipped teeth) that are experienced by approximately 17% of victims (Fisher, Cullen, & Turner, 2000), sexual assault victims usually develop other health complications and physical symptoms as a result of the assault. The physical symptoms and health complications most common after sexual assault include: fatigue, sleep disturbances (including nightmares and insomnia), chronic

headaches, nausea, and diminished sexual arousal or desire (Eby, Campbell, Sullivan, & Davidson, 1995; Steketee & Foa, 1987). Thus, a very substantial body of epidemiological research has documented that sexual assault has a devastating impact. For most victims, the negative symptoms that they experience, whether they be emotional, psychological, or physical, tend to peak approximately three weeks post-assault, remain high for the next several weeks, and then begin to decline after 3-4 months (with the exception of fear and anxiety) (Davidson & Foa, 1991; Rothbaum, Foa, Riggs, Murdock, & Walsh, 1992; Steketee & Foa, 1987). This of course varies for each individual, and many survivors will continue to experience numerous symptoms that can disrupt normal functioning for years.

Posttraumatic Growth

However, despite the high rates of PTSD and other emotional, psychological, and physical symptoms among sexual assault survivors, emerging evidence suggests that many survivors report, with the passage of time, some positive life changes eventually follow the assault (see for example, Frazier, Conlon, & Glaser, 2001; Frazier, Tashiro, Berman, Steger, & Long, 2004; Grubaugh, & Resick, 2007; Shakespeare-Finch & Armstrong, 2010). Although most research on sexual assault has focused on the negative consequences of the assault, a growing body of research has focused on what has been termed *posttraumatic growth*. This type of growth is defined as the experience of positive change after the occurrence of a highly stressful or challenging life crisis (Tedeschi & Calhoun, 2004). Overall, in the growing history of research on posttraumatic growth, it has been reported by an average of 50% to 60% of respondents across studies investigating posttraumatic growth following an array of traumatic events (Tedeschi & Calhoun, 1995). It is important to note that attempts to understand the growth process that takes place after a traumatic event are not intended to trivialize the distressing nature

of the event. Rather, by exploring how posttraumatic growth develops, the reactions and experiences of survivors can be better understood and could potentially aid in the treatment of trauma survivors.

Posttraumatic growth typically occurs within five major domains, which were first identified by Tedeschi and Calhoun (1996) with the development of the posttraumatic growth inventory (PTGI). Since then, research on posttraumatic growth has supported the five domains of the PTGI. Those five domains of growth are most often experienced as: (a) a reorganization of life priorities and greater appreciation for life, (b) closer and more intimate relationships with others, (c) increased or renewed spiritual development, (d) greater sense of self and personal resources or strengths, and (e) a renewed sense of meaning and purpose in life (Cole & Lynn, 2010; Joseph & Linley, 2006; Tedeschi & Calhoun, 1996).

Over the last 20 years research in this field has grown rapidly and has been applied to many forms of trauma or life crises. Tedeschi and Calhoun (2004) cited findings of various studies in which posttraumatic growth has been reported, including college students experiencing negative events (Park, Cohen, & Murch, 1996), bereaved individuals (Calhoun & Tedeschi, 1989, 1990; Edmonds & Hooker, 1992; Engelkemeyer & Marwit, 2008; Hogan, Morse & Tason, 1996; Lehman et al., 1993; Miles & Crandall, 1983; Nerken, 1993; Schwab, 1990; Shakespeare-Finch & Armstrong, 2010; Wolchik, Coxe, Tein, Sandler, & Ayers, 2009), people suffering from chronic illnesses and disabilities (Leung et al., 2010; Sheikh, 2004; Tennen, Affleck, Urrows, Higgins, & Mendola, 1992), HIV positive individuals (Bower, Kemeny, Taylor, & Fahey, 1998; Milam, 2004; Milam, 2006; Schwartzberg, 1993), cancer patients (Bellizzi & Blank, 2006; Bozo, Gundogdu, & Buyukasik-Colak, 2009; Collins, Taylor, & Skokan, 1990; Cordova, Cunningham, Carlson, & Andrykowski, 2001; Cordova et al, 2007; Salsman, Sergerstrom, Brechting, Carlson,

Andrykowski, 2009;), heart attack survivors (Affleck, Tennen, Croog, & Levine, 1987; Laerum, Johnsen, Smith, & Larsen, 1987), survivors of transportation accidents (Harms & Talbot, 2007; Joseph, Williams, & Yule, 1993; Shakespeare-Finch & Armstrong, 2010; Zoellner, Rabe, Karl, & Maercker, 2008), sexual assault and sexual abuse victims (Burt & Katz, 1987; Draucker, 1992; Frazier et al., 2001; Grubaugh & Resick, 2007; McMiller, Zuravin, & Rideout, 1995; Shakespeare-Finch & Armstrong, 2010;Silver, Boom, & Stones, 1983; Veronen & Kilpatrick, 1983), survivors of house fires (Thompson, 1985), war/combat veterans (Elder & Clipp, 1989; Feder et al., 2008; Maguen, Vogt, King, King, & Litz, 2006; Pietrzak et al., 2010; Sledge, Boydstun, & Rabe, 1980), hostage experiences (Cole, 1992; Sank, 1979), survivors of natural disasters (Harville, Xiong, Buekens, Pridjian, & Elkind-Hirsch, 2010; Vazquez, Cervellon, Perez-Sales, Vidales, & Gaborit, 2005), and victims of crime/terrorism (Butler et al., 2005; Milam, Ritt-Olson, Tan, Unger, & Nezami, 2005).

There are some commonalities in the research literature about factors that are likely to facilitate posttraumatic growth or lead a trauma survivor toward developing growth. For example, environmental factors like social support (Bozo et al., 2009; O'Leary, Alday, & Ickovics, 1998; Park et al., 1996), personality characteristics such as optimism, extraversion, openness to experience (Bozo et al., 2009; Davis et al., 1998; Evers et al., 2001; Tedeschi & Calhoun, 1996; Tennen et al., 1992; Updegraff et al., 2002) demographic variables including gender, race/ethnicity, and education (Tedeschi & Calhoun, 1996; Schaefer and Moos, 1998; Updegraff et al., 2002), as well as personal resources such as prior trauma experience (O'Leary et al., 1998). However, comparisons of growth following different types of trauma are relatively limited and research on various trauma populations does not always agree on what factors facilitate developing posttraumatic growth. Comparisons across all types of trauma should also

be used cautiously because certain areas of growth are more frequently endorsed after certain types of trauma than other types. For example, in a study comparing posttraumatic growth between survivors of motor vehicle accidents, sexual assault, and bereavement, researchers found that survivors of bereavement were more likely to develop more growth around relating to others and appreciation of life, whereas changes in perceptions of personal strength were similar for all survivors (Shakespeare-Finch & Armstrong, 2010). Researchers also found that survivors of bereavement and motor vehicle accidents reported more growth, whereas sexual assault survivors reported more distress. However, sexual assault survivors still reported a moderate amount of posttraumatic growth.

Posttraumatic Growth following Sexual Assault

Although post-traumatic growth tends to fall within the five domains identified by Tedeschi and Calhoun (1996), depending on the type of trauma, other areas of growth have been reported. This is the case with sexual assault survivors. Most notably, sexual assault survivors report positive changes in becoming more cautious, appreciating life more, changing relationships in positive ways, reevaluating life and goals, taking better care of themselves, being more assertive, realizing their strengths, changes in types of men preferred for intimate relationships, and being closer to God. In a sample of 171 sexual assault survivors, 91% described at least one positive life change that resulted from the assault, the most common positive change being greater empathy for others in similar situations (Frazier et al., 2001). The greatest amount of change in this study took place between two weeks and two months postassault for the majority of participants. Researchers have also found that the factors most positively associated with reports of growth after sexual assault are social support, approach coping, religious coping, and perceived control over the recovery process (Frazier et al., 2004).

For example, Kennedy et al. (1998) found that positive changes after sexual assault occurred more in spirituality for African American women (71%) than by Hispanic (54%) or White (38%) women. These initial themes and factors related to growth are important beginnings to developing a better understanding of posttraumatic growth following sexual assault.

Coping Strategies

The coping strategies utilized by women following sexual assault are highly important to the recovery as well, and a coping model posed by Snyder and Pulver (2001) is helpful in understanding how posttraumatic growth develops for women after they have been sexually assaulted. Snyder and Pulver's (2001) model of coping considers two main styles of coping when faced with a stressful event: avoidance coping and approach coping. Avoidance coping is chosen when individuals assess the stressor and determine that they do not have the necessary or sufficient coping resources to handle the situation. On the other hand, approach coping is chosen when individuals determine that they have sufficient coping resources. This type of response involves active coping mechanisms that are either focused on the emotional reaction to the stressor or the problem at hand (Littleton & Breitkopf, 2006). Research suggests that several negative sequelae of an assault are related to coping strategies, especially avoidance coping. This suggests that women who rely more on avoidance coping strategies may not be able to develop posttraumatic growth or that it may not develop until much later in the coping process.

Core Beliefs

Traumatic events are not simply precursors to growth; they can be devastating life events that have an intensely distressing impact on an individual. Researchers have found that the psychological processes that an individual uses to manage the distress after a traumatic event are the same general types of processes that also can lead to positive changes (Tedeschi & Calhoun,

2004). Individuals, at a young age, develop and rely on a general set of beliefs and assumptions about their world. These beliefs and assumptions help guide their actions, help them to understand why things happen, and provide them with sense of meaning and purpose (Tedeschi & Calhoun, 2004). After a traumatic event occurs, these basic beliefs and assumptions are challenged, and the person's understanding of the world can be shattered. It is believed that posttraumatic growth and psychological distress after a traumatic event often coexist, as they both require these fundamental schemas and assumptions to be threatened and shattered. However, they are independent of one another, and it is important to note that growth is not inevitable. It is the struggle with the new reality that individuals are faced with after the trauma that is important in determining the extent to which they will develop posttraumatic growth (Tedeschi & Calhoun, 2004).

The actual assumptions that are shattered as a result of experiencing a traumatic event depend on each individual's unique experience and the type of trauma that is experienced. However, there are still some common assumptions that are shattered or at least seriously questioned by the majority of trauma survivors. The three assumptions that appear to be most typically affected are: (a) perceived benevolence in the world and people; (b) the belief in personal invulnerability; and (c) viewing the world as meaningful and logical (Janoff-Bulman, 1989). All three of these assumptions are interconnected in that an individual who strongly holds one of these assumptions is likely to hold the other two. Perceived benevolence in the world and people is the extent to which a person views the world and other people as good or bad. As this assumption becomes stronger for individuals, the more they believe the world or other people are good and that bad things rarely happen. With the belief in personal invulnerability individuals overestimate the likelihood they will experience positive outcomes in life, while underestimating

the likelihood that they will experience negative outcomes (Janoff-Bulman & Frieze, 1983). Individuals who hold this type of assumption believe that it cannot happen to them or that bad things do not happen and they go about their life operating on this illusion. The previous two assumptions rely in part, on the basic assumption that the world is logical and meaningful. With the third common assumption, the world makes sense because individuals have constructed social theories that allow them to account for specific occurrences (Janoff-Bulman & Frieze, 1983). For example, what happens to individuals in the world can appear controllable and one can prevent misfortune if they engage in sufficiently cautious behavior. According to Lerner's (1970, 1980) *just world* theory, individuals tend to believe that people get what they deserve and deserve what they get. Even when people explicitly deny this belief, they nevertheless tend to behave in accordance with it (Lerner, 1980). When these assumptions become threatened or shattered after a traumatic experience an individual's world no longer makes sense to them. When trauma survivors are the victim of a crime that shatters all three of these assumptions, they view the world as unsafe; they can no longer say, "It cannot happen to me," and they do not see the world as just anymore. For many sexual assault survivors this is the case, which thus leads to high rates of distress.

Given the prevalence of sexual assault on college campuses, and the likelihood of such assaults becoming a source for both PTSD, and posttraumatic growth, the first purpose of this study was to examine posttraumatic growth in the period at least six months or later following the experience of sexual assault. Although many studies have examined posttraumatic growth following various traumatic events, few have studied posttraumatic growth following sexual assault. Because sexual assault is different from the other events that are typically studied in the posttraumatic growth literature (i.e., it involves intentional harm and greater stigma), it is

necessary to examine how posttraumatic growth develops after sexual assault to better understand the positive life changes that can occur after the assault (Frazier & Berman, 2008). Because posttraumatic growth may be a key component in the overall healing process, but so little is known about the role it might play, a mixed-methods qualitative study (with some quantitative features) offered the best opportunity to discover potential causal relationships (Hanson, Creswell, Clark, Petska, & Creswell, 2005). With so little previous research, at present it is premature to test models of posttraumatic growth, as it occurs/develops after sexual assault. For this reason, the present study will include a qualitative component to address the gap in the literature.

CHAPTER II
METHOD

Participants

Participants were recruited for the current study through either (a) a local sexual assault crisis and recovery organization, (b) through a Counseling Center, (c) residence halls, or (d) through the psychology department's research participation website. All participants recruited from the university setting were recruited from a large, Southeastern, public university. Participants were solicited through flyers posted in the public areas of the centers or residence halls, or from a public posting on the research participation website. Participants were not required to be current clients of either center used for recruitment or to currently be in therapy. Although there is preliminary research to suggest that posttraumatic growth can develop within a few days or weeks following the assault, for the purposes of this study participants were required to be at least six months post-assault and no more than five years post-assault. This timeframe was based on theoretical considerations. The literature suggests that a period of rumination occurs before posttraumatic growth and therefore some time may be needed for growth to actually take place (Tedeschi & Calhoun, 1996). However, the literature also suggests that characteristics of survivors and the circumstances that they face in recovery are likely more important than time in determining perception of benefits (Tedeschi & Calhoun, 1996), therefore selecting only a six month delay should allow sufficient time for these women to reflect back over their experience rather than focus on their distress. A five year outer limit was set with the idea that an extended time beyond this would result in a loss of clarity and problems recalling attitudes and situations related to the assault.

A total of 11 participants provided usable data. All of the participants were female. For this study the following definition of sexual assault proposed by the National Center for Victims of Crime (2008) will be used:

> Sexual assault takes many forms including attacks such as rape or attempted rape, as well as any unwanted sexual contact or threats. Usually a sexual assault occurs when someone touches any part of another person's body in a sexual way, even through clothes, without that person's consent. Some types of sexual acts which fall under the category of sexual assault include forced sexual intercourse (rape), sodomy (oral or anal sexual acts), child molestation, incest, fondling, and attempted rape. Sexual assault in any form is often a devastating crime.

The mean age of the 11 participants was 21.27 years (*SD* = 7.62, range = 18 to 44 years). In terms of racial/ethnic identification six participants indicated "Caucasian/White," three indicated "African American/Black," one participant indicated "Native American," and one participant indicated "Multi-racial." Table 1 displays demographic information for each participant. Note that all names used are pseudonyms. Participants received a $20 gift card for their involvement in the study or research participation credit for a class.

Measures

Posttraumatic Growth Inventory (PTGI; Tedeschi & Calhoun, 1996). The PTGI (Tedeschi & Calhoun, 1996) was developed to measure positive changes reported by people who have experienced a traumatic event (e.g., "I discovered that I'm stronger than I thought I was"). The PTGI is a 21-item instrument that uses a 6-point Likert scale *(0 = I did not experience this change as a result of being sexually assaulted; 5 = I experienced this change to a very great degree as a result of being sexually assaulted)*. For the current study, the Likert scale was

changed to reflect whether the experienced change had a negative impact or a positive impact in a participant's life. As a result participants had an option to select that they did not experience this change or answer on an 11-point Likert scale *(-5 =This was a negative impact to a very great degree to +5 = This was a positive impact to a very great degree)*. The questionnaire contains separate continuous scores on five domains of life (i.e., new possibilities/purpose, relating to others, spiritual change, appreciation of life, and personal strength. The authors reported that internal consistency (coefficient alpha) estimates for the total PTGI score are .90 (Tedeschi & Calhoun, 1996). Internal consistency estimates for the five factors ranged from .67 to .85, while test-retest reliability was .71 for a sample of mixed trauma survivors (*n* =28) (Tedeschi & Calhoun, 1996). Cronbach's alpha for the PTGI was .94, with subscale scores ranging from .78 to .85 in a sample of female assault victims (Grubaugh & Resick, 2007).

Core Beliefs Inventory. The CBI (Cann et al., 2010) was developed to measure the disruption of the assumptive world after a highly stressful experience or life crisis (e.g., "Because of the event, I seriously examined the degree to which I believe things that happen to people are fair"). This brief measure is a 9-item scale, focusing on human nature, meaning of life, relationships with others, spiritual/religious beliefs, and personal strengths and weaknesses (Cann et al., 2010). Items are answered on a 6-point Likert scale *(1 = not at all to 6 = a very great degree).* Instructions direct respondents to rate the extent to which they have seriously examined the core beliefs as a result of the traumatic event, which for the present study would be the assault. Cann et al. (2010) reported internal consistency reliability (coefficient alpha) of .82, with test-retest reliability at .69 in a sample recruited from the university population, reporting on various stressful life events.

Coping Strategies Inventory. The CSI (Tobin, Holroyd, Reynolds, & Wigal, 1989) was used to assess coping behaviors adopted by sexual assault survivors. The CSI consists of eight, 9-item subscales and was designed to assess two main types of coping- engagement and disengagement, which appear to be synonymous with Snyder and Pulver's (2001) model of approach and avoidance coping. Four subscales were chosen that seemed most relevant to sexual assault. Approach coping was assessed with two subscales that load on the higher order Engagement factor. In factor analyses reported by Tobin et al. (1989) the Cognitive Restructuring subscale (e.g., "I convinced myself that things aren't quite as bad as they seem.") and Expressing Emotions subscale (e.g., "I let my emotions out.") load on the engagement factor. Two items confounded with pathology (Frazier et al., 2004; Stanton, Danoff-Burg, Cameron, & Ellis, 1994) were removed from the Expressing Emotions subscale. Avoidant coping was assessed with two subscales that load on the higher order Disengagement factor. Tobin et al. (1989) determined through factor analyses that the Problem Avoidance subscale (e.g., "I avoided thinking/doing anything about the situation.") and the Social Withdrawal subscale (e.g., "I spent more time alone.") both loaded on the Disengagement factor. Instructions directed respondents to indicate the extent to which they have used these strategies in coping with a specific stressful event. All items are answered on a 5-point Likert scale *(1 = not at all to 5 = very much)*. Tobin et al. (1989) reported internal consistency reliabilities of .71 to .94, and test-retest reliabilities of .67 to .83. Alpha coefficients were .91 for approach coming and .84 for avoidant coping in a sample of female sexual assault victims that used the same four subscales as the present study (Frazier et al., 2004).

PTSD Checklist – Specific Stressor Version (PCL-S; Weathers, Litz, Herman, Huska, & Keane, 1993). The PCL-S was developed to measure the symptom severity of PTSD (e.g.,

"Avoiding activities or situations because they reminded you of the stressful experience?") according to the Diagnostic and Statistical Manual of Mental Disorders (4th ed.; DSM-IV; American Psychiatric Association, 1994). This brief measure is a 17-item scale that asks respondents to identify a specific traumatic event and then indicate to what extent they have been bothered by each item in the past month. All items are answered on a 5-point Likert scale *(1 = not at all, 5 = extremely)*. A total symptom severity score is obtained by summing the scores of the 17 items, which ranges from 17-85. The scale also converts the 17 items of the scale to a DSM-IV diagnosis of PTSD. A diagnosis of PTSD is given if at least one B item (questions 1-5) at least three C items (questions 6-12), and two D items (questions 13-17), and symptoms rated as moderately or above are counted (U.S. Department of Veterans Affairs, 2010). The PCL-S has been extensively used with a wide variety of trauma populations and has sound psychometric properties. Blanchard, Jones-Alexander, Buckley, and Forneris (1996) reported internal consistency reliability (coefficient alpha) of .94 in a sample of motor vehicle accident and sexual assault victims. Weathers et al. (1993) reported test-retest reliability of .96.

Procedure

The study was approved by a university institutional review board. A sequential mixed-methods, quantitative and qualitative design was used. Participants were recruited through the Sexual Assault Center of East Tennessee (SACETN), the University of Tennessee Counseling Center (UTCC) and residence halls and a posting on the University of Tennessee's psychology department's research participant website. Participants were recruited through sites by fliers advertising the study posted in the centers' and residence halls' waiting rooms, offices, women's restrooms, and hallways. Persons who were interested in participating were invited to contact the principal investigator by email for additional information or go directly to the secure study link

to complete the online survey for Part I of the study. Potential participants who visited the web link presented in the solicitation flyer found the informed consent document first. The informed consent document also presented the protocol of interview questions, so that participants could gain a general understanding of what they would be asked in the interview. After participants completed the informed consent they completed a brief demographic questionnaire and a short self-administered questionnaire. To ensure anonymity, participants developed a code name at the end of the questionnaire. The only purpose of this code name was to allow researchers to match the participant's data from Part I of the study with their data from Part II. The final instructions directed them to send an email message to researchers that contained their contact information and preferred times for a telephone interview.

Upon receiving an email from a participant, the principal investigator set up an interview time and conducted the interview over the phone, lasting approximately 30 minutes to 45 minutes. The principal investigator conducted all interviews. The start of the interview was not taped, instead the key points of the informed consent were verbally summarized and any questions were answered before the interview began. The interview began with the four screening questions presented in Appendix C to rule out any participant that may not have been psychologically stable and/or fit to complete the interview. In addition to this, these questions were used to help the principal investigator determine the participants' capacity to proceed without a harmful level of stress. After it was determined that the participant was able to proceed, the remainder of the interview protocol questions were asked with follow-up questions and prompts as required by individual circumstances. Before ending the interview the participant was asked if they had any questions and reminded that they would be contacted for the member check. At the conclusion of the interview, participants were asked if they preferred a gift card or

research participation credit. If participants choose a gift card they were asked for their preferred mailing address and a $20 gift certificate to Amazon.com or Wal-Mart, whichever they chose, was mailed to this address as their incentive for participating in the study. If they choose research participation credit for a class their credit was assigned online through the psychology department's research participation website and they were assigned six credits for their participation in both parts of the study.

The undergraduate member of the research team transcribed the digital recordings. To ensure confidentiality, all identifying information revealed during the interview was removed, altered, or replaced with participant numbers. Both transcripts and copies of the original recordings were reviewed by the data analysis team, which consisted of the primary investigator, a second graduate student, one undergraduate student (who typed the transcripts), and the faculty advisor. The transcripts and recordings were stored in a locked filing cabinet in an office separate from the documentation of informed consent and interviewee's contact information. Reviewers were directed to listen to the tape while they had a written transcript available. Team members listened and made notes independently and then convened as a team to discuss results.

The final aspect of the project that involved participants directly is the "member check" follow-up interview, which is a standard procedure in grounded theory research to establish trustworthiness of a study's conclusions (Morrow, 2005). A second purpose of the member check process is to allow participants an opportunity to request that anonymous quotes based on their interview material be removed from the final research report. Participants are assured in the Informed Consent that no quoted material for any participant will pertain to details of the sexual assault. After the team prepared a preliminary summary of findings, this summary was sent by email to each participant interviewed. The summary contained quotes to illustrate key points, but

was labeled only with pseudonyms (e.g. Julie stated, ". . ."). The email message that accompanied this summary informed a specific participant, "You are "Alice" in this summary. If you see any quotes attributed to "Alice" that you would prefer that we not use, please let us know and we will delete them." This email also arranged a time for a follow-up telephone call 1-2 weeks after the summary was sent. The overall purpose of this "member check" interview was to ask how accurately the summary described a particular participant's experience and to determine whether participants wanted any of their quotes removed.

Strauss and Corbin's (2007) approach to grounded theory was used in this study. Strauss and Corbin's approach is a systematic and analytic approach to grounded theory, which emphasizes that the researcher seek to systematically develop a theory that explains process, action, or interaction on a topic (Creswell, 2007). The research team first began with open coding and identified the major categories of information in the data. From the coding, axial coding took place, in which the research team identified one open coding category to focus on, which was determined to be the core phenomenon. After the core phenomenon was identified, the research team went back to the original set of data and created categories around this core phenomenon. Strauss and Corbin (2007) identified four types of categories around the core phenomenon: (1) *causal conditions* (what factors caused the core phenomenon), *strategies* (actions taken in response to the core phenomenon), *contextual and intervening conditions* (broad and specific situational factors that influence the strategies), and *consequences* (outcomes from using the strategies). Finally, we conducted selective coding, in which we developed hypotheses that assembled a story that described the interrelationship of categories in the model.

CHAPTER III
RESULTS

This study aimed to describe the factors that contribute to how posttraumatic growth develops after sexual assault and to better understand the positive life changes that occur in female survivor's lives. After the data analysis team completed work, a total of 36 subcategories emerged, that could be clustered into nine major domains. These nine key domains were then fit into a flow chart depicting a process we believe fits the data. This process can be described by the four phases shown in Figure 1. Thus, each of the four phases can be considered as a "super-cluster" that subsumes the nine major domains. On the basis of their meanings and properties the four super-clusters were named. *(I) Preexisting Traits, (II) Responses or Impact from Assault, (III) Coping Strategies, and (IV) Growth and Outcomes.* The nine domains were, (a) *Traits Prior to Sexual Assault*, (b) *Negative Affective Responses*, (c) *Symptom Reactions*, (d) *Negative Relationship Impact*, (e) *Negative Coping Strategies*, (f) *Adaptive Coping Strategies*, (g) *Seeking Support*, (h) *Positive Personal Growth*, and (i) *Increasing Knowledge and Speaking Out*. The relationship of the four super-clusters, nine domains, and 36 subcategories are shown in Table 4. [A note on data: In this paper, the quotes used have been edited to removed pauses and utterances such as "um."]

Preexisting Traits (Cluster I)

This cluster consisted of one domain and encompassed traits that participants seemed to hold prior to being sexually assaulted, which were broken down into two subcategories: Prior Mental Health Issues and Personality Traits.

Traits Prior to Sexual Assault. For those who reported prior mental health issues, most reported having prior suicidal ideation, anxiety, or being on psychotropic medications before

their assault, and the assault making symptoms worse immediately after it took place. However, all participants reported that at the time of the interviews they did not have suicidal thoughts. Nevertheless, several participants explained that they still currently struggled with coping at the time of the interview. Prior mental health problems seemed to play a role for Katie who explained that,

> I still have trouble coping with a lot of stuff. I still have flashbacks, but I know part of it is I take Zoloft, and I was taking it before the incident. So, I don't know if going off of that would make it any harder, but I know it hasn't hurt.

However, it should be noted that the majority of participants did not report prior mental health problems before they were sexually assaulted.

Personality Traits were not directly assessed. However, four participants commented on traits that helped them to cope with the assault. For example, Faye described her basic sense of optimism this way,

> I try to instead of being pessimistic, like a Debby Downer I kind of look on the bright side of things and realize that maybe it's bad, but there's always maybe a better part of life. And of course I'm young so I have so many years to just continue building upon myself and making the change and then, being better and happier. I just realized that since this happened I'm not going to let it control who I am… this is just something that happened but it doesn't need to define me.

Camille explained that openness to experience and trustworthiness were important traits for her. Although most interviewees did not directly mention personality traits as something that helped them cope, optimism, conscientiousness, openness to experience, introversion, and trustworthiness were all traits that were affected both positively and negatively. These traits were

commented on by most participants as either a negative response or impact from the assault, or as an aspect of positive growth, and will be discussed in further detail later.

Responses or Impact from Assault (Cluster II)

This cluster consisted of three domains and described the ways participants responded to the assault in the first days or weeks immediately afterward, or the impact that being sexually assaulted had on them. More long-term coping processes are described in Cluster III.

Negative Affective Responses. Participants' perceptions about their experiences were heavily influenced by their negative affective responses, as evidenced by the six subcategories that emerged within this domain. First, all participants, except for Heidi, reported experiencing negative emotional reactions and/or negative reactions in their lives after the assault took place. Regardless of the severity of the assault, participants reported feeling damaged emotionally and as if there were a lot of negative effects to deal with. Common emotional reactions included increased fear or apprehension of one's surroundings, the assault happening again, and fear of losing control and not being able to contain their emotions. For example, Faye began carrying around a can of mace after the assault "just in case I'll need it." In addition to fear, confusion and uncertainty were common emotional reactions. Participants explained that they were left feeling confused after the assault or uncertain of what happened, which tended to have a greater emotional impact on them. For example, Camille described,

> …he had sex with me, raped me or however you want to put it, and left me standing there by myself, extremely confused, immediately guilt-ridden. And, I did not know what to do with it, and I went home the next day. And, I stayed in my room for days.

Participants often expressed that their confusion and/or uncertainty was due to alcohol being involved and/or being drugged prior to the assault and not having much recollection of what

happened. All participants reported that they knew the perpetrator prior to the assault and several noted that they either had a prior intimate relationship or were currently in an intimate relationship with the perpetrator when they were assaulted, which seemed to exacerbate the uncertainty for a period of time while they coped with the assault. Other emotional reactions reported by participants included depression, grief, guilt, feeling powerless, suppression of emotions, feeling manipulated, regret, judgment from others for what happened, shock, loss of identity, and feeling overwhelmed.

The second subcategory within this domain came from participants feeling *closed-off or not as open*. Seven participants discussed how the assault caused them to feel secretive, wanting to withdraw from others, not open up as much as they used to, feel more guarded, or hold back information from others in their life. Elanna shared that she was less outgoing due to the lack of support and disbelief from her extended family. Dionne, on the other hand, explained that she has always been introverted and had difficulty opening up to others, but the assault made it even more difficult to open up to others. Julie stated that for the first few months following her assault she did not see the point in talking to others and did not share what had happened with anyone.

The third subcategory was *self-blame or decreased self-worth*. Many participants blamed themselves for the assault. For example, Alice stated "I blamed myself for leaving the campus, for following him. I blamed myself, I felt like somehow I contributed to that attack." Bailee shared that part of her self-blame was related to alcohol being involved and feeling as though "she instigated it." Others reported experiencing lower self-worth, feeling less self-assured, and devaluing themselves as a result of the assault. Katie mentioned that she felt like she "was a worthless person, which is why the assault happened." Gwen stated that the assault in general affected her self-worth and was the cause of making her feel worthless and less confident.

The fourth subcategory included *loss of control* for participants. Five of the participants reported experiencing this as a result of the assault. As a result of some of the negative emotions they experienced from the assault mentioned earlier in category one, such as feeling powerless or manipulated, there seemed to also be control taken away from participants. For example, Julie explains,

> …feeling like I wasn't in control of my body, that was kind of how I felt after I would leave work and I would just go and take a shower and just stand in the shower and cry. Just kind of cry a little bit. I felt like I couldn't escape the way that being at work made me feel, smell, or feel physically which also related to what was happening.

Gwen talked about also experiencing loss of control as a result of the assault, how the assault completely changed everything in her life, and how she had a difficult time controlling her emotions. Bailee described having "frequent dreams about trying to control other people, but still feeling powerless against them." Others described feeling a lack of control during the assault. For example, Katie explained that her perpetrator was forceful and would not listen to her.

The fifth category, *feeling hopeless or helpless,* came from participants feeling stuck or questioning whether things would improve in their life. Five participants described experiencing a loss of hope, feeling helpless, feeling stuck, questioning how they were coping/their coping process, and felt as though there was a lot of negative affect that would always stay negative as a result of the assault. Bailee explained that she "definitely lost hope" due to blaming herself for the assault. Julie also reported feeling helpless and stuck; "feeling like you couldn't do anything about it either, even after," which ultimately kept her from reporting the assault or being able to talk about what happened with her boyfriend at the time.

The final subcategory for this domain, *effects on emotionality*, came from participants feeling "overall" changed as a result of the assault. Gwen explained that as a result of being sexually assaulted she "felt very hardened by it." She also shared,

> It completely changed everything. After it happened I had a really hard time dealing with doing the same thing every day and not thinking about it. Because just the way that I was manipulated, it was all the time in my life. It wasn't just once every week. It was like an everyday thing. So, It was ever present. So, it was very hard to continue on doing the normal things, playing all the sports I used to play, doing all this, because my life revolved around it in a way.

Others shared that overall they became more sensitive and more emotional after the assault, and had more difficulty trusting themselves. Although some of these features have been commented on in the previous categories, it was noted that this was more of a lasting change, whereas the previously mentioned emotional responses or impacts did not have as much of a lasting impact.

Symptom Reactions. This domain was used to describe the prompt reactions to the assault that were not primarily impacts on relationships or feelings. Two categories emerged within this domain. First, participants reported struggling with losing touch with reality and/or zoning out as a symptomatic reaction to their assault. Bailee explained, "For the first two to two and a half years I was basically not even here. I've been asleep so I've kind of just been floating around. Um, and nothing has ever felt like it was actually happening." Heidi described her experience as unconsciously "zoning out," which sometimes is actually relaxing for her. Dionne agreed that losing touch with reality made her feel disconnected and/or felt like zoning out. Both Heidi and Dionne commented that when this happened it lasted for only a few minutes.

The second subcategory in this domain included *sleep disturbances* experienced by participants. These included symptoms such as nightmares, flashbacks, and difficulty sleeping through the night. Only two participants (Bailee and Katie) directly commented on their sleep disturbances during their interviews. However, it should be noted that symptoms were not directly assessed in the interview. However, the quantitative data collection portion of the study included the PCL-S, which provided an assessment of symptoms. All participants, except for Isabelle, reported that they either experience disturbing memories, images, repeated disturbing dreams, flashbacks/feeling as though they are reliving the assault, and/or trouble falling or staying asleep.

Negative Relationship Impact. Participants' perceptions about their experiences were also heavily influenced by the negative impact that the assault had on relationships in their lives, as evidenced by the six subcategories that emerged within this domain. First, several participants shared how the assault led to the loss of relationships. A few participants mentioned that they previously had a relationship with the perpetrator, but after the assault it led them to end the relationship. For example, Isabelle explained that after her boyfriend sexually assaulted her she ended the relationship "pretty much immediately" after the assault. Other participants described how the assault affected other relationships in their lives. Elanna shared,

> I can say I distanced myself from the family, and going to school 500 miles away. That was one thing that's the elephant is kind of still kind of in the room, when I'm around that particular family's home. That was the main thing, I just wanted to stay completely distanced from myself, from the family, that side of the family, that part of the family. And to just kind of be, be out of my own. My mother was very very supportive. My father was very supportive and he's since passed, but we always had a very close-knit

> family so it's been really hard to kind of be in a situation and not be able to be in that situation. You know what I mean like you're in it, and you know your family's there and what have you, but then you don't want to be there. So you know that was one of the main things that I wanted to do was to just go to school away versus staying at home.

Overall, participants commented that the combination of negative impacts led them to pull away, distance themselves, or not trust others, and/or not be as comfortable around others.

The second subcategory that emerged within this domain was *increased isolation and/or distance from others*. Participants described isolating themselves from others, feeling more distant from others, feeling unable to relate to others, and feeling out of place around others. Some participants commented that this was due to not having a close support system or finding that seeking social support was not helpful for them. Heidi shared,

> I'm a lot more reserved. I don't really go out of my way to talk to people unless I have to. Kind of keep to myself more too. I don't really talk to anyone. I do talk to people, just not...just don't put myself out there all the time. There isn't a family member or a friend or somebody that I really confide in or open up to.

Camille commented that she had "spent a lot more time isolating herself" immediately following the assault, but has worked through that problem and "resolved that." Elanna mentioned that she has felt more like an "odd ball" because she has a difficult time relating to her same age peers.

About half of the participants described how the assault caused them to develop a *fear of intimacy and/or relationships with males*. These participants said that the assault led them to pull away from, or complicated relationships they were in currently, made them uncomfortable around other males or wary of males, caused them to not want to date or consider being in an

intimate relationship, and/or in general made sex and/or intimacy difficult. Isabelle shared "I haven't dated again since then." Elanna explained,

> Just as far as being wary about males or relationships putting myself in a situation where something might happen. I'm very cautious about things like that and I'm not looking for relationships, but it makes it hard because I sometimes have the thought of someone not treating me, the way I should be treated…I guess my area of discomfort would be with relationships and sometimes it's just guys in general approaching me or making me feel uncomfortable, that kind of stuff in a situation.

The fourth subcategory was *barriers to seeking social support*. Slightly over half of the participants reported experiencing barriers that prevented them from seeking out social support. For some participants the barrier had more to do with their own personality, for example Dionne shared "I'm not too fond of going to people and talking about my problems. . . I limit myself." However, other participants explained that how others treated them caused barriers to seeking social support. For example, Alice shared about how her invalidation caused a barrier to seeking support,

> I think part of the issue that happened for me is, when I reported it, it was as if, the university really didn't do anything. I think that contributed to me feeling like...where do you go? Who do you trust? They didn't help, they didn't help at all. They really didn't. And it's a real pity and a shame. [I: It sounds like you've kind of lost your faith in the system.] Well, that system, at the university. And as a side point: When things like this occur, women have to know that there's an advocate for them and my experience has been, which has contributed to why I just have a deep distrust, they were more concerned

about him than they were that something terrible happened. So that was another reason that I blamed myself. Because they seemed to be on his side and not neutral.

Alice also commented that the messages she received were that it was her problem and it was an issue that she needed to deal with on her own. She also noted that she found it difficult to find resources for peer support.

Other interviewees commented on how people in their support network did not believe them when they tried to reach out for support, it caused friction within their family/support network, family responded with anger/judgment/shame, support network did not see what happened as "wrong" or do anything to intervene in the moment, they were afraid to report what happened due to fear of consequences or threats made by the perpetrator, and/or afraid to seek professional help due to not having prior experience with therapy.

The last subcategory in this domain, *trust issues with others*, involved participants' feeling as though their trust in others had been violated or broken. They explained how it became more difficult to trust others after the assault, and in some cases led to a complete lack of trust in others, which ultimately led participants to want to be more independent and less reliant on others. Camille described her experience as a "violation of trust and the friendship" that she thought she had before the assault. She also shared that she tried to "not be very dependent on friends when they go out." Heidi described herself as more "cautious with people" and not as "willing to trust" people as she used to be since the assault. Katie also commented that she is not "trustworthy of people." Overall, the negative responses or impacts that participants experienced as a result of their assault seemed to interact in ways that influenced how survivors tried to cope with their assault.

Coping Strategies (Cluster III)

This cluster consisted of three domains, and described the ways participants tried to cope with their assault, both in an unhealthy and in an adaptive way. This cluster included prompt coping strategies immediately after the assault, but also included the long-term strategies. Many participants described negative coping strategies they used in the immediate aftermath, which were then eventually replaced by more adaptive strategies.

Negative Coping Strategies. Three subcategories emerged in this domain about the ways participants tried to cope after the assault in an unhealthy or maladaptive way. First, approximately half of participants shared that *denial* was a coping strategy that they tried to utilize. Most explained that it was helpful at first because it kept them from thinking about the assault or it helped decreased affective responses, but later realized that it was not helpful in the long run. For example, Isabelle explains how she used denial to cope,

> Probably denial, I don't think about it or I didn't think about it too much. I, tried to make light of the situation. I mean, it's been a while now so, I'm better with it, I guess… I think it was helpful because if I thought about it too much, I'd start having bad dreams and I couldn't sleep and it's just something that happened.

Other participants tried to minimize what happened or make excuses for what happened. For example, Bailee who shared that she tried to "forget about it and make it okay like it's not bad."

The second subcategory, *avoidance*, was heavily used as a maladaptive coping skill. All participants reported using avoidance at some point in their coping process to deal with the impact the assault had on their life. However, the extent and form of avoidance that each participant used varied. For example, some participants feared that if they got help (professionally or from their support network) it would increase the negative emotions they

already experienced, and therefore that things would "get worse." They also feared judgment from others or being viewed as "the victim." Others tried to distract themselves to prevent themselves from having "free time" and allowing thoughts about the assault to come up. For example, Faye explains,

> Just trying to stay distracted I guess because if I have a lot of time to sit and think my mind will go towards the darker places. So I try to learn new things, read things, anything new and exciting just to keep me really positive.

It was also mentioned during the interviews that avoidance was used to try to numb feelings and isolate or withdraw from others. Julie also shared that she used avoidance to rationalize what had happened because she felt "threatened" after the assault and "unsafe." She also noted that she currently uses avoidance to not have to see her perpetrator, which she sees as a helpful coping skill.

The third subcategory included *negative behaviors and/or risky behaviors* that participants tried to use to cope with the impact of the assault. Four participants indicated that they turned to these type of coping strategies. Those who did report using these kind of coping strategies often referred to them as "self-destructive behaviors." For example, Bailee explained,

> I don't really have a lot of interest in my future. Sex kind of didn't matter anymore so I just had causal sex, because [chuckles] I thought that's all what it was about…For a while I took up smoking pretty much right after the incident, did that for about 2 years and I drank a lot; I was really just self-destructive… I think it was the fact that I blamed myself so much about it for the 1st year or more. That was difficult to make that go away, the blame, so, I guess I blame myself so much for it that I think that's why I became self-destructive and had sex with random people and took up smoking and drinking and stuff.

I kind of didn't care what happened to me.

The negative coping strategies participants reported using included: increased use of alcohol, increased use of smoking, casual sex, cutting/self-harm behaviors, using drugs, and suicide attempt. Participants commented that they realized, after some time had passed, that the negative coping strategies they were using were not as helpful. Thus, they turned to or tried more helpful/healthy ways of coping.

Adaptive Coping Strategies. Three subcategories also emerged about the ways participants tried to cope after the assault in a more healthy or adaptive way. First, nearly all participants shared general ways of *caring for themselves*. Participants described a variety of ways of adaptive coping that seemed to help, some of which took the form of healthy distractions and/or self-care techniques. These activities included things like exercising, reading, drawing, taking time out for themselves, crafts, learning new things, and writing and/or journaling. For example, Katie shared,

> A lot of writing it down. A lot of thinking about, a lot of writing in the exact moment of how I feel and what's bugging me, and what I'm thinking. And remembering it and being able to go back and say this is what was bugging me. This is what I went through, these are the things that have helped me and these are the things that impaired me.

Others, like Heidi commented that she "took up drawing and reading" after her assault because it allowed her to "get out of her head." Other participants explained that distance from the assault in terms of time, physical, emotional, and mental distance helped. Camille stated that she has tried to distance herself from the "relationship she has with [him] the perpetrator]" in order to help her cope and move on. Some also commented that they tried to re-map their thought process/work through cognitive dissonance, used humor and laughed more, worked on

forgiveness, and started an advice column to provide/for peer support.

The second category that emerged was *religion*. Some participants shared that as a result of trying to cope with the affect and impacts of their assault they turned to religious and/or spiritual beliefs. In some cases, participants commented on how their faith was strengthened and they became more active by turning to prayer, reading scriptures, and attending church more frequently. Elanna commented,

> I was always raised in a church. So, I do a lot of prayer, a lot of reading, a lot of talking to the Lord …[I] just pray and go to church a lot and. . .when you're younger you don't quite understand what some of the things are. . .until you actually go through something and you have that to draw your strength on…another important. . .factor would be my pastor because. . .he's always been a close friend to the family so. . .without me having to go into much detail. . .he did give me different scriptures and different things that I could go to and read. . . .[they] would help show me that it wasn't me. It's nothing that I did; it was this other individual's problem.

Participants that mentioned religion seemed to have a prior religious background or were raised in a religious family. Isabelle was the only participant to specifically note that she pulled away from her religion as a result of the assault. Julie noted that her religious values and practices did not change.

The last subcategory in this domain, *determination and/or resiliency*, came from participants' attempts to cope by putting more effort into things, working harder to achieve their goals, trying various coping skills until they found something that worked, and facing daily safety/comfort barriers in an attempt to overcome their fears. Gwen commented that she was tired of being "sad all the time" and decided that she "had to find something good to come out

this or she would have to let it go." Alice explained that she had to continue to go to campus on a daily basis and risk running into her perpetrator, despite feeling unsafe, running into him once, and feeling as if the "system had failed her." Katie also noted that once she found a coping skill that worked she would "stick with it for awhile."

Seeking Support seemed so important that we designated it as the third domain in this super-cluster, separated from other adaptive coping strategies. Participants' perceptions about the ways they coped after their assault were heavily influenced by the ways they sought support from others, as evidenced by the five categories that emerged within this domain. First, almost all of the participants shared that reaching out for *social support in general*, was a helpful way of coping with their assault. Many participants shared that they gradually opened up to others and gained awareness of the benefits of talking to others and reaching out for help. Gwen shared that "being able to talk about it has been the best thing ever." Elanna commented that part of her desire to talk or reach out to others was to see how others cope. Faye noted that she reached out for indirect support by asking for help, but not directly talking about her assault or the details of what happened. Julie also explained,

> Just having now a close-knit support group, I feel more comfortable, as a woman. . . I feel like if something were to happen, I could talk to them about it, whereas I didn't really feel like that before…And I'm more willing to be open about my emotions about this topic…I feel more open now and willing to talk about things like this with people that might have had similar experiences, that are needing someone to talk to … having a support group has helped me to realize I deserve to be treated a certain way, for instance, they helped me realize that this guy that I'm dating is not actually that great of a guy and to have the confidence to stand up for how I feel…and because of that, I feel like some positive

> things have come from the experience. So, that group of people supporting me has been the key to even talking about it in the first place, and then being able to say that this is a positive thing that happened…

Other participants stated that by seeking out social support they were able to "resonate" more to others, relate to strangers and not feel so alone, felt more valued as a result of seeking support, and became more comfortable talking about their assault. Camille also noted that she felt "relief and less pressure" after opening up to others. Some participants shared that they opened up to others right away, whereas others, who seemed to be more introverted, private, or closed off to begin with, took their time in opening up to others.

The second subcategory, *family social support,* involved the ways that interviewees described how family members provided support. Some participants also mentioned that their relationships with family members strengthened as a result of reaching out and getting support for their assault. Gwen commented,

> I definitely got closer to my family and that was something that was really important. My grandmother and I have a wonderful relationship and since then she helped out a lot with that, and since her cancer diagnosis last summer we got a lot closer over that too. So, definitely like a family thing, and my brother and I are a lot more protective of each other and we look out for each other a lot more then we use to.

Others shared that their parents, siblings, and/or grandparents provided consistent support. A few participants mentioned that they did not receive helpful support from family and shied away from telling family, out of fear of judgment due to cultural and/or religious beliefs around sexual assault and sexual activity. For example, Isabelle noted that she did not feel comfortable talking

to family because there is "stigma around premarital sex" and she didn't "want her family to look down on her or judge her" for what happened.

Third, just over half of participants, explained that they reached out to *friends or peers for social support*. Some participants mentioned that they only opened up to close friends and felt comfortable talking to these friends about their assault. For example, Bailee shared that "her family doesn't know" and it even takes her a while to open up to friends. Isabelle described how she opened up to a close friend because she knew that her friend would not be "judgmental" and as a result of asking for support their friendship strengthened. She also noted that this support was "key" for her coping with her assault. Others explained that opening up to friends and seeking out support changed how they valued their relationships with others. For example, Katie shared,

> I've put a lot of emphasis in all of my friendships. I value my family, my friends, and the people that I feel are really going to be there for me if ever I had an issue, and I could do the same for them. I think I'm just valuing and realizing what's important. That's really been a big change.

Participants also explained that they would reach out for indirect support to help deal with the overwhelming emotions they would experience or other symptoms, but not directly share about their assault.

The fourth category, *partner and/or relationship support*, was singled out by two participants as a helpful form of social support. Bailee explained that being in a committed relationship put her "more at ease" and helped to reduce some of the negative symptoms and affects she experienced as a result of her assault. Gwen also specifically mentioned her boyfriend

being a helpful support during the time of her assault and after. She stated, "he helped out a lot; he was there for me through the whole thing."

The final subcategory in this domain, *professional and/or therapeutic support*, was mentioned by just over half of participants as a helpful source of support. Participants mostly mentioned seeking out therapy and/or talking to a therapist in this subcategory. However, Isabelle also mentioned telling her doctor as a means of reaching out. Others explained that therapy was helpful to allow them to spend some time focusing on acceptance, fear in relationships, resolving self-blame, guilt, trust issues, and working on issues of relevancy. Camille stated,

> I think definitely, seeing my therapist and I've been in only recently, but she and I spent a few sessions really discussing it. And she was really helpful. I mean I'm not the only person that this happens to and it is scary and it's not my fault, and that was really something that I needed to hear because it still at times felt like it was really my fault that I hadn't been responsible or on top of my attitude that night. I think she reminded me that it gets really hard because he was a friend, someone I thought I could trust, and then not being someone I could trust at all.

Faye also shared that she applied coping skills she learned from prior therapeutic experiences to help her cope with her assault. Alice share that therapy was "key" for her in finding the good or positive after the assault.

Growth and Outcomes (Cluster IV)

This cluster consisted of two domains and described the ways participants responded to the assault or the long-term impact that being sexually assaulted had on them.

Positive Personal Growth. Participants' perceptions about the positive personal growth that occurred in their lives was greatly influenced as a result of coping with their assault, as evidenced by the five categories that emerged within this domain. First, participants explained how their *outlook* changed as a result of coping with the assault. Participants shared that they were able to develop a more positive outlook on life, able to look towards the future more, and find themselves and move forward. Faye stated,

> I feel like since it happened I've really been able to establish what I want to be and who I want to be…Yeah, my whole outlook on life has become a lot better. I just realized that, it used to be I was just living that day, that day everything matters, but I'm able to look more towards the future… Be able to plan towards something I want to happen. And I feel I'm matured in that sense. I feel like everything will be okay eventually.

The second subcategory, *strength and/or confidence,* emerged in the data analysis from participants explanations of how they felt stronger and more confident after coping with their assault. Most participants mentioned that they felt stronger, more self-reliant, more independent, secure, and/or more confident after some period of time passed and they utilized the aforementioned coping skills. For example, Dionne explained,

> I feel like I'm stronger. I try not to let something like that bother me too much…If I can know how to handle that situation to where I've been I've been handling it, I'm sure I can overcome a lot of other things.

Julie disclosed that the support she received was key in helping her to begin "feeling like a stronger, empowered woman." Katie noted that she learned to "value her life more," which was an important growth toward feeling stronger. Others also commented that having a sense of control over factors that may have contributed to their assault (e.g., alcohol, being more self-

reliant) allowed them to feel more secure and confident. Isabelle also noted that “growing up and maturing” was key for her and helped her to feel more confident. Overall, participants indicated that through coping, they were able to develop more personal strength.

Third, participants explained that they developed a change in their *frame of mind or more optimism*. Over half of participants commented that they became more appreciative or grateful for what they had, they valued life more, became more positive, and/or tried to reach a point of equilibrium. Katie explained that she became more aware of how much she "valued" and was "grateful for the things she has." She also stated,

> Because it's kind of almost like I got a new lease on life. Like that person that did that to me is awful and that's an awful thing that they did. But if I can find it somewhere to forgive them and, sympathize with other people about it then in turn that makes it, the experience that much a part of my life and for me to be able to move on from it and get going… if I start trying to see the positive in one of the worst situations that could ever happen to someone, then hopefully I'll be able to deal with it for the rest of my life.

Others, like Alice, shared that they changed their views of world, felt more resilient, and felt like they were more prepared to handle additional hardships in the future due to learning how to cope with their assault.

The fourth subcategory, *acceptance*, is similar to the first and third subcategories in that this quality seemed to help participants move forward with their lives. However, we felt its importance “earned” designation as a separate subcategory because it was purely about being able to acknowledge or in some cases forgive what happened and move on, rather than changing the way an interviewee thought or saw the future. For example, Bailee commented that she found

comfort in acceptance and shared that it helped to realize that an assault like this is "probably not supposed to make people stronger." Gwen shared,

> I guess just the whole getting on with your life thing. That has been really important to me because I'm just not a sad person and to just see that sad person is just not what I wanted to do. And finally being able to accept what happened and be able to talk about it, deal with it in a healthy way. That's probably been the best thing ever.

Other participants commented that they spent time thinking about their assault directly and put it into perspective. They explained that they made a conscious decision to let it go and accept what happened in order to help them to be able to move forward with their lives.

Finally, participants described feeling *increased empathy and/or compassion for others* as a result of coping with their assault. Four participants were explicit in sharing that they experienced more compassion for others, more empathy for others, were more able to relate to others, and/or had a desire to put others first. For example, Faye reported that she has become "more aware of other people's feelings and what they may be going through." Gwen explained that her "attitude towards people and the compassions she has towards other people has changed drastically" for the better. She noted that this was "a high point of her story." Katie also shared that she is more aware of other people's stories and that "everyone's got their own specific story that they carry with them." Overall, participants commented that their own coping opened their eyes to what others go through and helped them to become more empathic.

Increasing Knowledge and Speaking Out. Participants' perceptions about expanding their knowledge around sexual assault and becoming activists was heavily influenced as a result of coping with their assault, as evidenced by the five subcategories that emerged within this domain. First, four participants explained how they gained *increased interpersonal awareness*

after the assault took place. Participants commented that they became more aware of others, their own bodies, and/or became more thoughtful/aware of how they talked about things, particularly around the topic of sexual assault. Katie explained that she "puts a lot more thought into what she says now," and is more aware of "how much things can hurt people." She also noted that she feels like she has become a "better listener, friend, and person" partly due to having gained more awareness. Faye also shared that she is more aware and has become "a lot more aware of people," which has helped her to not let things control her or "take over how she is feeling entirely."

The second subcategory that emerged was *increased awareness of surroundings and/or being more cautious*. Just over half of participants mentioned that they felt more aware of their surroundings or became more cautious. It should be noted that this is often seen as a negative effect or a symptom of PTSD in research literature. However, participants commented that this tended to be a positive change for them because they felt more secure and experienced increased safety as a result of this change. Some did note that they also noticed negative effects, as it caused barriers to interacting with others. For example, Julie explained,

> I guess this could be positive or negative, but I feel hyperaware about my surroundings sometimes, which can be a good thing because if you are aware of the precautions you need to take for your safety, I would like to think that you would be less likely to have something happen to you. But that can also be negative because I feel like there is like an extra barrier of distance when it comes to me and some males that I don't know, so I feel like it can also be a negative thing.

Overall, participants commented that they felt like they put more protective factors in place or became more aware, in order to protect themselves in the future.

Third, participants explained that an area of growth for them was *increasing their knowledge around sexual assault and/or about the prevalence of sexual assault*. Some participants shared that prior to their assault they were unaware of how prevalent sexual assault was, how often it goes unreported, and/or what sexual assault actually was. For example, Julie stated,

> I didn't even think of it [i.e. what happened to her] as sexual assault at that time. It took seeing something about the different definitions of sexual assault somewhere online before I fully realized that it was sexual assault. I guess a lot of people tend to think of sexual assault as rape and only rape.

Through studying about sexual assault, expanding their understanding of what constitutes an assault, learning about the prevalence rates, the number of cases that go unreported, and researching resources, participants found that they were more able to confront what happened. Camille shared that through her experience she feels less "naïve" now that she has gained knowledge about what it is like to go through something like her assault. Faye also commented that she values the increased awareness she gained about sexual assault, as well as being able to talk about that indirectly with others and spread that knowledge without directly sharing about her experience.

The fourth subcategory was a *sense of responsibility to help others*. Four participants shared that they felt a sense of responsibility to help others and/or have committed themselves to helping others. Although many participants did not directly endorse this category, those who did shared that they felt a sense of responsibility to help others or look out for others, and mentioned that they want to prevent others from having to go through something similar to what they have gone through. For example, Gwen explained

> It's just always been important to me because I would hate for anything like what happened to me to happen to any of my friends or anybody in my family. So if I could avoid it, like help out by spreading awareness to help avoid the situation then I feel like I've done my part.

Katie also explained that after her assault she made a suicide attempt as a result of struggling to cope. She shared that after someone intervened it "changed her outlook on life and made her realize that at least one person valued her life." She went on to explain,

> Maybe people are going through the same thing as I am. So, after that I kind of made a promise to myself to help other kids with the same problem. And I've recently . . .started this advice column, online. And I have about 80 people that read it and I put up blog posts every week….So, I just kind of take in what happened to me and turn it around. I'm going to take this and make it something I can help other people with.

The last subcategory involves participants' reported *desire to share their own story in order to help others*. Although most did not directly mention a sense of responsibility to help others, when asked why they were interested in participating in the study, the majority of participants commented that they wanted to share their story in the hopes that it would help others. Participants explained that they hoped sharing their story would help others cope in the future, they had a desire to help others because they know how difficult it is to cope with a sexual assault, and/or they felt more inspired to be more vocal/active. Some, like Faye, commented,

> I've become a lot more opinionated and soulful about my opinions. I've become a lot more feminist I suppose and I actively try to change things that I see or if somebody's seeming really misogynistic I'll call that person out and tell him or her what they're doing

> and how it makes people feel. And if I hear a joke that's in poor taste, like any kind of rape joke, I let that person…like I don't say it happened to me, but I say that those who have had it happen could hear a joke like that and it's going to make them relive the experience. So, I try to make people be more aware of what they're doing and how it's affecting other people.

Others shared that part of wanting to help others included spreading awareness, standing up for their beliefs, and/or being a source of support for others. Katie described her desire to help others as a "pay it forward mentality." Most described a desire to want to increase awareness around sexual assault and helping others learn how to cope.

Posttraumatic Growth Development Model in Female Sexual Assault Survivors

The themes discussed above have been organized into a flow chart or model of development (see Figure 1) for posttraumatic growth in female sexual assault survivors. This model represents the important clusters and domains that emerged, as well as the most important relationships among the domains. It should be acknowledged that all clusters, domains, and categories are linked to each other. However, the relationships depicted in the model (i.e., Figure 1) represent those our data analyses suggested might be the most relevant. This will also be discussed with the data that was collected in Part I of the study (see Table 2).

After the final analysis was completed that model was constructed all participants were contacted to participate in the member check described in the method section. Participants were emailed the entire report and asked to look over the report for two things. First, to read the report and determine whether the findings were accurate and a good fit for each of them and/or whether they needed to be revised in some way. Second, to determine whether they were uncomfortable with any of the quoted material in the report that was under their pseudonym and

wanted it removed. Although all participants were contacted for the member check, two participants (Camille and Katie) participated in the member check. After reviewing the final report, neither had any changes to suggest and shared that everything fit well.

CHAPTER IV

DISCUSSION

This mixed-methods qualitative study targeted a group of females who had experienced a sexual assault between a period of six months to five years. The purpose of the current study was to explore the development of posttraumatic growth and use grounded theory methodology to develop a causal model of how this growth can occur following a sexual assault. Participants in the current study described a process that occurs as a result of experiencing a sexual assault. This process began with traits an interviewee believed she possessed before the assault, and in turn involved the effects and impacts of the assault perceived by each participant, the coping strategies used, and the growth and/or outcomes that resulted through this process. The most significant pathways can be seen in Figure 1.

Pathways Involving Preexisting Traits

Participants, who reported prior mental health problems or cited personality traits as causal factors in their coping processes, described three important potential causal links shown in Figure 1. The first significant link is the path between traits prior to sexual assault and negative coping strategies. Traits such as introversion and prior mental health seemed to have a strong influence on participants' initial use of negative coping skills such as denial and avoidance, as well as negative behaviors/risky behaviors like increased alcohol and/or drug use, causal sex, cutting, and suicidal ideation and/or attempts. In general, people who tend to be more introverted have a lower tolerance for social stimulation and lower preference for social support, which may make growth less likely (Tedeschi & Calhoun, 2004). Previous research has found that psychological history, openness to experience, and prior violence exposure influences the severity of PTSD symptoms and how people cope (Koss, Figueredo, & Prince, 2002). However,

research has also found that postassault factors such as self-blame, beliefs about the world, and perceptions of control play a larger factor (Frazier 2003; Koss et al., 2002; Ullman, Filipas, Townsend, & Starzynski, 2007). These factors will be discussed later.

The second and third significant pathways that participants identified include the paths between traits prior to sexual assault and the more adaptive ways of coping that participants utilized. Traits like openness to experience, trustworthiness, conscientiousness, and optimism were traits that tended to lead to more adaptive ways of coping. Participants who reported traits like optimism and conscientiousness were less likely to turn to negative coping strategies such as denial and negative/risky behaviors. However, all participants reported using avoidance as a coping skill to some degree. Instead of using more negative coping skills, participants with optimism and conscientiousness, turned to adaptive coping skills like journaling, spending time alone and being open and honest with themselves; turning to their religion and increasing their religious activity; exercising, reading, learning new things to stay in a positive frame of mind; or starting an advice column, staying busy, and working on forgiveness. Optimists tend to emphasize the positives within a difficult/negative situation, which can help them to focus their attention on more adaptive ways of coping. Those high in conscientiousness tend to be disciplined and orderly, which may also help them to rely on developing more adaptive coping skills and ultimately develop more growth and positive change (Linley & Joseph, 2004; Tedeschi & Calhoun, 1996). Camille, who mentioned openness to experience and trustworthiness, utilized more negative coping skills. However, she also incorporated more adaptive coping skills like those who endorsed optimism and conscientiousness. Her use of both forms of coping may be due to the fact that those who are open to experience are accustomed to examining their

experiences and are potentially able to see how they can grow from their experiences and/or how they can be beneficial to their lives (Linley & Joseph, 2004; Tedeschi & Calhoun, 1996).

Participants who identified themselves as optimistic, conscientious, open to experience, and trustworthy were also much more likely to endorse seeking support, as opposed to introverted participants or those who only endorsed prior mental health problems. These traits led participants to feel more comfortable seeking indirect support, opening up to others, and/or seeking professional help through therapy. These characteristics also allowed them to be able to relate to others, feel more connected, learn to further build trust, and learn the importance of interpersonal connections. Prior research has found that optimism, seeking social support, spirituality/religion, active coping, acceptance coping, and religious coping are correlated and associated with posttraumatic growth (Prati & Pietrantoni, 2009). Researchers have asserted that people with personality characteristics, such as optimism and hope, promote growth through its effects on threat appraisal and adaptive coping strategies (i.e., active coping, seeking social support, and positive reappraisal) (Prati & Pietrantoni, 2009).

Links Involving Responses or Impact(s) from Assault

With regard to the responses and impact of the assault that participants reported, they endorsed four important links shown in Figure 1. The first significant pathway that participants endorsed was the path between negative affective responses and negative coping skills. Due to the negative emotional reactions that participants reported feeling, such as fear, apprehension, confusion, shock, depression/sadness, guilt, grief, feeling powerless, regret, feeling overwhelmed, judgment from others, closed-off, feeling hopeless/helpless, self-blame, etc., it is not surprising that participants would initially react to their assault with more negative coping skills such as denial, avoidance, and/or negative behaviors/risky behaviors (i.e., "self-destructive

behaviors"). These coping skills allow sexual assault survivors to distance and distract themselves from their assault, keep themselves from having to think about their assault, allow them to rationalize what happened, and/or allow them to find ways to numb the often intense negative emotional and psychological impact they experienced as a result of their assault. This was supported by the quantitative data collected in part one of the study, in that those who scored higher in avoidance coping in problem avoidance tended to have higher symptomatic scores on the PCL-S or more distress (see Table 2). Previous research also supports the current findings that those who tend to engage in denial, avoidance, and/or self-destructive behavior tend to be those who experience greater distress as a result of their assault (Frazier, Mortensen, & Steward, 2005; Rosental, Hall, Palm, Batten, & Folette, 2005; Wiffen & MacIntosh, 2005). Researchers have also found that survivors who experience more negative affects or distress are more vulnerable to rely on maladaptive or avoidance coping (Littleton & Breitkopf, 2006).

For the current study, the second significant link is the path between symptomatic reactions and negative coping strategies. Those who endorsed the significant symptomatic reactions were more likely to engage in more negative coping skills than other participants. Symptom reactions such as losing touch with reality or sleep disturbances appeared to have an impact on participants using negative coping skills like avoidance and to some extent denial and negative behaviors/risky behaviors. Participants were more likely to endorse using negative coping skills within at least two subcategories when they endorsed symptomatic reactions. This seemed to allow them to alleviate some of the distress they experienced as a result of their assault. Maladaptive coping strategies such as self-destructive behavior, avoidance, social withdrawal, etc., have been found to be associated with higher symptom severity and greater rates of distress (Arata, 1999; Frazier et al., 2005; Valentiner, Foa, Riggs, & Gershuny, 1996).

Two of the four participants (Bailee and Heidi) who reported experiencing these negative symptomatic reactions were two of the three that met criteria for a PTSD diagnosis according to their responses on the PCL-S. All four of these participants also tended to score higher on the PCL-S, as well as to moderately endorse problem avoidance coping on the CSI. It should be noted that previous research has yielded mixed results regarding the relationship between symptom severity and posttraumatic growth (Grubaugh & Resick, 2007).

The other significant pathway involving responses or impacts from the assault includes the path between negative relationship impacts that participants experienced and both negative coping strategies used and desire and/or ability to seek support from others. First, participants described how loss of relationships, increased isolation and/or distance from others, fear of intimacy and/or relationships with males, perceived barriers to social support, and trust issues with others all had an impact on their use of negative coping skills. Participants who endorsed more negative relationship influences seemed to also endorse more negative coping strategies. For example, Katie and Elanna both endorsed four negative relationship impacts and endorsed two or more negative coping strategies such as avoidance, denial, cutting, increased alcohol and drug use. Research has shown that survivors of sexual assault find feelings of stigma around their assault to be a significant predictor to greater reliance on avoidance coping (Gibson and Leitenberg, 2001). In addition to this link, participants with more negative relational impacts, especially those with more perceived barriers to social support had more difficulty seeking support overall.

The fourth pathway between negative relationship impact(s) and seeking support seemed to be impacted by how participants perceived others (i.e., whether they were trustworthy, judgmental, supportive, or their would be disbelief). Based on their experiences with others, the

majority of participants reported slowly opening up to others about their assault and what they were struggling with. Some did this indirectly (i.e., by not sharing about their assault, but rather just talked to others to get support), and some were very open about their experiences. However, participants who experienced more negative relational impacts tended to be reluctant to open up to others initially. This may be due to the negative coping skills they utilized like denial and avoidance. For example, Dionne and Heidi both shared that they did not find social support helpful and/or did not open up to others. Researchers have found that survivors who tend to cope by withdrawing tend to report more distress (Frazier & Burnett, 1994). The data from the social withdrawal scale in this study did not match what participants reported during their interviews, in that those with more negative relational impacts did not always have higher scores on the social withdrawal subscale of the CSI. Prior research has found that negative changes in relationships tend to be associated with higher levels of distress, which is likely due to the expectations survivors have of receiving support from those close to them (Frazier et al., 2001).

Pathways Involving Negative Coping Strategies

When participants made use of negative coping strategies it was apparent that there was a period of time immediately following their assault where they were especially likely to employ these strategies. However, after some time passed they realized that the negative coping strategies were ultimately not helpful, and they began to look for more adaptive strategies. This resulted in two significant paths between negative coping strategies and both adaptive coping strategies and seeking support. First, participants, like Bailee, Camille, and Julie who reported using negative coping strategies from all of the subcategories tended to report less adaptive coping strategies. However, these were participants who tended to strongly endorse the importance of seeking support and the role that social support had in their recovery/growth

development. Overall, participants seemed to reach a point in their process when the negative coping strategies no longer worked or became counterproductive. Researchers have found that survivors of sexual traumas who use more adaptive coping strategies (i.e., cognitive appraisal/restructuring, approach coping, problem-focused coping, seeking social support) are generally associated with more positive adjustment (Walser & Hayes, 2006). It has also been shown that using available resources and/or disclosing the trauma to a supportive social network tends to produce more psychological benefit (Cole & Lynn, 2010). Participants also seemed to realize that in order to be able to move on with their lives they would have to turn to more adaptive or try healthier ways of coping to alleviate their distress.

Links Involving Healthy Coping Strategies

As participants moved towards use of healthier coping strategies they began to notice the growth opportunities and changes in their lives that took place following their assault. It should be noted that this was a gradual process. Although some participants reported less growth overall, all did indicate some growth and/or positive changes in their lives as a result of trying to cope with their assault and find more adaptive ways to move forward. This is supported by the quantitative data collected: With the exception of Bailee, all participants reported growth on the PTGI. However, for most, the changes that the PTGI picked up were moderate. The pathways that occurred within this area appeared to be bi-directional. For example, as participants made use of more adaptive coping strategies they seemed to notice more positive changes and growth in their lives, which in turn allowed them to continue to employ more adaptive coping strategies and/or feel comfortable opening up and talking about their experience. With this in mind, four significant bi-directional pathways emerged.

The first significant pathway that participants endorsed is the path between adaptive coping strategies and positive personal growth. For participants who endorsed adaptive coping strategies such as: self-care techniques, increased distance, forgiveness, cognitive reappraisal, turning to spiritual/religious support, increased effort, and/or approach coping tended to also endorse more positive changes in their lives and posttraumatic growth. Some participants were able to directly link their growth and positive changes to their adaptive coping and shared that through coping they were able to make changes such as: build more personal strength or confidence; gain acceptance for what happened, what life hands you, and/or of human behavior; and gain a more positive outlook on life and begin looking toward the future. Participants also endorsed the other two subcategories of personal growth (i.e., outlook and increased empathy/compassion for others), but this varied for those who endorsed adaptive coping strategies. This is consistent with previous research, showing that there is a positive relationship between survivors who use more adaptive coping strategies or approach coping and those who report more positive life changes (Frazier et al., 2004; Park et al. 1996). Based on the quantitative data collected, participants who reported higher rates of growth on the PTGI tended to also endorse approach coping on the CSI. However, all participants also endorsed avoidance coping at a fairly high rate on the CSI. Because participants were asked to respond to the extent they used each type of coping mechanism in handling their sexual assault, it is hard to determine whether the high rates of avoidance coping took place immediately following the assault and then they moved toward approach coping, which is why the interviews provide useful insight into their coping patterns. All participants, except for Isabelle, reported reexamining their fundamental assumptions about the world from a moderate to very great degree based on the results from the CBI. Researchers have posited that during the process of reexamination,

survivors of traumatic events have the opportunity for the recognition of the positive, as well as the negative, implications of their stressful experience which can ultimately help them to grow and establish positive changes and realizations in their lives (Cann et al., 2010).

The second significant pathway that emerged was the path between seeking support and positive personal growth. Participants who endorsed social support as a helpful coping strategy tended to also endorse more positive personal growth subcategories. It should be noted that two participants (Dionne and Heidi) indicated that seeking support from others was not a helpful coping strategy for them, but they were still able to recognize and develop positive personal growth out of their experiences. For those who did endorse seeking support from others as helpful, they were more likely to gain more compassion or increase their empathy for others, as well as change their outlook for the better. It seems that the two subcategories of positive personal growth that were not as affected by other adaptive coping strategies were more affected by seeking support. For some, the support they received was the most important factor for them in developing their growth and seeing positive changes. Researchers have found that survivors who rate their support network as more helpful and have less negative feelings towards their support network, also report more positive life changes (Frazier et al., 2004; Park et al., 1996). Quantitative data, for the most part, supported these findings in that those who reported more growth on the PTGI also reported lower scores on the social withdrawal scale of the CSI.

The third significant path between adaptive coping strategies and growth outcomes is increasing knowledge and speaking out. When more adaptive coping strategies were employed participants grew in areas such as increased interpersonal awareness, becoming more cautious, increasing their knowledge of sexual assault, and/or gaining a desire to share their story to help others. Previous research has found that those who report increases in approach coping, adaptive

coping, control over recovery, and taking precautions also report more positive life change versus those who report increases in avoidance coping and higher distress (Frazier et al., 2004). In particular, participants in the current study appeared to gain more knowledge about the prevalence of sexual assault, how many cases go unreported, and exactly what constitutes an assault, which tended to also lead to an increased desire to speak out and help others. This only appeared to happen after participants employed more adaptive coping strategies and found themselves in a more stable place, as well as built up some of the positive personal growth like strength and confidence, acceptance, and/or increased empathy and compassion for others. Some participants even shared how talking to or helping other provided a way for them to continue to help themselves. Prior research has found that survivors who are able to talk about their assaults and acknowledge what happened tend to experience less severe PTSD symptomatology and tend to see benefits sooner than those who remain closed off (Ullman et al., 2007). For the current study, participants shared that as timed passed, anywhere from a few months to several years depending on the person, they seemed to feel like they needed to help others or "pay it forward" as Katie explained it, in order to prevent something similar from happening to people they care about or to try to decrease the prevalence of unreported cases.

The final noteworthy link in Figure 1 is the path between seeking support and increasing knowledge and speaking out. In the current study, as participants turned to others for support they tended to observe more growth in increased awareness, knowledge around sexual assault, and a desire to help others. Previous research has found that sexual assault survivors have described becoming more cautious and less trusting as benefits of their trauma experience (Frazier & Burnett, 1994; McMillen et al., 1995). This may be why survivors are able to eventually feel more comfortable opening up and seeking out various sources of support; due to

their new sense of safety and security. The majority of participants shared that they were interested in participating in the current study because they wanted to speak to their experience as a sexual assault survivor and share their story in order to help others. However, some also shared that they were interested in hearing how others have coped to receive additional help themselves. It is possible that by participating in the study and/or reaching out for support, survivors receive validation in the absence of negative reactions, which is likely a powerful experience that leads them towards positive change and continued growth. Individuals who report increases in social support and taking precautions tend to report more positives changes overall versus those who report higher levels of distress and utilize avoidance coping (Frazier et al., 2004). It is also worth noting that those who reported professional and/or therapeutic support as a helpful source of support seemed to endorse more positive change and growth overall, but particularly in the areas of increased knowledge of sexual assault, a desire to help others, increase in strength and confidence, change in frame of mind or optimism, and acceptance. Participants did not necessarily comment that these were the benefits that therapy provided, but some did mention that therapy was essential in helping them to find the positive or the good after their assault.

Limitations of the Study

This study presents a more holistic view of the effects and development process of posttraumatic growth associated with sexual assault and the bidirectional nature of the coping process during recovery. Nonetheless, some limitations pertaining to the mixed-methods design, as well as participants' backgrounds are important to highlight. First, although we used a team for analysis, the findings are inevitably influenced by the team members' biases and expectations. A second limitation is the potential of self-selection bias amongst participants. Those who

volunteered to participate in the study are more likely to have positive feelings about seeking support and opening up about their experiences concerning the assault than those who found support and talking about their assault less helpful. In other words, survivors with a tendency to seek social support and/or have a desire to help others may be over-represented in the women who volunteered for this study. Third, all participants had a prior relationship with or knew their perpetrator, which could change the way they coped or were affected by their assault as well as how posttraumatic growth developed. Without having participants who did not know their perpetrator for a comparison, it is difficult to tell if developmental processes would be the same. Fourth, all participants were current college students from a large southeastern university, despite the various forms of recruitment. One participant who was somewhat older than the others and had a master's degree. Additionally, due to the retrospective nature of the interview process and the questions asked during the interviews, participants may have only disclosed things that particularly stood out to them, were prompted and/or primed on (due to the interview questions and/or due to the quantitative survey from part one of the study), and/or had particularly clear memories of. Participants' ability to articulate their experiences, coping, and growth may have impacted the data collection. Furthermore, potential participants needed to self-identify as a sexual assault survivor, which could have led some survivors to not participate because they felt like their experience was not technically "sexual assault" or would not be classified in that way. As one participant stated, "a lot of people tend to think of sexual assault as rape and only rape." In summary, the results of this study may not be transferable to survivors of sexual assault who are not as willing to open up/seek support, not students, have lower educational levels, or could not articulate their experiences.

Implications for Practice and Intervention

This study helps to shed light on the processes that survivors of sexual assault go through in attempting to cope with the distress they experience. Therefore, the study has significant implications for practice and education. The results highlight the complex dynamics between preexisting traits; responses or impacts; and coping strategies, and how they interact to help survivors develop positive changes or growth. Therefore, it is important for practitioners to be aware of preexisting traits that their clients may hold and how they could benefit their clients in the posttraumatic growth process (e.g., optimism or conscientiousness) or hinder them (e.g., introversion). It will also be important for practitioners to be aware of how survivors tend to cope and whether they utilize approach coping techniques or more avoidance coping techniques. As the current study has suggested, most survivors will go through a process of utilizing avoidance coping techniques, but eventually turn to approach coping. It may be that they need assistance in establishing more adaptive or approach coping skills before they can begin to make use of them and/or before significant posttraumatic growth may be able to take place.

It is also important for practitioners to take note of what participants commented on in terms of finding helpful to explore in therapy (i.e., focusing on acceptance; fear in relationships; resolving self-blame, guilt, trust-issues; and working on issues of relevancy). For example, practitioners could design their interventions to address negative assault sequelae (e.g., self-blame) by utilizing cognitive processing therapy and stress inoculation training to reduce avoidance coping (Resick & Schnicke, 1996; Zoellner, Fitzgibbons, & Foa, 2001). Through helping clients to focus on the effects or impacts that are most significant to them or holding them back, practitioners can help survivors to move forward toward a place of positive personal growth and/or increased knowledge and speaking out. It is important to note that alleviation of

distress does not necessarily indicate that growth will take place. However, in utilizing more approach coping techniques and working toward growth can in turn alleviate more distress (Frazier et al., 2001; Linley & Joseph, 2004). With this in mind practitioners can promote the facilitation of growth in survivors as a different intervention from those that focus on alleviating distress (Linley & Joseph, 2004).

It is also important to note for practitioners that survivors' acceptance does not necessarily mean forgiveness. Participants in this study commented that for them acceptance meant being able to acknowledge their assault and admit what happened to them. For example, Gwen explained that for her it was important to "accept what happened and be able to talk about it, and deal with it in a healthy way." Gwen never actually mentioned forgiveness as a part of her healing process or moving towards acceptance. Most participants who shared that acceptance was an important part of their growth did not mention forgiveness, which is beneficial for practitioners to know that survivors can still make positive changes in their lives and grow from their experience without forgiving their perpetrator.

Overall, the study highlights several important places for practitioners to intervene when working with sexual assault survivors. However, it also provides useful information about educating the general public about sexual assault, what constitutes sexual assault, and prevalence rates, as this would prove to be beneficial in responding to sexual assault survivors in need. It is also important to educate people on how to be sensitive to respond to a sexual assault survivor and be empathic to their needs, as well as the importance and/or impact that strong/positive social support in a survivor's life can have. As indicated in the results of this study, most survivors commented that positive, non-judgmental social support was one of the most beneficial coping strategies that helped lead them to establish more positive changes and grow after their

assault. Learning that social support is a key factor in the coping process for survivors may help to shed some light on the need for prevention programs being targeted at raising empathy and decreasing rape myths in order to help provide this kind of support and response to survivors, but also to increase awareness of what survivors go through. Research has shown that prevention programs targeted at increasing empathy and reducing rape myth acceptance have shown positive results in reducing rape myth acceptance, but lasting effects of increased empathy for survivors have had mixed results (Jiminex & Abreu, 2003; O'Donohue, Yeater, Fanetti, 2003).

Conclusion and Suggestions for Future Research

In sum, the current study contributes to the integration of research on posttraumatic growth and sexual assault survivors. This study resulted in a model of the developmental processes of how female sexual assault survivors cope after their assault, and how some ultimately develop posttraumatic growth. The findings of this study provide important insights into considering that survivors utilize more avoidance coping techniques immediately following their assault and then turn to more adaptive or approach coping techniques after realizing that avoidance techniques are not working for them or are no longer useful or are causing more problems than benefits. It is with more approach coping strategies, especially seeking support, that survivors of sexual assault seem to develop positive personal growth and increased knowledge and a desire to speak out to help others.

The present study suggests that participants tend to turn to negative coping strategies or avoidance coping immediately following their assault. However, it was never directly asked if this was due to the fact that they lacked approach coping techniques or knowledge of them. Future research is needed to determine what makes survivors more likely to turn to avoidance coping immediately following their assault, rather than approach coping strategies if they prove

to be more helpful. Also, due to the homogeneity of the sample (i.e., all were college students, most were similar in age, all knew their perpetrator) future research should include survivors who differ to a greater extent in demographic variables and assault characteristics to gain a clearer understanding of whether these characteristics play a role in how a survivor copes and thus develops posttraumatic growth. Future research should also look at the positive and negative changes that take place following a sexual assault in a survivor's life and how both types of changes may influence the outcomes of growth, given that many participants in the current study pointed out that there were many negative things that resulted from their assault that will remain negative. However, these participants were still able to develop growth in light of those things remaining negative. The interplay of the positive and negative changes that occur in a survivors life is likely important to the developmental process of posttraumatic growth and more information is needed in this area. In addition to these areas, future research should look at changing the scoring/scale on the PTGI. In the current study, the scale was changed to an 11-point Likert scale (including both negative and positive responses), which allowed participants to rate how their assault has impacted them in the areas assessed by the PTGI. Many rated several items negatively, which is likely why there was only moderate growth picked up on the PTGI. Only giving participants the option of something being positive or it not occurring is not very realistic to a trauma survivor's recovery process. Therefore, it would be beneficial for future research to look at the impact of the scale of the PTGI.

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APPENDICES

APPENDIX A
TABLES

Table 1

Participant Information

Participant	Pseudonym	Age	Race/Ethnicity	Highest level of education completed	Months since sexual assault occurred
1	Alice	44	African American	Master's degree	10
2	Bailee	19	Native American	Some college, but no degree earned	38
3	Camille	20	Caucasian, White	Some college, but no degree earned	26
4	Dionne	18	African American	Some college, but no degree earned	36
5	Elanna	20	African American	Some college, but no degree earned	25
6	Faye	18	Caucasian, White	Some college, but no degree earned	7
7	Gwen	18	Caucasian, White	Some college, but no degree earned	39
8	Heidi	18	Multiracial	High school graduate or equivalent	48
9	Isabelle	18	Caucasian, White	Some college, but no degree earned	50
10	Julie	21	Caucasian, White	Some college, but no degree earned	19
11	Katie	20	Caucasian, White	Some college, but no degree earned	12

Note. All names are pseudonyms.

Table 2

PTGI, CBI, and PCL-S

Participant	Pseudonym	PTGI Total	PTGI (+)	PTGI (-)	CBI	PCL-S	PTSD
1	Alice	3.16	4.06	-2.33	4.33	29	.00
2	Bailee	-3.86	-	-3.86	4.56	42	1.00
3	Camille	.67	2.55	-2.29	3.67	26	.00
4	Dionne	1.70	2.29	-1.25	4.22	45	.00
5	Elanna	.60	1.53	-1.38	4.89	44	.00
6	Faye	1.00	1.65	-.70	4.11	42	1.00
7	Gwen	.14	3.00	-3.27	5.89	49	.00
8	Heidi	1.41	3.42	-2.83	4.22	42	1.00
9	Isabelle	.90	2.00	-1.00	2.78	22	.00
10	Julie	2.50	2.50	.00	4.33	35	.00
11	Katie	.88	2.50	-3.00	3.67	40	.00

Note. PTGI Total = total score on the Posttraumatic Growth Inventory, PTGI (+) = PTGI score with only positive responses possible, PTGI (-) = PTGI score with only negative scores possible, CBI = Core Beliefs Inventory, PCL-S = total score on the PTSD Checklist – Specific Stressor Version, PTSD = a diagnosis of PTSD = 1 based on responses to at lease one B item, at least 3 C items, and 3 D items on the PCL-S

Table 3

Coping Strategies

Participant	Pseudonym	CR	EE	AP	PA	SW	AV
1	Alice	3.44	2.57	6.01	2.33	3.33	5.66
2	Bailee	1.88	2.67	4.55	2.67	3.67	6.34
3	Camille	1.89	2.57	4.46	2.67	4.11	6.78
4	Dionne	2.89	2.00	4.89	3.00	2.11	5.11
5	Elanna	2.33	2.14	4.47	2.78	2.78	5.56
6	Faye	1.44	1.86	3.30	2.67	2.67	5.34
7	Gwen	1.67	1.57	3.24	3.63	4.13	7.76
8	Heidi	2.33	1.14	3.47	3.33	4.67	8.00
9	Isabelle	1.44	2.71	4.15	2.44	2.78	5.22
10	Julie	3.22	2.43	5.65	3.44	4.11	7.55
11	Katie	2.44	2.86	5.30	2.67	2.89	5.56

Note. CR = Cognitive Restructuring, EE = Emotional Expression, AP = Approach coping, PA = Problem Avoidance, SW = Social Withdrawal, AV = avoidance coping

Table 4

Clusters, domains, and subcategories

Cluster I: Preexisting Traits

1) Traits Prior to Sexual Assault
    a. Prior Mental Health Issues (4)
    b. Personality Traits (5)

Cluster II: Responses or Impact from Assault

1) Negative Affective Responses
    a. Negative Emotions/Reactions (10)
    b. Closed-off/Not Open (7)
    c. Self-Blame (6)
    d. Loss of Control (5)
    e. Feeling Hopeless/Helpless (5)
    f. Effects on Emotionality (3)
2) Symptom Reactions
    a. Out of Touch with Reality (3)
    b. Sleep Disturbance (2)
3) Negative Relationship Impact
    a. Lost Relationships (5)
    b. Isolation/Distance from Others (5)
    c. Fear of Intimacy/Relationships with Males (5)
    d. Barriers to Seeking Social Support (7)
    e. Trust issues with Others (5)

Cluster III: Coping Strategies

1) Negative Coping Strategies
    a. Denial (5)
    b. Avoidance (11)
    c. Negative Behaviors/Risky Behaviors (4)
2) Adaptive Coping Strategies
    a. Self-care/Healthy Coping Skills (10)
    b. Religion (5)
    c. Determination/Resilience (4)
3) Seeking Support
    a. General Social Support (9)
    b. Family Social Support (4)
    c. Friend/Peer Social Support (6)
    d. Partner/Relationship Support (2)
    e. Professional/Therapeutic Support (6)

Cluster IV: Growth and Outcomes

1) Positive Personal Growth
    a. Outlook (5)
    b. Strength/Confidence (10)
    c. Frame of Mind/Optimism (8)
    d. Acceptance (7)
    e. Increased Empathy/Compassion for Others (4)
2) Increasing Knowledge and Speaking Out
    a. Increased Interpersonal Awareness (4)
    b. Increased Awareness of Surroundings/More Cautious (6)
    c. Increased Knowledge of Sexual Assault (6)
    d. Sense of Responsibility to Help Others (4)
    e. Desire to Share Own Story to Help Others (9)

APPENDIX B
FIGURES

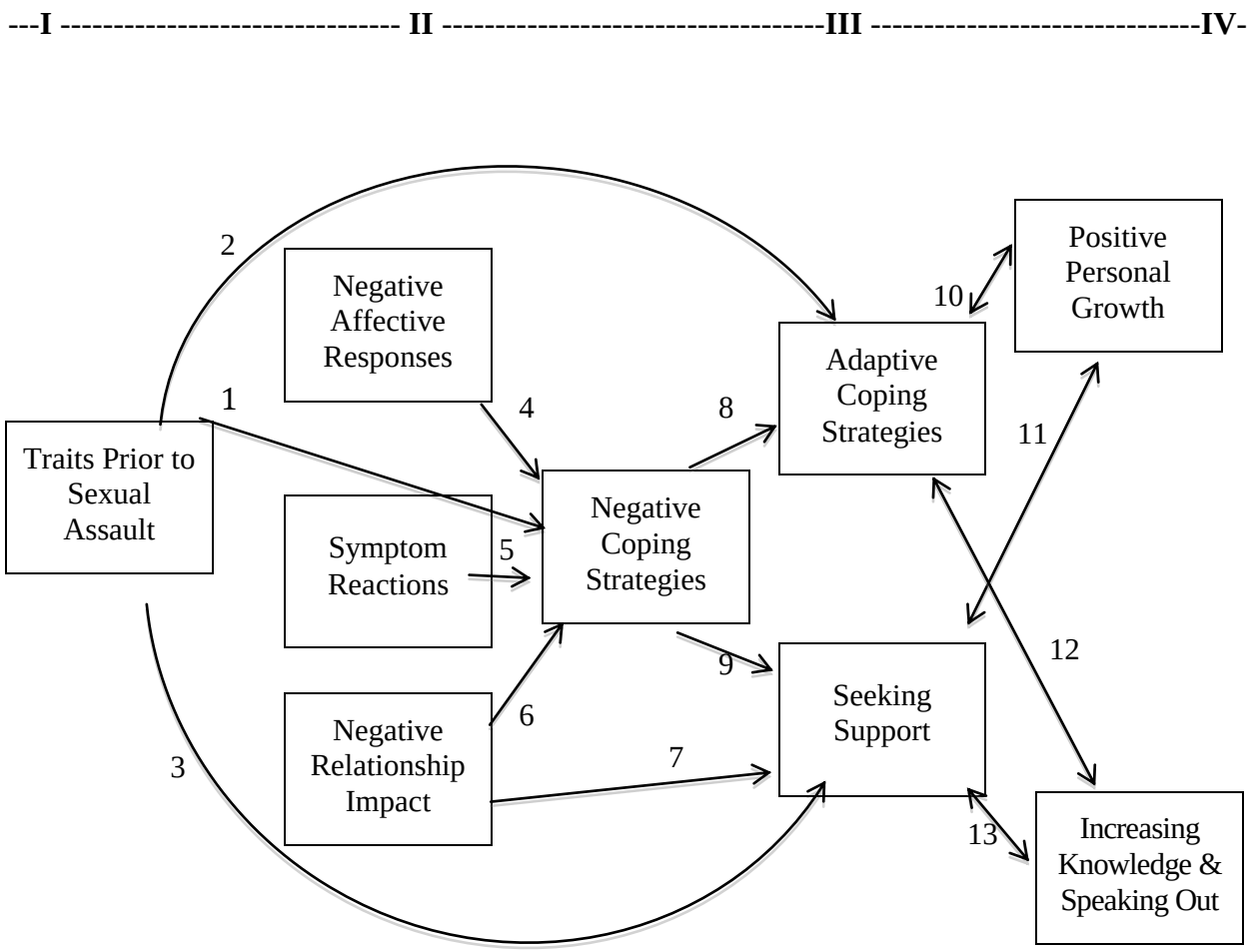

Figure 1: *Posttraumatic Growth Development Model in Female Sexual Assault Survivors*
Note. This model only represents the most important linkages between factors. However, we do acknowledge that everything is linked to everything else. I = Preexisting Traits, II = Responses or Impact from Assault, III = Coping Strategies, IV = Growth and Outcomes

APPENDIX C
INTERVIEW PROTOCOL

Screening Questions:

- Question 1: Have you had thoughts of ending your life? <<If interviewee responds yes, ask follow-up question.>> Do you currently have thoughts of suicide?
- Question 2: Are you afraid you are might lose control or act violently?
- Question 3: Do you feel like you lose touch with reality?

Interview Questions: <<if the interviewee answers the above questions no, then Jessica will proceed with the interview and ask the following questions. If the interviewee responded yes to any of the above questions the interview was be terminated. The participant was thanked for their time and it was made clear that they would still receive the $20 gift card for their time. >>

- Question 1: Let's start with hearing a little bit about what interested you to participate in this research.
- Question 2. In only as much detail as you are comfortable with, can you tell me the broad outlines of what happened to you during the sexual assault you reported on in Part I of the study?
- Question 3: What changes you have noticed in your life since you were sexually assaulted?
- Question 4: In what ways have you coped with the assault?
- Question 5: In what ways are you a different person today than you would be if the assault did not happen?
- <<At this point in the interview Jessica Mason should stop and check in with the interviewee to make sure they are doing okay and are okay to continue. "At this point I

just want to stop and check in. How are you doing? We've finished 5 of the 9 questions, Is it OK to proceed?" >>

- Question 6: With the passage of time, some people say that eventually they are able to recognize positive changes in the aftermath of their experience. Has anything like this happened for you?
- <<Skip the next question if interviewee does not report anything positive changing in their life.>>
- Question 7: I'm particularly interested in looking at how people find the good or the positive in what has happened to them after a terrible experience. What has been key for you in finding the good or positive after the assault?
- Question 8: Is there anything else you would like to say or add?
- Question 9: Do you have any questions you would like to ask me before we complete the interview?

VITA

Jessica Mason was born in Prescott, Arizona. She received her Bachelor's of Science degree in Psychology from Arizona State University in December 2005. She received her Master's of Science degree from Georgia Southern University in Clinical Psychology in May 2008. She is currently attending the University of Tennessee, Knoxville where she expects to receive her doctorate in Counseling Psychology upon completion in August 2013. She is currently completing her pre-doctoral internship at the Virginia Commonwealth University counseling center. After graduating she hopes to continue working with the university population and advocating for sexual assault survivors.