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POST-ASSAULT RECOVERY IN UNDERGRADUATE COLLEGE STUDENTS: THE ROLE OF MINDFULNESS AND SELF-COMPASSION

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THE ROLE OF MINDFULNESS AND SELF-COMPASSION

A DISSERTATION APPROVED FOR THE
DEPARTMENT OF EDUCATIONAL PSYCHOLOGY

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For my husband, for always believing in me and the constant reminders to take each day bird by bird. For Clayton, who will forever be missed but will forever live on as our wise old owl.

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Abstract

The study sought to explore the role that aspects of self-compassion (self-kindness, common humanity, mindfulness, self-judgement, isolation, overidentification) and mindful awareness would have on the psychological wellbeing of those who reported a history of sexual assault during childhood (prior to age 18) and/or a history of sexual assault during adulthood (since age 18). Prior research has already established a significant relationship between mindfulness, and psychological wellbeing (Campos et al., 2016; Desrosiers et al., 2013), which aligns with the existing theory of the Temporal Model of Perceived Control (Frazier, 2003), and the current counseling theories within Mindfulness – and Acceptance Based Therapies (Hayes, 2004). Self-compassion has also been shown to increase psychological wellbeing (Barlow et al., 2017; Neff, 2003). The current study explored (a) the relationships between aspects of self-compassion, mindful awareness, and psychological wellbeing among college -matriculated students with childhood and/or recent experiences of sexual assault, and (b) does mindful awareness and aspects of self-compassion predict psychological wellbeing among undergraduate students with childhood experiences and/or recent experiences of sexual assault. All aspects of self-compassion variables and mindful awareness were entered into a hierarchical regression model separately for those who reported a childhood and/or those who reported a recent experience of sexual assault. Self-kindness, and mindful awareness were found to be significant predictors of psychological wellbeing for those with a childhood history of sexual assault. Self-kindness, isolation, and mindful awareness were found to be significant predictors of psychological wellbeing for those with a recent experience of sexual assault.

Chapter 1: Introduction

The United States Department of Justice (Truman & Langton, 2015) reported that from 2005 to 2014, 30% of the population were sexually assaulted or raped and 50% of the population experienced an attempted rape or sexual assault. Sexual assault is defined as touching another person's intimate parts *without consent*, attempting to coerce, or forcing a person to touch another person's intimate parts *without consent*, rape, or if the victim is unable to provide consent because of age, incapacitation (i.e., drugs, alcohol, being unconscious or passed out), or mental status (Abbey, Clinton-Sherrod, McAuslan, Zawacki, & Buck, 2003; Cantor et al., 2015; U.S. Department of Justice, 2014).

Although sexual assault can occur anytime throughout someone's lifetime, it has been found that women from late adolescence to early adulthood have a higher likelihood of experiencing sexual assault (Truman & Langton, 2015). Considering that almost half of women between the ages of 18-24 years old are in college, it is crucial to examine sexual assault within this specific context (Truman & Langton, 2015). In recent years, the occurrence of sexual assault on college campuses has become a national discussion and, in January 2014, resulted in the creation of the White House Task Force to Protect Students from Sexual Assault. Kirkpatrick and Kanin (1957) conducted the first study about sexual assault on college campuses, and since then there has been extensive research exploring the prevalence, risk factors, and recovery process on college campuses (Cantor et al., 2015; Coulter et al., 2017; Humphrey & White, 2000). On average, research findings have consistently shown that around a quarter of female college students have reported experiencing a sexual assault; however, it is

noteworthy that sexual assault remains significantly under-reported on college campuses compared to the general population (Sinozich & Langton, 2014). Thus, the actual number of college students who are sexually assaulted may be higher.

Considering that about one-quarter of college females reported being sexually assaulted during their college education (Sinozich & Langton, 2014), with the potential for even more assaults that are not reported, an important question to consider is what factors contribute to post-assault recovery from such a traumatic incident? The impact of sexual assault has been shown to be one of the most traumatic experiences an individual may have in their life (Frazier, Mortensen, & Steward, 2005), with a number of adverse long-term consequences linked to sexual assault including posttraumatic stress disorder (Kintzle et al., 2015), depression (Krahé & Berger, 2017), decreased self-esteem (Krahé & Berger, 2017), increased suicidality (Tomasula, Anderson, Littleton, & Riley-Tillman, 2012), substance abuse (Rhew, Stappenbeck, Bedard-Gilligan, Hughes, & Kaysen, 2017), and self-blame (Frazier, 2003; Frazier et al., 2005).

Sexual assault survivors who were incapacitated at the time of the assault have a higher likelihood to blame themselves for sexual assault, which has been linked to decreased post-assault recovery and increased psychological distress (Koss, Figueredo, & Prince, 2002; Peter-Hagene & Ullman, 2015) This is an important factor when considering post-assault recovery for college students since college students consume alcohol at a significantly greater rate than the general population (Abbey, 1991). Multiple research studies have confirmed that over half of college-aged sexual assault survivors were incapacitated at the time of the assault (Krebs, Lindquist, Warner, Fisher, & Martin, 2009; Lawyer, Resnick, Bakanic, Burkett, & Kilpatrick, 2010).

There have been two primary models introduced to explain the role of self-blame in the post-assault recovery process (Frazier, Berman, & Steward, 2001; Janoff-Bulman, 1979). Janoff-Bulman (1979) argued that behavioral self-blame was adaptive in that the sexual assault survivor could attribute the event to their past behavior, thus developing the belief that future traumas could be avoided. This was believed to create a sense of control over the future and as a result, decreased distress in the sexual assault survivor. Although Janoff-Bulman (1979) suggested behavioral self-blame is adaptive, research on the topic has found quite the opposite (Frazier et al., 2005). The Temporal Model introduced by Frazier (2003) proposed that behavioral self-blame inhibits the recovery process due to the focus of control being in the past (i.e., thinking of past behavior). This model differentiates the impact of past, present, and future control on psychological distress. Past control refers to focusing on control of a past stressful event that occurred, future control refers to trying to control a stressful event in the future, and present control refers to focusing on components of the stressor that is currently in one's control (Frazier et al., 2015). Past control has been consistently linked to increased self-blame, distress, depression, and anxiety, whereas present control has been linked to significant decreases in self-blame, distress, anxiety, depression, and perceived stress levels (Hintz, Frazier, & Meredith, 2015; Frazier, 2003; Frazier et al., 2005; Frazier et al., 2012) More specifically, Frazier et al. (2005) examined the impact of control on the recovery process for sexual assault survivors and found that present control was related to decreased distress because it resulted in decreased self-blame and maladaptive coping strategies (e.g., problem avoidance and social withdrawal).

Mindfulness is a construct that arguably parallels aspects of the present-control described by Frazier (2003) as it is most often defined as "paying attention in a particular way: on purpose, in the present moment, and nonjudgmentally" (Kabat-Zin, 1994, pp. 8-9). Mindfulness has been increasingly researched over the past few years and has demonstrated a multitude of psychological and physiological benefits including decreased perceived stress, anxiety, depression, negative emotional experiences, PTSD symptoms, self-blame and rumination (i.e., thinking of the same negative thoughts repeatedly), and increased emotional regulation and self-compassion (Goldin & Gross, 2010; Moskowitz et al., 2015; Neff, 2003; Tesh, Learman, & Pulliam, 2015; Thompson & Waltz, 2010); improved immune system functioning (Davis & Hayes, 2011); and an increased ability to cope with pain (Grossman, Tiefenthaler-Gilmer, Raysz, & Kesper, 2007). Given that research about mindfulness often describes both trait and state mindfulness, it is essential to distinguish the differences between these constructs (Hülsheger, Alberts, Feinholdt, & Lang, 2013). Trait mindfulness is described as a person's disposition for mindfulness without having received formal training to develop mindfulness (Hülsheger et al., 2013). Hülsheger et al. (2013) argued that everyone has a dispositional level of mindfulness which can be further developed through practice and effort (e.g., through meditation, breathing exercises). Hülsheger et al. (2013) also described state mindfulness, which refers to a person's experience of being mindful. For example, an athlete may describe being aware of their physical movements during a competition, which would be considered state mindfulness. Likewise, if someone also describes being aware of their present emotions in response to a stimulus, this would also be state mindfulness. Evidence of mindfulness being dispositional was found in a

study conducted by Boden et al. (2012) involving a treatment program for veterans with PTSD and depression. Although Boden et al. (2012) taught Cognitive-Behavioral techniques during the program, the researchers found that mindfulness levels increased post-treatment, with PTSD and depression symptoms decreasing accordingly. This demonstrated that even though these individuals were not explicitly taught mindfulness, they still showed having a disposition towards mindfulness abilities. The focus within this current study is on trait mindfulness since this can provide a broader assessment of someone's actual level of dispositional mindfulness, whereas state mindfulness would only capture brief moments of mindfulness and would not efficiently capture if mindfulness is a dispositional coping technique during post-assault recovery.

Mindfulness has even been incorporated into counseling theories conceptualized as the "third wave" of cognitive-behavioral therapies called Mindfulness- and Acceptance-Based Therapies (Hayes, 2004, p.639). Although it developed from the cognitive-behavioral therapies (CBT), mindfulness has a different approach to cognitions which does not involve trying to change the content of ones' thoughts but instead changing the *relationship* to ones' thoughts (Baer & Huss, 2008). In Mindfulness- and Acceptance-Based Therapies, one would step into an attitude of openness, curiosity, acceptance, and nonjudgment while examining a thought, sensation or emotion. At present, mindfulness has been incorporated into five different therapeutic interventions which have demonstrated efficacy in the targeted undergraduate student population (Le & Proulx, 2015; Wolitzky-Taylor, Arch, Rosenfield, & Craske, 2012).

Despite the reported benefits of mindfulness, there has been limited research on whether mindfulness contributes to the recovery process for sexual assault survivors. Thus far, research on mindfulness and trauma has primarily focused on PTSD in military veterans and has consistently found that increased mindfulness levels were associated with decreased PTSD and depression symptoms (Boden et al., 2012; Colgan, Christopher, Michael, & Wahbeh, 2016; Owens, Walter, Chard, & Davis, 2012). Owens et al. (2012) created a treatment program for veterans who were diagnosed with PTSD that included multiple weeks of group mindfulness sessions, including deep breathing exercises, practicing a new mindfulness skill, and being assigned a mindfulness meditation to complete. At the conclusion of the treatment program, there was a significant decrease in PTSD and depression symptoms. One of the components of mindfulness involved acting with awareness (i.e., being present-focused and mindful of our actions), which was found explicitly linked to a decrease in depression and PTSD symptoms.

Thompson, Arnkoff, and Glass (2011) reviewed current research about mindfulness and whether it could promote post-assault recovery. The review did not solely focus on sexual assault, but on a variety of traumatic events, one could experience in their life (e.g., combat, natural disasters, sexual assault, molestation, physical abuse, childhood neglect, and life-threatening incidents). It was found that mindfulness may be helpful in decreasing rumination regarding the traumatic event, which could then reduce symptoms of distress and avoidance coping behavior. Additionally, Thompson et al. (2011) found that multiple studies suggested that mindfulness could be a form of exposure to "feared, trauma-related stimuli" (p.223)

given that mindfulness involves being in the present moment as opposed to using avoidance or distraction techniques. In addition, a study by Moskowitz et al. (2015) found that mindfulness decreased the use of the maladaptive coping methods of self-blame and avoidance. This is important to note given that self-blame in sexual assault survivors has been significantly linked to increased psychological distress and hindered post-assault recovery (Frazier et al., 2005; Littleton & Grills-Taquechel, 2011; Ullman, 2014). Vujanovic, Youngwirth, Johnson, and Zvolensky (2009) conducted a study with individuals who had experienced a traumatic event during their life and examined whether different components of mindfulness (i.e., observing, describing, acting with awareness, accepting without judgment) were linked to PTSD symptoms. The types of traumatic incidents were variable ranging from the death of a family member to military combat with each participant reporting an experience of two traumatic events on average. The results indicated that the mindfulness component of accepting without judgment was significantly and negatively associated with PTSD symptoms. The mindfulness component of acting with awareness was also significantly and negatively associated with the PTSD symptom of re-experiencing symptoms (e.g., flashbacks, rumination). Mindfulness has also demonstrated an ability to increase feelings of self-compassion, which has been significantly linked to decreased psychological distress (Barlow, Turow, & Gerhart, 2017; Benzo, Kirsch, & Nelson, 2017; Hart, Ivtzan, & Hart, 2013; Hollis-Walker & Colosimo, 2011).

To my current knowledge, there has been little research involving mindfulness and undergraduate students who have experienced sexual assault. Research on college populations involving mindfulness and recovery from sexual assault has primarily

focused on how to decrease the risk of revictimization (Hill, Vernig, Lee, Brown, & Orsillo, 2011). Hill et al. (2011) created a brief two session mindfulness intervention with the aim of preventing sexual assault revictimization for college women who had experienced childhood sexual assault. The intervention provided mindfulness training to a small group of women with and without a childhood sexual assault history. Although in the 2-month follow-up survey there appeared to be a large-magnitude effect of decreased sexual assault revictimization, the results were not statistically significant. In regard to post-assault recovery, additional research needs to be conducted since prior research has been inconclusive regarding whether mindfulness can impact the post-recovery process in college students. Nguyen-Feng, Greer, and Frazier (2017) conducted a study specifically targeting college students with a history of interpersonal violence (i.e., witnessing family violence, experiencing unwanted sexual contact, or unwanted sexual attention). Nguyen-Feng et al. (2017) utilized a web-based intervention involving modules on present-focused control created by Frazier (2003) and mindfulness. While post-intervention, all participants reported a decrease in perceived stress, anxiety and depression, participants who were only provided the mindfulness intervention was not effective in significantly decreasing distress symptoms for those with a history of interpersonal violence. Given that this was one of the first studies conducted on mindfulness and sexual assault in undergraduate students, additional research is needed to determine whether mindfulness could facilitate post-assault recovery.

The purpose of this research is to focus on college students who report a history of sexual assault during childhood (before age 18) or a recent sexual assault (since age

18). More specifically, exploration of whether sexual assault survivor's dispositional level of mindfulness and aspects of self-compassion is predictive of mental wellbeing will be examined since this could indicate that mindfulness and self-compassion could facilitate post-assault recovery. If this is the case, mindfulness and self-compassion could become an additional intervention within the framework of Mindfulness- and Acceptance-Based Therapies for promoting post-assault recovery and incorporated into treatment when working with survivors of sexual assault. Given that mindfulness is one method for increasing self-compassion, if higher levels of self-compassion are correlated to mental wellbeing, then this could suggest additional evidence for using mindfulness as a post-assault intervention. Therefore, the purpose of this study is to explore whether trait levels of mindfulness and aspects of self-compassion are predictive of increased mental wellbeing for undergraduate students who have a history of either a recent or childhood sexual assault experience.

Chapter 2: Literature Review

Undergraduate college women are three times more likely than the general population to experience sexual assault (Sinozich & Langton, 2014). More specifically, 23.1% of undergraduate female and 5.4% of undergraduate male students reported experiencing a sexual assault through physical force, violence or incapacitation (Cantor et al., 2015). Additionally, data has shown that only around 20% of undergraduate female sexual assault survivors report to law enforcement so the actual statistics may be quite higher (Sinozich & Langton, 2014).

Given that sexual assault is a problem on college campuses, questions about post-assault recovery become prevalent. The Temporal Model of Perceived Control (TMPC) was initially developed to explain factors contributing to post-assault recovery (e.g., self-blame, present-focused control) and has since evolved into an intervention to reduce stress in college students, as well as decreasing psychological distress during post-assault recovery (Frazier et al., 2001). One of the main factors contributing to post-assault recovery is the impact of present-control on decreasing behavioral self-blame and psychological distress. Perceptions of being in control of the present-moment have demonstrated efficacy at reducing psychological distress and improving overall wellbeing for university students with a history of interpersonal violence which includes sexual assault, history of family violence, and uninvited sexual attention (Nguyen-Feng et al., 2015). Mindfulness is another concept which embodies present-control as its primary foundation (Kabat-Zinn, 1994). Already mindfulness is being used in a multitude of counseling interventions targeted towards depression (Walser et al., 2015), posttraumatic stress disorder (Kearney, McDermott, Malte, Martinez, & Simpson,

2012), anxiety (Wolitzky-Taylor et al., 2012), social phobia (Craske et al., 2014), chronic pain management (Kabat-Zinn, 1990), and borderline personality disorder (Axelrod, Perepletchikova, Holtzman, & Sinha, 2011). These interventions encapsulate a new movement in counseling theories called Mindfulness-and Acceptance-Based Theory (Hayes, 2004).

Research has shown that some of the primary mechanisms for how mindfulness decreases psychological distress (e.g., self-blame, depression) is through developing self-compassion, cognitive flexibility, and emotional regulation (Hill & Updegraff, 2012; Hollis-Walker & Colosimo, 2011; Prakash, Hussain, & Schirda, 2015; Masuda, Mandavia, & Tully, 2014). To my knowledge, there has not been a study specifically examining whether mindfulness and aspects of self-compassion predict greater mental wellbeing in undergraduate survivors of sexual assault. The goal will be to determine if mindfulness and self-compassion facilitate post-assault recovery since if so, mindfulness could be conceptualized as an additional psychological intervention for matriculated-college students with a recent and/or a childhood history of sexual assault. In addition, considering that mindfulness has been identified as one method for increasing self-compassion (Benzo et al., 2017) if aspects of self-compassion are found to facilitate mental wellbeing, then this could provide additional support for utilizing mindfulness as an intervention during post-assault recovery.

In order to provide context for this study, I will first describe the unique developmental aspects for traditional (ages 18-25) undergraduate students, the prevalence of sexual assault for this population, and the negative psychological impacts of sexual assault. The TMPC will be briefly introduced as this is a current present-

focused intervention used to facilitate post-assault recovery and promote general wellbeing. Subsequently, mindfulness will be presented as another present-focused concept that while parallels aspects of the present-control described in TMPC, also has factors which could uniquely contribute to post-assault recovery. A definition of how mindfulness is conceptualized in the research will be provided, and an overview of the current counseling theory incorporating mindfulness will be discussed as the framework and theory for this study. Following this, psychological benefits of mindfulness will be described to begin establishing support for mindfulness as a positive contributor to post-assault recovery and overall well-being. More specifically, mindfulness, as it relates to developing self-compassion and increasing mental wellbeing, will be discussed. Lastly, the underlying mechanisms of how mindfulness is beneficial will be reviewed and then connected to how these mechanisms could be therapeutic during post-assault recovery and thus promote psychological well-being.

Emerging Adulthood

Emerging adulthood (ages 18-25) is conceptualized as being a distinct period separating late adolescence and adulthood and includes significant instability in an educational environment, relationships, and vocation (Arnett, 2000). More than half of incoming undergraduate students (62.6%) enter emerging adulthood when transitioning to college (NCES, 2016). There have been multiple research studies on undergraduate student's adjustment to college and factors that contribute to increased adjustment including self-esteem, family cohesiveness, perceived stress levels, and goal oriented coping techniques (Friedlander, Reid, Shupak, & Cribbie, 2007; Johnson, Gans, Kerr, & LaValle, 2010; Lindgren, Schacht, Pantalone, & Blayney, 2009). Johnson et al. (2010)

conducted a longitudinal study involving first-year undergraduate students (*N*=320) over the span of 2 consecutive years. The study's goal was to explore aspects that contributed to undergraduate student adjustment to college (e.g., family environment, ability to cope with emotions, overall social and emotional adjustment). The emotion coping technique used by undergraduate students was significantly predictive of college adjustment. More specifically, undergraduate students who avoided emotions reported considerably more difficulty in adjusting to all aspects of college (e.g., socially, educationally, emotionally). Johnson and Nussbaum (2012) found that undergraduate students conceptualized in their study as traditional (ages 18-24) compared to non-traditional (25 years and older) employed different types of coping techniques. Traditional undergraduate students were significantly more likely to engage in emotion-oriented coping (e.g., avoidance, self-blame) whereas non-traditional students were more likely to engage in task-oriented coping (e.g., problem-solving). Boekaerts (1993) stated that emotion-oriented coping often occurs due to trying to protect ones' self-worth, thus avoiding situations that could negatively impact self-esteem. The instability of identity exploration during emerging adulthood could explain why traditional undergraduate students feel an increased pressure to protect their self-worth. When undergraduate students were emotionally self-aware and able to identify and manage their emotions, there was minimal difficulty in academic, social, and emotional adjustment to college (Johnson et al., 2010). When undergraduate students struggled in their adjustment to college, there was a significantly higher risk for dropping out of college, academic difficulties, and developing mental health concerns (Friedlander et al., 2007; Credé & Niehorster, 2012).

Additionally, undergraduate college females between the ages of 18 to 24 years old have the highest reported sexual assault and rape victimizations compared to the general population (Sinozich & Langton, 2014). Despite the typical stressors of a university setting (e.g., time management, exams, identity exploration), sexual assault has demonstrated numerous adverse psychological and physiological consequences including posttraumatic stress disorder (Kintzle et al., 2015), depression (Krahé & Berger, 2017), decreased self-esteem (Krahé & Berger, 2017), increased suicidality (Tomasula et al., 2012), substance abuse (Rhew et al., 2017), and self-blame (Frazier, 2003; Frazier et al., 2005).

Sexual Assault

Prevalence of Sexual Assault in Universities

On average, 11.2% of all undergraduate and graduate students experience rape or sexual assault during their college education (Cantor et al., 2015). When looking only at undergraduate students, the Massachusetts Institute of Technology (2014) found that female students reported significantly more sexual assault encounters compared to male students (17% female undergraduate students and 5% male undergraduate students). Other studies have also indicated that female undergraduate students reported significantly more sexual assault encounters compared to male undergraduate students (Abbey et al., 2003; Coulter et al., 2017; Humphrey & White, 2000). In addition, freshmen undergraduate students may be at higher risk for sexual assault (Cantor et al., 2015; Cranney, 2015; Kimble, Neacsiu, Flack, & Horner, 2008). Warshaw (1988) developed the term "the red zone" to describe the period of increased risk of sexual assault for female undergraduate students. This period was conceptualized as "between

when a freshman undergraduate student arrives on campus to the first semester break (Warshaw, 1988, p.157)." Additionally, Kimble et al. (2008) found that freshmen were also at increased risk of sexual assault during the first few weeks of both the fall and winter semesters. The increased risk of sexual assault during freshmen year was also supported in a study examining sexual assault reports across academic years (Cantor et al., 2015). Specifically, while 16.9% of freshmen females reported experiencing unwanted sexual contact by physical force or when incapacitated during their freshman year, the percentage of unwanted sexual contact steadily declined each school year with 11.1% senior females reporting unwanted sexual contact experiences within the past year.

Risk Factors of Sexual Assault

Although the parameters of the "red zone" have been well established (Kimble et al., 2008; Krebs et al., 2009; Warshaw, 1988), the underlying mechanism influencing the increased risk of sexual assault during freshmen and sophomore years has only recently been researched (Cranney, 2015). A study conducted by Cranney (2015) examined survey responses across 22 universities with a large sample of undergraduate students (*N*=16,000). The survey utilized was the Online College Social Life Survey, which is an Internet survey administered to 22 universities from 2005 to 2011. At the conclusion, freshman had a significantly greater likelihood for sexual victimization (i.e., physically forced intercourse, attempted forced intercourse, unwanted intercourse when incapacitated, unwanted intercourse to verbal pressure) at social parties compared to hanging out casually. Although this could indicate freshmen are at a greater risk for sexual victimization at parties, Cranney (2015) noted that risk for sexual victimization

was still significant for when freshmen were hanging out casually, thus attending parties did not wholly explain the increased risk of sexual assault for freshmen. A study by Littleton and Ullman (2013) was conducted to identify additional risk factors for sexual assault victimization. The participants were drawn from a previous longitudinal sexual assault study by Ullman, Najdowski, and Filipas (2009) and contained women who reported a sexual assault history (*N*=1,084). The longitudinal study involved participants filling out two surveys that were administered a year apart. At the study's conclusion, PTSD symptomatology was found to be associated with increased risk for forcible and incapacitated rape, however hazardous drinking (e.g., alcohol abuse, dependence or heavy drinking) was associated only with an increased risk for incapacitated rape (Littleton & Ullman, 2013). The explanation provided for this was that PTSD symptoms might impact someone's ability to recognize and respond to risky situations. Additionally, those with PTSD symptoms historically have lower self-worth and may be more likely to enter abusive relationships (Campbell, Dworkin, & Cabral, 2009). Multiple studies have also found that if someone experienced childhood sexual abuse that there is a greater risk of revictimization during adolescence and adulthood (Aosved, Long, & Voller, 2011; Classen, Palesh, & Aggarwal, 2005). Explanations for this increased risk of revictimization has been linked to difficulties with emotional regulation due to a history of sexual victimization (Walsh, DiLillo, & Messman-Moore, 2012). A study by Walsh et al. (2012) examined what aspects of emotional regulation was impeded in participants with a history of sexual assault. At the conclusion, the following emotional regulation difficulties were identified: (a) difficulties with identifying emotions and acceptance of ones' emotions, (b) difficulties utilizing goal-

directed behavior when emotionally distraught, (c) issues with impulse control, and (d) limited ability to engage in emotional regulation strategies.

Additionally, Littleton and Ullman (2003) found ethnic differences in the risk of revictimization with African American women having a greater risk of experiencing childhood sexual abuse and a forcible rape between an initial survey and a follow-up survey compared to European American women. A study by Coulter et al. (2017) expanded on this by examining multiple intersectional identities and whether this impacted the increased risk of sexual assault. Specifically, sexual orientation, gender identity, and race/ethnicity were explored in the study to find whether different intersections of these identities resulted in increased risk for sexual assault. A cross-sectional survey data was utilized drawing from 120 universities (*N*= 73,791). At the study's conclusion, participants identifying as transgender reported the greatest prevalence of experiencing sexual assault in the past year (20.9%), with Black transgender participants (55.6%) reporting an even higher incidence than White transgender participants (18.2%). Additionally, cisgender women (8.6%) had more reports of sexual assault in the past year compared to cisgender men (3.6%), however the sexual orientation of the cisgender women had significant impact on the amount of reported sexual assaults (heterosexual 8%, gay/lesbian 8.8%, bisexual 17.2%, unsure 13.4%). Thus, different intersecting identities could also increase the risk of sexual assault victimization. Given this, intersecting identities are essential to consider when developing an inclusive and culturally appropriate intervention for post-assault recovery especially given that participants with minority and intersecting minority identities have a higher risk of sexual assault.

Context of Undergraduate Sexual Assault

Research has increasingly found that the circumstances and context of a sexual assault can impact post-assault recovery and coping techniques utilized by sexual assault survivors (Krebs et al., 2009; Lawyer et al., 2010). One of the unique circumstances that appears to occur more frequently for undergraduate students is attendance at parties or social events involving alcohol (Schulenberg et al., 2017). According to the Schulenberg et al. (2017), 40.8% of college students reported being drunk due to alcohol intoxication compared to 30.4% of non-college individuals who were similar ages. Given this, it is not a surprise that incapacitation during a sexual assault appears to be quite prevalent for undergraduate students (Cantor et al., 2015; Lawyer et al., 2010). Cantor et al. (2015) defined incapacitation as being "unable to consent or stop what was happening because you were passed out, asleep or incapacitated due to drugs or alcohol (p.8)." In a comprehensive study conducted by Cantor et al. (2015), undergraduate students at 27 universities (N=150,170) were surveyed regarding sexual assault experiences, and 11.7% of participants (n=17,570) reported non-consensual sexual contact whether by force or incapacitation. Individuals identifying as female and non-binary gender reported the highest nonconsensual sexual contact involving physical force or incapacitation (i.e., 23% of females, 5% of males and 24% non-binary gender). Other studies have reported that between 44%-84% of sexual assault survivors were incapacitated and most studies find that more than half of sexual assault survivors were incapacitated during the sexual assault (Krebs et al., 2009; Lawyer et al., 2010; Massachusetts Institute of Technology, 2014). Krebs et al. (2009) found that 19% of undergraduate females had experienced an attempted or completed

sexual assault and 83% reported being incapacitated at the time of the assault. This is not to say that the female sexual assault survivors were in any way responsible for the sexual assault, but rather that being incapacitated decreases the ability to resist a sexual assault attempt. As a result, it is possible that when someone is incapacitated, either voluntarily or involuntarily (e.g., forced to consume drugs or alcohol or given drugs without their awareness), that there may be an increased risk for a sexual assault. This is important to note since sexual assault survivors who were incapacitated at the time of the assault have reported significantly greater self-blame, which is correlated to greater psychological difficulties during post-assault recovery (Peter-Hagene & Ullman, 2015).

Post-Assault Factors

Psychological Distress. There has been extensive research conducted on the negative psychological impact of sexual assault (Kintzle et al., 2015; Krahé & Berger, 2017; Rhew et al., 2017; Tomasula et al., 2012) which can still be experienced many years post-assault (Frazier et al., 2005). Post-assault recovery is an area of growing research examining the factors that either contribute to or inhibit the recovery process (Frazier, 2003; Frazier et al., 2005; Koss et al., 2002; Lawyer et al., 2010). A study by Kintzle et al. (2015) was conducted as a three-wave longitudinal approach to assess the psychological impacts of sexual victimization across three-time periods. The participants were university students (N= 2,425) who received surveys during their first year enrolled at the university and then subsequently for two years, one year apart. At the study's conclusion, sexual victimization reported during the first survey was a significant predictor of depression 12 months later, during the second survey. In addition, depression still demonstrated significant indirect effects even during the last

survey, one year later. A comprehensive review of the psychological impacts of sexual assault was completed by Campbell et al. (2009) who found that studies have conclusively shown 13%-51% of sexual assault survivors developed depression, 12%-40% developed Generalized Anxiety Disorder, 17%-65% developed PTSD, and 13%-49% became dependent on alcohol. A longitudinal study by Rhew et al. (2017) found if a severe sexual assault (i.e., sexual assault experiences occurring more frequently and involving greater physical force or violence) had occurred in the previous year that it was significantly correlated to a 71% higher count of typical drinks in a week compared to those who had not experienced a sexual assault. In addition, the severity of sexual assault seemed to be correlated with increasing levels of alcohol consumption in a week, with the most severe correlated to the highest alcohol consumption. However, it is important to note that even the less severe sexual assault experienced still demonstrated a greater alcohol consumption in a week compared to those without any sexual assault experiences.

Another study that examined differences in psychological distress for childhood and adolescent sexual assault experiences, sexual assault revictimizations, and no history of sexual assault found significantly greater diagnoses of PTSD and Major Depressive Disorder for people who reported an adolescent sexual assault compared to those without a history of trauma (Kaltman, Krupnick, Stockton, Hooper, & Green, 2005). The researchers also found that people with multiple sexual assault experiences had the highest levels of PTSD, depression, and general distress compared to any other group.

Self-Blame. Self-blame is one of the negative psychological impacts that has been increasingly researched and shown to result in decreased post-assault recovery, increased depression, and PTSD symptoms (Frazier, 2003; Campbell et al., 2009; Koss et al., 2002; Peter-Hagene & Ullman, 2014). A study by Campbell et al. (2009) even concluded that sexual assault survivors' experience of self-blame is further exacerbated at multiple systemic levels through responses from others and societal messages (e.g., friends, family, legal system, rape-prone culture). Janoff-Bulman (1979) constructed an early model that examined the role of self-blame (e.g., the survivor blaming themselves for the assault) in either inhibiting or fostering post-assault recovery. In the theory (Janoff-Bulman, 1979), it was proposed that behavioral self-blame was adaptive since it provided the sexual assault survivor with information on how to prevent sexual assault in the future. In other words, the sexual assault survivor, who blames their past-behavior for the sexual assault, would then consider what behavior to enact in the future to decrease the risk of future sexual assault. The theory argued that it was through focusing on the past that the sexual assault survivor would feel more in control of the future, thus leading to less distress in the present. While this theory dominated the field of psychology for many years (Frazier et al., 2005), there has since been research indicating that behavioral self-blame is associated with greater, as opposed to less, psychological distress (Koss et al., 2002; Peter-Hagane & Ullman, 2014; Ullman, 2014). Frazier (2003) examined the role of self-blame on distress experienced after a sexual assault in a longitudinal study. Participants in the study were sexual assault survivors immediately post-assault recruited from local emergency rooms (N=1,518). The study was a cross-sectional design across four different time periods measuring

post-assault recovery (i.e., two weeks, two months, six months and 12 months). The results indicated that self-blame (i.e., viewing the assault as occurring due to past behaviors) was linked to distress at each period. In addition, as self-blame decreased, the amount of distress experienced also decreased. Frazier (2003) conceptualized self-blame as a form of past-control since it typically involves blaming the self for past behaviors. Present-control, conceptualized as the belief that one has control over the recovery process, was associated with less distress across all four-time periods. Multiple research studies have found similar results, with self-blame consistently being linked to greater distress and present-control being linked to decreased distress during post-assault recovery (Frazier et al., 2005; Frazier et al., 2012; Miller, Handley, Markman, & Miller, 2010; Nguyen-Feng et al., 2017).

Miller et al. (2010) conducted a study to deconstruct self-blame and its role in post-assault recovery. Participants in the study were undergraduate women who reported experiencing a sexual assault during adolescence. The survey explored what types of cognitions, if any, were correlated to self-blame (e.g., "If only I hadn't gotten into that situation…"). Miller et al. (2010) found that the content and process of the cognitions (e.g., negative self-cognitions and cognitions about wishing past behavior could be changeable) was predictive of self-blame. The thought processes and cognitions that were correlated to self-blame also mirrored the rumination Frazier et al. (2003) found when survivors focused on perceived past-control as opposed to perceived present-control. Miller et al. (2010) concluded that the cognitions sexual assault survivors experienced during post-assault significantly predicted whether self-blame

would manifest. This could be indicative of types of coping techniques that may be helpful in reducing self-blame and increasing post-assault recovery.

Currently, self-blame has been linked to maladaptive coping strategies such as social withdrawal and problem avoidance (Frazier, Tashiro, Berman, Steger, & Long, 2004). Peter-Hagene and Ullman (2014) found that even a year post-assault that self-blame exacerbated PTSD symptoms, which suggests that self-blame could have a long-lasting influence on post-assault recovery. Contrarily, self-compassion is a growing body of research correlated to decreased PTSD symptoms (Barlow et al., 2017; Hiraoka et al., 2015), reduced self-blame and trauma-related shame (Au et al., 2017), decreased depression (Hall, Row, Wuensch, & Godley, 2013), reduced anxiety (Neff, Kirkpatrick, & Rude, 2007), and increased adaptive coping (Neff & Vonk, 2009).

Coping. While self-blame has been linked to inhibited post-assault recovery, Ullman (2014) examined what factors contributed to posttraumatic growth (i.e., "positive psychological change experienced as a result of the struggle with highly challenging life circumstances (p.219)" in 1,864 female sexual assault survivors ranging from pre-assault to post-assault factors. The post-assault factors accounted for 40% of the variance for posttraumatic growth with maladaptive coping (i.e., strategies that temporarily decrease distress but do not confront the source of distress) inhibiting post-assault recovery. Littleton and Grills-Taquechel (2011) surveyed 1,744 women who were sexually assaulted and found that 45% engaged in avoidance coping behaviors; as well as had the highest levels of depression and PTSD symptoms. However, 34% of the survivors from the same sample were also classified as utilizing adaptive coping strategies (i.e., appropriately processing their emotions and using social support).

Although the group of survivors who engaged in adaptive coping strategies endorsed depression and PTSD symptoms, the symptoms were less severe compared to the survivors participating in avoidance coping behaviors. Additionally, Ullman (2014) concluded that self-blame was related to decreased posttraumatic growth; whereas, perceived control over recovery was related to greater posttraumatic growth and recovery. This resulted in self-blame being categorized as a maladaptive coping strategy given the significant correlation between self-blame and psychological distress.

Frazier et al. (2004) found that sexual assault survivors who reported posttraumatic growth used "approach-oriented coping strategies" and viewed the recovery process as in their control (p.27). Approach-oriented coping was defined as cognitive restructuring (i.e., viewing the situation from a different perspective) and expressing emotions (i.e., finding an outlet to express feelings). Frazier et al. (2005) expanded on this research by exploring whether different coping techniques used during post-assault recovery were linked to present-control or past-control. Four primary coping categories were examined: (a) problem avoidance (i.e., "I avoided thinking/doing anything about the situation"); (b) social withdrawal (i.e., "I avoided being with people"); (c) cognitive restructuring (i.e., "I reorganized the way I looked at the situation, so things didn't look so bad"); and (d) expressing emotions (i.e., "I got in touch with my feelings and just let them go"). The coping strategies of problem avoidance and social withdrawal were found to be associated with behavioral self-blame and greater distress. In addition, perceived control over the recovery process, or present-focused control, was negatively associated with problem avoidance and social

withdrawal and positively related to cognitive restructuring and expressing emotions. Additionally, present-control resulted in decreased distress for sexual assault survivors.

Social Reactions. Trauma is not the only post-assault experience survivors may experience, as some survivors, unfortunately, encounter negative social reactions when disclosing their sexual assault which can often be significantly retraumatizing (Dworkin, Ullman, Stappenbeck, Brill, & Kaysen, 2018; Filipas & Ullman, 2001; Orchowski, Untied, & Gidycz, 2013; Ullman & Peter-Hagene, 2014). A study by Ahrens, Cabral, and Abeling (2009) found that 81.6% of sexual assault survivors have reported disclosing the assault informally to at least one other person with the average having reported to three people. The highest rates of disclosure were to counselors, friends, and family with the lowest rates of disclosure to romantic partners, police personnel, and physicians. A study by Orchowski and Gidycz (2012) surveyed 374 participants from a university across three different time periods. The participants were asked questions about sexual victimization in adolescent (i.e., age 14 to the baseline of the current study) and sexual victimization that occurred during the interim between baseline and follow-up surveys. Additionally, participants were assessed on whether they disclosed the sexual victimization, to whom they disclosed, social reactions to the disclosure, and coping strategies. Of those who had experienced sexual victimization prior to the study, 74.6% reported disclosing the experience to someone, with 11% disclosing to their mother, 5% disclosing to their father, 17% disclosing to their siblings or other family members, 36% disclosing to a male peer, and 86% disclosing to a female peer. At the study's conclusion, 19.6% of participants reported experiencing sexual victimization during the interim, and 55% disclosed the experience to another

person. Orchowski and Gidycz (2012) also found that those who had reported disclosing sexual victimization that occurred during adolescence were six times more likely to disclose future sexual victimization.

There has been a growing body of research about the multitude of responses to disclosure of sexual assault (Ahrens et al., 2009; Orchowski & Gidycz, 2012). Ahrens et al. (2009) conducted a mixed-methods study with 103 sexual assault survivors. The goal of the study was to examine who survivors were most likely to disclose their assault to, as well as whether the experience of disclosing to certain people was more helpful or hurtful. There were different categories of social reactions in the study including (a) emotional support/belief (e.g., believing the survivor, listening), (b) tangible aid (e.g., helping to get medical attention), (c) blame (e.g., telling survivor it is their fault), (d) taking control (e.g., making decisions for survivor), (e) distraction (e.g., encouraging survivor to not think about the assault), (f) treated differently (e.g., becoming more distant from the survivor or behaving like something is now wrong with the survivor), and (g) egocentric reactions (e.g., focusing on their own needs or becoming too upset to be helpful). The results indicated that certain people engaged in some reactions more frequently than others. In particular, formal support providers (i.e., counselors, police, and medical staff) provided the greatest tangible aid, however over half of the survivors felt that it was not helpful disclosing to legal personnel due to feeling blamed by personnel or not feeling emotionally supported. In addition, almost every social reaction was viewed as positive if coming from a counselor or a friend. Contrarily, negative reactions from romantic partners were associated with the worst recovery compared to negative reactions from other providers.

Relyea and Ullman (2015) grouped some of these social reactions into two categories of negative reactions sexual assault survivors may experience when disclosing: (1) being turned against (e.g., blamed, stigmatized) and (2) unsupportive acknowledgment (e.g., controlling, egocentric, or distraction). When survivors experienced being turned against, there was a decrease in post-assault recovery as survivors were more likely to engage in self-blame, social withdrawal, and decreased sexual assertiveness. Contrarily, sexual assault survivors who did receive acknowledgment of their assault yet did not receive support engaged in both increased maladaptive and adaptive coping strategies.

When looking specifically at emerging adulthood, it is essential to consider which types of social reactions sexual assault survivors are more likely to encounter. A study by Orchowski and Gidycz (2012) found that the reactions by male and female peers to sexual assault disclosure involved encouraging distraction behaviors (e.g., encouraging the survivor to not think about it) and male peers were more likely to respond with egocentric behaviors, such as wanting revenge. These responses were concerning considering that they are both viewed as negative social reactions to disclosure of sexual assault (Ullman, 2000).

Given these multitudes of social reactions a survivor may encounter, researchers have begun to explore how these reactions may influence post-assault recovery (Dworkin et al., 2018; Orchowski et al., 2013). Dworkin et al. (2018) conducted a longitudinal study with survivors of sexual assault (N=75) to examine the relationship between perceived social support and PTSD symptom severity. Participants' PTSD symptoms and perceived social support was assessed twice-daily which resulted in

1,173 daily assessments at the study's conclusion. There were a few critical aspects of this study to highlight, the first being that daily perceived social supports and PTSD symptoms produced a significant negative correlation. The second key aspect is that perceived social support on one day was predictive and positively correlated with social support the following day. In addition, results indicated that PTSD symptom severity was lower on days where participants received higher social support. Dworkin et al. (2018) hypothesized that social support may affect PTSD symptom severity by promoting adaptive coping strategies such as reducing self-blame and negative cognitive appraisals. In addition, positive social support may be protective against developing and perpetuating PTSD symptoms. Research by Orchowski et al. (2013) also found that controlling social reactions (e.g., making decisions for the survivor) were predictive of increased anxiety symptoms and decreased reassurance of worth. This is an interesting point since it parallels other studies that have found that feeling in control of the recovery process is a significant and important aspect in increasing post-assault recovery (Frazier, 2003; Frazier et al., 2005; Koss et al., 2002; Lawyer et al., 2010). Thus, the social reactions of being controlled could potentially undermine the survivor's sense of personal agency. Additionally, blaming social reactions were predictive of decreased self-esteem and decreased coping through problem solving. Contrarily, emotional support was associated with increased coping through seeking additional emotional support.

There have been multiple research studies that have demonstrated social support being a *protective* factor for sexual assault survivors (Filipas & Ullman, 2001; Ullman & Peter-Hagene, 2014), however only recently have researchers began to explore

whether the source of the social support makes a difference in post-assault recovery (Dworkin, Ojalehto, Bedard-Gilligan, Cadigan, & Kaysen, 2018). In a study by Dworkin et al. (2018), 147 undergraduate women completed a longitudinal study to examine PTSD symptoms and the perceived social support. Consistent with previous studies (Ullman, 1999; Ullman & Peter-Hagene, 2014), perceived social support was significantly and negatively correlated to PTSD symptoms. However, results also indicated that while perceived social support from friends and family were both negatively correlated to PTSD symptoms, perceived social support from friends was more significant in buffering against PTSD symptoms. A mixed-methods study by Billette, Guay, and Marchand (2008) also found that social support from romantic partners can significantly decrease PTSD symptoms in sexual assault survivors.

Although this relationship between social support and psychological distress may seem unidirectional, a study by Ullman and Relyea (2016) found quite the opposite. A longitudinal study by Ullman and Relyea (2016) was conducted to examine the impact of social reactions to sexual assault disclosure over three-time periods (i.e., initial time of survey, one year, and two years). A diverse sample of women were surveyed (N=1,012) and assessed on social reactions experienced, coping strategies, and severity of psychological distress. When examining the results, symptoms of PTSD, maladaptive coping, and all social reactions declined over the 3-year time span. Additionally, the study revealed a reciprocal relationship between social reactions, psychological distress, and maladaptive coping behaviors. More specifically, negative social reactions were predictive of increased symptoms of PTSD and maladaptive coping strategies, which may also then result in more negative social reactions. The

researchers also found that survivors who utilized maladaptive coping behaviors frequently experienced increased unsupportive acknowledge social reactions (e.g., others taking control) and that these reactions predicted maladaptive coping between year 1 and two post-baseline. Contrarily, survivors who received positive reactions was predictive of decreased maladaptive coping. This is interesting, considering that this is the only study that demonstrated a bidirectional relationship between social reactions and post-assault recovery. Thus, not only is social support helpful at decreasing levels of psychological distress, but a cyclical relationship may manifest with negative social reactions exacerbating maladaptive coping behaviors which could then result in additional negative social reactions.

When looking at the role of social support across cultures, research has indicated that social support may be a crucial factor facilitating post-assault recovery in collectivistic cultures (Bryant-Davis, Ullman, Tsong, & Gobin, 2011). A study by Bryant-Davis et al. (2011) examined the role of social support in African American women (*N*=413) who had reported a history of unwanted sexual experiences. The study found that African American women who had greater access to use of social support also reported less depression and PTSD symptoms than women with less social support. It was theorized that social support could be helpful at decreasing shame and could affirm the worth of survivors. This would make sense when conteomplating the frequency of self-blame and shame that manifest in response to unwanted sexual experiences and sexual assault.

Considering the significant aspects of identity development that occurs during college education, the psychological impact (e.g., depression, PTSD, self-blame) of

sexual assault may impede further development of vocational pursuits, academic achievement, and personal growth. While in an ideal world sexual assault would not occur in the first place, unfortunately, the research has shown that sexual assault is quite prevalent for undergraduate students (Cantor et al., 2015). Given that this is our reality, interventions contributing to post-assault recovery need to be explored to identify additional support and resources for sexual assault survivors. Mindfulness provides a present-focused framework which could potentially increase psychological wellbeing, self-compassion, and facilitate post-assault recovery. An overview of mindfulness, its benefits, current theoretical uses, and research contributions will be discussed further below.

Mindfulness

Definition and Components

Mindfulness originated within the Buddhist tradition and involves developing present-oriented awareness, focused attention, and an intentional stance of observing mental states, physical surroundings, and emotional experiences (Gethin, 1998). Mindfulness was first introduced into western society by T. W. Rhys David in 1881 who was the first known person to translate the word into English (Sahdra, Ciarrochi, & Parker, 2016). Jon Kabat-Zinn (1994) defined mindfulness as "paying attention in a particular way: on purpose, in the present moment, and nonjudgmentally (pp. 8-9)." In Buddhism, this is typically cultivated through insight meditation where the practitioner sits silently and focuses on their internal experiences (e.g., emotions, cognitions, physical sensations). Some researchers conceptualize meditation as a method for training our mental processes and gaining additional control over the ability to regulate

emotions (Menezes, Pereira, & Bizarro, 2012). The concept of mindfulness has since been incorporated into a multitude of professional fields and research endeavors (e.g., healthcare, social work, education, business). I will first discuss the mindfulness definition used in this study and then briefly differentiate this definition from similar concepts and mindfulness definitions used in other fields.

Mindfulness and Psychology. Hart et al. (2013) differentiated two schools of thoughts on mindfulness with one school led by the researcher Langer and colleagues and the second led by the researcher Jon Kabat-Zinn and colleagues. A central focus of Langer's research was how mindfulness impacted creativity and focusing awareness on external stimuli. In comparison, Kabat-Zinn examined the meditative qualities of mindfulness in relation to improving psychological and physiological well-being; as well as focused awareness on both internal and external stimuli (Hart et al., 2013). The mindfulness referred to in this study will be within the Jon Kabat-Zinn school of thought.

There are a few key characteristics of mindfulness that need to be further expanded. The first characteristic is developing awareness of the inner experiences such as emotions, the motivation for behavior, and thoughts. The second characteristic is processing information by simply noticing what is occurring without trying to evaluate, analyze, or reflect on the experience. In this sense, a person can become less fused with their thoughts and step into an observational state. The third characteristic is being present-focused which involves intentionally focusing attention to the present moment rather than ruminating on the past or future. The fourth characteristic is that mindfulness is a disposition in everyone and can be further cultivated through practice. Both aspects

of the last characteristic have been supported by research with Hülsheger et al. (2013) demonstrating that mindfulness is a dispositional trait in everyone and that meditation can further develop and strengthen levels of mindfulness. Thus, someone may experience mindfulness despite not having received formal training.

Research about mindfulness often describes both trait and state mindfulness. (Hülsheger et al., 2013). Trait mindfulness is defined as a person's disposition for mindfulness without formal training to develop mindfulness (Hülsheger et al., 2013). There is also state mindfulness which refers to a person's experience of being mindful. For example, an athlete may describe being aware of their physical movements during an athletic competition. This would be considered a state of mindfulness. If someone also describes an experience where they are aware of their present emotions in response to a stimulus, then this would also be a state of mindfulness. Someone who has high trait mindfulness would likely experience more intense states of mindfulness as compared to someone who had low trait mindfulness. In addition, there has been extensive research on the psychological benefits of mindfulness including decreased rumination (Im & Follette, 2016), perceived stress (Brown & Ryan, 2003), anxiety (Hofmann, Sawyer, Witt, & Oh, 2010), depression (Smith et al., 2011); PTSD (Kearney et al., 2012), substance abuse (Smith et al., 2011), increased emotional regulation (Hill & Updegraff, 2012), and posttraumatic growth (Victorson et al., 2017).

Mindfulness and Contrasting Definitions. First, it is important to understand what mindfulness isn't, since this is often an area of confusion. In the literature field, John Keats, a famous Romantic Poet, developed a theory called Negative Capability which can be understood as one's ability to contemplate the world while embracing any

uncertainty and ambiguity observed (Keats, 1970). While this concept does share some similarities with mindfulness in relation to the mindset of observing the world with acceptance, Negative Capability does not refer to self-reflection of the internal experiences one may have. Thus, the practice of mindfulness is not only limited to the external world as described in Negative Capability. It is the intersection of the multiple facets of mindfulness that have been shown to be psychologically beneficial.

Another concept which may appear to have some similarities is Flow (Cacioppe, 2018). In 1975 Mihaly Csikszentmihalyi was the first researcher to identify a concept known as flow, which he defined as the sensation one may experience when wholly involved with an activity, where the self and the environment, actions and reactions, and the past, present, and future feels indistinguishable (Compton, 2005). The most common example of flow is drawn from sports, where athletes report feeling "in the zone" where they become entirely engrossed in the game and feel they are competing at their best (Cooper, 1998). Csikszentmihalyi has studied nine different characteristics that are optimal for flow to occur: (1) merging of action and awareness; (2) balancing the activity's challenge with one's skill; (3) concentration on the task; (4) lack of worry resulting in increased sense of control; (5) loss of self-consciousness; (6) transformation of time; (7) purpose of activity is for its own sake; (8) activity gives unambiguous goals and immediate feedback; and (9) intentional and clear goal (Cacioppe, 2018).

Research has been conducted to examine whether flow and mindfulness are distinct constructs and if so, the relationship between these concepts (Kee & Wang, 2008). A key component to flow is the complete absorption in an activity, where a person has narrow attention to the current activity while blocking out other inputs not

related to this activity. Some researchers have argued that this absorption resembles a limited type of mindfulness, where one is acutely aware of the present moment and the engaged activity (Sheldon, Prentice, & Halusic, 2015). However, mindfulness as a whole involves awareness of multiple stimuli as opposed to only one stimulus. When examining the absorption characteristic of flow and mindfulness, a study by Sheldon et al. (2015) found an inverse relationship. In other words, participants who experienced higher levels of flow also scored lower levels of mindful self-awareness. Kee and Wang (2008) examined, more specifically in a cross-sectional study of student-athletes, how the different components of flow may be correlated to a mindful disposition. At the conclusion, higher levels of mindfulness were correlated to only *some* of the flow dispositions including the balance between challenge and skill, clear goals, increased concentration and sense of control, and loss of self-consciousness.

Mindfulness has also been incorporated into many fields beyond psychology and counseling. In order to better understand the concept of mindfulness used in this study, it is essential to briefly highlight the similarities and differences in the definitions used in other professional fields. In the field of education, there has been a growing body of research about the concept of mindfulness (Emerson et al., 2017; Hyde & LaPrad, 2015; Roeser, Skinner, Beers, & Jennings, 2012). A definition accepted within the educational realm is mindfulness being a natural human ability that involves observation, participation, and acceptance of each moment from a balanced, loving kindness mindset (Albrecht, Albrecht, & Cohen, 2012). Researchers in education seemed to have derived this definition from the mindfulness definition first introduced by Jon Kabat-Zinn (1994). This is important to note since this is the same origin of the mindfulness

definition most often utilized in the counseling field. The typical mindfulness practices addressed in education are primarily relaxation techniques, breathing meditations, and movement meditations such as yoga (Hyde & LaPrad, 2015). Research has even begun to look at the effects of mindfulness training on academic teachers (Emerson et al., 2017; Roeser et al., 2012). A study by Emerson et al. (2017) even found that introducing a mindfulness training course for teachers was correlated with decreased burnout and stress, as well as increased emotional regulation and professional self-efficacy.

Human resources, while similar in some respects to counseling, is another field which has begun to research mindfulness (Brendel & Bennett, 2016; Schein, 2013;). The mindfulness definition used within this field also derives its origin from the definition introduced by Jon Kabat-Zinn (1994) where mindfulness is a type of awareness developed from intentionally paying attention to the present moment and without judgment. In the context of human resources and more specifically, leadership development, Brendel and Bennett (2016) presented arguments for new leadership principles that incorporated mind-body components including: developing a broader awareness of self, others, and the environment; focusing on the present moment with a stance of openness, and non-judgement; embracing a beginner's mindset (i.e., staying open to nonexperts); and staying open to new ideas. These arguments resulted in a shifting focus to holistic principles when conceptualizing leadership development (Scharmer, 2009; Schein, 2013). Brendel and Bennett (2016) even found that as large corporations introduced mindfulness and somatic training in their leadership programs that employees reported a clearer mentality and approach to their work. King and Haar

(2017) conducted a study on 84 Australian leaders and tested two leadership quality dimensions including self-mastery and organizational-transformation in relation to mindfulness. The study's conclusion found that mindfulness was significantly linked to greater self-mastery which then further manifested into leadership self-mastery.

Mindfulness has also been increasingly researched in the field of social work (Garland, 2013; Turner, 2008). The definition of mindfulness within social work has been varied (Hick, 2009), but it wasn't until Garland (2013) that an operationalized definition was decided. The definition proposed by Garland (2013) focused on mindfulness being a naturalistic state, meta-cognitive, a mindset that can be practiced, and a natural disposition or trait that can be further developed. The natural mindset involves moment-to-moment awareness with a nonjudgmental attitude. Mindfulness was also discussed as being meta-cognitive in that it involves self-monitoring of both the process and content of consciousness. In addition, Garland (2013) described mindfulness as a practice where one can engage in the act of being mindful through purposefully placing attention to the present (e.g., breathing meditation, moving meditation, observation of internal states). Lastly, mindfulness was conceptualized as a natural trait that can be further developed in everyone. Arguments for the utilization of mindfulness in social work has been made in relation to its ability to increase client empathy, affect regulation, and increase attentiveness and attunement to clients (Turner, 2008). These arguments have been well supported by research and continue to be a growing field of study within social work (Brenner & Homonoff, 2004; Fulton, 2005; Siegel, 2007; Morgan & Morgan, 2005).

The last field to discuss is the use and definition of mindfulness within healthcare. The definition used in this field describes mindfulness as a non-judgmental stance and present-focused awareness which is often connected to a practice of self-reflection (Kinser, Braun, Deeb, Carrico, & Dow, 2016). A study conducted by Kinser et al. (2016) introduced an 8-week mindfulness program to healthcare professionals. At the study's conclusion, participants reported decreased perceived stress, anxiety, and symptoms of burnout. Benzo et al. (2017) also found that self-compassion and mindfulness were significantly linked to increased well-being and happiness in healthcare professionals. Many researchers have even presented a framework to introduce mindfulness-based programs to use with patients and healthcare workers (Demarzo, Cebolla, & Garcia-Campayo, 2014; Klich, 2015). As seen in these different professional fields, the definition and benefits of mindfulness supported by research share similarities when compared to mindfulness described in the counseling field.

Mindfulness and Acceptance-Based Therapy

Mindfulness – and Acceptance-Based Therapies have been conceptualized as the "third wave" of the Cognitive-Behavioral Therapies (Hayes, 2004, p. 639). The first wave involved use of operant conditioning, exposure-based interventions, and behavioral skills training (Baer & Huss, 2008). This wave was then followed by the second wave which incorporated a focus on cognition processes in the treatment of mental health issues. Primary counseling theories that originated during the second wave were Cognitive Therapy (Beck, 1976) and Rational-Emotive Therapy (Ellis, 1962). The interventions developed from the first and second wave have shown broad

empirical support and have been widely incorporated into counseling treatment in the form of Cognitive-Behavioral Therapy (CBT).

While traditional CBT involves the client changing the content of their thoughts to reduce undesirable emotions and creating changes to their behavior, the third-wave treatments aim to change clients' *relationships* to the unwanted internal experiences rather than changing the actual experiences (Baer & Huss, 2008). For instance, if a client presented with experiencing a sad thought, CBT would typically involve the client examining the content of the thought, gathering evidence for and against the thought, developing a more rational and balanced thought, then noting if there was a change in their emotions. Contrarily, Mindfulness- and Acceptance-Based Therapies would involve the client examining the sad thought; noticing where it is felt in the body, labeling its experience (e.g., tightness in chest, tears in eyes, thoughts of being unlikeable); redirecting attention to the breath while still observing the feeling of sadness; and maintaining an attitude of openness, curiosity, acceptance, and self-compassion. Baer and Huss (2008) described the goal of engaging in mindfulness and acceptance of ones' emotions as not to *keep* someone floundering in the emotion but instead to *enable* thoughtful action without utilizing maladaptive coping (e.g., avoidance, distraction).

Presently, mindfulness has been incorporated into five different treatment modalities in the therapeutic setting including Mindfulness-Based Stress Reduction (MBSR), Acceptance and Commitment Therapy (ACT), Dialectical Behavior Therapy (DBT), Mindfulness-Based Cognitive Therapy (MBCT), and Mindfulness-Based Relapse Prevention (MBRP) (Vujanovic, Niles, Pietrefesa, Schmertz, & Potter, 2011).

Of these interventions, MBSR, ACT, DBT, and MBCT have been integrated most frequently as interventions during therapeutic practice and have shown efficacy with majority and minority populations (Hinton, Pich, Hofmann, & Otto, 2013; Le & Proulx, 2015; Liehr & Diaz, 2010; Toomey & Anhalt, 2016; Wolitzky-Taylor et al., 2012).

Mindfulness-Based Stress Reduction (MBSR). In the 1970s Jon Kabat-Zinn was the first person to popularize mindfulness as an intervention through a program called Mindfulness-Based Stress Reduction (MBSR) which was created at the University of Massachusetts Medical School for patients who were experiencing chronic pain and stress-related issues (Kabat-Zinn, 1982). The standard program consisted of 8 weekly group sessions of 2.5 hours and an all-day session on week 6. The sessions typically involved the practice of three mindfulness-based meditation exercises including the body scan (i.e., systematically focusing on different parts of the body starting at the feet and moving up towards the face), sitting meditation, and yoga (Baer, Carmody, & Hunsinger, 2012). During these exercises, people were encouraged to adopt an attitude of non-judgmental observation and acceptance while noticing internal and external stimuli (e.g., bodily sensations, cognitions, emotions). Participants were also encouraged to practice mindfulness exercises outside of the MBSR class. Research has found efficacy for MBSR reducing perceived stress levels and in promoting greater well-being (Hart et al., 2013). Beyond the established ability for MBSR to reduce perceived stress (Snippe, Nyklíček, Schroevers, & Bos, 2015), there has been an indication that MBSR can decrease emotional reactivity as well (Goldin & Gross, 2010). These results are interesting given that MBSR does not appear to explicitly focus on reducing emotional reactivity in the program's framework. Additional research

indicated that MBSR can reduce depression and anxiety symptoms as well (Chiesa & Serretti, 2009; Evans et al., 2008; Segal, Williams, & Teasdale, 2002).

Acceptance and Commitment Therapy (ACT). Around the same time that MBSR was created, Acceptance and Commitment Therapy (ACT) was also being developed by Steven Hayes and colleagues at the University of North Carolina at Greensboro (Baer & Huss, 2008). ACT has been increasingly researched and found to have efficacy with numerous psychological and physiological issues including decreased aggression (Zarling, Lawrence, & Marchman, 2015), decreased social anxiety (Craske et al., 2014), decreased anxiety (Wolitzky-Taylor et al., 2012), decreased substance use (Luoma, Kohlenberg, Hayes, & Fletcher, 2012), decreased depression and suicidality (Walser et al., 2015), decreased PTSD (Orsillo & Batten, 2005), increased emotional regulation (White et al., 2011), decreased severity in Tinnitus (Hesser et al., 2012), and improved psychological functioning for participants with chronic pain (Vowles, Witkiewitz, Levell, Sowden, & Ashworth, 2017).

The key foundation to ACT is psychological flexibility which involves six interrelated constructs: (1) contact with the present moment (i.e., actively focusing on the present to observe and label internal and external stimuli), (2) acceptance (i.e., nonjudgmental stance while observing internal and external stimuli without trying to change them), (3) defusion (i.e., learning that cognitions are not necessarily static and true, but instead understanding that cognitions are impermanent events that come and go), (4) self-as context (i.e., viewing the self as the canvas where cognitions, emotions, and sensations occur, thus experiences are separate from the person), (5) values (i.e., self-chosen values in particular domains in life such as relationships, career, health or

spirituality), and (6) committed action (i.e., creating goals in line with a person's chosen values and identifying necessary behaviors to achieve them) (Baer & Huss, 2008). Mindfulness is woven into the first four of the constructs to increase psychological flexibility and decrease experiential avoidance (Luoma, Hayes, & Walser, 2007).

Dialectical Behavior Therapy (DCT). DBT was created by Marsha Linehan to specifically treat individuals diagnosed with Borderline Personality Disorder (Baer & Huss, 2008). Marsha found that her clients with Borderline Personality Disorder (BPD) were not willing to practice the sitting meditation presented within the Buddhist tradition so instead, she modified the intervention to teach mindfulness within a set of behavioral exercises. The introduction of mindfulness and acceptance skills seemed to increase her clients' tolerance to sit with the discomfort related to behavioral change, acceptance of painful memories, and current unchangeable circumstances. DBT has become highly popularized as a treatment intervention for clients with BPD and consist of four different treatment modalities including individual therapy, skills training in a group format, consultation between the client and therapist outside of session on an as-needed basis and therapist consultation team meetings (Rizvi, Steffel, & Carson-Wong, 2013).

A study by Axelrod et al. (2011) was conducted with 27 women who were diagnosed with BPD and had substance dependence to explore whether there were any changes in emotional regulation after completing a 20-week group DBT program. At the study's conclusion, the participants demonstrated a significant improvement in emotional regulation. Additionally, emotional regulation was correlated with decreased substance use which could indicate that participants were able to better regulate their

emotions without relying on substances. Although DBT was initially created for clients diagnosed with BPD, it has since been adapted as an intervention for substance abuse (Van den Bosch, Koeter, Stijnen, Verheul, & Van den Brink, 2005), eating disorders (Hill, Craighead, & Safer, 2011), adolescents with self-harm and suicidal behaviors (Rathus & Miller, 2002), treatment-resistant depression (Lynch et al., 2007), attention-deficit and hyperactivity disorder (Hesslinger et al., 2002), and in forensic settings (McCann, Ivanoff, Schmidt, & Beach, 2007).

Mindfulness-based Cognitive Therapy (MBCT). Mindfulness-based Cognitive Therapy (MBCT) was developed in 1992 by Zindel Segal at the University of Toronto, John Teasdale at the Medical Research Council in Cambridge, England and Mark Williams at the University of Wales at Bangor to treat individuals with a history of recurrent depression (Baer & Huss, 2008; Worsfold, 2013). In the context of MBCT, mindfulness is employed to increase individual's awareness of their bodily sensations and to connect these sensations to mental experiences. For example, the goal is to connect bodily sensations with the depressive thoughts or feelings rather than solely focusing on the mental experiences. Researchers have argued that by focusing on the immediate sensations in the body, people gain access to the "primary level of meaning-making (p.56)." This access precipitates that automatic negative thoughts which are characteristic of depression and many other mental health issues. As a result, people can gain the ability to interrupt their habitual thought patterns, dysfunctional thinking, and rumination. The process of interrupting these thoughts has been conceptualized as a shift from a "conceptualizing/doing" mode to a "mindfulness/being" mode (Worsfold, 2013). This refers to a shift from processing experiences by examining how they

occurred to the mental process of noticing our experiences in the present moment without trying to change, analyze, or influence them.

In the study by Worsfold (2013) researchers wanted to explore how meditators in an MBCT course related to their emotions. A qualitative study was conducted with 20 participants who were interviewed for an hour at the beginning and end of a MBCT course. Participants were asked to describe how they engaged with their bodies during meditation and how this might contribute to therapeutic change. This study resulted in a tentative conclusion that MBCT can decenter individuals from their emotions, creating an opportunity to consciously respond to emotions rather than automatically reacting to emotionally provoking stimuli. In this sense, mindfulness could be a form of emotional regulation.

Emotional Regulation

The ability to effectively regulate emotions and make empowered, mindful reactions has been a growing focus in psychological research (Menezes et al., 2012). Watford and Stafford (2015) described emotional regulation as the effort someone puts forth to moderate an emotional experience. There are multiple emotional regulation strategies described as maladaptive (e.g., suppression) which could negatively impact a person's psychological well-being (Ehring, Tuschen-Caffier, Schnülle, Fischer, & Gross, 2010). Menezes et al. (2012) referenced three common strategies used in emotion regulation 1) reappraisal, 2) distraction, and 3) suppression. Reappraisal is defined as reassigning meaning to an emotionally triggering stimulus and has demonstrated the greatest level of emotional regulation as opposed to distraction and suppression. Distraction is defined as purposely changing focus away from the

emotionally triggered stimulus, and suppression refers to inhibiting an emotional response. When examining areas of the brain which are activated in the different emotional regulation tactics, reappraisal has shown modulation within the amygdala, insula, and medial orbitofrontal cortex and noticeable increase in activation within the prefrontal cortices (Menezes et al., 2012). Given that the prefrontal cortices are associated with cognitive control there appears to be evidence supporting reappraisal as an effective method for regulating emotions.

Difficulties regulating emotions is often a core component of multiple mental health disorders (e.g., anxiety, depression, PTSD). Evidence of impaired emotional regulation can be seen in the Diagnostic and Statistical Manual of Mental Disorders Fifth Edition (DSM-V), a diagnostic manual used by clinicians for diagnosing mental health conditions. In the DSM-V symptoms typically must be classified as "excessive," "recurrent" and "distressing" which suggest that the emotions experienced in certain mental health diagnoses may be felt at a heightened intensity (American Psychiatric Association, 2013). In regard to trauma, a study by John, Cisler, and Sigel (2017) examined the role of emotional regulation in participants with and without a history of child abuse. It was found that participants with a history of child abuse had significantly greater difficulty regulating emotions. Additionally, emotional regulation was a significant mediator between child abuse and all mental health symptoms assessed in the study (e.g., PTSD, depression). Emotional regulation difficulties have been linked to symptom severity in PTSD as well (Ehring & Quack, 2010). A study by Ehring and Quack (2010) found that trauma survivors with PTSD demonstrated the following: (a) decreased clarity and self-awareness of emotions, (b) less acceptance of negative

emotions, high levels of experiential avoidance, and emotional suppression, (c) difficulties with impulse control and decreased engagement in goal-directed behavior; and (d) diminished utilization of emotion regulation strategies (e.g., reappraisal). Research has increasingly found that emotional regulation is one of the key benefits from mindfulness, which has been linked to improved psychological well-being including decreasing symptoms of anxiety, depression, and PTSD (Hill, & Updegraff, 2012; Menezes et al., 2012; Schirda, Nicholas, & Prakash, 2015).

Mindfulness and Emotional Regulation. In Buddhism, mindfulness addresses emotions through one of Buddhism's core tenets which involves the encouragement to notice experiences, thoughts, and emotions gently and without judgment (Gethin, 1998). This concept teaches individuals to accept and sit with their emotions rather than engaging in distraction tactics or suppressing their emotional experiences. When using distraction, people are not confronting their experiences, but using avoidance as a tactic to decrease the discomfort experienced when feeling their emotions. Suppression is the other tactic which involves ignoring the provoked emotions. Both distraction and suppression tend to result in a decreased ability to regulate emotions due to the avoidance of *feeling* ones' emotions. Mindfulness appears to incorporate aspects of the reappraisal tactic since by allowing the totality of ones' emotions to be fully observed in a nonjudgmental stance, the initial and automatic reaction can become altered to a different response entirely. Vujanovic et al. (2011) argued that mindfulness could be an effective treatment for military members diagnosed with PTSD. They predicted that since mindfulness encourages people to accept and move towards experiences rather than avoid them, that mindfulness could become a type of exposure therapy for clients.

At the study's conclusion, veterans who reported increases in acting with awareness, a characteristic of mindfulness, had lower levels of PTSD and depression symptoms. While mindfulness has many facets, the aspect of observing one's experiences (i.e., thoughts, emotions, behaviors) with a non-judgmental attitude may be helpful for decreasing avoidant coping and more specifically decreasing self-blame. Moskowitz et al. (2015) conducted a study with participants diagnosed with HIV and found that increased mindfulness levels were associated with being less likely to use two types of maladaptive coping behaviors including self-blame and avoidance.

In addition, mindfulness promotes openness to experiences where someone can observe and accept their emotional states without engaging in judgment, which has been shown to improve psychological functioning (Davis & Hayes, 2011). Hill and Updegraff (2012) expanded on this in a study to explore whether emotional reactivity (i.e., automatically engaging and responding to emotions) decreased if an individual reported higher levels of mindfulness. It was hypothesized that mindfulness would increase a person's ability to objectively notice their reactions and emotions prior to automatically responding to their emotions. At the study's conclusion, Hill and Updegraff (2012) found that individuals who reported higher levels of mindfulness also reported less emotional regulation difficulties and emotional reactivity. Kabat-Zinn and Hanh (2009) proposed that mindfulness created the ability for someone to *respond to* their environment rather than *react to* their environment. In other words, mindfulness can potentially increase the ability to sit with uncomfortable emotions and consciously choose a response as opposed to impulsively reacting to emotions. In addition,

emotional regulation has been shown to mediate the perceived stress levels in individuals with higher levels of mindfulness (Prakash et al., 2015).

Wellbeing

Depression. Multiple studies have shown that mindfulness is correlated significantly with decreasing symptoms of depression (Desrosiers, Vine, Klemanski, & Nolen-Hoeksema, 2013; Waszczuk et al., 2015; Worsfold, 2013). A study by Desrosiers et al. (2013) examined five specific factors of mindfulness and their correlation to symptoms of anxiety and depression. The five factors of mindfulness included describing (e.g., findings words to label ones' emotions), observing (e.g., ability to notice internal and external experiences), non-reactivity (e.g., ability to allow feelings to come and go without getting swept up into them), nonjudging (e.g., non-judgmental stance towards cognitions and emotions), and acting with awareness (e.g., ability to maintain attention in the present moment). All of these factors, except observing, was significantly correlated with symptoms of depression and anxiety. More specifically, non-reactivity to inner experiences, such as negative cognitions, was negatively correlated to general depression symptoms which suggest that non-reactivity may be helpful at interrupting rumination and having a less intense emotional reaction to cognitions (e.g., feeling depressed in response to negative cognitions). It was also hypothesized that non-reactivity could increase emotional regulation, thus decreasing symptoms of depression. In addition, non-judgment was negatively and significantly correlated to symptoms of depression. The researchers hypothesized that higher levels of non-judgment countered a key characteristic of depression which was self-criticism and ruminating on negative cognitions. Additional mechanisms for how mindfulness

decreases depressive symptoms have been linked to increased psychological flexibility which is described as a willingness to experience negative thoughts and emotions (Masuda et al., 2014). A study by Im and Follette (2016) also found that mindfulness decreased rumination in sexual assault survivors, which was correlated with decreased symptoms of depression.

Happiness. Contrarily, mindfulness has demonstrated research efficacy at being able to increase feelings of happiness (Campos et al., 2016; Coo & Salanova, 2017). One study examined how the cultivation of mindfulness through daily meditation practice impacted levels of happiness (Campos et al., 2016). Both meditator and non-meditators were compared (n = 183 meditators, n = 182 non-meditators) across multiple variables of wellbeing with results indicating that the frequency of meditation practice was significantly correlated to higher levels of mindfulness and happiness. Campos et al. (2016) also found that the specific mindfulness facets of nonjudging and nonreactivity were significant and independent predictors of well-being. Research has also found that attention and cognitive flexibility as two underlying mechanisms for how mindfulness can potentially lead to increased happiness (Holas & Jankowski, 2013; Moore & Malinowski, 2009; Siegel, 2009). This was found in a study by Moore and Malinowski (2009) where participants with higher reported mindfulness levels demonstrated greater attention and cognitive flexibility when engaging in endurance and cognitive-processing test. In addition, Holas and Jankowski (2013) suggested that mindfulness enhanced the ability to engage in metacognition, or awareness of one's executive functioning, which includes self-reflection and the general ability to maintain attention. Garland, Farb, Goldin, and Fredrickson (2015) developed a theory called

Mindfulness-To-Meaning theory to explain the mechanisms for how mindfulness promotes psychological well-being. The theory suggested that mindfulness can promote positive reappraisal due to the type of decentered awareness within mindfulness where one views emotions and thoughts from a metacognitive stance (Coo & Salanova, 2017) This metacognitive stance allows a more flexible and adaptive response to stimuli. Garland et al. (2015) tested this theory in a study that examined whether mindfulness predicted more positive affect and cognition. The results indicated that participants who engaged in a MBCT treatment had higher levels of positive cognitions from pre – to post-treatment. Additionally, higher levels of positive affect were also predictive of higher levels of positive affect and cognition on subsequent days. It was hypothesized that positive affect had a cumulative effect where the more positive emotions experienced, the more positive cognitions would occur in the future. Research has also found that self-compassion may partially mediate the relationship between mindfulness and happiness (Hollis-Walker & Colosimo, 2011). More specifically, self-compassion may negate one's tendency to engage in guilt and self-criticism thus increasing overall well-being and happiness.

Self-Compassion. Recent research has demonstrated the psychological benefits for self-compassion including decreased PTSD symptom severity (Barlow et al., 2017), decreased self-blame (Au et al., 2017), decreased depression (Hall et al., 2013), increased emotional regulation (Neff, 2003), and increased resilience (Scoglio et al., 2015). In Buddhism, compassion is one of the four primary virtues or Brahmaviharas with the other three as loving-kindness, empathetic joy, and equanimity (Gunaratana, 2017). The importance of developing compassion is evident from one of the Buddhist

techniques called Loving-Kindness Meditation (Hutcherson, Seppala, & Gross, 2008). The purpose of this practice is to develop compassion, positive feelings, and kindness through directing well wishes for wellbeing and compassion towards the self and others (Salzberg, 1995). Compassion involves wishing all beings are free from suffering thus compassion does not have the opportunity to manifest without suffering first occurring (Gunaratana, 2017). Given that awareness of our suffering is a pre-requisite to developing self-compassion, mindfulness can be described as foundational to compassion.

Neff (2003) created a Self-Compassion Scale (SCS) which has been paramount to the recent increase in self-compassion literature. Even within the SCS, Neff (2003) included a mindfulness subscale due to its foundational nature for increasing feelings of self-compassion. It is important to note that the facet of mindfulness described within the scale specifically refers to the ability to develop awareness of negative thoughts and feelings with a balanced perspective. Contrarily, mindfulness as a whole construct refers to one's ability to develop awareness of *all and any* experiences, whether positive, negative, or neutral (Neff & Dahm, 2015).

Mindfulness training is one important method for increasing self-compassion especially considering that mindfulness is a prerequisite to developing self-compassion. The theoretical approaches incorporating mindfulness described previously have shown effectiveness at increasing self-compassion (e.g., MBSR, MBCT). There has also been a movement to develop therapeutic approaches specifically targeting self-compassion called Compassion-Focused Therapy (CFT; Gilbert, 2010), Mindful Self-Compassion (MSC; Neff & Germer, 2013), and Compassionate Mind Training (CMT; Gilbert &

Irons, 2005). Research has begun to demonstrate that mindfulness can further cultivate self-compassion which is also linked to increased psychological well-being. A study by Hollis-Walker and Colosimo (2011) was conducted with undergraduate students to examine the differences in mindfulness from meditators versus non-meditators. Analysis of the results indicated that self-compassion partially mediated the relationship between mindfulness and happiness. When looking at what specific factors of self-compassion predicted happiness, the facets of common humanity (e.g., understanding that all humans are fallible), isolation (inversely), and mindfulness were all significant predictors of happiness. In addition, participants who reported high levels of mindfulness also reported high levels of self-compassion and psychological wellbeing. Another study that examined happiness in healthcare workers found that self-compassion explained 39% of the happiness model presented in the study (Benzo et al., 2017). In addition, the factors of self-compassion most predictive of happiness were mindfulness and isolation, suggesting that mindfulness is indeed a primary foundation and significant factor for facilitating self-compassion's influence on one's psychological well-being.

Neurological Changes from Mindfulness

Additional research has been conducted to explore whether there were actual physiological changes in the brain from the prolonged utilization of mindfulness (Farb et al., 2010). In a study conducted by Farb et al. (2010), researchers used neuroimaging to detect whether the emotion of sadness was altered in where and how neurons expressed that sadness in the brain. The participants completed an MBSR Program, and upon completion, participants had a brain scan while being exposed to sad provoking

films. In the control group, sadness provocation demonstrated brain activation suggestive of "ruminative and self-reflective processing (p.28)." In addition, the control group primarily had left-brain activation whereas those within the mindfulness training group produced greater right-brain activation. There appeared to also be less neural reactivity in the MBSR participants when provoked by sad films as compared to the control group. Despite these changes, the participations still indicated experiencing the emotion of sadness, which may suggest that the noted differences between groups are related to emotional regulation as opposed to a blunted emotional affect.

In a study conducted by Goldin and Gross (2010), MBSR-related changes in participants with Social Anxiety Disorder were examined through assessing clinical symptoms and neural changes of emotional reactivity and regulation. The researchers utilized two different forms of focused-attention including breath-focused attention and distraction-focused attention. They predicted that changes related to MBSR would be found within the breath-focused group including a decrease of negative emotions and a decrease in brain activity in the emotion-related limbic system and increased activity in brain regions related to attention. They also predicted there to be no changes found in the distraction-based attention group. Overall, Goldin and Gross (2010) found that from the initial baseline assessment to post-MBSR, participations reported a decrease in social anxiety, depression, rumination, and anxiety, as well as an increase in self-esteem. In addition, there was a decrease in amygdala response in individuals who participated in the breath-focused attention group. This may indicate that mindfulness may decrease emotional reactivity to stimuli and as a result could increase the ability regulate emotions more efficiently. The decreased amygdala response could also

indicate the ability to actively choose a reaction to emotion-provoking stimuli rather than automatically responding. This demonstrated that not only do participants self-report improvements in psychological wellbeing but there also are physiological changes in the brain after prolonged use of mindfulness.

Self-Compassion and Trauma

Self-compassion is a new and growing area of research which has been spearheaded by researcher Kristen Neff in her development of a Self-Compassion Scale (Neff, 2003). Neff defines self-compassion as a stance towards the self that encompasses non-judgmental understanding, patience, kindness, acknowledging the common struggles and fallacies of being human, and being worthy of compassion (Neff, 2003). These aspects are measured in the Self-Compassion Scale (SCS) by examining self-kindness versus self-judgment, common humanity versus isolation, and mindfulness versus overidentification (Neff, 2003). Kindness is described as being supportive and empathetic towards ourselves as opposed to self-criticism and having a low tolerance for our difficulties and pain. Common humanity refers to the awareness that everyone makes mistakes or fails but this is part of being human. In this sense, we're not isolated in our struggles, failures, or mistakes. Understanding that everyone is imperfect is a key aspect to increasing self-compassion. Mindfulness is the third facet which incorporates an awareness of the present moment without judgment or avoidance. Mindfulness also involves the observational stance to our negative thoughts and feelings as opposed to over-identifying with them.

The different facets of compassion have been linked to enhanced psychological well-being (Hall et al., 2013). In particular, self-kindness and common humanity were

significant at decreasing perceived stress levels. A study was conducted with first-year college students (*N*=466) to examine the impact of self-compassion on emotional regulation in people with a childhood trauma history (Barlow et al., 2017). The researchers found that low levels of self-compassion were correlated to emotional regulation difficulties and resulted in increased severity of PTSD symptoms. The impact of self-compassion has also been examined among veterans diagnosed with PTSD (Hiraoka et al., 2015). Veterans were recruited from a VA and were administered a survey at two different time periods examining the impact of self-compassion on PTSD symptoms and the amount of combat exposure's correlation to levels of self-compassion. At the study's conclusion, self-compassion predicted the severity of PTSD symptoms and even predicted their severity at the 12-month follow-up. In addition, greater combat exposure was not predictive to levels of self-compassion. Trauma recovery has also been examined in female survivors of physical or sexual violence (Scoglio et al., 2015). Scoglio et al. (2015) conducted a study that recruited women participants (*N*=176) from public hospitals and explored the relationship between emotional regulation, resilience, self-compassion, and PTSD symptom severity. Participants were assessed with semi-structured interviews and self-report measures in a cross-sectional design. As predicted, self-compassion was negatively correlated with emotional dysregulation, the severity of PTSD symptoms, and positively correlated with resilience. The researchers also found that emotional dysregulation mediated the relationship between self-compassion and PTSD symptoms.

Concerning self-compassion within a college population, a study by Lockard, Hayes, Neff, and Locke (2014) was conducted to establish norms for self-compassion.

College students seeking counseling services demonstrated lower self-compassion compared to the general student population. In addition, college students with a history of receiving counseling had self-compassion scores similar to depressed individuals in the general population. The study also examined differences of self-compassion based on race/ethnicity, sexual orientation, and gender. Results indicated no racial or sexual orientation differences of self-compassion; however, a statistical difference existed between men and women. In particular, men reported greater self-compassion compared to women. It was hypothesized that this might be due to societal messages women receive related to appearance and body image. Due to these gender differences, Neff and Germer (2013) argued that self-compassion interventions are important to provide for female college students.

Additionally, self-compassion has been increasingly researched as a potential mechanism to combat self-criticism and self-blame (Morris, Wilson, & Chambers, 2013). A study conducted by Morris et al. (2013) recruited men who were cancer survivors to examine factors contributing to posttraumatic growth. The researchers used a posttraumatic growth scale (Neff, 2003) containing six subscales (e.g., compassion, new possibilities, relating to others, personal strength, appreciation of life, and spiritual change) and found that the compassion subscale accounted for 48.9% of the variance. Although the participants in the study were survivors of prostate cancer as opposed to sexual assault, compassion appeared to be a significant factor in posttraumatic growth.

Interestingly, a recent study even found that self-compassion significantly mediated the positive effects of social support during post-assault recovery (Maheux & Price, 2016). This was the first study, and to current knowledge, the only study that has

looked at both of these variables together and the relationship between them. Maheux and Price (2016) surveyed 599 participants regarding trauma exposure and current symptoms of psychopathology. Of the surveyed participants, 19.9% met criteria for PTSD, 26.2% met criteria for Generalized Anxiety Disorder, and 32.9% met criteria for a Major Depressive episode. Participants were also assessed for perceived social support and self-compassion. The results showed that self-compassion and social support was significantly and negatively correlated to PTSD symptoms. In addition, 38% of social support's total effect on PTSD symptoms was accounted for by self-compassion (Maheux & Price, 2016). These results may indicate that internal (e.g., self-compassion) and external (e.g., social support) both play an important factor in recovery. More specifically, perceived social support may provide more opportunities for compassionate cognitive reappraisal, and self-compassion may lead to more adaptive coping responses such as seeking social support.

Chapter 3: Research Questions

The review of the literature highlighted the prevalence of traditional undergraduate students with a childhood history and/or recent experience of sexual assault and the psychological impact even many years post-assault. The majority of research has focused on preventative measures for sexual assault, the period that sexual assault occurs most frequently, and psychological distress experienced post-assault. There has been a recent interest in examining factors contributing and inhibiting post-assault recovery in an effort to develop beneficial interventions.

The TMPC (Frazier et al., 2001) suggested that focusing on present-control, or shifting thoughts to what aspects of the sexual assault are presently in one's control, is linked to decreased psychological distress, thus facilitating post-assault recovery. When looking at current counseling theory, the relatively new theoretical approach of Mindfulness -and Acceptance-Based Theory utilizes a present-control approach with some additional and unique components. There has been limited research on whether mindfulness and self-compassion, a construct that can be further developed from mindfulness, could demonstrate psychological benefits during post-assault recovery for undergraduate college students. It is important to examine these factors since if there is evidence supporting the psychological benefits of mindfulness for post-assault recovery, it could suggest an additional intervention approach within the Mindfulness-and Acceptance-Based theoretical framework. Further, the addition of self-compassion will be examined to further explore whether aspects of self-compassion and mindfulness have similar impacts on post-assault recovery.

In summary, the literature highlighted the significant distress associated with self-blame (i.e., self-criticism) and focusing on past behaviors during post-assault recovery. Research has consistently demonstrated the benefits of perceived control of the present moment as this decreases psychological distress and increases feelings of empowerment (Frazier, 2003). Within current counseling theories, Mindfulness-and Acceptance-Based Theory seems to parallel the underlying mechanism of present-control in the TMPC. However, mindfulness also contains unique factors that expand beyond present-control, which could provide additional benefits to survivors of sexual assault through increased emotional regulation (Davis & Hayes, 2011). More specifically, mindfulness has been linked to decreased perceived stress (Kabat-Zinn, 1990), decreased depression (Kearney et al., 2012), and decreased anxiety (Liehr & Diaz, 2010). Considering the established framework of Mindfulness-and Acceptance-Based Theories in the counseling profession, the potential for mindfulness to positively contribute to post-assault recovery could further strengthen the current theory by establishing greater breadth and depth. Thus, the research questions include:

Question 1: What are the relationships between self-judgment, isolation, over-identification, self-kindness, common humanity, mindfulness, mindful awareness, and psychological well-being among college-matriculated students with childhood and recent experiences of sexual assault?

Question 2: Does mindful awareness and aspects of self-compassion (self-kindness, self-judgment, common humanity, isolation, mindfulness, over-identification) predict psychological well-being among college-matriculated students with childhood experience of sexual assault?

Question 3: Does mindful awareness and aspects of self-compassion (self-kindness, self-judgment, common humanity, isolation, mindfulness, over-identification) predict psychological well-being among college-matriculated students with a recent experience of sexual assault?

Chapter 4: Method

Participants

The targeted population within this study involves undergraduate students at the University of Oklahoma with and/or without a history of sexual assault. Although much of the research indicates that ages 18-24 are at the greatest risk for sexual assault (Humphrey & White, 2000), the current study recruited undergraduate students ages 18-25 to increase the likelihood of having a larger sample within the study. The participants' ages ranged from 18 to 25 years old, with 20 as the mean age.

Due to the limited number of participants who reported being transgender or a gender other than what was listed, these gender categories were combined into a new category called nonbinary gender. Of the 286 participants in this study, 73% participants identified as female (*n* = 210), 24% as male (*n* = 69), and 2% as nonbinary (*n* = 7). When looking at ethnicity, the majority identified as white (76%), followed by Biracial (7%), Asian (5%), Hispanic or Latino (3%), American Indian or Alaskan Native (3%), Other (3%), and Black or African American (2%). The majority of participants self-identified as heterosexual (71%) with the remaining participants self-identifying as bisexual (18%), other (5%), gay (4%), and lesbian (2%).

Overall the classification of participants was evenly distributed with 28% freshman (*n* = 80), 21% sophomores (*n* = 59), 23% juniors (*n* = 67), and 28% seniors (*n* = 80). Lastly, participants were asked to identify current or past experiences with counseling or meditation. When asked about counseling, 16% reported currently receiving counseling (*n* = 45), 8% reported having received counseling less than a year ago (*n* = 24), 23% reported having received counseling more than a year ago (*n* = 66),

and 51% reported no history of counseling (*n* = 147). Participants reported even less experience with meditation, with 12% reported meditation practice greater than a year (*n* = 34), 18% reported less than a year of meditation (*n* = 52), and 69% reported no experience with meditation (*n* = 197). Please see Table 1 for the specific demographics of participants who reported a history of childhood sexual assault (prior to age 18) and/or history of emerging adulthood sexual assault (since age 18).

Measures

Participants were asked to answer numerous demographic questions, including age, self-identified gender, academic year (e.g., freshman, sophomore, junior, senior), sexual orientation (e.g., heterosexual, gay, lesbian, bisexual, other), and race/ethnicity. After completing the demographic questions, measures assessing psychological well-being and self-compassion were provided. Following this, a message was provided about the next series of questions containing explicit language related to sexual assault. Participants were also reminded that they could skip questions and leave the survey at any time. Questions related to unwanted sexual experiences (childhood and recent) were then populated including specific types of incidents and the means of how the perpetrator attempted the unwanted sexual behaviors (e.g., coercion, use of force).

Mindful Attention Awareness Scale (MAAS; Brown & Ryan, 2003). The MAAS is a 15-item questionnaire that assesses a receptive or open awareness and attention to the present moment which is described as a primary characteristic of mindfulness. The MAAS ask participants to respond to the statement, "Next are a collection of statements about your everyday experience. Please indicate how frequently or infrequently you currently have each experience. Please answer according to what

really reflects your experience rather than what you think you experience should be. Please treat each item separately from every other item," followed by 15 specific statements. Sample items include, "I could be experiencing some emotion and not be conscious of it until some time later," "I rush through activities without being really attentive to them," and "I find myself preoccupied with the future or past." Participants are asked to respond to how frequently a statement occurred for them on a 6-point scale ranging from 1-6 (1= Almost always and 6 = Almost never). Scoring the measure involves computing a mean of the 15 items resulting in a total mindful awareness score with a higher score reflecting higher levels of dispositional mindfulness. Test-retest reliability was conducted by Brown and Ryan (2003) with an undergraduate student population over a 4-week period and found that the intraclass correlation was .81 (p<.0001). The MAAS has demonstrated good reliability ranging from .89 to .92 (Osman, Lamis, Bagge, Freedenthal, & Barnes, 2016). In seven samples of students and adults, Cronbach's alpha coefficient was a .80 or higher (Brown & Ryan, 2003). In addition, a confirmatory factor analysis was conducted with samples of both traditional students and adults. The analysis confirmed a single-factor model with this model fitting the samples of students and adults (Brown & Ryan, 2003). MAAS has also shown good validity (.70) when comparing its ability to measure the construct of mindfulness compared to other validated mindfulness measures (Osman et al., 2016). Convergent validity was also established by utilizing measures of emotional intelligence. There were modest correlations on measures related to openness to experiences, more specifically on subscales pertaining to attentiveness and being receptive to experiences and behaviors (Osman et al., 2016). Regarding discriminant

validity, the MAAS was not correlated with private self-consciousness (i.e., reflection of the self) and negatively correlated to public self-consciousness and social anxiety (Brown & Ryan, 2003). The Cronbach's alpha for the current study was .86.

Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS; Tennant, Fishwick, Platt, Joseph, & Steward-Brown, 2006). WEMWBS is a 14-item questionnaire developed in the United Kingdom to measure hedonic and eudaemonic mental aspects which include positive affect (e.g., optimism, relaxation, happiness), positive functioning (e.g., energized, autonomy, thinking clearly) and healthy interpersonal relationships (Tennant et al., 2007). The WEMWBS was the culmination from a meeting of an expert panel including representatives from psychiatry, psychology, public health, social science and health promotion with the purpose of developing a new wellbeing measure (Tennant et al., 2006). The measure asks participants to respond to the instructions, "Next are some statements about feelings and thoughts. Please select the box that best describes your experience of each over the last two weeks," with 14 statements following. Sample items include, "I've been feeling optimistic about the future," "I've been feeling good about myself," "I've had energy to spare," and "I've been feeling loved." Participants were asked to respond to how often they have experienced each statement within the previous two weeks on a 5-point scale ranging from 1-5 (1= None of the time and 5 = All of the time). Higher scores indicate higher levels of mental wellbeing with a minimum possible score of 14 and a maximum possible score of 70. In the United States, this measure has not yet been used in a research study or validated with samples from the United States population. However, the WEMWBS has been validated numerous times in English speaking populations

from the United Kingdom, Pakistan, and Scotland, as well as cross-culturally validated in non-English speaking populations (e.g., Chinese, Arabic, Dutch, French, German) through quantitative and qualitative methods (Taggart, Stewart-Brown, & Parkinson, 2016). Currently, the WEMWBS is part of a standardized battery of assessments provided nationally to people living in Scotland to assess mental wellbeing (NHS Health Scotland, 2015). The WEMWBS demonstrated good test-retest reliability of .83 ($p<.01$) at one week in a student sample (Tennant et al., 2007). The Cronbach's alpha was .89 in a student sample and .91 in a sample in the general population (Tennant et al., 2007). In this study, the Cronbach's alpha was .91.

Self-Compassion Scale (SCS; Neff, 2003). SCS is a 26-item questionnaire developed to measure levels of self-compassion across six different factors: (a) Self-Kindness, (b) Self-Judgement, (c) Common Humanity, (d) Isolation, (e) Mindfulness, and (f) Over-Identification (Neff, 2003). The Self-Kindness and Self-Judgement subscale each contain five items with the other subscales all containing four items. The measure asks participants to respond to the instructions, "Please read each statement carefully before answering. To the left of each item, indicate how often you behave in the stated manner, using the following scale:", with 26 statements following. Sample items include, "I try to be loving towards myself when I'm feeling emotional pain" (self-kindness), "when times are really difficult, I tend to be tough on myself" (self-judgement), "when things are going badly for me, I see the difficulties as part of life that everyone goes through" (common humanity), "what I'm feeling down, I tend to feel like most other people are probably happier than I am" (isolation), "When I'm feeling down and try to approach my feelings with curiosity and openness" (mindfulness), and "when

I'm feeling down I tend to obsess and fixate on everything that's wrong" (over-identification). Participants are asked to respond to how often they behaved in the stated manner on a 5-point scale ranging from 1-5 (1= Almost never and 5 = Almost always). There are a few different ways you can score the SCS, and the first involves calculating the means for each subscale. Scoring it in this manner would allow the ability to examine the impact of each specific subscale. The second method is to calculate the total self-compassion score for each participant by first reverse scoring the items in subscales Self-Judgment, Isolation, and Over-Identification. After reverse scoring these items, the mean of the reversed scored subscales will be calculated, followed by computing a grand mean of all of the subscales' means. This computation should provide a total self-compassion score for each participant with higher scores indicating higher levels of self-compassion.

The SCS demonstrated good test-retest reliability across two different time periods with the overall score for the self-compassion scale demonstrating the reliability of 0.93 and the subscales reliability as the following: self-kindness 0.88, self-judgment 0.88, common humanity 0.80, isolation 0.85, mindfulness 0.85, and over-identification 0.88. A study by Neff, Hsieh, and Dejitterat (2005) also found the SCS had good internal consistency reliability (.94). In regard to predictive associations between the SCS subscales and depressive symptoms, others have found strong associations between the SCS's negative items (self-judgment, isolation, over-identification) and depressive symptoms, more so than the ones of the SCS's positive items (Mills, Gilbert, Bellew, McEwan, & Gale, 2007; Wasylkiw, MacKinnon, & MacLellan, 2012). In addition, the SCS negative items showed to be the strongest predictor of psychological

symptoms, indicating that a harsh attitude towards oneself has important negative implications for wellbeing. Self-judgment also showed to predict psychological symptoms significantly. A self-critical attitude that has shown to be an important determinant of depressive symptoms (Dunkley, Zuroff, & Blankstein, 2006; Dunkley, Sanislow, Grilo, & McGlashan, 2009). In this study, the Cronbach's alpha for the Self-Compassion Scale was .93 with the Cronbach's alpha for the subscales being the following: Self-Kindness .85, Self-Judgment .86, Common Humanity .79, Isolation .79, Mindfulness .74, and Over-identification .80.

Sexual Experiences Survey Short Form Victimization (SES-SFV; Koss et al., 2007). The Sexual Experiences Survey (SES) was first developed by Koss, Gidycz, and Wisniewski (1987) and a revised version was developed by Koss et al. (2007) to address identified weaknesses in the original measure (e.g., improving behavioral specificity and incorporating gender-neutral language). The Sexual Experiences Survey Short Form Victimization (SES-SFV) assesses sexual victimization that has occurred in the last 12 months and sexual victimization that occurred from age 14 and older. For the purpose of the study, participants will be asked about unwanted sexual experiences since age 18 and before age 18. The measure prompts participants about the nature of the survey by saying, "The following questions concern sexual experiences that you may have had that are unwanted." Reassurance is provided that all reported information is confidential and no identifying information is gathered from participants. Participants are provided 7-item questions about the type of sexual victimization (e.g., unwanted fondling, oral sex) and five sub-items regarding the method used to enact the sexual victimization (e.g., coercion, force). Sample items of types of sexual victimization

include, "Someone had oral sex with me or made me have oral sex with them without my consent by:", "A man put his penis into my vagina, or someone inserted fingers or objects without my consent by:", and "even though it did not happen, someone TRIED to have oral sex with me, or make me have oral sex with them without my consent by:". Sample items of method used by perpetrator to enact sexual victimization include, "Taking advantage of me when I was too drunk or out of it to stop what was happening," "Using force, for example holding me down with their body weight, pinning my arms, or having a weapon," and "showing displeasure, criticizing my sexuality or attractiveness, getting angry but not using physical force, after I said I didn't want to". Participants are asked to respond to how many times the specific sexual victimization occurred for them since age 18 and how many times before age 18 on a 4-point scale ranging from 1-4 (1= Yes, once, 2= Yes, more than once, 3= No, and 4 = Unsure). Subsequently, participants are asked about the gender of the person or person who did one of the previously identified behaviors (e.g., male, female, male to female trans, female to male trans, other). The short-form of the SES has been found to have adequate reliability (Cronbach alpha .92 for women and .98-.99 for men) compared to the longer form (Cronbach alpha .74 for women, .89 for men). The rest-retest reliability was also adequate with the mean item agreement between two administrations being 93% for the long form (Koss et al., 1987). The short form test-retest reliability over a 2-week period was 70%-73% for women and 91% for men (Johnson, Murphy, & Gidycz, 2017). In addition, the revised SES-SFV and the original SES were correlated significantly with 55% of participants matching the same category. Furthermore, the short-form demonstrated good predictive validity (e.g., women with a sexual assault

history predicted trauma symptoms). In this study, the Cronbach's alpha was .79 for women and .73 for men who reported a sexual assault prior to age 18. In addition, the Cronbach's alpha was .78 for women and .83 for men who reported a sexual assault since age 18.

Social Reactions Questionnaire-Shortened (SRQ-S; Ullman, Relyea, Sigurvindsdottir, & Bennett, 2017). The 48-item Social Reactions Questionnaire (SRQ) was first developed by Ullman (2000), and a shortened version was developed by Ullman et al. (2017) to provide a shorter option in case the original SRQ was too lengthy for research efforts. The SRQ-S is a 16-item questionnaire that assesses different social reactions sexual assault survivors may encounter after disclosing their sexual assault experiences. The social reactions are grouped into three general scales (Turning Against, Unsupportive Acknowledgement and Positive Reactions) with eight subscales (Stigmatize, Infantilize, Blame, Distract, Control, Egocentric, Emotional Support, and Tangible Aid). The sub-scales were grouped within the following general scales: (a) Turning Against (stigmatize, infantilize, blame), (b) Unsupportive Acknowledgement (distract, control, egocentric), and (c) Positive Support (emotional support, tangible aid). The SRQ-S ask participants to respond to statement, "The following is a list of reactions that other people sometimes have when responding to a person with this experience," followed by 16 specific statements.

Sample items include, "Avoided talking to you or spending time with you (turning against; stigmatize)", "Treated you as if you were a child or somehow incompetent (turning against; infantilize)", "Told you that you were irresponsible or not cautious enough (turning against; blame)", Told you to stop thinking about it

(unsupportive acknowledgement; distract)", "Made decisions or did things for you (unsupportive acknowledgement; control)", "Has been so upset that they needed reassurance from you (unsupportive acknowledgement; egocentric)", "Reassured you that you are a good person (positive support; emotional support)", and "Provided information and discussed options (positive support; tangible aid)." Participants are asked to respond to how often a statement occurred for them on a 5-point Likert scale ranging from 0-4 (0= Never and 4 = Always).

Scoring the measure involves computing a mean for the items in each general scale, with the higher the average, the higher the endorsement of that general scale. For example, high scores for items in both sub-scales within positive support would be averaged to provide a total number for the amount of positive support received after disclosure. Ullman et al. (2017) suggested that calculation of the sub-scales could also occur but due to the sub-scales having fewer items that the alpha may be low. Thus, depending on the sample size, the sub-scales could be additional variables to examine as well.

Test-retest reliability of the SRQ was conducted Ullman (2000) with an undergraduate student population over an eight-week period while reporting reactions they had received regarding the same sexual assault experience. The test-retest correlations were statistically significant for every participant, with values of Pearson's r being the following: .74 for distraction, .75 for emotional support, .73 for tangible aid, .64 for victim blaming, .81 for treating different, .78 for taking control, and .80 for egocentric responses. To assess whether the SRQ-S also demonstrated good internal consistency, Ullman et al. (2017) examined multiple longitudinal studies from

community and college populations. The alpha was tested for the general scales and the subscale and was found to be adequate when assessed across all longitudinal samples. More specifically, the three general scales demonstrated an alpha ranging between .83-.91 for Turning Against, .64-.84 for Unsupportive Acknowledgement, and .74-.88 for Positive Support. The following were the range for alpha in each subscale: .69-.81 Stigmatize, .77-.89 Infantilize, .72-.88 Blame, .51-.78 Distract, .50-.82 Control, .57-.78 Egocentric, .65-.87 Emotional Support, and .76-.86 Tangible Aid. Ullman et al. (2017) also examined whether the internal consistency varied across racial identities. It was found that all scales and subscales demonstrated adequate reliability (.60-.93); however, the control and egocentric subscales had poor reliability depending on racial identity. More specifically, the control subscale demonstrated poor reliability for survivors who were Black (.59), and egocentric subscale demonstrated poor reliability for survivors who were White (.57) and women with other racial identities (.45). In addition, a confirmatory factor analysis was conducted with samples from the community and a northeastern university. The analysis confirmed three general factors with eight specific factors model for reactions survivors received after first disclosing and have received from their most recent sexual assault disclosure (Ullman et al., 2017). In this study, the general scale's Cronbach's alpha demonstrated good reliability with Positive Support .64-.77, Unsupportive Acknowledgement .74-.80, and Turning Against .87-.90. The reliability for each subscale was the following: Emotional Support .68, Tangible Aid, .82, Distraction .77, Control .81, Egocentric .59, Stigmatize .76, Blame .81, and Infantilize .89.

Procedures

Participants were recruited through a mass e-mail sent to current undergraduate students at the University of Oklahoma. Included in the e-mail was a brief summary of the study, Institutional Review Board (IRB) approval information and the survey link. In addition, minority student organizations (e.g., African Students Association, American Indian Student Association, Queer Student Association), were also e-mailed in order to increase representation of undergraduate students with minority identities.

This study consisted of multiple assessments compiled into an online survey through the Qualtrics survey system to promote ease of access. The survey took approximately 15 to 30 minutes to complete. Contact information for the University of Oklahoma Counseling Center and other resources were provided on the exit page in case participants were triggered or needed to speak with a mental health provider. If participation was withdrawn or declined, participants were not penalized or lost benefits or services unrelated to the study. If someone decided to participate, then they could decline to answer any question and could choose to withdraw at any time, by clicking on the "Exit Survey" on the bottom left of the window. In regard to compensation, there is no compensation for completing the study but rather participation in the study was completely voluntary. Subsequently, no information will be included that could possibly identify participants in any published reports that develop from this study,

Development of the survey was through Qualtrics software and was stored on the Center for Educational Development and Research (CEDaR) server. Access to the account was only through the researcher's login information, thus the survey responses were only accessible to the researcher. There was no identifying information gathered

from participants in an effort to keep survey responses anonymous. The survey was posted in English on Qualtrics after approval for the study was obtained from the University of Oklahoma Institutional Review Board. Responses were collected in February of 2018. The initial responses collected included 321 participants. Responses were deleted because of declined consent (*n*=2) and missing values (*n*=33). This resulted in 286 responses being utilized in the study.

Data Analyses

Preliminary analyses were conducted to examine relationships among the main study variables. This included a zero-order correlation and tests for multicollinearity. Demographic variables were also analyzed to provide information on the participants in the study. After this, two hierarchical regression analyses were conducted, the first examined participants who reported an experience of sexual assault prior to age 18, and the second examined those that reported an experience of sexual assault age 18 years or older. The criterion variable was total wellbeing, and predictor variables included the self-compassion subscales (self-judgement, self-kindness, common humanity, isolation, over-identification, and mindfulness), and total level of mindful disposition, or mindful awareness. The first hierarchical regression examined participants who reported a sexual assault prior to age 18. The six aspects of self-compassion (self-judgment, self-kindness, common humanity, isolation, over-identification, and mindfulness) were entered into the first step to partial out the influence of these aspects on wellbeing. Mindful awareness was entered into the second step to explain any remaining variance.

The second hierarchical regression was conducted on participants who had reported a sexual assault experience age 18 or greater. The regression had the same

criterion and predictor variables as the previous hierarchical regression, with the additional predictor variable of year in college (freshmen, sophomore, junior, senior). Year in college (freshmen, sophomore, junior, senior) was entered into step one of the second hierarchical regression model to control for the known effect of this variable on wellbeing in the context of risk of sexual assault and adjustment to college. The six aspects of self-compassion (self-judgment, self-kindness, common humanity, isolation, over-identification, and mindfulness) were entered into the second step to partial out the influence of these aspects on wellbeing. Mindful awareness was entered into the third step to explain any remaining variance.

As discussed earlier, the research questions were presented due to the gap in the literature about the role of self-compassion and mindfulness in recovery from sexual assault. The research questions were as follows: (1) What are the relationships between aspects of self-compassion (self-kindness, self-judgement, common humanity, isolation, mindfulness, over-identification), mindful awareness and psychological wellbeing among college-matriculated students with a childhood and recent experiences of sexual assault. (2) Does mindful awareness and aspects of self-compassion (self-kindness, self-judgement, common humanity, isolation, mindfulness, over-identification) predict psychological wellbeing among college matriculated students with childhood experience of sexual assault? (3) Does mindfulness awareness and aspects of self-compassion (self-kindness, self-judgement, common humanity, isolation, mindfulness, over-identification) predict psychological wellbeing among college-matriculated students with a recent experience of sexual assault?

Chapter 5: Results

Sexual Assault

Sexual Assault Characteristics

Information was gathered on the type of sexual assault behavior experienced prior to age 18 and since age 18 by participants (see Table 2). It's important to note that some participants may have reported *both* a sexual assault prior to age 18 and since age 18, however for the purpose of this study this was not looked at separately. When looking at prior to age 18, 44% of participants (n = 125) reported some form of unwanted sexual behavior. The most common unwanted sexual behaviors reported were being groped or having private parts of one's body grabbed (29%, n = 36), and being sexually penetrated (18%, n = 22). Differences amongst genders was also explored, with 15% of males, 52% of females, and 86% of nonbinary individuals reporting an unwanted sexual experience prior to age 18.

When looking at experiences of sexual assault since age 18, 37% of participants (n = 107) reported some form of unwanted sexual behavior. In this group, the most common unwanted sexual behaviors reported were receiving unwanted oral sex or being forced to give oral sex (33%, n = 36), and being groped or having private parts of one's body grabbed (26%, n = 28). In addition, 12% of participants (n = 13) reported unwanted sexual penetration. Differences amongst genders was explored, with 9% of males, 46% of females, and 71% of nonbinary individuals reporting an unwanted sexual experience since age 18.

Additionally, questions about the method used by the perpetrator were asked for sexual assault behavior prior to age 18 and since age 18 (see Table 3). When looking at

prior to age 18, the most common reported methods used by perpetrator were taking advantage of them while too drunk, high, asleep, or out of it (26%, *n* = 31), catching them off guard, or ignoring verbal cues or looks (22%, *n* = 26), and showing displeasure, criticizing their sexuality or attractiveness, or getting angry (18%, *n* = 22). When looking at method used by perpetrator since age 18, the most common reported method used was taking advantage of them when too drunk, high, asleep, or out of it (44%, *n* = 45), followed by using force, or having a weapon (18%, n = 18), and being caught off guard or ignoring nonverbal cues or looks (17%, *n* = 17).

Social Reactions to Disclosure

Participants who had reported sexual assault prior to age 18 or since age 18 were also asked follow-up questions related to the types of social reactions received after disclosing their sexual assault experiences. As previously discussed, there are 3 primary scales and 8 subscales: turning against (stigmatize, infantilize, blame), unsupportive acknowledgement (distract, control, egocentric), and positive reactions (emotional support, tangible aid). The averages of each primary scale and subscales were calculated for participants who reported a sexual assault prior to age 18 and/or for participants who reported a sexual assault since age 18.

Frequencies were first calculated for those who reported sexual assault prior to age 18. When looking at the average frequency of participants' experiencing turning against reactions, 49% (*n* = 59) reported never, 26.7% (*n* = 32) reported rarely, 16% (*n* = 20) reported sometimes, and 7.5% (*n* = 9) reported frequently. When asked about unsupportive acknowledgement, 40.3% (*n* = 48) reported never, 35.4% (*n* = 42) reported rarely, 21% (*n* = 25) reported sometimes, and 3.3% (*n* = 4) reported frequently.

Positive reactions were the last primary scale, with 36.1% (*n* = 43) reported never, 31.8% (*n* = 38) reported rarely, 22.7% (*n* = 27) reported sometimes, 7.5% (*n* = 9) reported frequently, and 1.7% (*n* = 2) reported always. In addition, means for the 8 subscales were calculated with the highest means found to be in emotional support (*M* = 2.88), followed by distraction (*M* = 2.52), and blame (*M* = 2.42).

Frequencies were also calculated for those who reported sexual assault since age 18. When looking at the average frequency of participants' experiencing turning against reactions, 44.7% (*n*= 46) reported never, 29.2% (*n* = 30) reported rarely, 18.4% (*n* = 19) reported sometimes, and 7.9% (*n* = 8) reported frequently. When asked about unsupportive acknowledgement, 37.5% (*n* = 39) reported never, 36.5% (*n* = 38) reported rarely, 22.1% (*n* = 23) reported sometimes, and 3.9% (*n* = 4) reported frequently. Positive reactions were the last primary scale, with 31.7% (*n* = 33) reported never, 35.5% (*n* = 37) reported rarely, 25% (*n* = 26) reported sometimes, 4.8% (*n* = 5) reported frequently, and 2.9% (*n* = 3) reported always. In addition, means for the 8 subscales were calculated with the highest means found to be in emotional support (*M* = 2.91), followed by distraction (*M* = 2.58), and blame (*M* = 2.52).

Preliminary Analyses

Preliminary analyses were conducted on the main variables (aspects of self-compassion, mindful awareness, wellbeing) including test for normality, means, and the range. There were no extreme outliers present and the variables demonstrated adequate normality.

Zero-Order Correlation

Before running the hierarchical regression model, Zero-Order Correlations were conducted to explore relationships between aspects of self-compassion, mindful awareness, and wellbeing (see Table 4). Each predictor variable significantly correlated with wellbeing including mindful awareness ($r = .52$, $p < .01$), self-kindness ($r = .48$, $p < .01$), common humanity ($r = .23$, $p < .01$), mindfulness ($r = .40$, $p < .01$), self-judgment ($r = -.45$, $p < .01$), isolation ($r = -.49$, $p < .01$), and overidentification ($r = -.45$, $p < .01$). Following the standards presented by Cohen (1988), the majority of variables correlated as expected between the low and moderate range, with mindful awareness being the only variable that demonstrated a large correlation. Test for multicollinearity indicated that a very low level of multicollinearity was present (*VIF* = 3.11 for self-kindness, 1.83 for common humanity, 2.66 for mindfulness, 3.21 for self-judgement, 1.95 for isolation, 2.18 for overidentification, and 1.55 for mindful awareness).

Multiple Regression Model

Two hierarchical multiple regressions were performed (see Table 5 and Table 6) to investigate whether aspects of self-compassion (self-kindness, common humanity, mindfulness, self-judgment, isolation, overidentification) and mindful awareness contribute uniquely in the prediction of psychological wellbeing among participants with a self-reported history of either childhood sexual assault (prior to age 18) and/or recent sexual assault (18 years or older).

The first hierarchical regression conducted was for participants who identified as having an unwanted sexual experience prior to age 18. Aspects of self-compassion were

entered into the first step and mindful awareness was entered into the second step. Model 1 including self-kindness, common humanity, mindfulness, self-judgment, isolation, and overidentification was statistically significant (R^2 = .287, F (6, 116) = 7.770, p<.001). Model 2 including self-kindness, common humanity, mindfulness, self-judgement, isolation, overidentification, and mindful awareness was statistically significant (R^2 = .397 F (7,115) = 10.809, p<.001). The change in R-Square (ΔR-square=.110) from Model 1 to Model 2 was statistically significant, F (1, 115) = 21.007, p<.001. In Model 1, self-kindness was a significant positive predictor (b= 5.36, S.E.= 1.515, p=.001, β=.489) of wellbeing, whereas isolation was a significant negative predictor (b= -3.038, S.E.= 1.155, p= .010, β=-.280). In Model 2, self-kindness was a significant positive predictor (b=5.520, S.E.=1.4, p<.001, β=.504) of wellbeing, as was mindful awareness (b=4.797, S.E.=1.047, p<.001, β=.413).

The second hierarchical regression conducted was for participants who identified as having an unwanted sexual experience since age 18. Year in college (freshmen, sophomore, junior, senior) was entered into the model in step one to control for the known effect of this variable on wellbeing in the context of risk of sexual assault and adjustment to college. Aspects of self-compassion (self-kindness, common humanity, mindfulness, self-judgment, isolation, over-identification) was entered into the second step to partial out the influence of these aspects on wellbeing and mindful awareness was entered into the third step to explain any remaining variance.

Model 1 including classification (freshman, sophomore, junior, senior) was not statistically significant predictor for wellbeing (R^2 = .003, F (1, 102) = .348, p=.557). Model 2 including classification, self-kindness, common humanity, mindfulness, self-

judgement, isolation, and overidentification was statistically significant (R^2 = .278, F (7, 96) = 5.280, p<.001). Model 3 including classification, self-kindness, common humanity, mindfulness, self-judgement, isolation, overidentification, and mindful awareness was statistically significant (R^2 = .327, F (8,95) = 5.775, p<.001). The change in R-Square (ΔR-square=.275) from Model 1 to Model 2 was statistically significant, F (6, 96) = 6.085, p<.001. The change in R-Square (ΔR-square=.049) from Model 2 to Model 3 was also statistically significant, F (1, 95) = 6.948, p=010.

In Model 2, self-kindness was a significant positive predictor (b= 4.669, S.E.= 1.686, p=.007, β=.434) of wellbeing, whereas isolation was a significant negative predictor (b=-3.408, S.E.= 1.233, p=.007, β= -.329). In Model 3, self-kindness was a significant positive predictor (b=4.758, S.E.= 1.637, p=.005, β=.442) of wellbeing, as was mindful awareness (b= 3.125, S.E.= 1.185, p=.010, β=.285). Isolation was also a significant negative predictor (b= -2.491, S.E.= 1.246, p=.048, β= -.240) of wellbeing.

Chapter 6: Discussion

The aim of this study was to establish support for aspects of self-compassion and mindful awareness in facilitating increased psychological wellbeing in those who report a history of sexual assault during childhood and/or adulthood. The clinical value of this study is in providing additional support for the psychological benefits of self-compassion and mindfulness in not only the general population, but in college-matriculated students who specifically reported a history of sexual assault. Given this as the aim of the study, the role of self-compassion (self-kindness, common humanity, mindfulness, self-judgement, isolation, overidentification) and mindful awareness was explored on the psychological wellbeing of people who reported a history of childhood sexual assault prior to age 18, and/or an experience of sexual assault since age 18, during emerging adulthood. Two hierarchical regression were used to look at these questions separately. This was prompted by research suggesting that a childhood experience of sexual assault may have long lasting impacts on emotional regulation, possibly affecting subsequent psychological wellbeing in emerging adulthood (Ford & Courtois, 2009). In addition, the variable of undergraduate classification (freshman, sophomore, junior, senior) was added as the first step in the hierarchical regression for sexual assault since age 18, since research has suggested adjustment to college during freshman year can negatively impact psychological wellbeing as well (Arnett, 2000; Azmitia, Syed, & Radmacher, 2013; Johnson et al., 2010).

The second question, which was related to participants who reported a history of childhood sexual assault, explored whether aspects of self-compassion and mindful awareness impacted psychological wellbeing. The full model which included self-

kindness, common humanity, mindfulness, self-judgment, isolation, overidentification, and mindful awareness accounted for significant variance in psychological wellbeing. Self-kindness and mindful awareness were significant predictors for psychological wellbeing of those who reported a childhood history of sexual assault (prior to age 18). The third research question was also supported with the exception of undergraduate classification which did not demonstrate significant variance on psychological wellbeing. Thus, the final model for this research question looked identical to the model from the second research question, with self-kindness, isolation (inversely), and mindful awareness as significant predictors for psychological wellbeing of those who reported a recent experience of sexual assault (since age 18).

Childhood Sexual Assault and Self-Kindness

In the first hierarchical regression, self-kindness and mindful awareness were both significant predictors in psychological wellbeing for people who reported a history of childhood sexual assault. More specifically, self-kindness was a significant positive predictor to psychological wellbeing. Although this may seem intuitive, it was also interesting since the other aspects of self-compassion did not significantly impact the variance of psychological wellbeing. Thus, while previous research has focused on the total construct of self-compassion and has found support for it significantly impacting psychological wellbeing (Hall et al., 2013; Neff & Germer, 2017; Trompetter, de Kleine, & Bohlmeijer, 2017), to my knowledge, there has not been a study conducted that looked at each aspect individually in relation to post-assault recovery in undergraduate students. In addition, this is noteworthy since this could highlight a main

construct within self-compassion that positively impacts those with a history of childhood sexual assault.

As mentioned before, self-kindness is one of the main components of self-compassion which entails expressing warmth and understanding as opposed to self-criticism and judgement (Scoglio et al., 2015). Contrarily, self-blame is a construct quite opposite of self-kindness and as previously mentioned, self-blame and a self-critical attitude have been linked to a multitude of psychological and physiological distress (Dunkley et al., 2009). Research by Desrosiers et al. (2013) discussed the positive impact that non-judgment, or self-kindness, could have on symptoms of depression. More specifically, that non-judgment, or self-kindness, could counteract one of the key aspects of depression which was self-criticism. When connecting this to the research by Campbell et al. (2009), who found that sexual assault survivors were at risk of developing depression, generalized anxiety disorder, PTSD, and alcohol dependence, it makes sense that self-kindness was a significant positive predictor in psychological wellbeing. In addition, this seems to replicate similar findings by Barlow et al. (2017) who found that in a study of first-year college students, with a history of childhood sexual assault, low levels of self-compassion correlated to emotional regulation difficulties and increased symptoms of PTSD. This indicates that self-compassion could increase one's ability to regulate emotions, thus decreasing distress and encompassing greater psychological wellbeing.

Childhood Sexual Assault and Mindful Awareness

Lastly, mindful awareness was a significant positive predictor for psychological wellbeing, actually accounting for a significant increase of variance when added to the

regression model. In other words, although aspects of self-compassion accounted for significant variance in predicting psychological wellbeing, mindful awareness had an even greater and significant role in explaining psychological wellbeing. When looking at prior research on mindfulness and its positive impact on psychological wellbeing, this seems to be congruent (Davis & Hayes, 2011; Ehring & Quack, 2010; Hill & Updegraff, 2012). More specifically, research has shown that mindful awareness further facilitates self-compassion since only by increasing self-awareness of our suffering can we then consciously direct compassion towards ourselves (Neff & Dahm, 2015).

Mindfulness may also have been a significant positive predictor for psychological wellbeing due to its ability to increase emotional regulation (Hill & Updegraff, 2012; Menezes et al., 2012; Schirda et al., 2015). While emotional regulation is important for everyone, people with a history of childhood sexual assault have been found to especially struggle with emotional regulation due to trauma occurring during periods of significant development (Ehring & Quack, 2010). It is these emotional regulation difficulties that contribute significantly to increased distress levels and maladaptive coping strategies (Ford, 2009). Thus, it would make sense that mindfulness was a significant predictor in psychological wellbeing for people with a history of childhood sexual assault. Lastly, besides the study by Hill et al. (2011), this is one of few studies that specifically examined mindfulness and its role on people with a history of sexual assault during childhood.

Emerging Adulthood Sexual Assault and Self-Kindness

In the second hierarchical regression, self-kindness, isolation, and mindful awareness were significant predictors in psychological wellbeing for people who

reported a history of sexual assault since age 18. When looking at the direction of the predictors, self-kindness was a significant positive predictor for psychological wellbeing. Thus, self-kindness seems to be a significant underlying aspect of self-compassion that has a positive psychological impact on people who reported a sexual assault experience during emerging adulthood, as well as during childhood. As discussed previously, this is congruent with prior research which has found that self-compassion is a significant mechanism in combating self-criticism and self-blame (Morris et al., 2013). This is important when considering post-assault recovery and the diagnoses that typically accompany the recovery process (Campbell et al., 2009), especially in light of research finding that a self-critical attitude, the opposite of self-kindness, is an important mechanism for exacerbating depressive symptoms (Dunkley et al., 2006; Dunkley et al., 2009). Thus, self-kindness may be an important construct in the recovery process in decreasing psychological distress.

Emerging Adulthood Sexual Assault and Isolation

A second aspect of self-compassion, isolation, was found to have a significant impact on psychological wellbeing for participants who reported a history of sexual assault during emerging adulthood. In this case, isolation was a significant negative predictor of psychological wellbeing. This has been well-supported by research, which indicates that increased social support is predictive of greater psychological wellbeing and decreased distress during post-assault recovery (Dworkin et al., 2018; Dworkin et al., 2017). Thus, as isolation decreases, psychological wellbeing increases in response. Isolation may also be related to social support from friends being an especially crucial factor in adjustment to college and psychological wellbeing (Friedlander et al., 2007).

As described by Arnett (2000), emerging adulthood is a period that encapsulates frequent change and instability, thus increased isolation could further exacerbate distress given the potential characteristics of emerging adulthood.

In addition, the items that measured isolation in the self-compassion scale seemed to be reflective of a tendency to engage in social comparison. For example, some of the items measuring social isolation were the following: (a) When I fail at something that's important to me, I tend to feel alone in my failure, and (b) When I'm feeling down, I tend to feel like most people are probably happier than I am. Although social comparisons are a natural process, happy people tend to only be impacted by social comparisons by people who are *worse* at a task, whereas, unhappy people are heavily impacted by those who are better *or* worse at a task (Lyubomirsky & Ross, 1997). In other words, those who experience increased psychological distress (e.g., depression, anxiety, negative self-talk) may have an increased tendency to engage in social comparisons and may also be particularly susceptible to their consequent negative effects. In particular, research has found that social comparison has been linked to negative self-evaluations in some individuals, especially those who are already depressed or those who are at risk for depression (Swallow & Kuiper, 1988). It is possible that negative self-evaluations have an increased impact on wellbeing during emerging adulthood since this is a significant time of identify development and a period of life transitions (Arnett, 2000).

Emerging Adulthood Sexual Assault and Mindful Awareness

Lastly, mindful awareness was a positive predictor for psychological wellbeing. The positive impact of mindfulness on psychological wellbeing has been well supported

by prior research (Brown & Ryan, 2003; Davis & Hayes, 2011; Hofmann et al., 2010; Watford & Stafford, 2015), however, to my knowledge, research has not specifically focused on college-matriculated students who reported a sexual assault experience when 18 years or older.

Contrary to expectations, the mindfulness subscale within self-compassion was *not* a significant predictor in psychological wellbeing. It may be that the mindfulness in the self-compassion scale may have not captured one's full ability for mindfulness as it only examined one aspect of the construct as opposed to the core mechanism present-attention measured by mindful awareness (Brown & Ryan, 2003). As discussed by Neff and Dahm (2014), the mindfulness described in the self-compassion scale utilized within this study is smaller in scope as it only pertains to an awareness of *negative* thoughts and feelings from a balanced perspective. This only captures part of mindfulness, since the total construct of mindfulness involves awareness of *all* thoughts and feelings, both negative, neutral, and positive. In the present study, the mindful awareness construct may reflect a core component of mindfulness, defined as present-focused attention, which has been linked to emotional regulation and greater wellbeing. (Hill & Updegraff, 2012; Menezes et al., 2012; Schirda et al., 2015). Given this, the mindfulness in the self-compassion scale may have not captured one's full ability for mindfulness as it only examined one aspect of the construct.

Childhood Sexual Assault and Isolation

Considering that isolation *was* a significant predictor for participants who reported a sexual assault during emerging adulthood, one may wonder why this was also not the case for participants who reported a childhood history of sexual assault.

There are numerous factors which could influence this variable. First, sexual assault during childhood, especially if there were multiple encounters, occurs during a significant period of development, including creation of secure attachment bonds to caregivers (Ford, 2009). Thus, sexual assault can interrupt this normal trajectory. Attachment theory was first introduced by John Bowlby (1969, 1973, 1980) with Mary Ainsworth providing later contributions (Ainsworth, Blehar, Waters, & Wall, 1978). The basic premise of attachment theory is that infants have the tendency to develop an affectionate bond with others, most often the primary caretaker. This bond can then facilitate a sense of security in the child and it is from this security that exploration of the world is enabled.

Depending on the child's experience of security with the early attachment figure, Ainsworth et al. (1978) defined four different types of attachment styles: (1) secure, the child having a solid foundation of security, (2) insecure, child experiences anxiety in response to caretaker insufficiency, (3) preoccupied, child experiences uncertainty and caution in fostering a connection with an unreliable caretaker, and (4) disorganized, child often displays contradictory behaviors, such as seeking comfort from their caregiver, but then pushing them away (Magnavita, 2008). Main and Solomon (1990) theorized that disorganized attachment can manifest in response to infant's fear of attachment figures, yet also having the biological urge to seek comfort from their primary caregivers. In addition, research has found that these childhood attachment styles become internalized, thus becoming a blueprint for future interpersonal relationships (e.g., romantic, friendships) throughout adulthood (Green & Piel, 2015). In an effort to cope with trauma, children may develop a

disorganized/dissociative attachment (Lyons-Ruth, Dutra, Schuder, & Bianchi, 2006). Dissociation is described as a response to overwhelming circumstances where an individual cognitively and emotionally detaches as a means of coping. Research by Lyons-Ruth et al. (2006) has found that this attachment style can also have long lasting impacts into adulthood. In addition, the disorganized aspect of the attachment style reflects significant distrust, social withdrawal, and devaluing interpersonal relationships or interactions (van der Kolk, 2005).

Although a disorganized/dissociative attachment style may have initially developed as a strategy for survival, research indicates that individuals who utilize this coping mechanism indiscriminately engage in dissociative disconnection in the context of relational patterns or physical settings perceived as similar to the abuse. Over time, the tendency to cognitively and emotionally disengage may stagnate development of social and emotional capacities (Courtois, Ford, & Cloitre, 2009). Thus, for those who've experienced sexual assault during childhood, isolation may not be a significant predictor of psychological wellbeing since dissociation and detachment suggests being removed from interpersonal connections. However, this study did not specifically examine the contextual factors related to childhood sexual assault (e.g., attachment style, number of sexual assault encounters, relation to the perpetrator, exposure to other forms of abuse). Due to this, it is difficult to definitively determine the reason for isolation not being a significant predictor. Future studies may want to consider examining this further.

Contrary Findings

Interestingly, research by Hollis-Walker and Colosimo (2010) found that the self-compassion facets of common humanity, non-isolation, and mindfulness were significant predictors of happiness. Benzo et al. (2017) also found that the most predictive self-compassion facets for happiness were mindfulness and non-isolation. Although isolation was a significant negative predictor for participants who reported a sexual assault experience during emerging adulthood, it is not clear why neither common humanity nor mindfulness were significant in predicting psychological wellbeing in this study. These differences may be related to the targeted populations in these studies, as well as the particular measures used for assessing psychological wellbeing and happiness. In the study by Hollis-Walker and Colosimo (2010), participants were recruited both from an undergraduate and general population. In addition, the participants were not specifically people with a history of sexual assault, but rather were a comparison between those who meditated and those who did not meditate. Contrarily, the study by Benzo et al. (2017) targeted healthcare workers from a teaching hospital, so again these participants were not recruited due to a history of sexual assault as was done in the current study. In addition, the measure used by Benzo et al. (2017) only looked at happiness as opposed to total psychological wellbeing.

These contrary findings may be reflective of the targeted population within this study. There are three unique characteristics of this population, the first two characteristics being either a history of sexual assault prior to age 18 and/or since age 18 and the third characteristic being people within the emerging adulthood developmental period. In addition, when considering early trauma during childhood,

research has shown there is a greater likelihood of self-criticism and shame since these participants may not have received consistent warmth and support during childhood (Gilbert & Proctor, 2006). This could be why self-kindness was one of the greatest predictors of psychological wellbeing for these particular individuals as opposed to common humanity or mindfulness. In addition, the non-significant impact of common humanity on posttraumatic stress symptomology is consistent with a study by Valdez and Lilly (2016) who found that only self-kindness and mindfulness were significant predictors. The study by Valdez and Lilly (2016), also found that only self-kindness and mindfulness were related to less hyperarousal and emotional numbing, whereas common humanity was not correlated with any posttraumatic stress symptomology. Given this, the researchers suggested that perhaps common humanity is not as relevant to symptoms of posttraumatic stress. It is important to note that unlike the current study, the mindfulness facet in self-compassion in the study by Valdez and Lilly (2016) was a significant predictor for levels of distress. However, the majority of participants surveyed in the Valdez and Lilly (2016) study were in a psychosocial period of development beyond emerging adulthood, with the average participant being 31 and ages ranging from 18 to 67. Thus, the different psychosocial periods of development could impact which self-compassion components are most relevant during post-assault recovery.

The psychosocial context of this population is also important since it can further highlight the impact of trauma during this period of development. Erik Erikson (1950) first introduced the idea of psychosocial stages of development which included eight separate stages. However, Arnett (2000) later introduced an additional stage called

emerging adulthood (18-25 years old) which was discussed previously. Emerging adulthood is a unique period for individuals since people don't necessarily feel like an adult, nor do they feel like adolescents. Arnett (2000) conceptualized this period of development as one of identity exploration and heightened instability. There are three primary domains for identity exploration Arnett (2000) discussed which were love, work, and worldviews. Given this, isolation being a significant predictor of wellbeing for those who reported a sexual assault during emerging adulthood makes sense since it could interrupt all domains of identity exploration, especially love and one's worldview. Thus, isolation, which is quite opposite of openness to exploration, could further exacerbate psychological distress during a period of critical identity development. Further, a study by Azmitia et al. (2013) found that increased social support was correlated to feelings of increased identity synthesis. Isolation, then, may reflect feelings of identity uncertainty and potentially even shame since shame is also linked to avoidance behaviors (Frazier et al., 2005). In addition, the previous study by Hollis-Walker and Colosimo (2010) which found that common humanity and mindfulness were predictive of happiness examined participants who were in a very different stage of psychosocial development. During emerging adulthood, feelings of common humanity may be less of a focus and instead the focus being on unique identity development and emerging independence.

In addition, the mindfulness facet within self-compassion primarily addresses the ability for emotional regulation through approaching emotions with equanimity and an openness (Neff & Dahm, 2015). A study by Zimmermann & Iwanski (2014), that examined emotional regulation across multiple periods of development, found that

emerging adulthood is similar to adolescence in having low emotional regulation capabilities, however with the addition of increased seeking of social support. The addition of social support was found to increase adaptive regulation and result in developing greater ability in social and individual emotional regulation. Thus, emerging adulthood has greater emotion regulation compared to adolescence, but it does not appear to resemble the type of emotional regulation described in the mindfulness facet. Given this, this may explain why the mindfulness facet was not a significant predictor for psychological wellbeing.

Emerging adults who reported childhood sexual assault does not necessarily indicate an interruption of identity development during emerging adulthood since the incident of sexual assault occurred during an earlier psychosocial period of development. These differences in the psychosocial developmental context of the sexual assault may explain why isolation was not a significant predictor for those who reported a sexual assault during childhood compared to those who reported sexual assault during emerging adulthood. When again considering Erikson's (1950) stages of psychosocial development, undergraduate students who experienced sexual assaults prior to age 18 may not have resolved ego identity development, a stage of development that occurs during youth and adolescence. This is a foundation for assuming adult roles in society, including forming stronger peer groups and romantic connections. Those who have not successfully resolved this stage during adolescence would not have emerged with a sufficient sense of self, and feelings of independence and control, thus remaining insecure about themselves and the future. Given this, the components of self-

compassion most relevant to those who have experienced childhood sexual abuse or assault may be different than those who experienced sexual assault during adulthood.

Mindfulness and Self-Compassion

While the current study provided additional evidence for the significant role of mindfulness in promoting psychological wellbeing, due to the cross- sectional nature of the study it is unclear whether mindfulness is indeed a foundation for developing self-compassion When contemplating the role of mindfulness in relation to self-compassion, Gunaratana (2017) has argued that mindfulness is a necessary foundation to developing self-compassion. The argument states that self-compassion involves awareness that suffering is occurring. As a result, a present-focused awareness is an essential foundation since it is from awareness that we become conscious of our suffering and only then we experience self-compassion.

Historically, research about sexual assault and undergraduate college students has focused on risk factors for future sexual assault, contextual aspects of the sexual assault, and reporting behaviors (Cranney, 2015; Kimble et al., 2008; Krebs et al., 2009; Moore & Baker, 2016). This study contributed to the existing body of researcher in that it focuses on factors that may impact post-assault recovery and psychological wellbeing. Given this, the goal is to develop support for additional counseling interventions during post-assault recovery. Overall, results are in support of mindfulness and aspects of self-compassion in promoting greater psychological wellbeing for participants with either a history of childhood and/or emerging adulthood sexual assault. In addition, it can be argued that this even provides support for the Temporal Model of Perceived Control (TMPC) which discussed present-focused control linked to decreasing psychological

distress and behavioral self-blame (Frazier et al., 2001), since mindful awareness, a present-focused construct, was a positive significant predictor for psychological wellbeing. Further, this study is unique in that it explored the impact of mindfulness and aspects of self-compassion with both participants who reported a childhood sexual assault experience *and/or* those who reported an adult sexual assault experience.

In addition, it is important to further discuss the differing conceptualizations between mindful awareness and the mindfulness as described within the Self-Compassion Scale as this could shed light onto why mindful awareness *was* a significant predictor, however mindfulness within the SCS was *not* a significant predictor (Brown & Ryan, 2003; Neff, 2003). Brown and Ryan (2003) created the Mindful Awareness Attention Scale (MAAS) to measure the awareness of attention to what is happening in the present, as they argued this attribute as being central to mindfulness. The type of present-awareness in mindfulness described by Brown and Ryan (2003) is of an "enhanced attention to and awareness of current experience or reality (p.822)" as opposed to the type of awareness during everyday functioning. For example, divided attention during multitasking would impede mindfulness as one is not fully attentive to the present moment. In creation of the MAAS, Brown and Ryan (2003) examined correlations between the construct measured by the MAAS and other psychological constructs (e.g., openness to experience, self-consciousness, self-reflection) to determine if the MAAS truly measured a distinct construct. At the study's conclusion, there was either no correlation or moderate correlations which indicated that the MAAS measured the distinct construct of mindful awareness.

Contrarily, the mindfulness measured in the SCS taps into a different facet of mindfulness which is "holding one's painful thoughts and feelings in balanced awareness rather than over-identifying with them (Neff, 2003, p.224)." Thus, the mindfulness described in SCS is not only an enhanced awareness of everyday experiences, but rather an enhanced meta-awareness of negative thoughts and feelings, while also being *open* to these experiences as opposed to repressing or over-identifying with them (Neff & Dham, 2015). In other words, the mindfulness in SCS encompasses an accepting stance towards the unpleasant feelings and thoughts one may experience. It is possible that the mindfulness within SCS was not a significant predictor since the act of turning inward to be aware and accepting of negative emotions and cognitions is a higher level metacognitive skill that has not been taught or practiced. This may be especially true with the targeted population who may feel retraumatized, triggered, or experience increased distress when focusing on their distressing emotions or cognitions. However, the mindful awareness construct, which focuses solely on the enhanced awareness characteristic of mindfulness, may still provide initial benefits for this population as the enhanced awareness can be directed towards positive, neutral, *or* negative experiences. In addition, it is possible to have a high score on the mindful awareness scale but not the mindfulness scale within the SCS, since the mindful awareness scale examines enhanced awareness of *all* experiences (positive, negative, neutral), and the mindfulness in the SCS measures awareness of *negative* experiences and responding to those experiences with equanimity. Thus, someone can be skilled at being aware of positive and pleasant experiences, but still engage in avoidance of being aware of one's negative experiences (e.g., thoughts, emotions, sensations). Lastly, it is possible that if mindfulness training was provided for

people with a history of childhood and/or emerging adulthood sexual assault, that the mindfulness construct in SCS would have also been a significant positive predictor for wellbeing. This has clinical implications which will be discussed further below.

Limitations and Future Directions

Although the current study provides evidence for aspects of self-compassion and mindfulness in promoting psychological wellbeing during post-assault recovery, there are some important limitations to consider. First, the smaller sample size may have limited the generalizability to other university populations or to the general population. Thus, future studies may want to consider recruiting participants from multiple universities or to provide incentives as a means of increasing recruitment. It may also be informative to recruit participants who are not undergraduate students but are within the same targeted age range to determine if the effects of the predictor variables can be replicated in a different population. In addition, participation in the current study required access to the Internet, which could have limited the amount of participation. Although, the diversity within the study was representative of the University of Oklahoma, the size of the subsamples (e.g., racial/ethnic, sexual orientation, gender identity) was too small for between-group comparisons. Thus, future studies may want to intensify efforts in recruiting minority populations to be able to examine whether results are similar across diverse identities.

In addition, due to the cross-sectional and correlational design of the study, it was not possible to determine causation. Thus, future studies may want to consider an experimental design of teaching mindfulness and self-compassion and then exploring differences in psychological wellbeing prior to beginning the study and at the study's

conclusion. In addition, given that this study's aim was to gather evidence in support of mindfulness and self-compassion for post-assault recovery, the next step might be to explore these variables within the context of a counseling setting. Future studies may also want to explore whether the recency of the sexual assault experience impacts the role of self-compassion and mindfulness on post-assault recovery. Another consideration for future studies is whether researchers want to utilize a more comprehensive mindfulness measure such as the Five Facet Mindfulness Questionnaire (Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006), as this could identify unique nuances of mindfulness and post-assault recovery.

It is also important to note that some participants may have reported *both* a childhood experience of sexual assault and emerging adulthood experience of sexual assault. Future studies may want to examine the role of mindfulness and self-compassion in the psychological wellbeing of participants who reported *both* childhood and adulthood experiences, participants that *only* reported a childhood experience, and participants that *only* reported an emerging adulthood experience of sexual assault in case any significant differences emerge. Lastly, future studies may want to test the path between self-compassion and mindfulness. In other words, whether mindfulness leads to self-compassion by using structural equation modeling.

Clinical Implications

Childhood Sexual Assault

There are several important clinical implications that come from this study. First, almost 50% of participants in this study reported a history of an unwanted sexual experience during childhood. This amount is staggering and given this, clinicians are

encouraged to be aware that clients presenting to counseling may have a history of sexual assault and that the psychological impacts of these encounters can be long lasting (Ford & Courtois, 2009).This finding is consistent with research that delineates the psychological consequences of sexual abuse in childhood (Arata, Langhinrichsen-Rohling, Bowers, & O'Farrill-Swails, 2005; Gibson & Leitenberg, 2001; Green et al., 2010; Walsh et al., 2007). Additionally, a study by Gibson and Leitenberg (2001) found that undergraduate students who had experienced a previous sexual assault were at an increased risk of using disengagement coping methods and as a result, experienced greater psychological distress. As counselors, if a client reports a history of sexual assault, it is important to further assess current coping behaviors and distress levels as these could still be remnants from the assault experienced during childhood. People that have experienced child abuse are also at an increased risk for development of mood and anxiety disorders (Green et al., 2010), substance abuse (Blumenthal et al., 2008), and risky sexual behavior (Arata et al., 2005).

These factors are crucial to be mindful of as a counselor since the presenting concerns of clients do not always reflect the contextual factors from which the symptoms originated. For example, a client presenting with symptoms of anxiety may have a childhood history of sexual assault that resulted in emotional dysregulation leading to anxiety symptoms. This information could influence the direction for a treatment plan with this client. Additionally, research has consistently demonstrated that a history of childhood sexual assault is a significant risk factor for revictimization in adulthood (Relyea & Ullman, 2015). Walsh et al. (2007) examined factors contributing to revictimization in adulthood and identified that those with low positive coping was

significantly linked to future coerced sexual victimization. Again, this is essential to keep in mind as a counselor since addressing the method of coping utilized by clients with a history of childhood sexual assault could potentially reduce the risk of revictimization.

Coping Method

Understanding the type of coping method used by clients can be very beneficial in a counseling treatment approach. A study by Gibson and Leitenberg (2001) surveyed undergraduate women with both a history of sexual abuse during childhood, adolescence, or young adulthood. The study found that those with a history of childhood and adolescent sexual abuse were at a greater risk of using disengagement coping compared to those with a history of sexual abuses during young adulthood. This tendency for avoidance may actually exacerbate PTSD symptoms since avoidance does not allow for emotional processing, a process which has been linked to decreasing symptoms of distress (Frazier et al., 2005). In addition, if clients engaged in avoidance coping strategies it would be important to explore the underlying reason behind these behaviors. For example, research has found that people who engage in avoidance coping are also more likely to experience self-blame, which has been significantly linked to greater levels of distress and prolonged post-assault recovery (Frazier et al., 2005; Ullman, 2014; Valentiner, Foa, Riggs, & Gershuny, 1996). If a client demonstrated greater levels of self-blame, then this could be an opportune moment to introduce self-compassion and mindfulness.

This seems to corroborate with the current study given that participants who reported a childhood or adult sexual assault experience *and* displayed greater levels of

self-kindness, had higher levels of psychological wellbeing. As a counselor, the significant positive impact of self-kindness on post-assault recovery is important to keep in mind. For example, being aware of the type of self-talk used by clients could inform counselors of the client's internalized self-worth and whether an intervention of self-kindness is needed in decreasing psychological distress. In general, counselors who work with a client who reports a history of sexual assault during childhood or emerging adulthood may also want to focus on self-kindness as part of the treatment plan since it has been significantly linked to increasing post-assault recovery. Neff and Germer (2012) have even developed a Mindful Self-Compassion program to specifically train people to develop more self-compassion. In the initial pilot program, there were significant increases in self-compassion, mindfulness, happiness, and life satisfaction. There were also significant *decreases* in depression, anxiety, and stress (Neff and Germer, 2012). Strategies from this program could be helpful for a clinician when working with clients exhibiting self-blame and low self-compassion. Clinicians may want to be aware of the contextual factors of the sexual assault, as research has found that survivors who were incapacitated at the time of the assault are at an increased risk of self-blame and psychological distress (Koss et al., 2002).

Mindful Awareness

Lastly, mindful awareness was significant in promoting post-assault recovery for both groups. This provides support for introducing the concept of mindfulness, or present-focused attention, since this could promote greater psychological wellbeing and recovery from trauma. Mindfulness can be introduced in multiple ways in the counseling setting, however it is very important to be intentional of *when* to introduce

aspects of mindfulness when working with survivors of sexual assault. For example, somatic sensations (e.g., feeling physical sensations similar to when the assault occurred) are a potential trauma symptom experienced during post-assault recovery (Park et al., 2014). Thus, if a client presented with somatic sensations early in treatment, and they were also taught a mindfulness technique to allow their emotions and physical sensations to be experienced with acceptance and mindfulness, then this may initially be more detrimental than helpful (Herman, 1997).

Given this, different aspects of mindfulness may be more important to introduce depending on the specific client, client characteristics, and current stage in post-assault recovery. Research on counseling approaches to clients with a history of sexual assault indicates that the first step in interventions should be on establishing client rapport and safety (emotional and physical) in the room (Herman, 1977). This is often one of the longest steps in trauma treatments as people with a history of trauma may still be in a survival mode, one of that involves hypervigilance and distrust towards other people (Courtois et al., 2009). Creating a foundation of trust and safety is an essential first step in facilitating post-assault recovery. In addition, this is an important time for empowering the client especially since feelings of being out of control and disempowered are experienced by many trauma survivors (Ford, 2009). An aspect of mindfulness that can be introduced during this period is a form of grounding, or any technique that can help someone become refocused to the present (Fisher, 1999). A common mindfulness grounding technique involves present-focused attention of the current room and experiences through the five-senses (e.g., what color is the room, feeling of the chair, noticing feet on the ground) as a means to increase feelings of

control and limit being overwhelmed by emotional distress. For example, if a client is reminded of their past trauma either by a trigger or if asked questions related to the trauma incident, then some clients experience intense flashbacks or have a significant increase of emotional distress (e.g., anxiety, panic attacks, tearfulness). Using a grounding technique provides the client a method for interrupting a flashback, emotional distress, or rumination, and instead reorient themselves into the present room. This act of present-focused attention is also helpful at increasing emotional regulation, which research has found can lead to decreased distress for survivors of sexual assault (John et al., 2017; Keng & Tong, 2016). Only after a solid foundation of established safety in the counseling room and client empowerment should the next phase of treatment begin.

The next phase would involve assisting the client in increasing awareness of triggers that remind them of the past trauma (e.g., physical sensations, locations, people). This could be an opportune time for introducing another aspect of mindfulness which is practicing self-awareness of thoughts, emotions, and sensations as they arise. This can be taught through a basic sitting meditation where clients take an observer stance while noticing their thoughts, emotions, and physical sensations. As clients continue to practice this awareness, then there will be an increased ability to intentionally notice trauma symptom triggers. Within this stage there is room for variation in approach in response to each client and what their needs are at the time. The Mindfulness –and Acceptance-Based Therapies already provide an excellent framework for working with clients, however it will be important to be especially cognizant of

intervention timing due to the unique characteristics of trauma survivors described previously.

Self-Kindness and Isolation

Clinicians may also want to consider introducing self-kindness and self-compassion to facilitate emotional healing during post-assault recovery, as many trauma survivors struggle with self-blame (Frazier, 2003). This could be an especially crucial treatment goal as the result of this study indicated that self-kindness was significant in increasing psychological wellbeing. In the counseling setting, a client's current level of self-compassion and self-kindness quickly becomes evident by their self-talk and reactions to difficulties. As discussed previously, self-blame is one form of negative self-talk that can be detrimental during post-assault recovery (Breitenbecher, 2006; Frazier, 2003; Hiroaka et al., 2015). Thus, it makes sense that self-kindness could negate the tendency towards self-blame and be beneficial when recovering from trauma. As a clinician, this could involve introducing the client to different forms of self-talk that originates from a place of self-kindness, as well as modeling compassion through a nonjudgmental and warm therapeutic relationship. In addition, it is important to keep in mind that developing client rapport with survivors of sexual assault may take some time as the client may be initially guarded or simply not ready to process the trauma However, once rapport is established it can become the foundation for emotional healing and recovery (Herman, 1997).

Neff and Germer (2013) have also created a program called Mindful Self-Compassion (MSC) whose purpose is to teach people how to be more self-compassionate. Clinicians could consider receiving training in this program or taking

elements from the program to introduce to their clients. The program involves 8 weekly, 2-hour meetings in a group format. Education is provided related to self-compassion and the group discusses the type of self-talk used when encountering difficulties. The group format allows for moments of common humanity where clients can realize that they are not the only ones struggling with negative self-talk. In addition, some of the exercises taught during MSC can be incorporated into an individual counseling setting including a loving-kindness meditation, a meditation originating within Buddhism to develop good will towards oneself and towards others (Hutcherson et al., 2008) and practicing phrases of self-compassion throughout the day (Neff & Germer, 2013).

An interesting result that manifested was that non-isolation predicted increased psychological wellbeing only for participants who reported a history of sexual assault during emerging adulthood. This could be especially informative for clinicians who practice in a university counseling center given they may want to consistently check-in with client's perceived level of social support and maladaptive coping strategies, such as social avoidance. Awareness of the negative impact of isolation on this population may influence treatment plans and the focus of counseling interventions depending on current level of client distress and perceived social support. Lastly, it is possible that focusing on the therapeutic relationship between the client and the counselor may also decrease feelings of isolation in this population.

Differential Diagnoses and Interventions

There are a number of differential diagnoses to consider when working with clients who report a history of trauma, especially given that early trauma during childhood has been found to impact brain development due to the stress from repetitive

trauma (Ford, 2014). It is this repetitive stress that can shape the neutral networks to then prefer a stress response system. Although the stress response system was initially helpful for survival, it can lead to long lasting preference towards harm avoidance which is often characteristic of anxiety and anger. This tendency towards harm avoidance in response to trauma also negates another important aspect of development, openness to experience (e.g., inquisitiveness, interest). Given this, it would be important to keep in mind how trauma can manifest in clients, especially if these clients have been living in a state of harm avoidance. For example, when diagnosing a client who presents with anxiety it would be crucial to understand the context of this person and whether there is a trauma history. Although it is quite possible that this client would *still* meet criteria for an anxiety diagnosis, the approach for treatment may look quite different between someone with and without a history of trauma. Mindfulness could be a potential treatment option as a history of childhood trauma has been linked to decreased openness to experience and Brown and Ryan (2003) have found that mindfulness is linked to increased openness to experience. Introducing mindfulness to these clients could be helpful in creating a different mode of being, one of openness to experience rather than a state of constant harm avoidance.

In addition, symptoms of Attention-Deficit Hyperactivity Disorder (ADHD) tends to overlap with many symptoms that occur in response to trauma (Pottinger, 2015). ADHD is defined as difficulties in: (1) sustained focus on tasks, correctly processing information, and then following through on instructions, (2) controlling impulses for acting and speaking, and (3) moderating energy levels so responses are appropriate to current situational context (American Psychological Association, 2013).

In fact, there has been a growing body of literature exploring the comorbid encounters of ADHD diagnoses and trauma exposure (Husain, Allwood, & Bell, 2008; Szymanski, Sapanski, & Conway, 2011). The difficulties with sustained attention and internal regulation is similar to the emotional dysregulation and inattentiveness characteristic of trauma responses (Ford, 2014). As a clinician it is crucial to be thorough in assessing a client's history of exposure to trauma since trauma symptoms can easily resemble symptoms of ADHD (Pottinger, 2015).

In addition, a study by Bueno et al. (2015) examined the impact of mindfulness training on adults who presented with ADHD. At the study's conclusion, adults with ADHD reported improved sustained attention, improved mood, and quality of life. Given this, inattention, a feature characteristic of ADHD and trauma, may be a lack of mindfulness. The study also demonstrated that mindfulness can be an effective intervention at increasing sustained attention abilities, thus inattention is not necessarily a static trait. Further, a study by Smalley et al. (2009) found that there was a negative correlation between mindfulness and ADHD, more specifically acting with awareness was significantly lower in those with ADHD compared to those without this diagnosis. The researchers also suggested that training in mindfulness could potentially improve ADHD symptoms.

Lastly, research by Ferrer et al. (2017) explored the frequency of Borderline Personality Disorder (BPD) and ADHD depending on type of trauma history experienced. The study found that physical trauma during childhood was correlated to persistent ADHD symptoms during adulthood, whereas emotional or sexual abuse was correlated to developing BPD or comorbid BPD-ADHD during adulthood. Given this,

when working with clients who report a history of trauma, it could be helpful to understand the nature of this trauma as it could suggest greater risk for certain diagnoses (e.g., BPD, ADHD, anxiety). Regardless, when working with clients with a trauma history, emotional regulation and sustained attention difficulties are key characteristics in many potential diagnoses and mindfulness can be one type of intervention to further develop emotional regulation capacities, as well as increase sustained attention and openness to experience.

Intersectional Identities

As clinicians, it is vital to keep in mind the intersectional identities of the client as this could influence the treatment plan in a counseling setting. Intersectional identities are a reference to the multitude of identities (e.g., racial, sexual orientation, gender) comprised within one individual. When considering the role of isolation for psychological wellbeing in college students, it also becomes necessary to consider whether different intersectional identities has a unique impact on feelings of loneliness and isolation. A study by Sümer, Poyrazli, and Grahame (2008) surveyed international undergraduate students to explore factors influencing their adjustment to living in the United States. The researchers found that social support was a significant factor in adjustment to living in the United States, as well as decreased levels of depression and anxiety. Additionally, English proficiency was a significant variable in predicting amount of social contact. This is an important clinical consideration given that if an international client reports an experience of sexual assault then there may be a greater difficulty at finding social support during post-assault recovery. Another study by Zhou and Cole (2017) indicated that international students experienced more loneliness in

comparison to American students. These results are similar to those demonstrated by Smith, Chesin, and Jeglic (2014) who surveyed American minority undergraduate students and mental health outcomes. At the study's conclusion, the researchers found that minority status in a college setting was predictive of poor mental health outcomes, which included increased loneliness, history of suicidality, and depression.

In addition to this, racial and ethnic minorities are less likely to seek mental health treatment compared to white individuals (Miranda, Soffer, Polanco-roman, Wheeler, & Moore, 2015). A study by Miranda et al., 2015 found that 89% of racial minorities had not utilized mental health treatment prior to attending college, and then only 31% of racial minorities followed up for mental health treatment after an intake appointment. The most frequently identified barrier to mental health treatment was financial, followed by lack of time, and stigma. College counselors will want to consider these barriers and of the need to develop additional treatment modalities to overcome them. For example, group counseling is often a more affordable option for clients and may also serve as a supportive environment where people can establish relational connections. Another consideration is to create a group specifically targeting sexual assault survivor with certain identities (e.g., racial, sexual orientation, gender). This could increase feelings of connection, as well as normalize some of their experiences by interacting with other sexual assault survivors of similar identities. Within an individual counseling setting, counselors should remain vigilantly aware of their client's intersectional identities and how this could impact their post-assault recovery. Depending on the client's identities, a counselor may need to take time during rapport building to further process *how* the client feels about attending counseling.

Regardless of a client's identities, it appears that loneliness and establishing social support can be protective factors for mental health during post-assault recovery.

Complex Trauma

The last consideration for clinicians to keep in mind the additive effect of multiple encounters of trauma during childhood or adolescence (Walsh et al., 2007). Research by Bidarra, Lessard, and Dumont (2016) found that if a child is exposed to intimate partner violence that there is also a heightened risk for other maltreatment, including sexual abuse. Debowska, Willmott, Boduszek, and Jones (2017) reviewed 16 studies that examined the prevalence of the co-occurrence of multiple forms of abuse during childhood. The researchers noted that the majority of the literature found a pattern of poly-victimization (i.e., exposure to multiple types of trauma), and that this group of individuals were linked to the greatest adverse consequences (e.g., depression, anxiety, aggression). Considering the co-occurrence of sexual abuse with emotional and other forms of abuse during childhood, these college students may have experienced other forms of abuse with greater frequency than their peers (Clemmons, DiLillo, Martinez, DeGue, & Jeffcott, 2003). It is this potential for prolonged exposure to trauma (emotional, sexual, physical) during childhood or adolescence that can develop into complex psychological trauma, which Ford and Courtois (2009) defined as "changes in mind emotions, body, and relationships (p.13)" including emotional dysregulation and dissociation.

This could have a greater impact on emotional dysregulation, which could then influence the priorities of the treatment plan with clients. Research has found that repetitive trauma during childhood can even alter the brain due to it being a key time for

brain development (Ford, 2009). As described by Ford (2009), trauma experienced in early childhood can result in the brain shifting from *learning* mode to a *survival* mode. While this shift makes sense, it can interrupt a multitude of typical development which includes emotional regulation and self-development. In fact, the two hallmarks of a posttraumatic survival brain are emotional dysregulation and lack of self-awareness. As a clinician it is important to consider how best to approach a client with complex trauma. Ford (2009) discusses main focuses of treatment that can be helpful in post-assault recovery including:

> overcoming developmental deficits; acquiring skills for emotion experiencing, expression, and self-regulation; restoring or developing a capacity for secure, organized relational attachments; enhancing personality integration and recovery of dissociated emotion and knowledge; restoring or acquiring personal authority over the remember process; and restoring or enhancing physical health p.90.

As a clinician it would be advisable to thoroughly assess a client's history of sexual assault since it could influence the best course of treatment. However, it is also important to be mindful of the readiness of a client in sharing their experience with trauma since if a client is not at a place of readiness then it could potentially be retraumatizing. Thus, when working with these clients, counselors will need to be in a state of frequent reassessment and flexibility throughout their treatment approach.

Conclusion

This study is an effort to add to the existing body of knowledge about the psychological benefits of mindfulness and self-compassion geared specifically towards college students who have experienced sexual assault during childhood and/or emerging

adulthood. After surveying undergraduate students at the University of Oklahoma, aspects of self-compassion and mindful awareness were found to be predictive of psychological wellbeing for the targeted population. In addition, mindful awareness accounted for even greater variance in psychological wellbeing in comparison to aspects of self-compassion. This seems in line with Neff and Dahm's (2015) description of present-focused attention, as developed through mindfulness, as a necessary foundation for self-compassion to manifest. In addition, previous research has established that mindfulness can increase emotional regulation (Farb et al., 2010), which is a significant predictor for post-assault recovery (Gibson & Leitenberg, 2001). This is especially important since emotional dysregulation during post-assault recovery is also a risk factor for revictimization (Walsh et al., 2007). Thus, evidence in support of mindfulness facilitating post-assault recovery can be informative for identifying additional interventions college counselors may find beneficial to their clients. As clinicians, self-compassion may be another concept to introduce to clients since it has been shown to combat self-blame, which is a potential response to sexual assault linked to greater distress (Frazier, 2003). More specifically, the self-compassion facets of self-kindness and non-isolation for those who reported a sexual assault during emerging adulthood and self-kindness for those who reported a sexual assault during childhood had the greatest impact on psychological wellbeing. This awareness of which aspects of self-compassion had the greatest impact could be informative for clinicians in developing appropriate treatment plans.

Additional research needs to be conducted on post-assault interventions in a college counseling setting, especially to explore if there are certain interventions better

suited for different stages of post-assault recovery, clients with multiple trauma encounters, as well as any differences based upon diverse intersectional identities. As can be seen, the exploration of counseling interventions and approaches is a ceaseless process and this study contributes to this process in that aspects of self-compassion and mindfulness have significant roles in post-assault recovery for undergraduate students.

References

Abbey, A. (1991). Acquaintance rape and alcohol consumption on college campuses: How are they linked?. *Journal of American College Health*, *39*(4), 165-169.

Abbey, A., Clinton-Sherrod, A. M., McAuslan, P., Zawacki, T., & Buck, P. O. (2003). The relationship between the quantity of alcohol consumed and the severity of sexual assaults committed by college men. *Journal of Interpersonal Violence*, *18*(7), 813-833.

Ahrens, C. E., Cabral, G., & Abeling, S. (2009). HEALING OR HURTFUL: SEXUAL ASSAULT SURVIVORS'INTERPRETATIONS OF SOCIAL REACTIONS FROM SUPPORT PROVIDERS. *Psychology of Women Quarterly*, *33*(1), 81-94.

Ainsworth, M., Blehar, M., Waters, E., & Wall, S. (1978). *Patterns of attachment: Assessed in the strange situation and at home*. Hillsdale, NJ: Erlbaum.

Albrecht, N. J., Albrecht, P. M., & Cohen, M. (2012). Mindfully teaching in the classroom: a literature review. *Australian Journal of Teacher Education*, *37*(12), n12.

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: Author.

Aosved, A. C., Long, P. J., & Voller, E. K. (2011). Sexual revictimization and adjustment in college men. *Psychology of Men & Masculinity*, *12*(3), 285-296.

Arata, C. M., Langhinrichsen-Rohling, J., Bowers, D., & O'Farrill-Swails, L. (2005). Single versus multi-type maltreatment: An examination of the long-term effects of child abuse. Journal of Aggression, Maltreatment & Trauma, 11, 29-52.

Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American psychologist*, *55*(5), 469-480.

Au, T. M., Sauer-Zavala, S., King, M. W., Petrocchi, N., Barlow, D. H., & Litz, B. T. (2017). Compassion-based therapy for trauma-related shame and posttraumatic stress: Initial evaluation using a multiple baseline design. *Behavior Therapy*, *48*(2), 207-221.

Axelrod, S. R., Perepletchikova, F., Holtzman, K., & Sinha, R. (2011). Emotion regulation and substance use frequency in women with substance dependence and borderline personality disorder receiving dialectical behavior therapy. *The American journal of drug and alcohol abuse*, *37*(1), 37-42.

Azmitia, M., Syed, M., & Radmacher, K. (2013). Finding your niche: Identity and emotional support in emerging adults' adjustment to the transition to college. *Journal of Research on Adolescence*, *23*(4), 744-761.

Baer, R. A., Carmody, J., & Hunsinger, M. (2012). Weekly change in mindfulness and perceived stress in a mindfulness-based stress reduction program. *Journal of Clinical Psychology*, *68*(7), 755-765.

Baer, R. A., & Huss, D. B. (2008). Mindfulness-and Acceptance-Based Therapy. In J. L. Lebow (Ed.), Twenty-First Century Psychotherapies: contemporary Approaches to Theory and Practice (pp. 123-166). Hoboken, NJ: John Wiley & Songs Inc.

Baer, R. A., Smith, G. T., Hopkins, J., Krietemeyer, J., & Toney, L. (2006). Using self-report assessment methods to explore facets of mindfulness. *Assessment*, *13*(1), 27-45.

Barlow, M. R., Turow, R. E. G., & Gerhart, J. (2017). Trauma appraisals, emotion regulation difficulties, and self-compassion predict posttraumatic stress symptoms following childhood abuse. *Child abuse & neglect*, *65*, 37-47.

Beck, A. T. (1976). *Cognitive therapy and the emotional disorders*. New York: International Universities Press.

Benzo, R. P., Kirsch, J. L., & Nelson, C. (2017). Compassion, Mindfulness, and the Happiness of Healthcare Workers. *Explore: The Journal of Science and Healing*, *13* (3), 201-206.

Bidarra, Z. S., Lessard, G., & Dumont, A. (2016). Co-occurrence of intimate partner violence and child sexual abuse: prevalence, risk factors and related issues. *Child abuse & neglect*, *55*, 10-21.

Billette, V., Guay, S., & Marchand, A. (2008). Posttraumatic stress disorder and social support in female victims of sexual assault: The impact of spousal involvement on the efficacy of cognitive-behavioral therapy. *Behavior modification*, *32*(6), 876-896.

Blumenthal, H., Blanchard, L., Feldner, M. T., Babson, K. A., LeenFeldner, E. W., & Dixon, L. (2008). Traumatic event exposure, posttraumatic stress, and substance use among youth: A critical review of the empirical literature. Current Psychiatry Reviews,4, 228– 254.

Boden, M. T., Bernstein, A., Walser, R. D., Bui, L., Alvarez, J., & Bonn-Miller, M. O. (2012). Changes in facets of mindfulness and posttraumatic stress disorder treatment outcome. *Psychiatry Research*, *200*(2), 609-613.

Boekaerts, M. (1993). Being concerned with well-being and with learning. *Educational psychologist*, *28*(2), 149-167.

Bowlby, J. (1969). *Attachment and loss: Vol. 1. Attachment.* New York: Basic Books.

Bowlby, J. (1973). *Attachment and loss: Vol. 2. Separation, anxiety, and anger.* New York: Basic Books.

Bowlby, J. (1980). *Attachment and loss: Vol. 3. Sadness and depression.* New York: Basic Books.

Breitenbecher, K. H. (2006). The relationships among self-blame, psychological distress, and sexual victimization. *Journal of Interpersonal Violence*, 21*(5), 597-611*.

Brendel, W., & Bennett, C. (2016). Learning to embody leadership through mindfulness and somatics practice. *Advances in Developing Human Resources*, *18*(3), 409-425.

Brenner, M. J., & Homonoff, E. (2004). Zen and clinical social work: a spiritual approach to practice. Families in Society: The Journal of Contemporary Social Services, 85, 261–269.

Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: mindfulness and its role in psychological well-being. *Journal of personality and social psychology*, *84*(4), 822-848.

Bryant-Davis, T., Ullman, S. E., Tsong, Y., & Gobin, R. (2011). Surviving the storm: The role of social support and religious coping in sexual assault recovery of African American women. *Violence against women*, *17*(12), 1601-1618.

Bueno, V. F., Kozasa, E. H., da Silva, M. A., Alves, T. M., Louzã, M. R., & Pompéia, S. (2015). Mindfulness meditation improves mood, quality of life, and attention in adults with attention deficit hyperactivity disorder. *BioMed research international*, *2015*, 1-14.

Cacioppe, R. L. (2017). Integral mindflow: A process of mindfulness-in-flow to enhance individual and organization learning. *The Learning Organization*, *24*(6), 408-417.

Campbell, R., Dworkin, E., & Cabral, G. (2009). An ecological model of the impact of sexual assault on women's mental health. *Trauma, Violence, & Abuse*, *10*(3), 225-246.

Campos, D., Cebolla, A., Quero, S., Bretón-López, J., Botella, C., Soler, J., García-Campayo, J., Demarzo, M., & Baños, R. M. (2016). Meditation and happiness: Mindfulness and self-compassion may mediate the meditation–happiness relationship. *Personality and Individual Differences*, *93*, 80-85.

Cantor, D., Fisher, B., Chibnall, S. H., Townsend, R., Lee, H., Thomas, G., & Westat, Inc. (2015). *Report on the AAU campus climate survey on sexual assault and sexual misconduct*. Washington, DC: Association of American Universities.

Chiesa, A., & Serretti, A. (2009). Mindfulness-based stress reduction for stress management in healthy people: a review and meta-analysis. *The journal of alternative and complementary medicine*, *15*(5), 593-600.

Classen, C. C., Palesh, O. G., & Aggarwal, R. (2005). Sexual revictimization: A review of the empirical literature. *Trauma, Violence, & Abuse*, *6*(2), 103-129.

Clemmons, J. C., DiLillo, D., Martinez, I. G., DeGue, S., & Jeffcott, M. (2003). Co-occurring forms of child maltreatment and adult adjustment reported by Latina college students. *Child Abuse & Neglect*, *27*(7), 751-767.

Colgan, D. D., Christopher, M., Michael, P., & Wahbeh, H. (2016). The body scan and mindful breathing among veterans with PTSD: Type of intervention moderates the relationship between changes in mindfulness and post-treatment depression. *Mindfulness*, *7*(2), 372-383.

Compton, W. C. (2005). *Introduction to Positive Psychology*. Thomson Wadsworth.

Coo, C., & Salanova, M. (2017). Mindfulness Can Make You Happy-and-Productive: A Mindfulness Controlled Trial and Its Effects on Happiness, Work Engagement and Performance. *Journal of Happiness Studies*, 1-21.

Cooper, A. (1998). *Playing in the zone: exploring the spiritual dimensions of sports.* Boston: Shambala.

Coulter, R. W., Mair, C., Miller, E., Blosnich, J. R., Matthews, D. D., & McCauley, H. L. (2017). Prevalence of past-year sexual assault victimization among undergraduate students: exploring differences by and intersections of gender identity, sexual identity, and race/ethnicity. *Prevention Science*, 1-11.

Courtois, C. A., Ford, J. D., & Cloitre, M. (2009). Best Practices in Psychotherapy for Adults. In Courtois, C. A., & Ford, J. D. (Eds.), *Treating complex Traumatic Stress Disorders: Scientific Foundations and Therapeutic Models* (82-103). New York, NY: The Guilford Press.

Cranney, S. (2015). The relationship between sexual victimization and year in school in us colleges: Investigating the parameters of the "red zone". *Journal of interpersonal violence*, *30*(17), 3133-3145.

Craske, M. G., Niles, A. N., Burklund, L. J., Wolitzky-Taylor, K. B., Vilardaga, J. C. P., Arch, J. J., & Lieberman, M. D. (2014). Randomized controlled trial of cognitive behavioral therapy and acceptance and commitment therapy for social phobia: outcomes and moderators. *Journal of consulting and clinical psychology*, *82*(6), 1034-1048.

Credé, M., & Niehorster, S. (2012). Adjustment to college as measured by the student adaptation to college questionnaire: A quantitative review of its structure and

relationships with correlates and consequences. *Educational Psychology Review*, *24*(1), 133-165.

Davis, D. M., & Hayes, J. A. (2011). What are the benefits of mindfulness? A practice review of psychotherapy-related research. *Psychotherapy*, *48*(2), 198-208.

Debowska, A., Willmott, D., Boduszek, D., & Jones, A. D. (2017). What do we know about child abuse and neglect patterns of co-occurrence? A systematic review of profiling studies and recommendations for future research. *Child abuse & neglect*, *70*, 100-111.

Demarzo, M. M. P., Cebolla, A., & Garcia-Campayo, J. (2015). The implementation of mindfulness in healthcare systems: a theoretical analysis. *General hospital psychiatry*, *37*(2), 166-171.

Desrosiers, A., Vine, V., Klemanski, D. H., & Nolen-Hoeksema, S. (2013). Mindfulness and emotion regulation in depression and anxiety: common and distinct mechanisms of action. *Depression and anxiety*, *30*(7), 654-661.

Dunkley, D. M., Sanislow, C. A., Grilo, C. M., & McGlashan, T. H. (2009). Self-criticism versus neuroticism in predicting depression and psychosocial impairment for 4 years in a clinical sample. *Comprehensive psychiatry*, *50*(4), 335-346.

Dunkley, D. M., Zuroff, D. C., & Blankstein, K. R. (2006). Specific perfectionism components versus self-criticism in predicting maladjustment. *Personality and Individual Differences*, *40*(4), 665-676.

Dworkin, E. R., Ojalehto, H., Bedard-Gilligan, M. A., Cadigan, J. M., & Kaysen, D. (2018). Social support predicts reductions in PTSD symptoms when substances are not used to cope: A longitudinal study of sexual assault survivors. *Journal of affective disorders*, *229*, 135-140.

Dworkin, E. R., Ullman, S. E., Stappenbeck, C., Brill, C. D., & Kaysen, D. (2018). Proximal relationships between social support and PTSD symptom severity: A daily diary study of sexual assault survivors. *Depression and anxiety*, *35*(1), 43-49.Ehring, T., & Quack, D. (2010). Emotion regulation difficulties in trauma survivors: The role of trauma type and PTSD symptom severity. *Behavior therapy*, *41*(4), 587-598.

Ehring, T., & Quack, D. (2010). Emotion regulation difficulties in trauma survivors: The role of trauma type and PTSD symptom severity. *Behavior therapy*, *41*(4), 587-598.

Ehring, T., Tuschen-Caffier, B., Schnülle, J., Fischer, S., & Gross, J. J. (2010). Emotion regulation and vulnerability to depression: spontaneous versus instructed use of emotion suppression and reappraisal. *Emotion*, *10*(4), 563-572.

Ellis, A. (1962). *Reason and emotion in psychotherapy.* New York: Lyle Stuart.

Emerson, L. M., Leyland, A., Hudson, K., Rowse, G., Hanley, P., & Hugh-Jones, S. (2017). Teaching mindfulness to teachers: A systematic review and narrative synthesis. *Mindfulness*, *8*(5), 1136-1149.

Erikson, E. H. (1950). Childhood and society. New York: Norton.

Evans, S., Ferrando, S., Findler, M., Stowell, C., Smart, C., & Haglin, D. (2008). Mindfulness-based cognitive therapy for generalized anxiety disorder. *Journal of anxiety disorders*, *22*(4), 716-721.

Farb, N. A., Anderson, A. K., Mayberg, H., Bean, J., McKeon, D., & Segal, Z. V. (2010). Minding one's emotions: mindfulness training alters the neural expression of sadness. *Emotion*, *10*(1), 25-33.

Ferrer, M., Andión, Ó., Calvo, N., Ramos-Quiroga, J. A., Prat, M., Corrales, M., & Casas, M. (2017). Differences in the association between childhood trauma history and borderline personality disorder or attention deficit/hyperactivity disorder diagnoses in adulthood. *European archives of psychiatry and clinical neuroscience*, *267*(6), 541-549.

Filipas, H. H., & Ullman, S. E. (2001). Social reactions to sexual assault victims from various support sources. *Violence and Victims*, *16*(6), 673.

Fisher, J. (1999). The work of stabilization in trauma treatment. *Trauma Center Lecture Series, Boston, Massachusetts*

Ford, J. D. (2009). Neurobiological and Developmental Research: Clinical Implications. In Courtois, C. A., & Ford, J. D. (Eds.), *Treating complex Traumatic Stress Disorders: Scientific Foundations and Therapeutic Models* (31-58). New York, NY: The Guilford Press.

Ford, J. D., & Courtois, C. A. (2009). Defining and Understanding Complex Trauma and Complex Trauamtic Stress Disorders. In Courtois, C. A., & Ford, J. D. (Eds.), *Treating complex Traumatic Stress Disorders: Scientific Foundations and Therapeutic Models* (13-30). New York, NY: The Guilford Press.

Frazier, P. A. (2003). Perceived control and distress following sexual assault: a longitudinal test of a new model. *Journal of personality and social psychology*, *84*(6), 1257-1269.

Frazier, P., Anders, S., Shallcross, S., Keenan, N., Perera, S., Howard, K., & Hintz, S. (2012). Further development of the temporal model of control. *Journal of counseling psychology*, *59*(4), 623-630.

Frazier, P., Berman, M., & Steward, J. (2001). Perceived control and posttraumatic stress: A temporal model. *Applied & Preventive Psychology*, *10,* 207-223.

Frazier, P., Meredith, L., Greer, C., Paulsen, J. A., Howard, K., Dietz, L. R., & Qin, K. (2015). Randomized controlled trial evaluating the effectiveness of a web-based stress management program among community college students. *Anxiety, Stress, & Coping*, *28*(5), 576-586.

Frazier, P. A., Mortensen, H., & Steward, J. (2005). Coping Strategies as Mediators of the Relations Among Perceived Control and Distress in Sexual Assault Survivors. *Journal of Counseling Psychology*, *52*(3), 267-278.

Frazier, P., Tashiro, T., Berman, M., Steger, M., & Long, J. (2004). Correlates of levels and patterns of positive life changes following sexual assault. *Journal of consulting and clinical psychology*, *72*(1), 19-30.

Friedlander, L. J., Reid, G. J., Shupak, N., & Cribbie, R. (2007). Social support, self-esteem, and stress as predictors of adjustment to university among first-year undergraduates. *Journal of college student development*, *48*(3), 259-274.

Fulton, P. R. (2005). Mindfulness as clinical training. In C. K. Germer, R. D. Siegel & P. R. Fulton (Eds.), Mindfulness and psychotherapy (pp. 55–72). New York: Guilford.

Garland, E. L. (2013). Mindfulness research in social work: Conceptual and methodological recommendations. *Social Work Research*, *37*(4), 439-448.

Garland, E. L., Farb, N. A., Goldin, P., & Fredrickson, B. L. (2015). Mindfulness broadens awareness and builds eudaimonic meaning: A process model of mindful positive emotion regulation. *Psychological Inquiry*, *26*(4), 293-314.

Gethin, R. (1998). *The foundations of Buddhism*. Oxford University Press.

Gibson, L. E., & Leitenberg, H. (2001). The impact of child sexual abuse and stigma on methods of coping with sexual assault among undergraduate women. *Child abuse & neglect*, *25*(10), 1343-1361.

Gilbert, P. (2010). An introduction to compassion focused therapy in cognitive behavior therapy. *International Journal of Cognitive Therapy*, *3*(2), 97-112.

Gilbert, P., & Irons, C. (2005). Focused therapies and compassionate mind training for shame and self-attacking. *Compassion: Conceptualisations, research and use in psychotherapy*, 263-325.

Gilbert, P., & Procter, S. (2006). Compassionate mind training for people with high shame and self-criticism: Overview and pilot study of a group therapy approach. *Clinical Psychology & Psychotherapy*, *13*(6), 353-379.

Goldin, P. R., & Gross, J. J. (2010). Effects of mindfulness-based stress reduction (MBSR) on emotion regulation in social anxiety disorder. *Emotion*, *10*(1), 83-91.

Green, J. G., McLaughlin, K. A., Berglund, P. A., Gruber, M. J., Sampson, N. A., Zaslavsky, A. M., & Kessler, R. C. (2010). Childhood adversities and adult psychiatric disorders in the national comorbidity survey replication I: associations with first onset of DSM-IV disorders. *Archives of general psychiatry, 67*(2), 113-123.

Green, M. G., & Piel, J. A. (2015). *Theories of human development: A comparative approach*. Psychology Press.

Grossman, P., Tiefenthaler-Gilmer, U., Raysz, A., & Kesper, U. (2007). Mindfulness training as an intervention for fibromyalgia: evidence of postintervention and 3-year follow-up benefits in well-being. *Psychotherapy and psychosomatics*, *76*(4), 226-233.

Gunaratana, B. H. (2017). Loving-Kindness in Plain English: The Practice of Metta. Somerville, MA: Wisdom Publications.

Hall, C. W., Row, K. A., Wuensch, K. L., & Godley, K. R. (2013). The role of self-compassion in physical and psychological well-being. *The Journal of psychology*, *147*(4), 311-323.

Hart, R., Ivtzan, I., & Hart, D. (2013). Mind the gap in mindfulness research: a comparative account of the leading schools of thought. *Review of General Psychology*, *17*(4), 453.

Hayes, S. C. (2004). Acceptance and commitment therapy, relational frame theory, and the third wave of behavioral and cognitive therapies. *Behavior Therapy,* 25(4), 639-665.

Herman, J. L. (1997). *Trauma and Recovery.* New York: BasicBooks.

Hesser, H., Gustafsson, T., Lundén, C., Henrikson, O., Fattahi, K., Johnsson, E., & Andersson, G. (2012). A randomized controlled trial of Internet-delivered cognitive behavior therapy and acceptance and commitment therapy in the treatment of tinnitus. *Journal of consulting and clinical psychology*, *80*(4), 649-661.

Hesslinger, B., Tebartz, L., Nyberg, E., Dykierek, P., Richter, H., Berner, M., & Ebert, D. (2002). Psychotherapy of attention deficit hyperactivity disorder in adults. A pilot study using a structured skills training program. *European Archives of Psychiatry and Clinical Neuroscience,* 252, 177-184.

Hick, S. F. (Ed.). (2009). Mindfulness and social work. Chicago: Lyceum Books.

Hill, D. M., Craighead, L. W., & Safer, D. L. (2011). Appetite-focused dialectical behavior therapy for the treatment of binge eating with purging: A preliminary trial. *International Journal of Eating Disorders,* 44, 249-261.

Hill, C. L., & Updegraff, J. A. (2012). Mindfulness and its relationship to emotional regulation. *Emotion*, *12*(1), 81-90.

Hill, J. M., Vernig, P. M., Lee, J. K., Brown, C., & Orsillo, S. M. (2011). The development of a brief acceptance and mindfulness-based program aimed at reducing sexual revictimization among college women with a history of childhood sexual abuse. *Journal of clinical psychology*, *67*(9), 969-980.

Hinton, D. E., Pich, V., Hofmann, S. G., & Otto, M. W. (2013). Acceptance and Mindfulness Techniques as Applied to Refugee and Ethnic Minority Populations With PTSD: Examples From" Culturally Adapted CBT". *Cognitive and Behavioral Practice*, *20*(1), 33-46.

Hintz, S., Frazier, P. A., & Meredith, L. (2015). Evaluating an online stress management intervention for college students. *Journal of counseling psychology*, *62*(2), 137-147.

Hiraoka, R., Meyer, E. C., Kimbrel, N. A., DeBeer, B. B., Gulliver, S. B., & Morissette, S. B. (2015). Self-Compassion as a Prospective Predictor of PTSD Symptom Severity Among Trauma-Exposed US Iraq and Afghanistan War Veterans. *Journal of traumatic stress*, *28*(2), 127-133.

Hofmann, S. G., Sawyer, A. T., Witt, A. A., & Oh, D. (2010). The effect of mindfulness-based therapy on anxiety and depression: A meta-analytic review. *Journal of consulting and clinical psychology*, *78*(2), 169-183.

Holas, P., & Jankowski, T. (2013). A cognitive perspective on mindfulness. *International Journal of Psychology*, *48*(3), 232-243.

Hollis-Walker, L., & Colosimo, K. (2011). Mindfulness, self-compassion, and happiness in non-meditators: A theoretical and empirical examination. *Personality and Individual differences*, *50*(2), 222-227.

Hülsheger, U. R., Alberts, H. J., Feinholdt, A., & Lang, J. W. (2013). Benefits of mindfulness at work: The role of mindfulness in emotion regulation, emotional exhaustion, and job satisfaction. *Journal of Applied Psychology*, *98*(2), 310-325.

Husain,S. A.,Allwood, M., & Bell,D. (2008).Relationship between PTSDsymptoms and attention problemsin children exposed to the Bosnian war. Journal of Emotional and Behavioural Disorders, 6(1), 52–62.

Hutcherson, C. A., Seppala, E. M., & Gross, J. J. (2008). Loving-kindness meditation increases social connectedness. *Emotion*, *8*(5), 720-724.

Humphrey, J. A., & White, J. W. (2000). Women's vulnerability to sexual assault from adolescence to young adulthood. *Journal of Adolescent Health*, *27*(6), 419-424.

Hyde, A. M., & LaPrad, J. G. (2015). Mindfulness, democracy, and education. *Democracy and Education*, *23*(2), 2.

Im, S., & Follette, V. M. (2016). Rumination and mindfulness related to multiple types of trauma exposure. *Translational Issues in Psychological Science*, *2*(4), 395-407.

Janoff-Bulman, R. (1979). Characterological versus behavioral self-blame: inquiries into depression and rape. *Journal of personality and social psychology*, *37*(10), 1798-1809.

John, S. G., Cisler, J. M., & Sigel, B. A. (2017). Emotion Regulation Mediates the Relationship between a History of Child Abuse and Current PTSD/Depression Severity in Adolescent Females. *Journal of Family Violence*, 1-11.

Johnson, V. K., Gans, S. E., Kerr, S., & LaValle, W. (2010). Managing the transition to college: Family functioning, emotion coping, and adjustment in emerging adulthood. *Journal of College Student Development*, *51*(6), 607-621.

Johnson, S. M., Murphy, M. J., & Gidycz, C. A. (2017). Reliability and Validity of the Sexual Experiences Survey–Short Forms Victimization and Perpetration. *Violence and Victims*, *32*(1), 78-92.

Johnson, M. L., & Nussbaum, E. M. (2012). Achievement goals and coping strategies: Identifying the traditional/nontraditional students who use them. *Journal of College Student Development*, *53*(1), 41-54.

Kabat-Zinn, J. (1982). An outpatient program in behavioral medicine for chronic pain patients based on the practice of mindfulness meditation: Theoretical considerations and preliminary results. *General hospital psychiatry*, *4*(1), 33-47.

Kabat-Zinn J. (1990). Full Catastrophe Living: Using the Wisdom of Your Body and Mind to Face Stress, Pain, and Illness. New York: Random House Inc.

Kabat-Zinn, J. (1994). Wherever you go, there you are. New York: Hyperion.

Kabat-Zinn, J., & Hanh, T. N. (2009). *Full catastrophe living: Using the wisdom of your body and mind to face stress, pain, and illness*. Delta.

Kaltman, S., Krupnick, J., Stockton, P., Hooper, L., & Green, B. L. (2005). Psychological impact of types of sexual trauma among college women. *Journal of Traumatic Stress*, *18*(5), 547-555.

Kearney, D. J., McDermott, K., Malte, C., Martinez, M., & Simpson, T. L. (2012). Association of participation in a mindfulness program with measures of PTSD, depression and quality of life in a veteran sample. *Journal of clinical psychology*, *68*(1), 101-116.

Keats, J. (1970). *The Letters of John Keats: A Selection*. Oxford: Oxford University Press.

Kee, Y. H., & Wang, C. J. (2008). Relationships between mindfulness, flow dispositions and mental skills adoption: A cluster analytic approach. *Psychology of Sport and Exercise, 9*(4), 393-411.

Keng, S. L., & Tong, E. M. (2016). Riding the tide of emotions with mindfulness: Mindfulness, affect dynamics, and the mediating role of coping. *Emotion, 16*(5), 706-718.

Kimble, M., Neacsiu, A. D., Flack, W. F., & Horner, J. (2008). Risk of unwanted sex for college women: Evidence for a red zone. *Journal of American College Health, 57*(3), 331-338.

King, E., & Haar, J. M. (2017). Mindfulness and job performance: a study of Australian leaders. *Asia Pacific Journal of Human Resources*, *55*(3), 298-319.

Kinser, P., Braun, S., Deeb, G., Carrico, C., & Dow, A. (2016). "Awareness is the first step": An interprofessional course on mindfulness & mindful-movement for healthcare professionals and students. *Complementary therapies in clinical practice, 25*, 18-25.

Kintzle, S., Schuyler, A. C., Ray-Letourneau, D., Ozuna, S. M., Munch, C., Xintarianos, E., Hasson, A. M., & Castro, C. A. (2015). Sexual trauma in the military: exploring PTSD and mental health care utilization in female veterans. *Psychological services, 12*(4), 394-401.

Kirkpatrick, C., & Kanin, E. (1957). Male sex aggression on a university campus. *American Sociological Review*, *22*(1), 52-58.

Klich, U. (2015). The integration of mindfulness-based biofeedback and compassion in the healthcare setting. *Biofeedback, 43*(3), 111-116.

Koss, M. P., Abbey, A., Campbell, R., Cook, S., Norris, J., Testa, M., Ullman, S., West, C. & White, J. (2007). Revising the SES: A collaborative process to improve assessment of sexual aggression and victimization. *Psychology of Women Quarterly*, *31*(4), 357-370.

Koss, M. P., Figueredo, A. J., & Prince, R. J. (2002). Cognitive mediation of rape's mental, physical and social health impact: Tests of four models in cross-sectional data. *Journal of consulting and clinical psychology*, *70*(4), 926-941.

Koss, M. P., Gidycz, C. A., & Wisniewski, N. (1987). The scope of rape: incidence and prevalence of sexual aggression and victimization in a national sample of higher education students. *Journal of consulting and clinical psychology, 55*(2), 162-170.

Krahé, B., & Berger, A. (2017). Longitudinal pathways of sexual victimization, sexual self-esteem, and depression in women and men. *Psychological trauma: theory, research, practice, and policy*, *9*(2), 147-155.

Krebs, C. P., Lindquist, C. H., Warner, T. D., Fisher, B. S., & Martin, S. L. (2009). College women's experiences with physically forced, alcohol-or other drug-enabled, and drug-facilitated sexual assault before and since entering college. *Journal of American College Health*, *57*(6), 639-649.

Lawyer, S., Resnick, H., Bakanic, V., Burkett, T., & Kilpatrick, D. (2010). Forcible, drug-facilitated, and incapacitated rape and sexual assault among undergraduate women. *Journal of American College Health*, *58*(5), 453-460.

Le, T. N. & Proulx, J. (2015). Feasibility of mindfulness-based intervention for incarcerated mixed-ethnic Native Hawaiian/Pacific Islander youth. *Asian American Journal of Psychology*, *6*(2), 181-189.

Liehr, P., & Diaz, N. (2010). A pilot study examining the effect of mindfulness on depression and anxiety for minority children. *Archives of Psychiatric Nursing*, *24*(1), 69-71.

Lindgren, K. P., Schacht, R. L., Pantalone, D. W., & Blayney, J. A. (2009). Sexual communication, sexual goals, and students' transition to college: Implications for sexual assault, decision-making, and risky behaviors. *Journal of college student development*, *50*(5), 491-503.

Littleton, H. L., & Grills-Taquechel, A. (2011). Evaluation of an information-processing model following sexual assault. *Psychological trauma: theory, research, practice, and policy*, *3*(4), 421-429.

Littleton, H., & Ullman, S. E. (2013). PTSD symptomatology and hazardous drinking as risk factors for sexual assault revictimization: Examination in European American and African American women. *Journal of Traumatic Stress*, *26*(3), 345-353.

Luoma, J. B., Hayes, S. C., & Walser, R. D. (2007). *Learning ACT: An acceptance & commitment therapy skills-training manual for therapists*. New Harbinger Publications.

Luoma, J. B., Kohlenberg, B. S., Hayes, S. C., & Fletcher, L. (2012). Slow and steady wins the race: a randomized clinical trial of acceptance and commitment therapy targeting shame in substance use disorders. *Journal of consulting and clinical psychology*, *80*(1), 43-53.

Lockard, A. J., Hayes, J. A., Neff, K., & Locke, B. D. (2014). Self-Compassion Among College Counseling Center Clients: An Examination of Clinical Norms and Group Differences. *Journal of College Counseling*, *17*(3), 249-259.

Lynch, T. R., Cheavens, J. S., Cukrowicz, K. C., Thorp, S. R., Bronner, L., & Beyer, J. (2007). Treatment of older adults with co-morbid personality disorder and depression: A dialectical behavior therapy approach. *International journal of geriatric psychiatry*, *22*(2), 131-143.

Lyons-Ruth, K., Dutra, L., Schuder, M. R., & Bianchi, I. (2006). From infant attachment disorganization to adult dissociation: Relational adaptations or traumatic experiences? *Psychiatric Clinics*, *29*(1), 63-86.

Lyubomirsky, S., & Ross, L. (1997). Hedonic consequences of social comparison: a contrast of happy and unhappy people. *Journal of personality and social psychology, 73*(6), 1141.-1157.

Magnavita, J. J. (2008). Psychoanalytic Psychotherapy. In Lebow, J. L. (Eds.), *Twenty-First Century Psychoterhapies: Contemporary Approadches to Theory and Practice* (206-236). Hoboken, NJ: John Wiley & Sons, Inc.

Maheux, A., & Price, M. (2016). The indirect effect of social support on post-trauma psychopathology via self-compassion. *Personality and Individual Differences*, *88*, 102-107.

Main, M., & Solomon, J. (1990). Procedures for identifying infants as disorganized/disoriented during the Ainsworth Strange Situation. *Attachment in the preschool years: Theory, research, and intervention*, *1*, 121-160.

Massachusetts Institute of Technology (2014, October 27). Survey Results: 2014 Community Attitudes on Sexual Assault. Retrieved from http://web.mit.edu/surveys/health/MIT-CASA-Survey-Summary.pdf.

Masuda, A., Mandavia, A., & Tully, E. C. (2014). The role of psychological inflexibility and mindfulness in somatization, depression, and anxiety among Asian Americans in the United States. *Asian American Journal of Psychology*, *5*(3), 230-236.

McCann, R. A., Ivanoff, A., Schmidt, H., & Beach, B. (2007). Implementing dialectical behavior therapy in residential forensic settings with adults and juveniles. In L. A. Dimeff, & K. Koerner (EDS.), *Dialectical Behavior Therapy in Clinical Practice* (pp. 112-144). New York, NY: Guilford.

Menezes, C. B., Pereira, M. G., & Bizarro, L. (2012). Sitting and silent meditation as a strategy to study emotion regulation. *Psychology & Neuroscience*, *5*(1), 027-036.

Miller, A. K., Handley, I. M., Markman, K. D., & Miller, J. H. (2010). Deconstructing self-blame following sexual assault: The critical roles of cognitive content and process. *Violence Against Women*, *16*(10), 1120-1137.

Mills, A., Gilbert, P., Bellew, R., McEwan, K., & Gale, C. (2007). Paranoid beliefs and self-criticism in students. *Clinical Psychology & Psychotherapy*, *14*(5), 358-364.

Miranda, R., Soffer, A., Polanco-Roman, L., Wheeler, A., & Moore, A. (2015). Mental health treatment barriers among racial/ethnic minority versus white young adults 6 months after intake at a college counseling center. *Journal of American College Health*, *63*(5), 291-298.

Moore, B. M., & Baker, T., (2016). An Exploratory Examination of Colelge Students' Likelihood of Reporting Sexual Assault to Police and University Officials: Results of a Self-Report Survey. *Journal of Interpersonal Violence*, *14*(1), 1-20.

Moore, A., & Malinowski, P. (2009). Meditation, mindfulness and cognitive flexibility. *Consciousness and cognition*, *18*(1), 176-186.

Morgan, W. D., & Morgan, S. T. (2005). Cultivating attention and empathy. In C. K. Germer, R. D. Siegel & P. R. Fulton (Eds.), Mindfulness and psychotherapy (pp. 73–90). New York: Guilford.

Morris, B. A., Wilson, B., & Chambers, S. K. (2013). Newfound compassion after prostate cancer: a psychometric evaluation of additional items in the Posttraumatic Growth Inventory. *Supportive Care in Cancer*, *21*(12), 3371-3378.

Moskowitz, J. T., Duncan, L. G., Moran, P. J., Acree, M., Epel, E. S., Kemeny, M. E., & Folkman, S. (2015). Dispositional mindfulness in people with HIV: Associations with psychological and physical health. *Personality and individual differences*, *86*, 88-93.

NCES (2016). *IPEDS Enrollment Survey and WICHE, Knocking at the College Door: Projections of High School Graduates.* Retrieved September 23, 2017 from http://www.higheredinfo.org/dbrowser/index.php?submeasure=63&year=2014&level=nation&mode=data&state=0.

Neff, K. D. (2003). Development and validation of a scale to measure self-compassion. *Self and Identity*, *2*, 223-250.

Neff, K. D., & Dahm, K. A. (2015). Self-Compassion: What it is, what it does, and how it relates to mindfulness (pp. 121-140). In M. Robinson, B. Meier & B. Ostafin (Eds.) Mindfulness and Self-Regulation. New York: Springer.

Neff, K. D., & Germer, C. K. (2013). A pilot study and randomized controlled trial of the mindful self-compassion program. *Journal of clinical psychology*, *69*(1), 28-44.

Neff, K. D., Hsieh, Y. P., & Dejitterat, K. (2005). Self-compassion, achievement goals, and coping with academic failure. *Self and identity*, *4*(3), 263-287.

Neff, K. D., Kirkpatrick, K. L., & Rude, S. S. (2007). Self-compassion and adaptive psychological functioning. *Journal of research in personality*, *41*(1), 139-154.

Neff, K. D., & Vonk, R. (2009). Self-compassion versus global self-esteem: Two different ways of relating to oneself. *Journal of personality*, *77*(1), 23-50.

Nguyen-Feng, V. N., Frazier, P. A., Greer, C. S., Howard, K. G., Paulsen, J. A., Meredith, L., & Kim, S. (2015). A randomized controlled trial of a web-based intervention to reduce distress among students with a history of interpersonal violence. *Psychology of Violence*, *5*(4), 444-454.

Nguyen-Feng, V. N., Greer, C. S., & Frazier, P. (2017). Using Online Interventions to Deliver College Student Mental Health Resources: Evidence from Randomized Clinical Trials. *American Psychological Association*, 1541-1559.

NHS Health Scotland (2015, April 7). Measuring mental wellbeing. Retrieved from http://www.healthscotland.com/scotlands-health/population/Measuring-positive-mental-health.aspx.

Orchowski, L. M., & Gidycz, C. A. (2012). To whom do college women confide following sexual assault? A prospective study of predictors of sexual assault disclosure and social reactions. *Violence against women*, *18*(3), 264-288.

Orchowski, L. M., Untied, A. S., & Gidycz, C. A. (2013). Social reactions to disclosure of sexual victimization and adjustment among survivors of sexual assault. *Journal of Interpersonal Violence*, *28*(10), 2005-2023.

Orsillo, S. M., & Batten, S. V. (2005). Acceptance and commitment therapy in the treatment of posttraumatic stress disorder. *Behavior Modification*, *29*(1), 95-129.

Osman, A., Lamis, D. A., Bagge, C. L., Freedenthal, S., & Barnes, S. M. (2016). The mindful attention awareness scale: further examination of dimensionality, reliability, and concurrent validity estimates. *Journal of personality assessment*, *98*(2), 189-199.

Owens, G. P., Walter, K. H., Chard, K. M., & Davis, P. A. (2012). Changes in mindfulness skills and treatment response among veterans in residential PTSD treatment. *Psychological Trauma: Theory, Research, Practice, and Policy*, *4*(2), 221-228.

Park, S., Hong, J. P., Bae, J. N., Cho, S. J., Lee, D. W., Lee, J. Y., ... & Seong, S. (2014). Impact of childhood exposure to psychological trauma on the risk of psychiatric disorders and somatic discomfort: Single vs. multiple types of psychological trauma. *Psychiatry research*, *219*(3), 443-449.

Peter-Hagene, L. C., & Ullman, S. E. (2015). Sexual assault-characteristics effects on PTSD and psychosocial mediators: A cluster-analysis approach to sexual assault

types. *Psychological Trauma: Theory, Research, Practice, and Policy*, *7*(2), 162-170.

Pottinger, A. M. (2015). The Use of Trauma Counseling for Children with Attention-Deficit Hyperactivity Disorder. *International Journal for the Advancement of Counselling*, *37*(1), 17-27.

Prakash, R. S., Hussain, M. A., & Schirda, B. (2015). The role of emotion regulation and cognitive control in the association between mindfulness disposition and stress. *Psychology and aging*, *30*(1), 160-171.

Rathus, J. H., & Miller, A. L. (2002). Dialectical behavior therapy adapted for suicidal adolescents. *Suicide and life-threatening behavior*, *32*(2), 146-157.

Relyea, M., & Ullman, S. E. (2015). Unsupported or turned against: Understanding how two types of negative social reactions to sexual assault relate to postassault outcomes. *Psychology of women quarterly*, *39*(1), 37-52.

Rhew, I. C., Stappenbeck, C. A., Bedard-Gilligan, M., Hughes, T., & Kaysen, D. (2017). Effects of sexual assault on alcohol use and consequences among young adult sexual minority women. *Journal of consulting and clinical psychology*, *85*(5), 424-433.

Rizvi, S. L., Steffel, L. M., & Carson-Wong, A. (2013). An Overview of Dialectical Behavior Therapy for Professional Psychologist. *Professional Psychology: Research and Practice, 44(2),* 73-80.

Roeser, R. W., Skinner, E., Beers, J., & Jennings, P. A. (2012). Mindfulness training and teachers' professional development: An emerging area of research and practice. *Child Development Perspectives*, *6*(2), 167-173.

Sahdra, B., Ciarrochi, J., & Parker, P. (2016). Nonattachment and mindfulness: Related but distinct constructs. *Psychological assessment*, *28*(7), 819-829.

Salzberg, S. (1995). Loving-kindness: the revolutionary art of happiness. Boston, MA: Shambhala Publications.

Scharmer, C. O. (2009). Theory U: Learning from the future as it emerges. San Francisco, CA: Berrett-Koehler.

Schein, E. (2013). Humble inquiry: The gentle art of asking instead of telling. San Francisco, CA: Berrett-Koehler.

Schirda, B., Nicholas, J. A., & Prakash, R. S. (2015). Examining trait mindfulness, emotion dysregulation, and quality of life in multiple sclerosis. *Health Psychology*, *34*(11), 1107-1115.

Schulenberg, J. E., Johnston, L. D., O'Malley, P. M., Bachman, J. G., Meich, R. A., & Patrick, M. E. (2017, September). Monitoring the Future national survey results on drug use, 1975-2016: Volume 2, College Students and adults ages 19-55. *National Institute on Drug Abuse*. Retrieved from https://www.drugabuse.gov/related-topics/trends-statistics/infographics/drug-alcohol-use-in-college-age-adults-in-2016.

Scoglio, A. A., Rudat, D. A., Garvert, D., Jarmolowski, M., Jackson, C., & Herman, J. L. (2015). Self-compassion and responses to trauma: The role of emotion regulation. *Journal of interpersonal violence*, 0886260515622296.

Segal, Z. V., Williams, J. M. G., & Teasdale, J. D. (2002). Mindfulness-based cognitive therapy for depression: A new approach to relapse prevention. *New York: Guilford*.

Sheldon, K. M., Prentice, M., & Halusic, M. (2015). The experiential incompatibility of mindfulness and flow absorption. *Social Psychological and Personality Science*, *6*(3), 276-283.

Siegel, D. J. (2007). The mindful brain: Reflection and attunement in the cultivation of well-being. New York: Norton.

Siegel, D. J. (2009). Mindful Awareness, Mindsight, and Neural Integration. *The Humanistic Psychologist, 27*, 137-158.

Smith, K. M., Chesin, M. S., & Jeglic, E. L. (2014). Minority college student mental health: Does majority status matter? Implications for college counseling services. *journal of Multicultural counseling and developMent*, *42*(2), 77-92.

Sinozich, S., & Langton, L. (2014, December). *Bureau of Justice Statistics.* Retrieved September 23, 2017, from https://bjs.gov/content/pub/pdf/rsavcaf9513.pdf.

Smalley, S. L., Loo, S. K., Hale, T., Shrestha, A., McGough, J., Flook, L., & Reise, S. (2009). Mindfulness and attention deficit hyperactivity disorder. *Journal of clinical psychology*, *65*(10), 1087-1098.

Smith, K. M., Chesin, M. S., & Jeglic, E. L. (2014). Minority college student mental health: Does majority status matter? Implications for college counseling services. *journal of Multicultural counseling and developMent*, *42*(2), 77-92.

Smith, B. W., Ortiz, J. A., Steffen, L. E., Tooley, E. M., Wiggins, K. T., Yeater, E. A., & Bernard, M. L. (2011). Mindfulness is associated with fewer PTSD symptoms, depressive symptoms, physical symptoms, and alcohol problems in urban firefighters. *Journal of Consulting and Clinical Psychology*, *79*(5), 613-617.

Snippe, E., Nyklíček, I., Schroevers, M. J., & Bos, E. H. (2015). The temporal order of change in daily mindfulness and affect during mindfulness-based stress reduction. *Journal of counseling psychology, 62*(2), 106-114.

Sümer, S., Poyrazli, S., & Grahame, K. (2008). Predictors of depression and anxiety among international students. *Journal of Counseling & Development, 86*(4), 429-437.

Swallow, S. R., & Kuiper, N. A. (1988). Social comparison and negative self-evaluations: An application to depression. *Clinical Psychology Review*, *8*(1), 55-76.

Szymanski, K., Sapanski, L., & Conway, F. (2011). Trauma and ADHD – Association or diagnostic confusion? A clinical perspective. Journal of Infant, Child and Adolescent Psychotherapy, 10(1), 51–59.

Taggart, F., Stewart-Brown, S., & Parkinson, J. (2016). Warwick-Edinburgh Mental Well-being Scale (WEMWBS). *User guide-Version*, *2*.

Tennant, R., Fishwick, R., Platt, S., Joseph, S., & Stewart-Brown, S. (2006). Monitoring positive mental health in Scotland: validating the Affectometer 2 scale and developing the Warwick-Edinburgh Mental Well-being Scale for the UK. *Edinburgh, NHS Health Scotland*.

Tennant, R., Hiller, L., Fishwick, R., Platt, S., Joseph, S., Weich, S., Parkinson, J., Secker, J. & Stewart-Brown, S. (2007). The Warwick-Edinburgh mental well-being scale (WEMWBS): development and UK validation. *Health and Quality of life Outcomes*, *5*(1), 63-76.

Tesh, M., Learman, J., & Pulliam, R. M. (2015). Mindful self-compassion strategies for survivors of intimate partner abuse. *Mindfulness*, *6*(2), 192-201.

Thompson, R. W., Arnkoff, D. B., & Glass, C. R. (2011). Conceptualizing mindfulness and acceptance as components of psychological resilience to trauma. *Trauma, Violence, & Abuse*, *12*(4), 220-235.

Thompson, B. L., & Waltz, J. (2010). Mindfulness and experiential avoidance as predictors of posttraumatic stress disorder avoidance symptom severity. *Journal of anxiety disorders*, *24*(4), 409-415.

Tomasula, J. L., Anderson, L. M., Littleton, H. L., & Riley-Tillman, T. C. (2012). The association between sexual assault and suicidal activity in a national sample. *School psychology quarterly*, *27*(2), 109-119.

Toomey, R. B., & Anhalt, K. (2016). Mindfulness as a coping strategy for bias-based school victimization among Latina/o sexual minority youth. *Psychology of sexual orientation and gender diversity*, *3*(4), 432-441.

Trompetter, H. R., de Kleine, E., & Bohlmeijer, E. T. (2017). Why does positive mental health buffer against psychopathology? An exploratory study on self-compassion as a resilience mechanism and adaptive emotion regulation strategy. *Cognitive therapy and research*, *41*(3), 459-468.

Truman, J. L., & Langton, L. (2015, August 27). *Bureau of Justice Statistics.* Retrieved September 23, 2017, from https://www.bjs.gov/index.cfm?ty=pbdetail&iid=5366.

Turner, K. (2009). Mindfulness: The present moment in clinical social work. *Clinical Social Work Journal*, *37*(2), 95-103.

Ullman, S. E. (1999). Social support and recovery from sexual assault: A review. *Aggression and violent behavior*, *4*(3), 343-358.

Ullman, S. E. (2000). Psychometric characteristics of the Social Reactions Questionnaire: A measure of reactions to sexual assault victims. Psychology of Women Quarterly, 24, 257–271.

Ullman, S. E. (2014). Correlates of posttraumatic growth in adult sexual assault victims. *Traumatology*, *20*(3), 219-224.

Ullman, S. E., Najdowski, C. J., & Filipas, H. H. (2009). Child sexual abuse, post-traumatic stress disorder, and substance use: Predictors of revictimization in adult sexual assault survivors. *Journal of child sexual abuse*, *18*(4), 367-385.

Ullman, S. E., & Relyea, M. (2016). Social support, coping, and posttraumatic stress symptoms in female sexual assault survivors: a longitudinal analysis. *Journal of traumatic stress*, *29*(6), 500-506.

Ullman, S. E., Relyea, M., Sigurvinsdottir, R., & Bennett, S. (2017). A short measure of social reactions to sexual assault: the social reactions questionnaire-shortened. *Violence and victims*, *32*(6), 1096-1115.

U.S. Department of Justice. (2014, April). *White House Task Force to Protect Students from Sexual Assault.* Retrieved from: https://www.justice.gov/ovw/protecting-students-sexual-assault.

Valdez, C. E., & Lilly, M. M. (2016). Self-compassion and trauma processing Outcomes among victims of violence. *Mindfulness*, *7*(2), 329-339.

Valentiner, D. P., Foa, E. B., Riggs, D. S., & Gershuny, B. S. (1996). Coping strategies and posttraumatic stress disorder in female victims of sexual and nonsexual assault. *Journal of Abnormal Psychology*, *105*(3), 455-458.

Van den Bosch, L. M. C., Koeter, M. W. J., Stijnen, T., Verheul, R., & Van den Brink, W. (2005). Sustained efficacy of dialectical behavior therapy for borderline personality disorder. *Behavior Research and Therapy, 43,* 1231-1241.

Van der Kolk, B. (2005). Developmental trauma disorder. *Psychiatric Annals*, 35, 439-448.

Victorson, D., Hankin, V., Burns, J., Weiland, R., Maletich, C., Sufrin, N., Schuette, S., Gutierrez, B. & Brendler, C. (2017). Feasibility, acceptability and preliminary psychological benefits of mindfulness meditation training in a sample of men diagnosed with prostate cancer on active surveillance: results from a randomized controlled pilot trial. *Psycho-oncology*, *26*(8), 1155-1163.

Vowles, K. E., Witkiewitz, K., Levell, J., Sowden, G., & Ashworth, J. (2017). Are reductions in pain intensity and pain-related distress necessary? an analysis of within-treatment change trajectories in relation to improved functioning following interdisciplinary acceptance and commitment therapy for adults with chronic pain. *Journal of Consulting and Clinical Psychology, 85*(2), 87-98.

Vujanovic, A. A., Niles, B., Pietrefesa, A., Schmertz, S. K., & Potter, C. M. (2011). Mindfulness in the Treatment of Posttraumatic Stress Disorder Among Military Veterans. *Professional Psychology: Research and Practice*, *42*(1), 24-31.

Vujanovic, A. A., Youngwirth, N. E., Johnson, K. A., & Zvolensky, M. J. (2009). Mindfulness-based acceptance and posttraumatic stress symptoms among trauma-exposed adults without axis I psychopathology. *Journal of anxiety disorders*, *23*(2), 297-303.

Walser, R. D., Garvert, D. W., Karlin, B. E., Trockel, M., Ryu, D. M., & Taylor, C. B. (2015). Effectiveness of acceptance and commitment therapy in treating depression and suicidal ideation in veterans. *Behaviour research and therapy*, *74*, 25-31.

Walsh, K., DiLillo, D., & Messman-Moore, T. L. (2012). Lifetime sexual victimization and poor risk perception: Does emotion dysregulation account for the links?. *Journal of interpersonal violence*, *27*(15), 3054-3071.

Warshaw, R. (1988). I never called it rape: The Ms. Report on recognizing, fighting and surviving date and acquaintance rape. New York: HarperPerennial.

Wasylkiw, L., MacKinnon, A. L., & MacLellan, A. M. (2012). Exploring the link between self-compassion and body image in university women. *Body image*, *9*(2), 236-245.

Waszczuk, M. A., Zavos, H., Antonova, E., Haworth, C. M., Plomin, R., & Eley, T. C. (2015). A multivariate twin study of trait mindfulness, depressive symptoms, and anxiety sensitivity. *Depression and anxiety*, *32*(4), 254-261.

Watford, T. S., & Stafford, J. (2015). The impact of mindfulness on emotion dysregulation and psychophysiological reactivity under emotional provocation. *Psychology of Consciousness: Theory, Research, and Practice*, *2*(1), 90-109.

White, R., Gumley, A., McTaggart, J., Rattrie, L., McConville, D., Cleare, S., & Mitchell, G. (2011). A feasibility study of Acceptance and Commitment Therapy for emotional dysfunction following psychosis. *Behaviour research and therapy*, *49*(12), 901-907.

Wolitzky-Taylor, K. B., Arch, J. J., Rosenfield, D., & Craske, M. G. (2012). Moderators and non-specific predictors of treatment outcome for anxiety disorders: A comparison of cognitive behavioral therapy to acceptance and commitment therapy. *Journal of Consulting and Clinical Psychology*, *80*(5), 786-799.

Worsfold, K. E. (2013). Embodied reflection in mindfulness-based cognitive therapy for depression. *The Humanistic Psychologist*, *41*(1), 54-69.

Zarling, A., Lawrence, E., & Marchman, J. (2015). A randomized controlled trial of acceptance and commitment therapy for aggressive behavior. *Journal of consulting and clinical psychology*, *83*(1), 199-212.

Zhou, J., & Cole, D. (2017). Comparing International and American Students: Involvement in College Life and Overall Satisfaction. *Higher Education*, *73*(5), 655-672.

Zimmermann, P., & Iwanski, A. (2014). Emotion regulation from early adolescence to emerging adulthood and middle adulthood: Age differences, gender differences, and emotion-specific developmental variations. *International journal of behavioral development*, *38*(2), 182-194.

Appendix A: Tables

Table 1

Sample Sizes and Percentages for Demographic Information for Those Who Reported a History of Childhood Sexual Assault and/or Those Who Reported a History of Emerging Adulthood Sexual Assault

	Before 18		**Since 18**	
Demographics	*N*	*%*	*N*	*%*
Gender				
Male	10	8	6	5.6
Female	109	87.2	96	90
Non-Binary	6	4.8	5	4.7
Ethnicity				
American Indian or Alaskan Native	6	4.8	6	5.6
Asian	3	2.4	2	1.9
Black or African American	0	0	2	1.9
White	101	80.8	80	75
Hispanic or Latino	6	4.8	8	7.5
Native Hawaiian or Other Pacific Islander	2	1.6	2	1.9
Biracial	4	3.2	4	3.7
Other	3	2.4	3	2.8
Sexual Orientation				
Heterosexual	78	62.4	71	66
Bisexual	31	24.8	23	22
Gay	1	0.8	1	0.9
Lesbian	2	1.6	2	1.9
Other	12	9.6	9	8.4
Classification				
Freshmen	32	25.6	27	25
Sophomore	23	18.4	19	18
Junior	31	24.8	31	29
Senior	39	31.2	30	28
Age				
18-19	46	36.8	36	34
20-21	58	46.4	52	49
22-23	16	12.8	13	12
24-25	5	4	6	5.6

Table 2

Type of Sexual Assault Experienced for Those Who Reported a History of Childhood Sexual Assault and/or Those Who Reported a History of Emerging Adulthood Sexual Assault

	Before 18		**Since 18**	
Type of SA	*N*	*%*	*N*	*%*
Someone fondled, kissed, or rubbed up against the private areas of my body or removed some of my clothes	12	9.6	7	6.5
Someone groped or grabbed private parts of my body in a public or private space	36	28.8	28	26.2
Someone TRIED to sexually penetrate me	6	4.8	8	7.5
Someone sexually penetrated me	22	17.6	13	12.1
Someone TRIED to perform oral sex on me or make me give them oral sex	16	12.8	15	14
Someone performed oral sex on me or made me give them oral sex	33	26.4	36	33.6
Total	125		107	

Note. This study defines childhood sexual assault as before age 18 and adulthood sexual assault is defined as age 18 or later. In addition, some participants may have reported *both* a childhood and adulthood sexual assault experience.

Table 3

Type of Method for Sexual Assault for Those Who Reported a History of Childhood Sexual Assault and/or Those Who Reported A History of Emerging Adulthood Sexual Assault

	Before 18		**Since 18**	
Method for SA	*N*	*%*	*N*	*%*
Catching you off guard, or ignoring nonverbal cues or looks	26	21.7	17	16.5
Telling lies, threatening to end the relationship, or to spread rumors about you, or verbal pressure	9	7.5	5	4.9
Showing displeasure, criticizing your sexuality or attractiveness, or getting angry	22	18.3	9	8.7
Taking advantage of you when you were too drunk, high, asleep or out of it	31	25.8	45	43.7
Threatening to physically harm you or someone close to you	0	0	1	1
Using force, or having a weapon	14	11.7	18	17.5
Other	12	10	8	7.8
Total	120		103	

Note. This study defines childhood sexual assault as before age 18 and adulthood sexual assault is defined as age 18 or later. In addition, some participants may have reported *both* a childhood and adulthood sexual assault experience.

Table 4

Means, Standard Deviations, and Intercorrelations of Wellbeing, Self-Judgement, Isolation, Overidentification, Self-Kindness, Common Humanity, Mindfulness, and Mindful Awareness

Variable	***M***	***SD***	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
1. WEMWBS	42.31	8.52								
2. SJ	3.53	0.83	-.45**							
3. I	3.43	0.88	-.49**	.66**						
4. OI	3.4	0.85	-.45**	.68**	.61**					
5. SK	2.77	0.78	.48**	-.68**	-.48**	-.50**				
6. CH	2.93	0.82	.23**	-.34**	-.37**	-.37**	.52**			
7. M	3.27	0.71	.40**	-.47**	-.44**	-.54**	.62**	.57**		
8. MAAS	3.54	0.77	.52**	-.58**	-.51**	-.48**	.43**	.17**	.40**	

Note. WEMWBS measured overall psychological wellbeing with the Warwick-Edinburgh Mental Well-being Scale (Tennant et al., 2007). SJ, I, OI, SK, CH, and M measured self-judgement, isolation, over-identified, self-kindness, common humanity, and mindfulness as aspects of self-compassion with the Self-Compassion Scale (Neff, 2003). MAAS measured mindful disposition with the Mindful Attention Awareness Scale (Brown & Ryan, 2003).
*p<.05, **p<.01.

Table 5

Summary of Final Step of the Two Step Hierarchical Multiple Regression Analysis for Variables Predicting Psychological Wellbeing in Participants with a Reported History of Childhood Sexual Assault Prior to Age 18

	Model 1			Model 2		
Variable	**B**	**SE B**	***β***	**B**	**SE B**	***β***
Self-Kindness	5.36	1.52	0.49**	5.52	1.4	0.5***
Common Humanity	-1.88	1.16	-0.17	-1.26	1.08	-0.11
Mindfulness	-0.52	1.63	-0.04	-1.68	1.53	-0.13
Self-Judgment	1.31	1.55	0.12	2.75	1.47	0.24
Isolation	-3.04	1.16	-0.28*	-1.89	1.1	-0.17
Over-identified	-1.16	1.41	-0.1	-0.96	1.3	-0.08
Mindful Awareness				4.8	1.05	0.4***
R		0.54			0.63	
R^2		0.29			0.40	
Adjusted R^2		0.25			0.36	
ΔR^2		0.29***				
					0.11***	

*p<.05. **p<.01. ***p<.001.

Table 6

Summary of Final Step of Three Step Hierarchical Multiple Regression Analysis for Variables Predicting Psychological Wellbeing in Participants with a Reported History of Adulthood Sexual Assault Since Age 18

	Model 1			Model 2			Model 3		
Variable	**B**	**SE B**	***β***	**B**	**SE B**	***β***	**B**	**SE B**	***β***
Classification	.44	.74	.06	-.60	.70	-.08	-.72	.68	-.10
Self-Kindness				4.67	1.67	.43**	4.76	1.64	.44**
Common Humanity				-1.05	1.25	-.10	-.49	1.23	-.05
Mindfulness				-.39	1.5	-.03	-.84	1.47	-.07
Self-Judgment				1.78	1.84	.16	3.14	1.86	.29
Isolation				-3.41	1.23	-.33**	-2.49	1.25	-.24*
Over-identified				-1.39	1.45	-.13	-1.62	1.41	-.15
Mindful Awareness							3.13	1.19	.29*
R		.06			.53			.57	
R^2		.003			.28			.33	
Adjusted R^2		-.01			.23			.27	
ΔR^2		.003			.28** *			.05*	

*p<.05. **p<.01. ***p<.001.

Appendix B: Demographic Questionnaire

(1) What is your classification?
   a. Freshman
   b. Sophomore
   c. Junior
   d. Senior

(2) Please choose the option that most closely describes your current relationship status.
   a. Married
   b. In a committed relationship with one or more partner(s)
   c. Casually dating one or more people
   d. Not currently in a sexual or romantic relationship with anyone, but have been previously
   e. Never been in a sexual or romantic relationship with anyone

(3) Which of the following best describes your gender?
   a. Male
   b. Female
   c. Transgender
   d. Prefer Not to Answer
   e. Gender, please specify _____

(4) What is your sexual identity? Check all that apply.
   a. Heterosexual or straight
   b. Bisexual
   c. Gay
   d. Lesbian
   e. Sexual Identity, please specify _____
   f. Prefer Not to Answer

(5) Are you an international student?
   a. No
   b. Yes

(6) What is your age? _____

(7) What country were you born in? _____

(8) What is the country you lived in and identify with most closely regardless of if you were born there. _____

(9) What is your race/ethnicity? Please check all that apply.

a. American Indian or Alaska Native
b. Asian
c. Black or African American
d. White
e. Hispanic or Latino
f. Native Hawaiian or Other Pacific Islander
g. Biracial
h. Other race/ethnicity, please specific _____

Appendix C: Mindful Attention Awareness Scale (MAAS)

Day-to Day Experiences

Instructions: Next are a collection of statements about your everyday experience. Please indicate how frequently or infrequently you currently have each experience. Please answer according to what *really reflects* your experience rather than what you think your experience should be. Please treat each item separately from every other item.

1	2	3	4	5	6
Almost Always	Very Frequently	Somewhat Frequently	Somewhat Infrequently	Very Infrequently	Almost Never

I could be experiencing some emotion and not be conscious of it until some time later.	1	2	3	4	5	6
I break or spill things because of carelessness, not paying attention, or thinking of something else.	1	2	3	4	5	6
I find it difficult to stay focused on what's happening in the present.	1	2	3	4	5	6
I tend to walk quickly to get where I'm going without paying attention to what I experience along the way.	1	2	3	4	5	6
I tend not to notice feelings of physical tension or discomfort until they really grab my attention.	1	2	3	4	5	6
I forget a person's name almost as soon as I've been told it for the first time.	1	2	3	4	5	6
It seems I am "running on automatic," without much awareness of what I'm doing.	1	2	3	4	5	6
I rush through activities without being really attentive to them.	1	2	3	4	5	6
I get so focused on the goal I want to achieve that I lose touch with what I'm doing right now to get there.	1	2	3	4	5	6
I do jobs or tasks automatically, without being aware of what I'm doing.	1	2	3	4	5	6
I find myself listening to someone with one ear, doing something else at the same time.	1	2	3	4	5	6

I drive places on 'automatic pilot' and then wonder why I went there.	1	2	3	4	5	6
I find myself preoccupied with the future or the past.	1	2	3	4	5	6
I find myself doing things without paying attention.	1	2	3	4	5	6
I snack without being aware that I'm eating.	1	2	3	4	5	6

To score the scale, simply computer a mean (average) of the 15 items. Higher scores reflect higher levels of dispositional mindfulness.

Brown & Ryan, 2003

Appendix D: The Warwick-Edinburgh Mental Well-being Scale

(WEMWBS)

Next are some statements about feelings and thoughts.
Please select the box that best describes your experience of each over the last 2 weeks

STATEMENTS	None of the time	Rarely	Some of the time	Often	All of the time
I've been feeling optimistic about the future	1	2	3	4	5
I've been feeling useful	1	2	3	4	5
I've been feeling relaxed	1	2	3	4	5
I've been feeling interested in other people	1	2	3	4	5
I've had energy to spare	1	2	3	4	5
I've been dealing with problems well	1	2	3	4	5
I've been thinking clearly	1	2	3	4	5
I've been feeling good about myself	1	2	3	4	5
I've been feeling close to other people	1	2	3	4	5
I've been feeling confident	1	2	3	4	5
I've been able to make up my own mind about things	1	2	3	4	5
I've been feeling loved	1	2	3	4	5
I've been interested in new things	1	2	3	4	5
I've been feeling cheerful	1	2	3	4	5

Scoring
Each of the 14-item responses are scored from 1 (none of the time) to 5 (all of the time), and a total scale score is calculated by summing the 14 individual item scores. The minimum score is 14 and the maximum is 70 with higher scores reflecting greater mental wellbeing.

Tennant et al., 2006

Appendix E: Self-Compassion Scale (SCS)

HOW I TYPICALLY ACT TOWARDS MYSELF IN DIFFICULT TIMES

Please read each statement carefully before answering. To the left of each item, indicate how often you behave in the stated manner, using the following scale:

Almost never				Almost always
1	2	3	4	5

___ 1. I'm disapproving and judgmental about my own flaws and inadequacies.

___ 2. When I'm feeling down I tend to obsess and fixate on everything that's wrong.

___ 3. When things are going badly for me, I see the difficulties as part of life that everyone goes through.

___ 4. When I think about my inadequacies, it tends to make me feel more separate and cut off from the rest of the world.

___ 5. I try to be loving towards myself when I'm feeling emotional pain.

___ 6. When I fail at something important to me I become consumed by feelings of inadequacy.

___ 7. When I'm down and out, I remind myself that there are lots of other people in the world feeling like I am.

___ 8. When times are really difficult, I tend to be tough on myself.

___ 9. When something upsets me I try to keep my emotions in balance.

___ 10. When I feel inadequate in some way, I try to remind myself that feelings of inadequacy are shared by most people.

___ 11. I'm intolerant and impatient towards those aspects of my personality I don't like.

___ 12. When I'm going through a very hard time, I give myself the caring and tenderness I need.

___ 13. When I'm feeling down, I tend to feel like most other people are probably happier than I am.

___ 14. When something painful happens I try to take a balanced view of the situation.

___ 15. I try to see my failings as part of the human condition.

___ 16. When I see aspects of myself that I don't like, I get down on myself.

___ 17. When I fail at something important to me I try to keep things in perspective.

___ 18. When I'm really struggling, I tend to feel like other people must be having an easier time of it.

___ 19. I'm kind to myself when I'm experiencing suffering.

___ 20. When something upsets me I get carried away with my feelings.

___ 21. I can be a bit cold-hearted towards myself when I'm experiencing suffering.

___ 22. When I'm feeling down I try to approach my feelings with curiosity and openness.

___ 23. I'm tolerant of my own flaws and inadequacies.

___ 24. When something painful happens I tend to blow the incident out of proportion.

___ 25. When I fail at something that's important to me, I tend to feel alone in my failure.

___ 26. I try to be understanding and patient towards those aspects of my personality I don't like.

Coding Key
Self-Kindness (SK) Items: 5, 12, 19, 23, 26
Common Humanity (CH) Items: 3, 7, 10, 15
Mindfulness (M) Items: 9, 14, 17, 22
Self-Judgment (SJ) Items: 1, 8, 11, 16, 21
Isolation (I) Items: 4, 13, 18, 25
Over-identified (OI) Items: 2, 6, 20, 24

Subscale scores are computed by calculating the mean of subscale item responses.
*Average scores tends to be around 3.0 on the 1-5 scale. A score of 1-2.5 indicates low in the subscale, 2.5-3.5 indicates moderate, and 3.5-5.0 indicates high.

Appendix F: Sexual Experiences Survey (SES)

The following questions are sensitive in nature involving references to sexual assault experiences and as a result containing explicit language. As a reminder you are able to skip questions and you may withdraw from the survey at any time. If you are feeling triggered or overwhelmed, contact information for resources will be provided at the end of the survey and if you choose to withdraw from the survey.

1. Have you experience any of the following PRIOR to age 18?

	Yes, once	Yes, more than one	No	Unsure
Someone fondled, kissed, or rubbed up against the private areas of my body or removed some of my clothes even though I didn't want to				
From one groped or grabbed private parts of my body in a public or private space even though I didn't want to				
Someone TRIED to sexually penetrate me (someone tried to put a penis or insert fingers or objects into my vagina or anus) even though I didn't want to				
Someone sexually penetrated me (someone tried to put a penis or insert fingers or objects into my vagina or anus) even though I didn't want to				
Someone TRIED to perform oral sex on me or make me give them oral sex even though I didn't want to				
Someone performed oral sex on me or made me give them oral sex even though I didn't want to				

2. Do the person or persons who did one or more of the previous behaviors do them by…

	Yes	No
Catching you off guard, or ignoring nonverbal cues or looks.		
Telling lies, threatening to end the relationship or to spread rumors about you or verbally pressuring you		

Showing displeasure, criticizing your sexuality or attractiveness, or getting angry		
Taking advantage if you when you were too drunk, asleep, or out of it		
Using force, or having a weapon		
Other method not described above, please specify		

3. What was the gender of the perpetrator or perpetrators? Check all that apply.
    1. Male
    2. Female
    3. Transgender
    4. Other:_____
    5. Prefer Not to Answer

1. Have you experience any of the following SINCE to age 18?

	Yes, once	Yes, more than one	No	Unsure
Someone fondled, kissed, or rubbed up against the private areas of my body or removed some of my clothes even though I didn't want to				
From one groped or grabbed private parts of my body in a public or private space even though I didn't want to				
Someone TRIED to sexually penetrate me (someone tried to put a penis or insert fingers or objects into my vagina or anus) even though I didn't want to				
Someone sexually penetrated me (someone tried to put a penis or insert fingers or objects into my vagina or anus) even though I didn't want to				
Someone TRIED to perform oral sex on me or make me give them oral sex even though I didn't want to				
Someone performed oral sex on me or made me give them oral sex even though I didn't want to				

2. Do the person or persons who did one or more of the previous behaviors do them by…

	Yes	No
Catching you off guard, or ignoring nonverbal cues or looks.		
Telling lies, threatening to end the relationship or to spread rumors about you or verbally pressuring you		
Showing displeasure, criticizing your sexuality or attractiveness, or getting angry		
Taking advantage if you when you were too drunk, asleep, or out of it		
Using force, or having a weapon		
Other method not described above, please specify		

3. What was the gender of person or persons who did one or more of the previous behaviors? Check all that apply.

1. Male
2. Female
3. Transgender
4. Other:_____
5. Prefer Not to Answer

Koss et al., 2007

Appendix G: Short Measure of Social Reactions (SRQ-S)

How Other People Responded…
The following is a list of reactions that other people sometime have when responding to a person with this experience. Please indicate how often you experienced each of the listed responses from other people.

1	2	3	4	5
Never	Rarely	Sometimes	Frequently	Always

1. Told you that you were irresponsible or not cautious enough
2. Reassured you that you are a good person
3. Treated you differently in some way than before you told them that made you uncomfortable
4. Told you to go on with your life
5. Comforted you by telling you it would be all right or by holding you
6. Tried to take control of what you did/decisions you made
7. Has been so upset that they needed reassurance from you
8. Made decisions or did things for you
9. Told you that you could have done more to prevent this experience from occurring
10. Provided information and discussed options
11. Told you to stop thinking about it
12. Expressed so much anger at the perpetrator that you had to calm them down
13. Avoided talking to you or spending time with you
14. Treated you as if you were a child or somehow incompetent
15. Helped you get information of any kind about coping with the experience
16. Made you feel like you didn't know how to take care of yourself

<u>Categories and Sub-scales</u>
1. Turning Against: 1, 3, 9, 13, 14, 16
    a. Stigmatize: 3, 13
    b. Infantilize: 14, 16
    c. Blame: 1, 9

Ullman et al., 2017