

AN INVESTIGATION OF THE RELATIONSHIP BETWEEN CHILDHOOD
TRAUMA TYPE AND EMERGING ADULT DISTRESS WITH A
HELP-SEEKING COLLEGE STUDENT POPULATION

by

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DISSERTATION ABSTRACT

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Title: An Investigation of the Relationship Between Childhood Trauma Type and Emerging Adult Distress with a Help-Seeking College Student Population

Successful negotiation of emerging adult transitions predicts positive developmental outcomes across the lifespan. Emerging adults who have experienced childhood trauma are at increased risk for maladaptive development. The purpose of this dissertation study was to (a) provide descriptive demographic and health information about emerging adult survivors of childhood trauma seeking support from a university counseling center and (b) investigate the impact that different types of childhood trauma had on psychological symptoms and aspects of distress experienced by that population during college. It was hypothesized that there would be no significant differences in student distress based on single-type abuse, but that there would be significant differences based on the experience of polyvictimization, with multi-type abuse related to increased distress.

Extant client data collected by the University of Oregon Counseling and Testing Center (UO-UCTC) were used to meet study objectives. Participants were college students, age 18-25 years, who voluntarily sought mental health services from UO-UCTC and who endorsed childhood trauma experiences on their intake paperwork. Results from descriptive, finite mixture modeling, logistic regression, chi-square, and multiple regression analyses revealed that (a) there were unique relationships between trauma type

and a variety of demographic variables; (b) help-seeking emerging adults reported experiencing childhood emotional single-type abuse most frequently, with childhood emotional-physical abuse being the most commonly reported form of multi-type abuse; (c) the sample endorsed higher than typical psychological symptoms and aspects of distress both in terms of quantity and severity, with particularly elevated depression, family distress, and generalized anxiety scores; (d) a five-component solution emerged, classifying participants into five clusters of symptom reporting; however, no relationship was found between symptom cluster and childhood trauma type; (e) the probability of experiencing generalized anxiety and/or family distress was related to the type of childhood trauma experienced; and (f) the severity of generalized anxiety and/or family distress that participants reported was significantly related to the type of childhood trauma they experienced. Findings highlight the importance of contextualizing current abuse typologies and assessing multi-type abuse. Recommendations for expanding definitions of trauma and providing care to emerging adult survivors of childhood trauma on college campuses are discussed.

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CHAPTER I

INTRODUCTION

Emerging adulthood is a distinct developmental period, between the ages of 18 and 25, when individuals are challenged to negotiate an increased number of new developmental tasks and transitions as they move out of adolescence and into adulthood (Arnett, 2000, 2006a, 2007). Approximately 66% of emerging adults living in the United States (US) attend an institution of higher education; a marked increase in college enrollment (National Center for Education Statistics [NCES], 2014). College campuses are also becoming more racially and ethnically diverse as enrollment of emerging adults from underrepresented backgrounds and other countries is on the rise (NCES, 2014). These student enrollment changes present unique opportunities and challenges for college campuses to foster emerging adult development and meet the health needs of an increasingly diverse emerging adult student body. Particular needs that are the focus of this study are emerging adults' experiences of childhood abuse and the developmental risks that they face when coming to college, which may exacerbate the impact of their childhood trauma experiences on their health.

National data show that 60% of adults report childhood abuse or other family-based trauma, which are considered complex traumas (National Center for Mental Health Promotion and Youth Violence Prevention, 2012). Many children demonstrate remarkable resilience in the face of such trauma (DuMont, Widom, & Czaja, 2007); whereas for others, complex childhood trauma can create a cascading pattern of maladaptive development over time and increase their risk for a variety of negative outcomes (Brenner & Ben-Amitay, 2015; K. Dodge et al., 2009; Read et al., 2012;

Widom, Czaja, & Dutton, 2008). Childhood maltreatment experiences are associated with difficulties across emotional, behavioral, and biological regulation; attachment security; cognition; and self-concept development (Cohen, Mannarino, Kliethermes, & Murray, 2012; Substance Abuse and Mental Health Services Administration [SAMHSA], 2013; van Vugt, Lanctôt, Paquette, Collin-Vézina, & Lemieux, 2014). Problems in these developmental areas increase in frequency and duration as survivors of childhood trauma age; that is, traumatic events experienced during childhood exert the greatest negative impact on psychological and psychosocial functioning during older adulthood when compared to traumas that occurred during later stages of development (Kapeleris & Paivio, 2011; Ogle, Rubin, & Siegler, 2013; Zielinski, 2009). Despite the documented impact of childhood trauma on adult development, very little scholarly attention has been given to its impact on emerging adult functioning.

It is well-documented that emerging adult college students are more susceptible to higher rates of mental health disorders, interpersonal violence victimization, and substance use (Adams, Knopf, & Park, 2014; Capaldi, Shortt, & Crosby, 2003; National Institute of Mental Health, 2005; Renzetti, Edleson, & Bergen, 2001; SAMHSA, 2013). Child abuse has the potential to worsen the stress associated with successfully negotiating developmental challenges (Faulkner, Goldstein, & Wekerle, 2014); thus, it is vital for college campuses to provide a healthcare hub for supporting trauma survivors. Childhood trauma survivors commonly present to university counseling centers (UCCs; Center for Collegiate Mental Health [CCMH], 2016), which offer easily accessible, low-cost or free counseling services to emerging adult college students.

The purpose of this dissertation study was to use extant data from the University of Oregon Counseling and Testing Center (UO-UCTC) to explore the relationships between childhood trauma type and emerging adult distress with a help-seeking college student population. Study objectives were (a) provide descriptive demographic and health information about emerging adult survivors of childhood trauma seeking support from a university counseling center and (b) to examine the relationships between different types of childhood trauma and students' psychological symptoms and aspects of distress experienced during college. Given that much of the current study is exploratory in nature, there was one primary study hypothesis: that there would be no significant differences in emerging adult distress based on single-type abuse (i.e., emotional, physical, or sexual abuse), but that there would be significant differences based on the experience of polyvictimization (i.e., more than one type of abuse), with multi-type abuse related to increased mental health symptomology and distress.

CHAPTER II

LITERATURE REVIEW

This review of the literature was conducted by entering the following keywords and their combinations into the Academic Search Premier, Google Scholar, PILOTS, and PsychINFO databases: college* student, young adult*, emerging adult*, child* trauma, child* abuse, child* maltreatment, child* physical abuse, child* sexual abuse, child* emotional abuse, trauma type, trauma severity, polyvictim*, revictim*, interpersonal violence, domestic violence, dating violence, sexual assault, harassment, abuse, betrayal, trauma appraisal, help seeking, mental health, mental disorder, psychological disorder, development, neurobiology, attachment, interpersonal relationship*, career development, resilience, protective factor*, and risk factor*. This search yielded a plethora of journal articles, books, and book chapters related to childhood trauma; a moderate amount of literature related to young adults and risk they experience; and significantly less research related to emerging or young adults and their experience of childhood trauma. At the time of review, a total of 16 published studies were identified that considered the impact of childhood trauma on some aspect of emerging adult development and/or functioning. In sum, the current literature review includes scholarship summarized in empirical papers and scholarly books from the disciplines of counseling, clinical, and developmental psychology; sociology; marriage and family therapy; psychiatry; neurobiology; and prevention science.

The literature review is organized as follows: First, a summary of emerging adulthood, with a focus on emerging adult college students and typical risk factors they experience, is discussed. Second, an overview of childhood trauma, including

information about complex trauma, trauma severity, and trauma types, is provided.

Third, a review of the extant research on what is known about the relationship between childhood trauma and emerging adult development is given. Risk factors across neurobiological, mental health, interpersonal, and career outcomes as well as protective factors are discussed.

Emerging Adult College Student Development

Emerging adulthood spans ages 18 to 25 and has been proposed as a distinct developmental period (Arnett, 2000). Although conceptually novel compared to more established stages of development, emerging adulthood is a key developmental period because it helps to prepare individuals for adult developmental tasks that include family formation, consolidation of career goals, and attainment of gratifying employment (Arnett, 2007; Erikson, 1968). Emerging adulthood has been characterized by some scholars as a phenomenon only applicable to a very select group of people, particularly individuals who identify as White and as middle to upper class (e.g., Hendry & Kloep, 2007). In contrast, Arnett (2011) asserts that the concept of emerging adulthood is not a static one; rather, there are many emerging adulthoods that vary across and within groups, in the US and around the world. It is well established that differences exist between groups for all developmental periods, but the overarching terms and tasks associated with any given area of development (i.e., the demographics of that life stage) remain largely consistent (Arnett, 2006a). In this section, the overarching tasks of emerging adulthood are briefly described and common disruptions to emerging adult functioning are discussed.

Features of Emerging Adulthood

Emerging adulthood can be dually defined as an age of possibilities and an age of uncertainty (Arnett, 2006a). Emerging adults are empowered to explore various aspects of their identity while also being faced with increased responsibility and decision-making (Arnett, 2000, 2006a; Glenn, 2014). Although culturally considered “grown-up”, emerging adults experience dramatic changes in neurobiology, mental health, relationships, and vocational development (Arnett, 2006b; McCarthy & Chronister, 2015; Southerland, Casanueva, & Ringeisen, 2009). Emerging adults are expected to increase their self-focus in order to explore their identity statuses (e.g., sexual orientation and religious beliefs) and personal and professional aspirations (e.g., career and relationships) while simultaneously feeling in between adolescence and adulthood and the consequent sense of instability (Arnett & Tanner, 2006).

As emerging adults begin to move away from their adolescent life, which may have been marked by greater parent or guardian guidance and imposed limitations, they are expected to make autonomous decisions (Arnett, 2004). For what may be the first time, many emerging adults make their own decisions about what they want to do, where they want to go, and with whom they want to spend time. While navigating these self-focused decisions and explorations, emerging adult college students encounter another feature of this unique developmental period, instability. Regular changes to housing, romantic relationships, and finances are normative challenges that emerging adults face (Arnett, 2004). This instability may be even greater and more risky for emerging adults who are navigating diverse cultural and contextual systems (Nagra, Chronister, Kosty, Caruthers, & Dishion, under review). For example, instability is of significant concern

for emerging adults without economic resources who live in higher risk and impoverished neighborhoods as well as gender variant young people who experience disproportionate rates of housing and job insecurity. Amidst instability, emerging adult college students typically describe feeling “in the middle,” not an adolescent or an adult (Arnett & Schwab, 2012). They often pursue adult autonomy and continued parental support simultaneously (Arnett & Tanner, 2006). For instance, 50% of emerging adult women and 59% of emerging adult men live at home with their parents during or after college (Vespa, Lewis, & Kreider, 2013). Of those emerging adults living away from home, parents dedicate an average of 367 hours per year to supporting their independent emerging adult children (Schoeni & Ross, 2005). More specifically, with a sample of 123 high risk emerging adults, 62.5% of parents reported loaning money to their child regardless of their living arrangement (McCarthy & Chronister, 2015).

Successful negotiation of the aforementioned developmental tasks provides emerging adult college students with opportunities to acquire skills, nurture relationships, pursue goals, and explore self-identities; whereas, difficulties with negotiating these tasks decreases growth opportunities and may disrupt future adult development and lead to increased distress (Chronister, Marsiglio, Linville, & Lantrip, 2014; Kapeleris & Paivio, 2011; O’Connor et al., 2011).

Common Disruptions to Emerging Adult College Student Development

Approximately 66% of recent high school completers (i.e., individuals aged 16 to 24 who recently graduated from high school or completed their GED during the calendar year) were enrolled in an institution of higher education (i.e., 2- and 4-year colleges; NCES, 2014). Given that a majority of emerging adults in the US enroll in institutions of

higher education and most college students are emerging adults, understanding the risk factors that college student's encounter is vital to understanding emerging adult development. Emerging adult college students are expected to autonomously excel in academic, interpersonal, career, and identity development simultaneously (Arnett & Schwab, 2012). For most emerging adult college students, aspects of this transition are successful, whereas, others are challenging. For example, 1,029 emerging adults enrolled at a small, Northeastern US University were polled about how it feels to be an emerging adult. Of the total sample, 83% indicated that emerging adulthood is "fun and exciting." Simultaneously, 72% reported that their life is "stressful" and 56% endorsed feeling anxious "often." Negative appraisals of life as an emerging adult are more common for young people who come from lower socioeconomic backgrounds, are chronologically younger in age, and identify as women (Arnett & Schwab, 2012). Often, emerging adults attribute stress and negative beliefs about their young lives to the intense pressure they feel to "find themselves" and navigate a dynamic, ever-changing developmental landscape (Arnett & Schwab, 2012). Additionally, there are several highly prevalent disruptions to development during emerging adulthood that have the potential to increase emerging adult distress. Negative relationship dynamics, interpersonal violence, alcohol and other drug (AOD) use, and mental health problems increase considerably during the transition to adulthood, particularly in the context of postsecondary educational pursuit (Belsky & Kelly, 1994; Feeney, Hohaus, Noller, & Alexander, 2001; Schulz, Cowan, & Cowan, 2006).

Emerging adulthood is a period of romantic relationship exploration and transition to more committed, intimate relationships (Arnett, 2006b). Concurrently, rates of

intimate partner violence and sexual assault peak during this stage of development (Bureau of Justice Statistics, 2015; Kim, Laurent, Capaldi, & Feingold, 2008). Approximately 33% of the college students who presented to US counseling centers last year reported experiencing interpersonal violence (CCMH, 2015b). Additionally, 20% of college women and 5% of college men are sexually assaulted while in college (Washington Post-Kaiser Family Foundation, 2015). Rates of crime and arrest also increase during emerging adulthood (Uniform Crime Reports, 2009), and the prevalence of AOD use and associated risk behaviors increases sharply during early adulthood (CDC, 2010; Johnston, O'Malley, Bachman, & Schulenberg, 2004). Emerging adults engage in AOD use and risky sexual behavior at rates higher than any other age group, and these risk behaviors are linked directly with interpersonal violence experiences (Campbell, Alhusen, Draughon, Kub, & Walton-Moss, 2011). Interpersonal violence victimization and engagement in risky behaviors are highly related to mental health concerns (Adams, Knopf, & Park, 2014; Brown et al., 2009; Nathanson, Shorey, Tirone, & Rhatigan, 2012), which represent one of the most common disruptions to emerging adult development.

Emerging adults, statistically, have the highest likelihood of developing a mental health disorder of any age group (SAMHSA, 2013). As adolescents transition into adulthood, they experience pervasive changes to both their context and expected social roles (Schulenberg, Sameroff, & Cicchetti, 2004). Coping strategies learned in childhood that were once highly adaptive may become defunct or even harmful to emerging adults' functioning, increasing their risk for mental health disorders (Schulenberg et al., 2004; Teyber & McClure, 2011). College students are often assumed to be a privileged

population, but the opportunity to pursue higher education does not free them of the risk for mental health disorders (Hunt & Eisenberg, 2010). Research suggests that the 12-month prevalence rates for mental health disorders are approximately the same for college students and their non-college-attending peers (Blanco et al., 2008). Consistent with this finding, 97% of US college counseling center directors nationwide reported a significant increase in the number of students presenting with serious mental health problems at their center (Gallagher, 2013). Partially because of this increase, mental health disorders among college students have been labeled as a public health concern (Zivin, Eisenberg, Gollust, & Golberstein, 2009).

The Center for Collegiate Mental Health (CCMH) focuses exclusively on college student mental health and compiles aggregate data from more than 139 counseling centers across the US each year (CCMH, 2015b). The CCMH's 2015-2016 Standardized Data Set (SDS) includes data from more than 140 US counseling centers representing up to 150,000 unique college students (sample size numbers vary; CCMH, 2017). For emerging adult students who sought help at one of these centers during the past year, 61% reported anxiety symptoms and 49% depressive symptoms; 26% endorsed engaging in non-suicidal self-injurious behaviors; 33% reported seriously considering suicide; 38% indicated that they experienced a traumatic event; and 27% reported concern about their alcohol or drug use (CCMH, 2017). These numbers are markedly above the national averages for adults living in the US (NIMH, 2005).

Given that an estimated 75% of lifelong mental health problems begin by age 24 (NIMH, 2005), the transition to adulthood is critical to the course of adult mental health and college campuses are the ideal location for implementing preventative and early

intervention targeting emerging adults' current and future functioning (Bechdolf et al., 2012; Johnston et al., 2004; Nordentoft, Jeppesen, Peterson, Bertelsen, & Thorup, 2009; Turrisi et al., 2009). University Counseling Centers (UCCs), in particular, are at the front lines of college student mental health. UCCs are accessible to many students because services are typically offered at no-cost (9% of UCCs utilized fee-based services during the 2014-2015 academic year) and promote positive outcomes (e.g., during the past academic year 71% of students utilizing UCC services reported a positive impact on their academic outcomes; (Reetz, Krylowicz, Bershad, Lawrence, & Mistler, 2015). The last decade has brought both increased symptom acuity and increased service utilization to UCCs across the country (Field, 2016). During the past six years alone, utilization of UCC services has grown by an average rate of 30%, which is more than five times the average rate of enrollment growth (CCMH, 2017). Unfortunately, this growth has not been met with matched increases in funding or staffing due to a variety of systemic problems (e.g., lack of office space, inability to fill contracts due to cost of living and/or lack of benefit packages, specialized positions requiring particular skillsets; Field, 2016). Triage systems, group therapy, and a brief therapy model have become the new normal at UCCs; whereas, in previous decades UCCs were able to provide longer-term individual therapy, when indicated, for the vast majority of students who sought support (Field, 2016). Despite changes and challenges, UCCs remain a hub of support for emerging adults managing common disruptions to development during the transition to adulthood.

In addition to the aforementioned disruptions common to many emerging adults, the extant literature reveals that the relationship between emerging adult development and risk for increased distress is even more pronounced for emerging adult survivors of

childhood trauma, with child abuse adding another layer of risk for emerging adults (Bradley et al., 2008; Heim & Nemeroff, 2001; McCauley et al., 1997). Although foundational research connecting the experience of childhood maltreatment to emerging adult developmental difficulties has been conducted, additional research is needed to better understand how various types of aversive childhood experiences impact emerging adult development. The influence of different types of childhood trauma on emerging adults' distress in a help-seeking setting is the focus of this study.

Childhood Trauma

The following section details the definition and scope of childhood trauma and provides additional information about the related constructs of complex childhood trauma, trauma severity, and trauma types.

Scope of Childhood Trauma

Several preeminent national studies on childhood trauma have been conducted in the past 30 years. Most notably, the Adverse Childhood Experiences (ACE) Study, which was conducted by the Centers for Disease Control and Prevention (CDC) and Kaiser Permanente. The ACE Study involved surveying more than 17,000 individuals from 1995 to 1997 about their experiences of childhood maltreatment (CDC, 2014; Felitti et al., 1998). More than 50 scholarly articles have been published using data from the ACE Study. Based on ACE Study results, the 10 most common traumatic childhood events are emotional, physical, and sexual abuse; emotional and physical neglect; witnessing partner violence, substance abuse, and/or mental illness in the home; parental separation or divorce; and having an incarcerated family member (Felitti et al., 1998). The National Survey of Children's Health (NSCH; 2011, 2012) revealed that nearly 35

million children in the US have experienced one or more of these childhood traumas, which translates to roughly half of the nation's children. Groups who experience social marginalization and oppression disproportionately experience trauma above and beyond this rate, including children with disabilities, those living in neighborhoods characterized by poverty, children with underemployed or unemployed parents, and those who are members of racial ethnic minority groups and/or who hold immigrant status (CDC, 2015; Chronister & Aldarondo, 2012; Chronister, Knoble, & Bahia, 2013; Hussey, Chang, & Kotch, 2006).

The immense scope of childhood trauma has been consistently highlighted in the extant literature as a major public health problem. The financial burden of untreated childhood trauma is estimated at approximately \$103 billion per year (Crusto, 2014). In addition to law enforcement, judicial, and child welfare costs (Crusto, 2014), this burden can largely be attributed to the relationship between trauma and maladaptive outcomes for children (Cohen et al., 2012; Cook et al., 2005). The impact of trauma on children's development varies greatly based on features of the trauma experience, with more negative developmental outcomes associated with more complex trauma (Cook et al., 2005; Kliethermes, Schacht, & Drewry, 2014). Complex trauma experienced during childhood tends to be associated with interpersonal violence revictimization and chronic mental and physical health problems across the life span (Desai, Arias, Thompson, & Basile, 2002; Fergusson, McLeod, & Horwood, 2013; Norman et al., 2012; Widom et al., 2008). In the next section, complex trauma is defined and discussed.

Complex Childhood Trauma and Its Impact on Development

Complex trauma involves stressors that are long-standing and/or chronic,

interpersonal in nature (i.e., that involve harm or abandonment by important others), and occur at critical developmental periods, such as early childhood (Ford & Courtois, 2009; Kliethermes et al., 2014). For trauma that occurs during childhood, complex trauma describes aversive experiences that hinder children's self-development and ability to trust important others (Cook et al., 2005; Ford & Courtois, 2009; Kliethermes et al., 2014). Based on this definition, child abuse, including physical, emotional, and sexual abuse are classified as complex traumas (Ford & Courtois, 2009). Prevalence rates for childhood complex trauma are consistently high for the general population (i.e., 22% for 1-year prevalence; 30% for lifetime prevalence) and even higher for marginalized groups, including children who are Black, from low-income backgrounds, and/or live in a single parent household (Finkelhor, Ormrod, & Turner, 2007; Turner, Finkelhor, & Ormrod, 2010). The experience of complex trauma during childhood is consistently associated with poorer outcomes across areas of development when childhood survivors of complex trauma are compared to their non-traumatized peers and to trauma survivors who experienced other types of traumatization (e.g., one-time car accident trauma; Briere, Kaltman, & Green, 2008; Cloitre et al., 2009; Cook et al., 2005; Ford, Wasser, & Connor, 2011; Hageraars, Fisch, & van Minnen, 2011; Kliethermes et al., 2014; Ogle et al., 2013; Wamser-Nanney & Vandenberg, 2013)

Cook (2005) identified seven domains of impairment commonly seen for children who have been exposed to complex trauma: (1) affect regulation: difficulty expressing and regulating emotions and/or communicating their wants or needs; (2) behavioral control: poor impulse control, aggressive or oppositional behavior, and/or sleep, eating, or substance use disorders; (3) dissociation: alterations in states of consciousness,

including depersonalization and/or derealization; (4) biology: somatization, sensorimotor problems, and/or increased medical problems; (5) attachment: interpersonal concerns, difficulty with perspective taking, and/or problems with boundaries; (6) cognition: learning delays, attention regulation concerns, and/or executive functioning difficulties, and (7) self-concept: lack of a consistent sense of self, guilt, and/or shame. A vast body of research suggests that developmental difficulties in these areas span childhood and follow a pattern of maladaptive developmental continuity wherein the experience of childhood trauma increases risk for similar negative outcomes during adulthood (e.g., Anda et al., 2007; Bradbury & Shaffer, 2012; Bradley et al., 2008; Cloitre et al., 2009; Connolly, 2014; Faulkner, Goldstein, & Wekerle, 2014; Felitti et al., 1998; Heim & Nemeroff, 2001; Huang et al., 2011; Lu et al., 2013; McCauley et al., 1997). The long-term consequences of childhood trauma often vary by severity and type of abuse (i.e., emotional, physical, sexual, multi-type). The next section summarizes what is known about the consequences of more severe trauma and certain types of child abuse.

Child Abuse Trauma Type, Severity, and Consequences

Individual experiences of and responses to trauma vary substantially, and as a result, scholars vary in their conclusion about the importance of differentiating trauma by type (Arata et al., 2005; Cohen et al., 2014; Higgins, 2004; Vranceanu, Hobfoll, & Johnson, 2007). This disagreement in the field is complicated by several decades of research that focused on childhood sexual abuse (e.g., Briere & Runtz, 1993; Neumann, Houskamp, Pollock, & Briere, 1996; Paolucci, Genuis, & Violato, 2001) to the exclusion of other types of child abuse, including multi-type abuse (Norman et al., 2012; Vranceanu et al., 2007). More current research shows that children who experience one type of

abuse are likely to experience other types as well (Edwards, Probst, Rodenhizer-Stampfli, Gidycz, & Tansill, 2014; Finkelhor et al., 2007; Richmond, Elliott, Pierce, & Alexander, 2009), and the study of multi-type child abuse has increased substantially (e.g., Ford et al., 2011; Richmond et al., 2009). Multi-type abuse is typically considered more severe than single-type abuse (Elliott, Alexander, Pierce, Aspelmeier, & Richmond, 2009).

Trauma severity increases when the invasiveness and frequency of the trauma experienced increases (Evans, Steel, & DiLillo, 2013). Although complex trauma is inherently chronic in nature, there are variations with regard to the invasiveness and frequency of child abuse. For example, sexual abuse that involves intercourse is considered more severe than sexual abuse that involves inappropriate touching, and emotional abuse that occurs on daily basis is considered more severe than emotional abuse that occurs on a monthly basis (Evans et al., 2013). Empirical findings suggest that increased severity across childhood emotional, physical, and sexual abuse is associated with more negative long-term consequences (Evans et al., 2013; Schenkel, Spaulding, DiLillo, & Silverstein, 2005; Schwandt, Heilig, Hommer, George, & Ramchandani, 2013; Young, Riggs, & Robinson, 2011; Zink & Stevens, 2009).

Personal narratives of trauma are culturally and contextually laden, making the severity of childhood trauma difficult to measure using standardized self-report measures. Despite the multifaceted nature of trauma severity, assessing polyvictimization, or the number of trauma types an individual is exposed to, offers researchers and clinicians a way to quantitatively measure trauma severity (Turner et al., 2010). Scholars today tend to focus on trauma severity more commonly than type; however, to properly assess polyvictimization, abuse type must also be taken into account (Clemmons, Walsh,

DiLillo, & Messman-Moore, 2007). To facilitate increased awareness of their similarities and differences, each of the aforementioned abuse types, including multi-type abuse, are detailed in the following sections.

Childhood emotional abuse. Childhood emotional abuse has received significantly less empirical attention than physical and sexual abuse; however, extant research reveals long-term consequences similar to other types of abuse. Emotional abuse involves psychological or emotional injury to a child as assessed by significant changes in the child's behavior, emotional response, or cognition (e.g., isolating or insulting a child; Child Welfare Information Gateway [CWIG], 2014). For adults, 13% of women and approximately 8% of men report experiencing childhood emotional abuse (CDC, 2014b). It is fairly rare to experience childhood emotional abuse in isolation; rather, experiences of emotional abuse tend to occur with other abuse types (Arata et al., 2005). Severe alcohol dependence and drug use, anxiety, depression, risky sexual behavior, and suicidality amongst survivors are some of the consequences associated with emotional abuse (Norman et al., 2012; Schwandt et al., 2013).

Childhood physical abuse. Childhood physical abuse is typically defined as non-accidental physical injury to a child, and in many states this definition also includes threats of harm and circumstances that create significant risk for harm (e.g., striking, kicking, or burning a child; CWIG, 2014). The US prevalence rate for childhood physical abuse is 28.3%, and it is the most common type of child maltreatment reported (CDC, 2014b). It should be noted that physical abuse is typically more identifiable than emotional abuse and often less stigmatized than sexual abuse. Consequently, individuals may be more likely to report physical abuse experiences, potentially explaining, in part,

the higher prevalence rates in comparison to other abuse types (Feiring, Simon, & Cleland, 2009; Pillado, Kim, & Dierkhising, 2010). More men (i.e., approximately 30%) report experiencing child physical abuse than women (i.e., 27%; CDC, 2014). Childhood physical abuse is associated with survivors' experiences of depression, anxiety, and eating disorders; increased delinquent behaviors, sexual partners, suicidal ideation and attempts; medical diagnoses; and decreased self-esteem (Arata et al., 2005; Norman et al., 2012; Springer, Sheridan, Kuo, & Carnes, 2007).

Childhood sexual abuse. Childhood sexual abuse can involve rape, molestation, prostitution, and the creation of pornographic content that involves a child (CWIG, 2014). More than 20% of US children have experienced childhood sexual abuse (CDC, 2014b). Women tend to experience childhood sexual abuse at higher rates than men (i.e., approximately 25% and 16%, respectively; (CDC, 2014b; MacMillan, Tanaka, Duku, Vaillancourt, & Boyle, 2013). Childhood sexual abuse has received the most scholarly attention and the array of consequences associated with this abuse type are well established (e.g., Saywitz, Mannarino, Berliner, & Cohen, 2000). Survivors of childhood sexual abuse report greater engagement in sexual risk behaviors, suicidal ideation, and past suicide attempts when compared to trauma survivors who experienced emotional abuse (Arata et al., 2005; Fergusson et al., 2013). Additionally, childhood sexual abuse is associated with a range of other mental health disorders (e.g., depression, anxiety, substance dependence) and decreased socioeconomic well-being and physical health for survivors (Fergusson et al., 2013). In addition to the consequences associated with single-type abuse, the increased severity typically ascribed to multi-type abuse significantly impacts the longevity and seriousness of posttraumatic consequences.

Multi-type abuse. Although multi-type abuse is not traditionally classified as a type of child abuse trauma, conceptual and empirical evidence indicate that it represents a unique type of trauma that is categorically different from emotional, physical, or sexual abuse in isolation (Elliott et al., 2009; Finkelhor et al., 2007; Turner et al., 2010). Consistent with its use as a proxy for trauma severity, the experience of polyvictimization is associated with increased symptom severity and decreased developmental success across the life span (Elliott et al., 2009; Finkelhor et al., 2007; Ford et al., 2011; Richmond et al., 2009; Turner et al., 2010). This link holds true even when “poly-victims” are compared to children who experienced one type of the same kind of maltreatment repeatedly (e.g., repeated physical single-type abuse; Finkelhor et al., 2007). Because of the importance of multi-type trauma on developmental outcomes, studies that focus on a single type of aversive experience, even when that experience is considered a complex trauma (e.g., single-type sexual abuse), may underestimate the impact multi-type trauma has on development (Turner et al., 2010). Further, it has been suggested that experiencing single-type abuse is less common than historically theorized (Arata et al., 2005). For instance, given the betrayal and fear associated with sexual and physical abuse, it could be argued that most survivors of these types of trauma also experienced emotional abuse. The use of multi-type trauma as an additional trauma type has the potential to provide a more contextual characterization of childhood trauma.

In sum, complex trauma that occurs during childhood presents the greatest risk for individuals long-term (Hagenaars et al., 2011) and has the potential to impact multiple aspects of functioning over time (Arata, 2004; Cook et al., 2005; Lowell, Renk, & Adgate, 2014; Lu et al., 2013; Lynch, Waite, & Davey, 2013; Southerland et al., 2009;

SAMHSA, 2013). Complex childhood traumas vary by type and severity, with more significant problems associated with multi-type trauma that is more frequent and/or invasive (Elliott et al., 2009; Evans et al., 2013). By assessing multi-type trauma as an additional trauma type, researchers and clinicians may be able to better capture the nuance of trauma and its impact.

Although the impact of childhood trauma on development tends to vary based on contextual factors, adequately addressing maladaptive developmental cascade requires researchers and clinicians to have a strong understanding of various stages of development. Emerging adulthood represents the life stage that currently is least understood by researchers who have focused on the effects of childhood trauma.

Childhood Trauma and Emerging Adult Development

The relationship between childhood trauma and maladaptive development has been consistently replicated; however, most observations of decreased functioning have been documented with children and adolescents (e.g., Cook et al., 2005; De Bellis & Zisk, 2014; Maguire et al., 2015; Rosenkranz, Muller, & Henderson, 2013; Spinazzola et al., 2014). The vast majority of the extant literature that considers adult outcomes following childhood trauma focuses on the important, albeit limited, connection between childhood maltreatment and adult outcomes either by linking childhood experiences to developmental stages beyond emerging adulthood or by using emerging adulthood as a proxy for later stages of development (e.g., surveying emerging adults, but drawing conclusions about middle or older adulthood; Chu, Williams, Harris, Bryant, & Gatt, 2013; De Bellis & Zisk, 2014; Lynch et al., 2013). Given that the areas of functioning influenced by childhood trauma are the same areas in which developmental growth is

expected during emerging adulthood, cascading cumulative effects for adult survivors of childhood trauma appear not merely possible, but probable.

Scholars have yet to identify individual characters, or clusters of characteristics, that predict emerging adult survivors' successful or unsuccessful negotiation of developmental tasks and outcomes (Connolly, 2014). Instead, maladaptive outcomes are likely to present in some domains of functioning, and resilience is likely to be identified in other areas. For example, many emerging adults with trauma histories tend to be high achieving academically. This indicates that academic achievement is an area of relative strength and resilience for many emerging adult survivors of child maltreatment; however, this strength does not necessarily decrease their cumulative risk for other maladaptive outcomes (Connolly, 2014).

Many of the primary areas of functioning in which there are peaks of growth during emerging adulthood have been implicated in the extant literature as related to childhood trauma (Connolly, 2014; Paradis & Boucher, 2010; Rinne-Albers, van der Wee, Lamers-Winkelmann, & Vermeiren, 2013; Sujan, Humphreys, Ray, & Lee, 2014). These areas include, neurobiology, mental health, interpersonal relationships, and career development. Scholars have not yet dedicated the same attention to investigating the impact of childhood trauma on emerging adult development and functioning; thus, the extant research is limited in these areas.

Neurobiology

The human brain reaches maturity at the end of emerging adulthood (e.g., Giedd, 2004). The prefrontal cortex has been most extensively studied with regard to emerging adult neural development; it facilitates increased emotion regulation, impulse control, and

problem solving as the brain matures (Simpson, 2008). Early maltreatment experiences are associated with altered neurobiology (Carrion & Wong, 2012; Northrop & Berkowitz, 2015). Lu and colleagues (2013) suggest that childhood trauma is related to decreased white matter integrity in adulthood, which is key to healthy brain functioning. The effect of trauma on white matter integrity remains evident even in the absence of current medical or psychological symptoms (Lu et al., 2013). It is hypothesized that childhood maltreatment over stimulates brain development wherein neurons are lost too quickly causing lasting changes to brain function and structure (Rinne-Albers et al., 2013). When emerging adults enter the final stages of brain development with decreased neural pathways, it is unlikely that their prefrontal cortex will be as mature as expected. Early life trauma has also been associated with changes to the amygdala, which impacts emotion regulation (Grant et al., 2014). Finally, childhood trauma has been associated with both exaggerated and blunted cortisol activity, which directly impacts emerging adults' stress response (Carpenter et al., 2007; Carpenter, Shattuck, & Price, 2011; Hagan, Roubinov, Mistler, & Luecken, 2014; Luecken, Kraft, & Hagan, 2009; Southerland et al., 2009). The association between trauma and neurobiology may partially account for the increased vulnerability for the development of mental health disorders amongst individuals with maltreatment histories (Grant et al., 2014; Lu et al., 2013).

Mental Health

Of all aspects of emerging adult development, the connection between childhood maltreatment and negative emerging adult mental health outcomes has received the most empirical attention. Approximately 45% of young adults with a trauma history are

diagnosed with a mental health problem (Southerland et al., 2009), which is more than double the national 12-month estimate for adult mental disorder prevalence (18.6%; SAMSHA, 2013). The severity of childhood trauma is positively related to mental health concerns, such that individuals with more severe trauma histories experience more acute psychological symptoms (Hovens et al., 2010). Additionally, stress reactivity plays a moderating role in the relationship between childhood trauma and emerging adult mental health (Hagan et al., 2014). Exaggerated cortisol response has been associated with increased internalizing problems and blunted cortisol response with increased externalizing problems in emerging adults with childhood trauma histories (Hagan et al., 2014).

Childhood trauma is strongly associated with adult depression and predicts stable and acute depressive symptoms for individuals with a history of depression and increased depressive symptoms for previously asymptomatic emerging adults (Frye & Liem, 2011b; Goldstein, Faulkner, & Wekerle, 2013; Grant et al., 2014). Childhood maltreatment is also associated with young adult risk behavior, including greater numbers of sexual partners, substance use, dating violence, delinquency, trait impulsivity, non-suicidal self-injurious behaviors, and suicidality (Arens, Gaher, Simons, & Dvorak, 2014; Faulkner et al., 2014; Sujan et al., 2014; Walsh, Lutzman, & Lutzman, 2014). For emerging adults, childhood trauma was associated with a 96% increase in drug-related problems above and beyond their adolescent drug use (Huang et al., 2011). Because one of the most common sequelae for mental health disorders is decreased interpersonal functioning, the impact of childhood trauma often extends from mental health to socio-emotional well-being.

Interpersonal Relationships

Although the effect of childhood trauma on interpersonal functioning has been increasingly researched (e.g., Reyome, 2010a, 2010b) and identified as the aspect of development most strongly influenced by childhood trauma (Connolly, 2014; Elliott et al., 2009), very little extant research focuses on emerging adult relationships. More sophisticated emotion regulation during emerging adulthood facilitates more meaningful relationships and vice versa (Bradbury & Shaffer, 2012; Lowell et al., 2014). Distinctive social cognitive advances that occur from adolescence to emerging adulthood result in more complex interpersonal relationships (Arnett, 2006b); however, childhood trauma is associated with decreased functioning across interpersonal domains, including attachment formation, emotion regulation, relationship satisfaction, reciprocity, affection, and the ability to develop a coherent sense of self (Abraham & Stein, 2012; Feiring, 2005; Paradis & Boucher, 2010; Seiffge-Krenke, 2003). Kapeleris and Paivio (2011) proposed that childhood trauma decreases emotion regulation and self-identity development such that intimate relationships are feared and secure attachments are avoided during adulthood. Similarly, Bradbury and Shaffer (2012) found that childhood emotional maltreatment was linked with decreased satisfaction in romantic relationships and that emotion dysregulation served as the pathway linking childhood emotional maltreatment to emerging adult interpersonal fulfillment. Although several scholars have empirically investigated the relationship between childhood trauma and emerging adult interpersonal functioning, no researchers have explored the relationship between childhood trauma and career development, one of the most salient developmental tasks associated with emerging adulthood.

Career Development

The transition to adulthood includes significant career development exploration. The vast majority of emerging adults hold high expectations related to their educational and occupational paths; simultaneously, most experience significant instability with regard to school and work (Arnett, 2006b). Scholars have seldom explored the associations between childhood maltreatment and adult employment. Of the extant research, findings reflect a negative relationship between childhood trauma and career development. For example, a longitudinal study of 397 homeless adults with trauma histories revealed an association between maltreatment and decreased participation in employment (Tam, Zlotnick, & Robertson, 2003). Most recently and robustly, Zielinski (2009) examined the relationship between childhood trauma and adult employment among 5,004 participants. Zielinski's results indicated that participants who experienced childhood maltreatment were approximately twice as likely as their non-maltreated peers to (1) be unemployed at the time of data collection, (2) to fall beneath the federal poverty line, (3) to have someone in their household lose a job within the previous 12 months, and (4) to be in the lowest 25% of the sample with regard to income (Zielinski, 2009). Despite the limited extant research, preliminary investigations suggest that the experience of childhood trauma may negatively influence career development and employment trajectories over time. Although the aforementioned impact on emerging adult functioning appears formidable, not all emerging adults with trauma histories experience poor health and adjustment outcomes.

Post-Trauma Resilience

Several protective individual and contextual factors that increase successful

adaptation after childhood trauma have been identified, including: self-identification as a woman, internal locus of control, self-compassion, secure attachment, above average cognitive ability, stable childhood home life (i.e., living in the family home or long-term foster care placement), perceived social support and economic resources, self-disclosure, and access to a secure attachment figure (Cicchetti, 2013; Cook et al., 2005; DuMont et al., 2007; Glenn, 2014; Luecken & Gress, 2010; McGloin & Widom, 2001; Ungar, 2013; Vettese, Dyer, Li, & Wekerle, 2011). A meaning-focused, coherent, and positive worldview; coherent understanding of the trauma experience; and resources to manage stressors, including a supportive partner, are factors specifically associated with emerging adult resilience following childhood trauma (DuMont et al., 2007; Glenn, 2014).

For emerging adult survivors of childhood trauma pursuing higher education, a heterogeneous pattern of resilience wherein academic success co-occurs with problematic mental health and interpersonal outcomes tends to be the most common resilience profile (Connolly, 2014; Elliott et al., 2009). The unique developmental tasks associated with emerging adulthood may facilitate this profile. For example, DuMont and colleagues (2007) empirically explored adolescents' and emerging adults' resilience after childhood trauma and found that based on an eight-domain operational definition of resilience, 50% of the sample ($n = 676$) was deemed resilient during adolescence; however, only 30% of the sample was deemed resilient during emerging adulthood. The transition to emerging adulthood may increase stress, and in turn, decrease adaptive coping and increase the risk of revictimization; thus, it is vital to explore known aspects of resilience most readily accessible to emerging adults (e.g., supportive friends and/or family, therapeutic support).

The opportunity for emerging adult posttraumatic growth. As adolescents move into emerging adulthood and are expected to explore their identities and live, work, and form relationships autonomously, trauma-informed coping strategies often become less adaptive, and emerging adults may become more likely to appraise their childhood experiences as abuse (Goldsmith, Freyd, & DePrince, 2009; Teyber & McClure, 2011). Concurrently, emerging adults' perceptions of childhood abuse may be complicated by their experience of instability and desire/need for continued support from caregivers, which increases the likelihood that they will internalize their experiences of childhood abuse (Arnett & Tanner, 2006; Springer et al., 2007). Internalization of abuse histories increases emerging adults' risk for psychological problems, particularly anxiety and depression (Briere, 1992; Springer et al., 2007). Despite this increased risk, reappraisals of trauma experiences and increases in psychological distress tend to increase the likelihood that emerging adult trauma survivors will seek out support (Brown & Freyd, 2008; Goldsmith et al., 2009; Wekerle et al., 2001).

In sum, emerging adult's ability to self-label their childhood experiences as trauma in a context away from their abuse and/or abusers (e.g., college) is likely to increase their experience of psychological distress, and subsequently, their help-seeking behaviors. By seeking support, emerging adults have the opportunity to process their trauma, learn new coping strategies, and positively impact their short- and long-term well-being (Brown & Freyd, 2008; Goldsmith et al., 2009; Wekerle et al., 2001). Thus, emerging adulthood is a key developmental stage at which to promote posttraumatic resilience by exploring childhood trauma and related aspects of distress with emerging adults who have experienced child maltreatment. College campuses provide an

opportune context to provide emerging adults with prevention and intervention services. Emerging adult survivors of childhood trauma regularly present to UCCs. Of approximately 30,000 students who presented to UCCs across the country during the 2015-2016 academic year, CCMH found that 45.9% reported childhood emotional abuse, 20.4% childhood physical abuse, 17.4% childhood sexual abuse (2017). Unfortunately, there is little extant research that provides UCC clinicians with evidenced-based interventions for treating emerging adult survivors of childhood trauma, particularly using a brief therapy model.

Study Purpose

The purpose of this dissertation study was to use a non-experimental, quantitative descriptive study design to examine how emerging adult distress is associated with childhood trauma type for a sample of help-seeking emerging adult college students with complex childhood trauma histories. Extant student client data collected by the UO-UCTC was used to meet study objectives. Participants were college students, ages 18-25, who sought mental health services from the UO-UCTC and who endorsed childhood trauma experiences on their intake questionnaire. Only data from participants' initial appointment at the UO-UCTC were utilized. The following research questions were examined:

Research Question 1: What types of trauma (i.e., emotional, physical, sexual, or multi-type abuse), self-reported psychological symptoms (e.g., depression, generalized anxiety) and aspects of distress (e.g., family distress, substance use) are most commonly reported by emerging adult survivors of childhood trauma seeking treatment at a university counseling center?

Research Question 2a: What clusters of symptoms, or symptom groups, exist for emerging adult survivors of childhood trauma seeking treatment at a university counseling center?

Research Question 2b: Is the type of childhood trauma (i.e., emotional, physical, sexual, or multi-type abuse) emerging adult survivors self-report related to the symptom group to which they are assigned?

Research Question 3: Do the type of self-reported psychological symptoms e.g., depression versus generalized anxiety) and/or aspects of distress (e.g., academic distress versus substance use) endorsed by emerging adult survivors of childhood trauma seeking treatment at a university counseling center vary by childhood trauma type (i.e., emotional, physical, sexual, or multi-type abuse)?

It was hypothesized that there would be no significant differences in reported psychological symptoms or aspects of distress for the three traditionally implicated trauma types (i.e., emotional, physical, and sexual abuse). Although the literature is mixed with regard to the utility of differentiating abuse by type (Arata et al., 2005; Cohen et al., 2014; Higgins, 2004; Vranceanu, Hobfoll, & Johnson, 2007), the majority of recent research points to greater similarities, rather than differences, between the outcomes associated with three trauma types (Clemmons et al., 2007; Edwards et al., 2014). It was hypothesized that there would be greater variability in reported psychological symptoms and aspects of distress for the polyvictimized group because multi-type abuse implies greater trauma severity (Ford et al., 2011). This group was expected to report distress levels consistent with higher-risk mental health concerns (e.g., suicidal and/or violent

ideation, substance use, disordered eating) more frequently than individuals who reported single-type abuse.

Research Question 4: Does the severity of self-reported psychological symptoms (e.g., mild, moderate, or severe depression) or distress (e.g., mild, moderate, or severe academic distress) endorsed vary by childhood trauma type (i.e., emotional, physical, sexual, or multi-type abuse) for emerging adult survivors of childhood trauma seeking treatment at a university counseling center?

It was hypothesized that multi-type abuse, would be associated with more severe psychological symptoms and distress and the experience of a single-type abuse would be related to less severe self-reports (Edwards et al., 2014; Ford et al., 2011; Hovens et al., 2010; Richmond et al., 2009). It was expected that this relationship would be consistent across all aspects of psychological functioning and aspects of distress.

CHAPTER III

METHODS

Participants

The current study involved analysis of extant data collected by the University of Oregon Counseling and Testing Center (UO-UCTC). Participant inclusion criteria for this study were (a) participants had to be 18-25 years old at the time of intake; (b) participants had to complete the UO-UCTC psychological intake questionnaire, Counseling Center Assessment of Psychological Symptoms – 62 (CCAPS-62; Locke et al., 2011), and UO-UCTC informed consent document; (c) participants had to self-report on the UO-UCTC intake questionnaire an experience of one or more types of childhood trauma; and (d) participants had to self-elect to attend the intake appointment at the UO-UCTC (as opposed to being mandated for services). Information regarding participant's participation in therapy after their intake appointment was not available within the current dataset. The current study sample included students aged 18 to 25 years, who sought services from the UO-UCTC from October 2014 to October 2016. During this time period, 1263 students completed the UO-UCTC intake paperwork. Of those students, 456 endorsed experiences of childhood trauma. Original data for 16 participants were removed because participants reported that they were mandated to attend counseling, and an additional 6 participants were removed due to excessive missing data. The current study included 434 UO-UCTC student participants ($n = 294$ women, $n = 109$ men, $n = 31$ other gender), which represented 34.4% of all emerging adult students who presented to the UO-UCTC during the time frame under study.

Normative Group

Because of the unique composition of the current selected sample (i.e., emerging adult survivors of childhood trauma attending an institution of higher education), several normative groups were considered for the present study. The CCMH's 2015-2016 Standardized Data Set (SDS) was chosen as the normative group given its inclusion of CCAPS data and primary focus on emerging adult college students. Additionally, a large portion of the sample endorsed experiencing childhood trauma (e.g., 45.9% endorsed experiencing childhood emotional abuse). This SDS includes over 150,000 unique college students; however, sample size numbers vary (CCMH, 2017).

Measures

Trauma history, demographics, and help-seeking. Information about participants' personal identities was gathered using the UO-UCTC intake questionnaire. This questionnaire includes 92 items. All students complete the questionnaire on a computer in the UO-UCTC lobby, which takes approximately 10 minutes to complete. Information solicited includes the following: personal demographics and identities, reasons for help seeking, academic status, extracurricular activities, housing, trauma history, and risk behaviors (e.g., substance abuse, non-suicidal self-injury). Additional information about social support, past therapy experiences, and interpersonal violence victimization was also gathered with this questionnaire. For the vast majority of questions, participants have the opportunity to choose from a drop down menu and/or type in their own response. Other questions require students to check boxes to indicate which responses are accurate for them, including those about traumatic experiences and substance use. Participants are able to check multiple boxes for experiences of childhood

trauma (i.e., emotional abuse, physical abuse, sexual abuse, or any combination of those three abuse types). A full list of questions included in the UO-UCTC intake questionnaire is included in Appendix A.

Psychological symptoms and aspects of distress. The Counseling Center Assessment of Psychological Symptoms – 62 (CCAPS-62; Locke et al., 2011; see Appendix B) was used to gather information about participants' distress. The CCAPS-62 is the most current long-version of the CCAPS-62. The CCAPS-62 was designed as a free and clinically informative measure for use in college counseling centers (CCMH, 2015a). It has multiple uses within the college counseling center setting, including as an intake screening measure for psychological symptoms (McAleavey et al., 2012). The measure is comprehensive, sensitive to low-range distress, and includes family- and academic-related questions. The CCAPS-62 includes eight subscales: Depression, Generalized Anxiety, Social Anxiety, Academic Distress, Eating Concerns, Family Distress, Hostility, and Substance Use. The CCAPS-62 takes approximately seven to ten minutes to complete (CCMH, 2015a) and asks, "How well each statement describes you during the past two weeks?" Participants may respond using a Likert-type scale ranging from 0 (*not at all like me*) to 4 (*extremely like me*; Locke et al., 2011). Higher scores are indicative of greater distress. Raw scores are averaged for each of the eight subscales included on the CCAPS-62 (see below for greater detail about each subscale). These raw subscale scores are often converted into percentile scores to increase interpretability for clinicians. Due to the multi-dimensional structure of the instrument, the CCAPS-62 does not utilize a total score (CCMH, 2010). Instead, the Distress Index (DI) provides an overall measure of client psychological distress by averaging the raw scores from several

subscales. The DI was created using a bifactor model that targeted items related to a general factor and a subscale-specific factor. Analyses indicated that the bifactor model was a better fit than a simple total score (CCMH, 2015a). The DI does not include items from the Eating Concerns, Family Distress, and Hostility subscales; thus, its interpretability is limited and the CCMH cautions researchers and clinicians alike to carefully examine all CCAPS-62 subscales in addition to the DI (2015a).

Current norms for the CCAPS-62 are based on 233,615 college students who sought therapeutic services from colleges across the US during the 2012-2014 academic years (CCMH, 2015a, 2015b; Locke et al., 2011). Current norms for the CCAPS-62 are based on 233,615 college students who sought therapeutic services from colleges across the US during the 2012-2014 academic years (CCMH, 2015a, 2015b; Locke et al., 2011). The majority of the general sample identified as women ($n = 62.8\%$) and White ($n = 71.2\%$) and participants ranged in age from 18 to 60 years ($M = 22.59$). Academic status was fairly evenly distributed within the general sample ($n \approx 20\%$ for freshman through senior students) with the exception of graduate students, who comprised only 15.6% of the sample. Across several studies using the CCAPS-62 with samples of college students, scholars have found that the assessment has strong psychometric properties (Locke et al., 2011; McAleavey et al., 2012). Internal consistency coefficients for the CCAPS-62 subscales range from 0.78 to 0.91 for a sample of over 22,000 college students at more than 135 colleges, which fall into the acceptable to very good categories for Cronbach's α (Locke et al., 2011). Convergent validity scores have consistently indicated that the CCAPS-62 subscales accurately measure their intended constructs (Locke et al., 2011; McAleavey et al., 2012). Two-week test-retest reliability were

sufficient for all subscales of the CCAPS-62, ranging from 0.76 to 0.92 for a sample of 117 help-seeking undergraduates, with the Depression subscale revealing the highest test-retest reliability coefficients at one-week and two-week administrations (Locke et al., 2011).

Psychometric data from the CCMH Interpretative Manual for each of the eight subscales as well as the Distress Index is provided below (CCMH, 2015a). The Depression subscale includes 13 items, $M = 1.58$, $SD = 0.93$, $\alpha = .91$. Sample items include: *“I have thoughts of ending my life”*, *“I feel disconnected from myself”*, and *“I feel sad all the time.”* The Generalized Anxiety subscale includes 9 items, $M = 1.60$, $SD = 0.92$, $\alpha = .85$. Sample items include: *“I feel tense”*, *“I experience nightmares or flashbacks”*, and *“My thoughts are racing.”* The Social Anxiety subscale includes seven items, $M = 1.81$, $SD = 0.95$, $\alpha = .84$. Sample items include: *“I am concerned that other people do not like me”*, *“I become anxious when I have to speak in front of audiences”*, and *“I feel self conscious around others.”* The Academic Distress subscale includes five items, $M = 1.85$, $SD = 1.02$, $\alpha = .82$. Sample items include: *“It’s hard to stay motivated for my classes”*, *“I am not able to concentrate as well as usual”*, and *“I am unable to keep up with my schoolwork.”* The Eating Concerns subscale includes nine items, $M = 1.81$, $SD = 0.95$, $\alpha = .84$. Sample items include: *“I feel out of control when I eat”*, *“I diet frequently”*, and *“I am dissatisfied with my weight.”* The Family Distress subscale includes 6 items, $M = 1.28$, $SD = 0.96$, $\alpha = .83$. Sample items include: *“I get sad or angry when I think of my family”*, *“There is a history of abuse in my family”*, and *“I wish my family got along better.”* The Hostility subscale includes 7 items, $M = 1.04$, $SD = 0.87$, $\alpha = .86$. Sample items include: *“I have difficulty controlling my temper”*, *“I feel*

irritable”, and “*I have thoughts of hurting others.*” The Substance Use subscale includes six items, $M = .76$, $SD = 0.87$, $\alpha = .84$. Sample items include: “*I use drugs more than I should*”, “*I drink more than I should*”, and “*When I drink alcohol I can’t remember what happened.*” Psychometrics for the Distress Index, which was used for research questions 2a and 2b, is as follows: $M = 1.64$, $SD = 0.84$, $\alpha = .92$. This variable averages the scores from 20 different items across subscales to assess respondents’ overall level of distress (CCMH, 2012, 2015a).

CCAPS-62 results include raw and standardized scores. Scores on each of the eight subscales include clinical cut-off points that are used as interpretive thresholds (CCMH, 2015a). Scores on these subscales can, therefore, be interpreted as categorical or continuous variables. Scores above the cut-point for any given subscale would signify membership in the symptomatic category rather than the asymptomatic category. Alternatively, scores are interpreted as continuous when the severity of symptoms is under investigation (i.e., how far above or below the interpretative threshold the score falls). For this study categorical interpretation of variables was used for research question 3 and continuous interpretation for research question 4.

Procedures

Prior to beginning treatment at the UO-UCTC, all clients complete clinical intake questionnaires on computers located in the UO-UCTC lobby. Clients are checked in and shown to a computer by a member of the UO-UCTC front desk staff. The intake questionnaire includes four sections: informed consent, intake questionnaire, CCAPS-62 assessment, and a class schedule. The informed consent document (see Appendix C) notifies students that “the information [they] provide may be used in aggregate form, i.e.

all information uniquely identifying any individual is removed, for the purposes of maintaining accurate statistics and conducting research.” On average, the intake questionnaire takes students 20-25 minutes to complete and no compensation for completing the intake questionnaire is provided. After students complete the intake questionnaire, they meet with a therapist to talk further about their presenting concerns and to discuss their responses to the intake questionnaire and experience of completing the questions. Students’ responses to the intake questionnaire are stored electronically in each student’s confidential case file located on a secure, internal, encrypted computer software management program, Titanium. Anonymous, aggregate data reports can be derived from these surveys using Titanium. At the UO-UCTC, Titanium is used to generate score reports, which include raw and percentile scores, for the CCAPS-62 assessment. All dissertation data were pulled from Titanium; no other sources of data were used.

No recruitment methods were used for any of the current study student data. The current data set was created and de-identified by a UO-UCTC assessment administrator. The project was deemed “minimal risk” and found exempt by the UO Institutional Review Board review on October 30th, 2015 (see Appendix D).

Data Analyses

Preliminary Analyses

Data were screened for inclusion criteria and cleaned prior to conducting the main study analyses. Preliminary analyses included descriptive statistics, frequency distributions, histograms, box plots, and bivariate correlations to provide context for the interpretation of significance of results (Field, 2013; Keppel & Zedeck, 1989). Data were

screened for irregular score distributions and missing data to ensure fit with statistical assumptions, which vary by statistical test but for present study analyses include linearity, homogeneity, independence of error, and/or normality (Field, 2013). All analyses were conducted with R version 1.0.136 for Macintosh computers (R Core Team, 2016).

Main Study Analyses

Research question 1. To answer research question 1, descriptive analyses were used to identify what types of trauma, psychological symptoms, and aspects of distress were most commonly reported by participants. Cross tabulation analyses were used to identify differences in reports based on relevant demographics.

Research question 2a. To answer research question 2a, finite mixture modeling (e.g., latent class analysis) was utilized. Finite mixture modeling is an exploratory technique used to find “clusters” of observations that have similar patterns of response across a set of variables; it minimizes differences within clusters and maximizes differences between clusters (Pastor, Barron, Miller, & Davis, 2007). For example, in a study like this, clusters with high, moderate, and low symptom reports may be found. The Bayesian information criterion (BIC) was utilized to assess model fit with different numbers of clusters. In addition to the BIC value, interpretability of results was assessed to determine the appropriate number of symptom clusters for the current sample.

Research Question 2b. To answer research question 2b, a Chi-squared test of independence was utilized. Cross tabulation analyses were used to interpret the nature of the Chi-squared test results. For example, if latent symptom group and experienced trauma type were not independent, it may be that a cluster reporting high symptoms were

more likely to have experienced multi-type childhood trauma, given that it is typically deemed more severe.

Research question 3. To answer research question 3, logistic regression was used to assess the strength of the relationship between distress and trauma type(s). Distress was treated as a categorical variable for this research question, with participants who endorsed concerns above the normative threshold for any given psychological symptom category or aspect of distress given group membership and those who fell below that threshold not given membership. Separate analyses by type of symptom and aspect of distress as well as overall distress were conducted for nine different models.

The data included participants' endorsement of three different kinds of childhood trauma (i.e., emotional, physical, and sexual). Many participants reported experiencing more than one type of trauma, potentially complicating the assessment of a relationship between any individual trauma type and distress outcomes. Although the most straightforward approach would seem to be to treat the three types of trauma (i.e., physical, emotional, and sexual) as separate effects and use stepwise regression modeling to test the predictive power of all two-way and three-way interaction terms above the main effects of each trauma type, the uneven distribution of reported trauma made this fine-grained analysis impossible. Although some patterns of multi-type trauma were relatively common (e.g., physical and emotional: $n = 84$; physical, sexual and emotional: $n = 36$), the combination of physical and sexual trauma without reported emotional trauma was so rare ($n = 3$) as to make estimation of a model including that category intractable. To circumvent this issue, trauma type was recoded into a single variable that included every reported pattern of experienced trauma types, with the exception of

physical and sexual trauma, which was instead included with the physical, emotional, and sexual trauma group. This decision was made under the assumption that physical and sexual trauma without the presence of emotional trauma would be unlikely; further, it is too rare in this dataset to estimate separately from the combined effects of all three types. Although this recoded trauma type variable does not allow for the fine-grained analysis of the three types of trauma as separate effects with interactions, it does preserve the ability to compare each of the individual trauma types with each other and with each reported combination of trauma types. All reported analyses use this combined trauma type variable.

Research question 4. To answer research question 4, multivariate analysis of variance (MANOVA) was conducted to explore the strength of the relationships between variables. Continuous standardized scores for each of the eight aspects of distress were used as the outcome variables in the analyses, with trauma type as the predictor. Univariate ANOVAs were used to follow up on significant effects in the multivariate model for each of the eight subscales and the distress index to further explore the relationships between psychological symptom severity and trauma type(s).

CHAPTER IV

RESULTS

Missing Data

Data were analyzed for missingness. Of the original 456 participants, six were removed because there was an excessive amount of missing data for CCAPS-62 items that made participants' data uninterpretable for the current study (i.e., at least one subscale was completely missing data). All of the reported analyses excluded these three cases. Total missingness for the current sample was 4%.

Descriptive Data

Trauma types. Participants were able to select multiple answers for the types of trauma they experienced, and as a result, there were seven trauma types initially examined with descriptive analyses (i.e., single-type traumas, emotional, physical, and sexual and multi-type traumas, emotional-physical, emotional-sexual, physical-sexual, and emotional-physical-sexual). Results revealed that the cell size for physical-sexual trauma was very low ($n = 3$). In order to retain these students' experiences, their data were classified in the emotional-physical-sexual group. This reclassification is based on literature connecting the experiences of physical and sexual trauma to emotional trauma (e.g., Arata et al., 2005). For all study analyses, therefore, a total of six trauma types were included: emotional single-type trauma, physical single-type trauma, sexual single-type trauma, physical-emotional multi-type trauma, emotional-sexual multi-type trauma, and physical-emotional-sexual multi-type trauma.

Participant demographics. Individual participant demographic characteristics are summarized in Table 1.

Table 1.

Individual Characteristics of Sample

	<i>n</i>	Percent endorsed
Academic status		
First-year	119	27.4%
Sophomore	109	25.1%
Junior	94	21.7%
Senior	80	18.4%
Graduate / professional degree student	28	6.5%
Non-degree student	1	0.2%
Non-student	1	0.2%
Other	1	0.2%
Missing	1	0.2%
Disability		
No	376	86.6%
Yes	42	9.7%
Missing	16	3.7%
First generation status		
No	279	64.3%
Yes	154	35.5%
Missing	1	0.2%
Gender		
Woman	294	67.7%
Man	109	25.1%
Transgender	12	2.8%
Self-identify	18	4.1%
Missing	1	0.2%
International status		
No	320	73.7%
Yes	16	3.7%
Missing	98	22.6%
Pathway Oregon status		
No	323	74.4%

Table 1 continued

	<i>n</i>	Percent endorsed
Yes	101	23.3%
Missing	10	2.3%
Race		
White	274	63.1%
Multi-racial	45	10.4%
Hispanic / Latino/a	40	9.2%
Asian American / Asian	34	7.8%
Self-identify	15	3.5%
African American / Black	14	3.2%
American Indian or Alaskan Native	6	1.4%
Native Hawaiian or Pacific Islander	4	0.9%
Missing	2	0.5%
Relationship status		
Single	249	57.4%
Serious dating or committed relationship	162	37.3%
Married	5	1.2%
Separated	4	0.9%
Civil union, domestic partnership, or equivalent	2	0.5%
Divorced	1	0.2%
Missing	11	2.5%
Religious affiliation		
No preference	111	25.6%
Agnostic	95	21.9%
Christian	65	15.0%
Atheist	49	11.3%
Self-identify	49	11.3%
Catholic	32	7.4%
Jewish	12	2.8%
Buddhist	9	2.1%
Hindu	3	0.7%
Muslim	2	0.5%
Missing	7	1.6%
Sexual orientation		
Heterosexual	286	68.2%
Bisexual	49	11.3%
Self-identify	33	7.6%

Table 1 continued

	<i>n</i>	Percent endorsed
Questioning	21	4.8%
Gay	19	4.4%
Lesbian	8	1.8%
Missing	8	1.8%
Transfer status		
No	335	77.2%
Yes	87	20.0%
Missing	12	2.8%

Note. Self-identify = participant did not want to select an identity that was provided with drop-down menus connected to specific items; and instead, chose to self identify. No written responses are linked with the choice of self-identify.

Correlations, means, and standard deviations. Pearson correlations, means, and standard deviations among psychological symptoms and aspects of distress are presented in Table 2. Analyses yielded significant correlations among most variables in the anticipated direction. Correlations ranged in strength; however, most were strong. Surprisingly, neither social anxiety nor family distress were significantly correlated with alcohol and other drug (AOD) use in the current study. Weak, but significant correlations were found between depression and AOD use, generalized anxiety and AOD use, academic distress and social anxiety, eating concerns and social anxiety, hostility and social anxiety, and family concerns and social anxiety.

Table 2.

Distress Correlations, Means, and Standard Deviations

	1	2	3	4	5	6	7	8	9
1. Depression	-	.61***	.53***	.56***	.31***	.44***	.32***	.11*	.87***
2. Generalized Anxiety		-	.45***	.39***	.31***	.42***	.26***	.11*	.81***
3. Social Anxiety			-	.24***	.26***	.21***	.15**	-.09	.55***
4. Academic Distress				-	.24***	.36***	.20***	.17***	.69***
5. Eating Concerns					-	.25***	.19***	.16**	.36***
6. Hostility						-	.29***	.28***	.61***
7. Family Concerns							-	.07	.33***
8. AOD Use								-	.18***
9. Overall Distress									-
Mean	2.01	2.14	2.19	2.01	1.22	1.24	2.14	0.89	2.08
SD	0.85	0.86	0.91	1.01	0.91	0.89	0.92	0.91	0.78

Note. * for $p < .05$, ** for $p < .01$ and *** for $p < .001$. The CCAPS-62 is scored on a five-point, Likert-type scale ranging from 0-5. 0 = “not at all like me” and 4 = “extremely like me.” Normative means and standard deviations for the CCAPS-62 follow: academic concerns ($M = 1.85$, $SD = 1.02$), alcohol and drug use ($M = 0.76$, $SD = 0.87$), depression ($M = 1.58$, $SD = 0.93$), eating concerns ($M = 1.00$, $SD = 0.88$), family distress ($M = 1.28$, $SD = 0.96$), generalized anxiety ($M = 1.60$, $SD = 0.92$), hostility ($M = 1.04$, $SD = 0.87$), overall distress ($M = 1.64$, $SD = 0.84$), and social anxiety ($M = 1.81$, $SD = 0.95$). Means for all subscales in the current study, with the exception of alcohol and drug use, were significantly higher than the normative group.

Cross tabulations. Cross tabulation analyses were run to assess the relationship between childhood trauma type and the vast majority of descriptive variables. Significant relationships were found between childhood trauma type and several participant characteristics and experiences, including the following: race, gender, sexual orientation, relationship status, first generation student status, religious affiliation, and past suicide attempts. Significant relationships were also found for past unwanted sexual experiences and past intimate partner violence experiences.

The relationship between trauma and **race** was significant, $\chi^2(15, N = 432) =$

28.24, $p = .020$, with White participants disproportionately reporting emotional single-type abuse or emotional-sexual multi-type abuse. The relationship between trauma and **gender** was also significant, $\chi^2 (15, N = 433) = 33.51, p = .004$, with men in the sample disproportionately reporting childhood emotional-physical multi-type abuse. For **sexual orientation**, participants who did not identify as heterosexual or bisexual (i.e., gay, lesbian, questioning, or self-identified) disproportionately endorsed more childhood emotional-physical-sexual trauma, $\chi^2 (10, N = 426) = 22.75, p = .012$. The relationship between **relationship status** and trauma revealed that students who were in a relationship (married, civil union/domestic partnership, or serious dating/committed relationship) disproportionately experienced childhood sexual abuse, emotional-sexual multi-type abuse, or emotional-physical-sexual multi-type abuse, $\chi^2 (5, N = 434) = 11.92, p = .036$, relative to their peers not in a relationship (single, divorced, or separated). The relationship between childhood trauma experiences and being a **first generation college student** suggested that first generation students disproportionately experienced multi-type trauma, $\chi^2 (5, N = 433) = 15.88, p = .007$. The relationship between **financial stress** and trauma history was also significant, $\chi^2 (15, N = 433) = 25.09, p = .049$, with participants with physical-emotional multi-type abuse disproportionately reporting “always” experiencing financial stress and participants with physical single-type abuse history disproportionately endorsing “sometimes” experiencing financial stress. Participants who experienced childhood physical single-type trauma disproportionately reported lower **religiosity** and participants who reported childhood physical-emotional-sexual multi-type trauma disproportionately endorsed a stronger identification with religious beliefs, $\chi^2 (20, N = 434) = 47.07, p = .001$. The relationship between childhood

trauma and **past suicide attempts** was significant, $\chi^2 (20, N = 427) = 29.22, p = .001$, with participants who reported childhood emotional-physical or emotional-physical-sexual multi-type trauma being disproportionately more likely to have had more than one past suicide attempt. The results for **suicidal ideation** are consistent with this, $\chi^2 (15, N = 423) = 26.74, p < .031$, with participants who reported emotional-physical or emotional-physical-sexual multi-type trauma disproportionately reporting more frequent suicidal ideation (3 or more times) and those with single type sexual abuse history less likely to report frequent suicidal ideation.

The relationship between trauma and **unwanted sexual experiences** was significant, $\chi^2 (15, N = 423) = 107.06, p < .001$, such that participants who endorsed emotional single-type abuse in childhood were less likely to endorse past unwanted sexual experiences, and participants who had experienced childhood emotional-sexual or emotional-physical-sexual multi-type trauma were more likely to report multiple (more than three) unwanted sexual experiences. The relationship between **intimate partner violence** across their lifetime and childhood trauma was significant, $\chi^2 (20, N = 430) = 75.63, p < .001$, with participants who reported more frequent intimate partner violence (more than three times) being disproportionately likely to have experienced childhood emotional-physical multi-type trauma. Participants who reported histories of childhood sexual single-type trauma were disproportionately likely to endorse experiencing IPV one time or less. Because of interpretive issues arising from the way these variables were coded (see Unexamined Covariates section for additional details), it is unclear whether these results represent genuine or spurious relationships.

The relationship between childhood trauma type and international student status,

Pathway Oregon status (i.e., a proxy measure for socioeconomic background and economic resource access for Oregon state residents), academic status, ability status, perceived social support, perceived family support, religious affiliation, alcohol and other drug (AOD) misuse, past counseling, psychotropic medication use, non-suicidal self-injurious behaviors, violent ideation, hallucinations, and significant loss were also considered, but no significant relationships were found (see appendix E for R output that includes all cross tabulation analyses).

Summary. In sum, examination of participant demographics showed that this sample comprised predominately White, heterosexual, able-bodied, single, US-citizen women who were early in their college careers. Unique features included that 36% of the sample identified as first generation college students; participants endorsed a diverse array of religious beliefs; and 30% of participants identified as a sexual minority. Pearson correlations were in the expected directions for all variables. Means and standard deviations on the CCAPS-62 were higher for this sample than the normative group for all psychological symptoms and aspects of distress. Crosstabs revealed participant demographic differences in experiences of childhood trauma type (e.g., first generation college students), but also revealed that childhood trauma type did not differ in the anticipated directions for other demographic variables, such as race and gender (i.e., it was expected that people of color, women, and transgender participants would disproportionately report multi-type abuse). Limited conclusions can be drawn about results related to IPV and unwanted sexual experiences given interpretive issues with the way in which those variables were measured.

Unexamined Covariates

Unwanted sexual experiences and IPV were considered as possible covariates for main study analyses. Due to several problems discovered with how these experiences were measured with the UO-UCTC intake questionnaire, unwanted sexual experiences and IPV were not examined as covariates for main study analyses. Specifically, both variables offered categorical options to assess the frequency of trauma experienced (i.e., never, 1 time, 2-3 times, 4-5 times, more than 5 times) and the timeline during which the trauma occurred (i.e., never, within the last 2 weeks, within the last month, within the last year, within the last 1-5 years, more than 5 years ago). Data could not be matched to identify the age at which the reported unwanted sexual experience(s) or IPV took place or specific information about frequency. It was unknown, therefore, if participants had experienced additional trauma during adulthood or if they were referencing their childhood trauma. Given the risk for measuring the same experience twice, associations between IPV and unwanted sexual experiences and the trauma types included in the current study could not be reasonably measured.

Research Question 1

Results for all descriptive analyses to answer research question 1 are summarized in Tables 3-6. Research question 1: *What types of trauma, self-reported psychological symptoms, and aspects of distress are most commonly reported by emerging adult survivors of childhood trauma seeking treatment at a university counseling center.*

Table 3.

Childhood Trauma Types

	<i>n</i>	Percent endorsed
Emotional	204	47.0%
Physical	19	4.4%
Sexual	55	12.7%
Emotional-Physical	84	19.4%
Emotional-Sexual	33	7.6%
Emotional-Physical-Sexual	39	9.0%

Table 4.

Other Traumatic Experiences During Lifetime

	<i>n</i>	Percent above threshold
Physical attack	54	12.4%
Sexual violence	127	29.3%
Military trauma	1	0.2%
Kidnapping	7	1.6%
Serious accident	35	8.1%
Terrorist attack	4	0.9%
Near drowning	40	9.2%
Life-threatening illness	11	2.5%
Natural disaster	11	2.5%
Torture	5	1.2%
Animal attack	10	2.3%
Other trauma	39	9.0%

Table 5.

Participants' Report of Above Threshold Psychological Symptoms and Distress

	<i>n</i>	Percent endorsed
Depression	281	64.7%
Generalized Anxiety	311	71.7%
Social Anxiety	168	38.7%
Academic Distress	184	42.4%
Eating Concerns	109	25.1%
Family Distress	300	69.1%
Hostility	177	40.8%
Substance Use	104	24.0%

Table 6.

Risk and Protective Factors

	<i>n</i>	Percent endorsed
Perceived family support		
Strongly agree	60	13.8%
Somewhat agree	125	28.8%
Neutral	77	17.7%
Somewhat disagree	105	24.2%
Strongly disagree	66	15.2%
Missing	1	0.2%
Perceived social support		
Strongly agree	70	16.1%
Somewhat agree	153	35.3%
Neutral	84	19.4%
Somewhat disagree	63	14.5%
Strongly disagree	32	7.4%
Missing	32	7.4%
Past hospitalization		
Never	374	86.2%
1 time	37	8.5%
2-3 times	11	2.5%
4-5 times	2	0.5%
Missing	10	2.3%
Intimate partner violence (lifetime)		
Never	119	27.4%
1 time	33	7.6%
2-3 times	49	11.3%
4-5 times	14	3.2%
More than 5 times	215	49.5%
Missing	4	0.9%
Significant loss		
Never	171	39.4%
Prior to college	126	29.0%
After starting college	54	12.4%
Both	71	16.4%
Missing	12	2.8%
Non-suicidal self-injurious behaviors		
Never	240	55.3%
1 time	30	6.9%

Table 6 continued.

	<i>n</i>	Percent endorsed
2-3 times	47	10.8%
4-5 times	20	4.6%
More than 5 times	90	20.7%
Missing	7	1.6%
Past counseling		
Never	160	36.9%
Prior to college	127	29.3%
After starting college	60	13.8%
Both	82	18.9%
Missing	5	1.2%
Psychotropic medication		
Never	267	61.5%
Prior to college	53	12.2%
After starting college	46	10.6%
Both	61	14.1%
Missing	7	1.6%
Religious importance		
Very important	36	8.3%
Important	77	17.7%
Neutral	149	34.3%
Unimportant	81	18.7%
Very unimportant	82	18.9%
Missing	9	2.1%
Suicidal ideation		
Never	223	51.4%
1 time	62	14.3%
2-3 times	82	18.9%
4-5 times	17	3.9%
More than 5 times	44	10.1%
Missing	6	1.4%
Past suicide attempt(s)		
Never	355	81.8%
1 time	46	10.6%
2-3 times	17	3.9%
4-5 times	6	1.4%
More than 5 times	3	0.7%
Missing	7	1.6%

Table 6 continued.

	<i>n</i>	Percent endorsed
Unwanted sexual experience (lifetime)		
Never	219	50.5%
1 time	90	20.7%
2-3 times	68	15.7%
4-5 times	13	3.0%
More than 5 times	33	7.6%
Missing	11	2.5%
Violent ideation		
Never	374	86.2%
1 time	14	3.2%
2-3 times	26	6.0%
4-5 times	2	0.5%
More than 5 times	10	2.3%
Missing	8	1.8%
Past violence (perpetration)		
Never	410	94.5%
1 time	9	2.1%
2-3 times	6	1.4%
More than 5 times	1	0.2%
Missing	8	1.8%

Research Question 2a

The results of finite mixture modeling, used to answer research question 2a, are discussed below. Research question 2a: *What clusters of symptoms, or symptom groups, exist for emerging adult survivors of childhood trauma seeking treatment at a university counseling center?* The Bayesian information criterion (BIC) was assessed for models with one to seven latent components. For the current sample, the 5-component solution had the BIC value closest to zero and strongest interpretability (see Figures 1-2; three- and four-class solutions were also tested and results are presented in Appendix F).

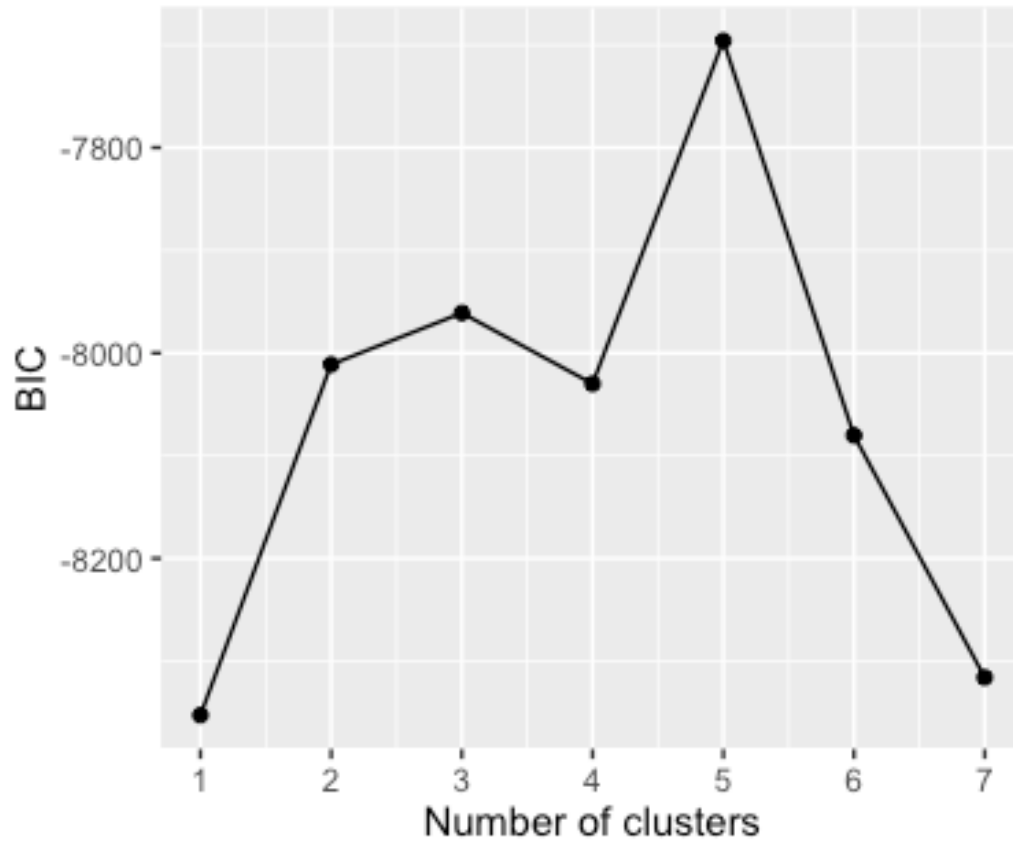


Figure 1. Number of clusters by Bayesian information criterion (BIC).

Note. 14 model types were assessed. Ellipsoidal, Equal Volume and Orientation (EVE) variance structure had the best fit.

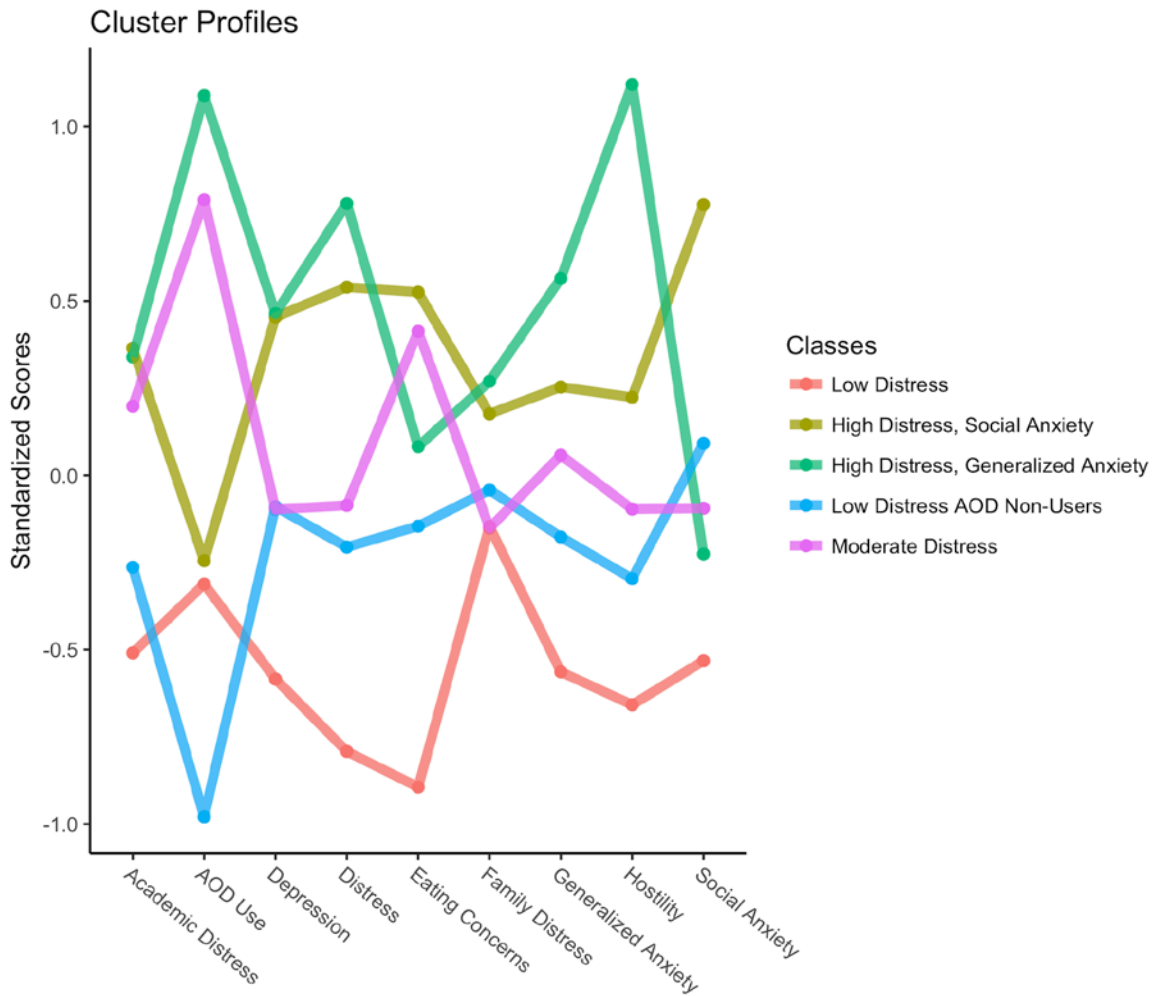


Figure 2. Five-class cluster profiles.

The following five symptom clusters emerged from the analyses. Class 1 ($n = 75$) reported low symptoms and distress across areas and endorsed engaging in low-level use of alcohol and other drugs. Class 4 ($n = 118$) was also characterized by low reports of most symptoms; however, this group also reported abstinence from using substances. This class was also distinguished from the former “low symptom” group based on their report of moderate rather than low social anxiety symptoms. Class 5 ($n = 101$) reported elevated eating concerns and AOD use but was otherwise characterized by moderate levels of distress. Two high distress groups emerged from the analyses, Class 2 and

Class 3. Class 2 ($n = 70$), reported high distress across all areas other than substance use, with markedly high social anxiety symptoms. Class 3 ($n = 70$), reported similarly high distress across most symptoms, but endorsed higher generalized anxiety, substance use, and hostility, and lower social anxiety symptoms when compared to the previous group.

Research Question 2b

Results from a chi-squared test of independence used to answer research question 2b are detailed below. Research question 2b: *Is the type of childhood trauma (i.e., emotional, physical, sexual, or multi-type abuse) that emerging adult survivors self-report related to the symptom group or class to which they are assigned?* There was no evidence of a relationship between trauma type and symptom group, $\chi^2 (20, N = 434) = 13.43, p = .86$. Given the small frequencies in some of the trauma type groups (in particular, physical single-type trauma, $n = 19$, which does not meet the recommended expected cell count of at least five across the latent symptom groups), trauma types were further collapsed for this analysis into two groups: single-type trauma and multi-type trauma. The relationship between symptom cluster and single- versus multi-type trauma was also not significant, $\chi^2 (2, N = 434) = 1.56, p = .82$. In essence, student participants' clusters of symptoms were not related to the type of trauma they experienced during childhood.

Research Question 3

Results from logistic regression used to answer research question 3 are described below. Research question 3: *Do the type of self-reported psychological symptoms and/or aspects of distress endorsed by emerging adult survivors of childhood trauma seeking treatment at a university counseling center vary by childhood trauma type?* A total of

nine regressions were conducted to evaluate the strength of the relationship between trauma type (i.e., emotional, physical, sexual, and multi-type traumas) and each measure of distress assessed by the CCAPS-62 (i.e., depression, generalized anxiety, social anxiety, academic distress, eating concerns, family concerns, hostility, alcohol and drug use, and overall distress). Each regression procedure was followed up with pairwise comparisons using Tukey's HSD, a posthoc correction for multiple comparisons, to explore differences among the trauma-type groups. Psychological symptoms and distress indicators were considered binary categorical variables for this research question, with participants who endorsed concerns above the normative threshold for any given subscale assigned group membership and those who fell below that threshold not assigned membership.

The relationship between **depression** and trauma type was not significant, $\chi^2 (5, N = 434) = 10.3, p = .07$, and none of the pairwise comparisons were significant. Based on these results, there was no evidence that students' probability of experiencing depressive symptoms above the normative threshold varied by the type of trauma that they experienced during childhood. The relationship between **generalized anxiety** and trauma type was statistically significant, $\chi^2 (5, N = 434) = 13.16, p = .02$, such that the probability of experiencing above-threshold generalized anxiety symptoms did vary by trauma type. In particular, the likelihood of students experiencing above-threshold generalized anxiety symptoms was greater for student survivors of certain combinations of multi-type childhood trauma. Emerging adult participants who reported emotional-physical multi-type childhood trauma were significantly more likely to experience above-threshold generalized anxiety symptoms than emerging adults who reported sexual

trauma histories, with 79% of participants with emotional-physical-sexual trauma histories reporting symptoms above threshold compared to 55% of participants with sexual single-type trauma histories. The relationship between **social anxiety** and trauma type was not significant, $\chi^2(5, N = 434) = 5.56, p = .35$, nor were any of the pairwise comparisons. Thus, there is no evidence that the probability of students experiencing social anxiety symptoms above the normative threshold varies by the type of childhood trauma they experienced. Similarly, there was no evidence that the probability of experiencing **academic distress** above the normative threshold was influenced by trauma type, $\chi^2(5, N = 434) = 3.98, p = .55$. No pairwise comparisons were significant for academic distress either. The relationship between **eating concerns** and trauma type was statistically significant, $\chi^2(5, N = 434) = 12.49, p = .03$. Although there is evidence for a relationship between eating concerns and childhood trauma type, none of the pairwise comparisons were significant at this power level using Tukey's HSD for multiple comparisons. The relationship between **family distress** and trauma type was statistically significant, $\chi^2(5, N = 434) = 33.06, p < .001$, as were several pairwise comparisons. For the majority of the significant comparisons, the likelihood of experiencing above-threshold family distress was greater for survivors of multi-type childhood trauma, and emerging adults who experienced sexual single-type trauma during childhood were less likely to report above threshold family distress. In particular, survivors of emotional-physical multi-type trauma were significantly more likely to report above-threshold family distress (85%) than survivors of physical or sexual single-type abuse (42%). Survivors of emotional-physical-sexual multi-type abuse were also more likely to report above-threshold family distress (79%) than survivors of sexual single-type abuse.

Additionally, emerging adult participants who had experienced emotional single-type trauma were more likely to report above-threshold family distress (71%) than their peers who had experienced sexual single type trauma. The relationship between **hostility** and trauma type was not significant, $\chi^2(5, N = 434) = 4.43, p = .49$, nor were any of the pairwise comparisons, which indicates a lack of evidence that the probability of experiencing hostility above the normative threshold varies by trauma type. The relationship between **alcohol and drug use** and trauma type was not significant, $\chi^2(5, N = 434) = 7.72, p = .17$, nor were any of the pairwise comparisons. Accordingly, there is no evidence that students' probability of using alcohol and drugs above the normative threshold varied by type of childhood trauma that they experienced. Lastly, the relationship between **overall distress** and trauma type was not significant, $\chi^2(5, N = 434) = 8.95, p = .11$, nor were any of the pairwise comparisons. There is no evidence that students' probability of experiencing overall distress above the normative threshold varied by type of childhood trauma that they experienced.

Research Question 4

Results from a multivariate ANOVA (i.e., MANOVA) and follow-up univariate ANOVAs used to answer research question 4 follow. Research question 4: *Does the severity of self-reported psychological symptoms or distress endorsed vary by childhood trauma type for emerging adult survivors of childhood trauma seeking treatment at a university counseling center?* Each univariate ANOVA procedure was followed up with pairwise comparisons using Tukey's HSD, a posthoc correction, to explore differences among the different trauma-type groups. A continuous standardized score for each of the eight aspects of distress (i.e., depression, generalized anxiety, social anxiety, academic

distress, eating concerns, family concerns, hostility, and alcohol and drug use) as well as overall distress were used in the analyses.

The overall MANOVA was statistically significant by Wilk's lambda, $F(45, 1881.9) = 0.82, p < .001$, with a multivariate eta-squared of .19 (i.e. 19% of the variance in the severity of self-reported psychological symptoms and distress is explained by trauma type). The relationship between **depression** severity and trauma type was not significant, $R^2 = .03, F(5, 428) = 2.21, p = .053$. Based on this result, there is no current evidence that students' experience of more severe depressive symptoms varies by the type of childhood trauma they experienced. The relationship between **generalized anxiety** and trauma type was statistically significant, $R^2 = .05, F(5, 428) = 4.04, p = .001$, such that students' experience of more severe generalized anxiety symptoms varied by the type of trauma they experienced. In particular, survivors of certain combinations of multi-type abuse reported more severe generalized anxiety symptoms. Similar to the results for question 3, which examined only above threshold outcomes, these results underscore those findings and reveal that emerging adults in this study who reported emotional-physical multi-type trauma reported more severe generalized anxiety symptoms than emerging adults who reported single-type emotional ($p = .043$) or sexual ($p = .006$) trauma histories. Additionally emerging adults in the current sample who reported experiencing all three types of abuse were more likely to experience severe generalized anxiety symptoms than emerging adults who reported single-type sexual trauma histories ($p = .017$). The relationship between **social anxiety** severity and trauma type was not significant, $R^2 = .01, F(5, 428) = 0.80, p = .547$; thus, there is no evidence that the experience of more severe social anxiety symptoms varies by childhood trauma type.

Similarly, there was no evidence that the experience of more severe **academic distress** was influenced by childhood trauma type given that the relationship between academic distress and trauma type was not significant, $R^2 = .01$, $F(5, 428) = 1.02$, $p = .408$. The relationship between severity of **eating concerns** and trauma type was not statistically significant, $R^2 = .01$, $F(5, 428) = 1.19$, $p = .316$. The relationship between **family distress** and trauma type was statistically significant, $R^2 = .11$, $F(5, 428) = 10.52$, $p < .001$, such that the severity of family distress was generally greater for survivors of multi-type trauma and generally lower for emerging adults who experienced sexual single-type trauma during childhood. Survivors of emotional-physical multi-type trauma reported more severe family distress than survivors of physical ($p = .009$), emotional ($p = .001$), or sexual single-type abuse ($p < .001$), and survivors of emotional-sexual multi-type trauma reported more severe family distress than survivors of sexual single-type abuse ($p = .011$). Survivors of emotional-physical-sexual multi-type abuse also reported significantly more family distress than survivors of sexual single-type abuse ($p < .001$). Additionally, emerging adults in the current sample who experienced emotional single-type trauma reported more family distress than their peers who had experienced sexual single-type trauma ($p < .001$). The relationship between **hostility** and trauma type was not significant, $R^2 = .02$, $F(5, 428) = 1.92$, $p = .090$, which indicates a lack of evidence that students' experience of more severe hostility symptoms varies by the type of childhood trauma that they experienced. The relationship between students' **alcohol and drug use** and trauma type was not significant, $R^2 = .01$, $F(5, 428) = .44$, $p = .817$. Accordingly, there is no evidence that more severe alcohol and drug use varies by childhood trauma type. Lastly, the relationship between students' **overall distress** and

trauma type was significant, $R^2 = .03$, $F(5, 428) = 2.75$, $p = .02$, such that students' experience of more severe overall distress varied by the type of trauma they experienced. In particular, survivors of emotional-physical trauma reported significantly more overall distress than survivors of single-type sexual abuse ($p = .01$).

CHAPTER V

DISCUSSION

The purpose of this dissertation study was to (a) provide descriptive information about the demographics of and symptoms reported by emerging adult survivors of childhood trauma seeking support from a university counseling center (UCC) and (b) examine the relationships between different types of childhood trauma and students' psychological symptoms and aspects of distress experienced during college. Given that childhood trauma tends to impact key areas of development in which growth is expected during emerging adulthood, childhood maltreatment has the potential to substantially impact emerging adult college students' functioning as they transition to adulthood (Faulkner et al., 2014). It was hypothesized that multi-type childhood trauma would be associated with a higher likelihood of experiencing a range of psychological symptoms and aspects of distress, and that multi-type trauma would also be associated with more severe psychological symptoms and aspects of distress. Participants were 434 emerging adult college students who voluntarily sought support from the University of Oregon Counseling and Testing Center (UO-UCTC) and who endorsed experiencing at least one type of childhood maltreatment.

Results from descriptive analyses, finite mixture modeling, logistic regressions, chi-square tests of independence, and multiple regression analyses revealed that (a) there were unique relationships between trauma type and gender, sexual orientation, relationship status, first generation college student status, religiosity, past suicide attempts, unwanted sexual experiences, and intimate partner violence; (b) help-seeking emerging adults reported experiencing childhood emotional single-type abuse most

frequently, with childhood emotional-physical abuse being the most commonly reported form of multi-type trauma; (c) participants endorsed higher than typical psychological symptoms and aspects of distress, with particularly elevated scores related to depression, family distress, and generalized anxiety; (d) a five-component solution emerged from finite mixture modeling, classifying participants into five clusters of symptom reporting; however, no relationship was found between symptom cluster and childhood trauma type; and (e) significant relationships were found between childhood trauma type and both generalized anxiety and family distress such that the probabilities of experiencing above-threshold generalized anxiety and/or family distress were related to the type of childhood trauma experienced. The severity of generalized anxiety, family distress, and/or overall distress that participants experienced was also related to the type of childhood trauma that they experienced.

The main study hypothesis was largely confirmed. That is, it appears that multi-type childhood trauma had more deleterious effects on emerging adult distress than single-type childhood trauma for the current sample. In particular, emotional-physical multi-type trauma was associated with a greater likelihood of experiencing distress and more severe distress for study participants. General trends related to aspects of distress that appear most sensitive to trauma type also emerged. For instance, it appears that there were meaningful differences in the way in which generalized anxiety and family distress were experienced based on trauma type for the current sample. In contrast, depressive symptoms appeared to be high for the sample in general and did not vary by trauma type for this group of emerging adults.

Study Contributions

The current study was the first to identify the trauma types, psychological symptoms, and aspects of distress that are most common for help-seeking emerging adult college students with childhood trauma histories. Although previous literature has identified the considerable impact multi-type abuse has on children (e.g., CDC, 2014b; Chapman et al., 2007; Ford et al., 2011; Richmond et al., 2009), prior studies have not explored the unique impact various combinations of trauma types may have on developmental outcomes. Further, multi-type abuse has not been empirically explored as an additional trauma type within a study that also considers the more commonly used abuse typologies (i.e., emotional, physical, and sexual single-type abuse). The present study was also the first to explore possible symptomatic differences based on different types of reported trauma.

Another unique feature of the current study was its focus on emerging adult college students. The vast majority of trauma-focused empirical literature that explores the impact of childhood trauma includes children, adolescents, and adults in stages of development beyond emerging adulthood. This study was the first to explore the impact of trauma type on emerging adult college student distress at intake and to investigate the relationship between trauma type and severity of emerging adult college student distress.

The following chapter provides a thorough discussion of both novel and discrepant study results using interpretations and extant literature that are most relevant to help-seeking emerging adult college students. Related research and clinical implications are incorporated within the interpretive text. The overarching study implications, including future research directions follow. The chapter concludes with a summary of

study limitations and conclusions.

Relationships Between Childhood Trauma Type and Distress

The overall purpose of this study was to investigate the relationships between participants' distress and the type of trauma they reported experiencing during childhood. Differences between self-reported single-type versus multi-type trauma were of interest, given the historical focus on single-type abuse typologies (i.e., single-type emotional, physical, or sexual abuse) within the extant literature. The following section includes interpretive information about the frequency of reported trauma types, novel findings related to trauma type, and anxious distress as a possible indicator of a posttraumatic stress response.

Frequency of reported trauma types. To contextualize the current study data, estimates of various child abuse types from the Adverse Childhood Experiences (ACE) Study are contrasted with the results of the present study. Although national prevalence data for a selected sample of childhood trauma survivors is available from the CDC, it was created using child protective service reports (CDC, 2014a). Because child abuse is grossly underreported (CDC, 2014a) and because current study results are based on retrospective, adult reports of childhood trauma, these CDC data were not used for comparison. Instead, the ACE Study comprises retrospective, self-reported data from approximately 17,000 adult participants, which included emerging adult participants as well as adults across the lifespan (i.e., young, middle, and older adulthood). Overall, 63.9% of ACE Study participants endorsed experiencing at least one aversive childhood experience (CDC, 2014a). Given that the current sample was selected and comprised only of help-seeking emerging adult trauma survivors, these data provide context rather

than direct comparison between national data and the present sample. The types of childhood abuse reported by present study participants varied consistently from ACE prevalence statistics for childhood abuse, which appears reasonable given the selected sample chosen for the current study.

The ACE Study indicated that 11% of participants reported experiencing emotional abuse, with an additional 16.6% reporting emotional neglect and 9.2% physical neglect (i.e., 36.8% endorsed emotional abuse or neglect; CDC, 2014b). The current study did not assess for neglect, and based on similarities in the definitions of emotional abuse and neglect, it may be that study participants' report of emotional abuse may also include experiences of neglect. In the current study, 47% ($n = 204$) of participants endorsed single-type emotional abuse, which was the most commonly reported childhood trauma type for this sample. When considering all abuse types in which emotional trauma was endorsed, 75.4% of the current sample reported experiencing emotional trauma. Given that emotional trauma is typically the least prevalent childhood trauma type, this finding is somewhat unique (CDC, 2014b); however, for help-seeking college students, emotional abuse tends to be the most commonly reported abuse type (CCMH, 2017).

The ACE prevalence rate for childhood physical abuse is 28.3% (CDC, 2014b), but for the current study, 4.4% of participants endorsed single-type physical abuse ($n = 19$), which was the least commonly reported childhood trauma type for this sample. Despite low reports of physical single-type abuse in the current study, childhood emotional-physical abuse was the most commonly reported form of multi-type abuse endorsed by study participants ($n = 84$, 19.4%). When considering all abuse types in

which physical trauma was endorsed, 32.8% of the sample reported experiencing physical abuse, which is more consistent with the ACE prevalence rate of 28.3%. Physical abuse is the most commonly reported childhood abuse type for the general population and the second most reported childhood abuse type for help-seeking college students (CCMH, 2017; CDC, 2014b). It is important to note that the majority of childhood physical abuse reports in the present study fell under the umbrella of multi-type abuse.

The national prevalence rate for childhood sexual abuse is 20.7% (CDC, 2014b). Sexual single-type abuse was reported by 12.7% ($n = 55$) of participants, with sexual abuse reported by 29.3% of the overall sample. Childhood sexual trauma is the second most commonly reported trauma type for the overall population and is the least reported childhood trauma type at university counseling centers (CCMH, 2017; CDC, 2014b). Similar to physical abuse, childhood sexual abuse was more likely to be reported along with another type of abuse rather than in isolation for the current sample. Overall, 36% of the participants in the present study endorsed multi-type childhood trauma. Based on this finding, it appears that long-standing single-type abuse typologies still used in isolation by many researchers may obscure the complexity of childhood trauma by simplifying its landscape into such distinct categories rather than acknowledging overlap.

Unique findings by abuse type. Previous research indicates that experiencing multiple types of abuse is associated with increased severity of abuse and increased distress (Arata et al., 2005; Clemmons et al., 2007; Elliott et al., 2009; Finkelhor et al., 2007; Richmond et al., 2009). Alternately, little is known about the impact that specific combinations of abuse types may have on distress.

The present study findings are largely consistent with the extant literature given that multi-type traumas were associated with increased severity of distress for the current sample. The notable addition of this study to the literature relates to significant findings for emotional-physical and emotional-physical-sexual multi-type trauma but not for emotional-sexual multi-type trauma. The concept of betrayal trauma, which “occurs when the people or institutions on which a person depends for survival significantly violate that person’s trust or well-being” (Freyd, 2008, p. 76), may provide partial explanation for this unexpected finding.

Childhood emotional, physical, and sexual traumas perpetrated by a caregiver are considered betrayal traumas (Freyd, DePrince, & Gleaves, 2007). Typically, it is assumed that childhood sexual abuse involves a young child victimized by a family member; however, there are many other forms of childhood sexual abuse. Of the sexual abuse children experience, approximately 30% is perpetrated by a family member while the majority (i.e., approximately 60%) is perpetrated by someone the family knows (Finkelhor & Shattuck, 2012; Whealin, 2007). Conversely, biological parents are the most common perpetrators of physical abuse, followed by stepfathers or male dating partners of biological mothers (Esernio-Jenssen, Tai, & Kodsi, 2011; Schnitzer & Ewigman, 2005; Tyler & Cauce, 2002). Similarly, parents are responsible for the overwhelming majority of childhood emotional abuse (i.e., 93%), with biological parents perpetrating an estimated 73% and non-biological parents approximately 20% (Sedlak et al., 2010). High-betrayal trauma during childhood has been found to significantly predict anxiety symptoms in adulthood, particularly for women (Goldsmith, 2004). Lastly, high frequencies of emotional and physical abuse are associated with decreased family

closeness across the lifespan (Savla et al., 2013).

When considering these previous findings in the context of current results, it is important to note that information about the perpetrator of abuse was not available for the current sample. The following extrapolations utilize the aforementioned family of origin distress data to make sense of novel findings in the current study. For instance, it appears that abuse types that include emotional and physical abuse may have represented high-betrayal traumas for participants in this study. It may be that participants who reported sexual single-type abuse were less likely to have encountered high-betrayal trauma (e.g., their perpetrators may have been acquaintances rather than caregivers). This may help to explain results, particularly those related to generalized anxiety, which differentiated single-type sexual abuse from single-type emotional abuse, emotional-physical multi-type abuse, and emotional-physical-sexual multi-type abuse. It may also provide some explanation for the lack of significant results found for the emotional-sexual multi-type trauma group. Finally, rates of elevated family distress in the current study are consistent with the extant literature, particularly given that emotional and emotion-physical abuse were the most commonly reported single- and multi-type traumas reported. It may be that these types of trauma are not only related to decreased family closeness across the lifespan, but also increased family distress.

Anxious distress as a trauma response. Findings related to generalized anxiety were significant throughout the current study. Childhood trauma survivors often experience exaggerated cortisol activity, increasing their reactivity to stress (Carpenter et al., 2011), which moderates the relationship between childhood trauma and emerging adult mental health (Hagan et al., 2014). Additionally, children who experienced

multiple traumas are more likely to present as adults with greater symptom complexity, including posttraumatic stress symptoms (Cloitre et al., 2009). In a study of children with histories of polyvictimization, PTSD was the only mental health diagnosis associated with the experience of multiple types of maltreatment (Ford et al., 2011). The CCAPS-62 does not assess for posttraumatic stress symptoms; however, several of the items on the Generalized Anxiety subscale include information consistent with PTSD diagnostic criteria (e.g., “I am easily frightened or startled”, “I experience nightmares or flashbacks”). The high rates of generalized anxiety symptoms reported by participants and significant findings found for this CCAPS-62 subscale are consistent with the existing literature, although the current results do not allow for interpretation about whether anxious distress is indicative of a heightened stress response or a posttraumatic stress response.

Despite the documented relationship between childhood maltreatment and adult PTSD (Faulkner et al., 2014; Hagenaars, Fisch, & van Minnen, 2011; Lilly & Valdez, 2012; Macho & Ahmed, 2007), treatment-focused research on PTSD has historically underrepresented adult survivors of childhood trauma (Ehring et al., 2014; Spinazzola, Blaustein, & Van Der Kolk, 2005). The omission of adult survivors of child abuse from trauma-focused best practices may increase the likelihood that clinicians misinterpret the symptoms of emerging adult clients (e.g., interpreting symptoms as anxiety rather than a trauma response). Given the high rates of above-threshold generalized anxiety symptoms reported by participants and the potential overlap between questions included on the CCAPS-62 generalized anxiety subscale and posttraumatic stress, it is key for practitioners using this measure to adequately assess childhood trauma survivors not only

for anxiety, but also for posttraumatic stress symptoms.

Sample Characteristics and Generalizability

The following section provides an interpretation of descriptive data in the current study related to the overrepresentation of marginalized identities as well as risk and protective factors for emerging adult survivors of childhood trauma.

Overrepresentation of marginalized identities. Institutions of higher education are growing increasingly diverse, with greater representation of historically oppressed groups on college campuses (Cuyjet, Howard-Hamilton, & Cooper, 2011). Despite this growth, multicultural competence has not expanded to the same degree that admissions rates have for historically marginalized groups (Cuyjet et al., 2011). A variety of marginalized groups were overrepresented in the current sample (i.e., participants who identified with a disability, first generation students, persons of color, sexual minorities, and gender minorities) when compared to other groups included in the study, the larger UO campus population, and/or national data comprised of help-seeking college students. This overrepresentation may be related to the increased risk for experiencing child abuse that many marginalized groups experience (CDC, 2015; Hussey et al., 2006). Additionally, marginalized populations face daily oppression, which increases their risk for academic, interpersonal, and psychological distress and may have led participants in the current sample to seek support (Sue & Sue, 2003).

Ten percent of study participants identified with a disability, compared to only 1% of the larger UO campus population (University of Oregon, 2016). Prior research has shown that children with disabilities are at significantly greater risk for experiencing childhood maltreatment, in particular multi-type abuse (Jaudes & Mackey-Bilaver, 2008;

Sullivan & Knutson, 2000; U.S. Department of Health and Human Services, 2010).

Further, women with disabilities have historically experienced the highest rates of sexual violence victimization of any adult group (i.e., 83% according to the most cited, albeit dated, study; Stimpson & Best, 1991). Given the epidemic of sexual assault on college campuses (Washington Post-Kaiser Family Foundation, 2015), it is presumed that violence against women with disabilities extends to the university setting; however, little data are available. Future research should focus on exploring rates of revictimization for emerging adult survivors of childhood trauma with disabilities.

In the current sample, 36% of students identified as first generation college students compared to 26% at the UO in general (University of Oregon, 2017a). Based on cross tabulation analysis, first generation college student participants in the current study were overrepresented in all categories of multi-type abuse during childhood. Lack of parental education opportunities has been identified as a risk factor for childhood abuse (CDC, 2015), and many first generation college students report having experienced additional risk factors associated with childhood adversity across levels of their ecology as children and adolescents (e.g., single parenthood, low income, parenting stress, neighborhood violence, housing instability, and parental unemployment; CDC, 2015; Saenz, Hurtado, Barrera, Wolf, & Yeung, 2007). Financial stress, academic, social, and cultural factors play a significant role in first generation students college success (Cardoza, 2016). The overrepresentation of first generation students in this sample may be related to successful UO-UCTC outreach efforts to reach this population and/or be indicative of first generation students having fewer options for accessing support and health care when compared to other students. The aforementioned results suggest a need

to more fully explore the intersections between childhood trauma and first generation student status.

At UO, 25% of students identify as students of color (University of Oregon, 2017b); in the current sample, 36% self-identified as a member of a racial/ethnic minority group. A consistently replicated finding in the extant literature shows that racial/ethnic minorities are more likely to experience childhood trauma than their White peers for reasons similar to those described above in reference to first generation college students (i.e., increased risk for experiencing life circumstances that increase risk for child abuse, such as social isolation, community violence, and parenting stress; CDC, 2015; Hussey, Chang, & Kotch, 2006). Despite relative overrepresentation in comparison to the larger UO population, present study results related to race were not as expected (i.e., extant literature would suggest that students of color would be more likely than their White peers to be overrepresented in the multi-type trauma categories; Hussey et al., 2006). For instance, White participants were overrepresented in the emotional-sexual multi-type trauma categories of the current study. This difference suggests that White participants and participants of color in the current study experience different kinds of trauma. Additionally, it may be that because the majority of participants were White-identified, the current study did not fully capture the experiences of students of color, particularly those that included emotional trauma. Participants were only able to identify childhood abuse by checking boxes labeled childhood emotional, physical, and sexual abuse. These labels may not have fit for all participants' family experiences, particularly racial/ethnic minority students. Previous literature suggests that race may moderate the relationship between parental behavior during childhood and later self-labeling of abuse (Lau et al.,

2006). Physical abuse, in particular tends to be culturally laden. For example, physical discipline can act as a risk factor for physical abuse for some communities, whereas for others, it serves to protect children from maltreatment (Deater-Deckard, Dodge, Bates, & Pettit, 1996). It may be that items that provide a behavioral description of childhood abuse without requiring participants to label their experiences as “abuse” would have produced results more consistent with previous studies. Moving forward, empirical studies that focus on greater representation of students of color and culturally congruent adaptations of survey instruments in order to explore the impact childhood trauma has on college outcomes would add substantially to the extant literature.

Sexual and gender minorities are more likely to experience child abuse (i.e., up to four times greater risk; Friedman et al., 2011; Roberts, Rosario, Corliss, Koenen, & Austin, 2012) and adolescent dating violence (Martin-Storey, 2014). Both groups were overrepresented in the current sample with nearly 30% of the sample identifying as a sexual minority (e.g., bisexual, gay, lesbian, questioning, pansexual) and approximately 7% of the sample identifying outside of the gender binary (e.g., transgender, genderqueer, nonbinary, agender). Although the UO does not have statistics about the number of students who identify as sexual and/or gender minorities, in their 2015-2016 report, the CCMH indicated that of students who presented for counseling at US-based counseling centers, 17.4% identified as sexual minorities and 1.6% identified as transgender or chose to self-identify outside the gender binary (note: the overall sample size for these estimates was approximately 100,000; CCMH, 2017).

Current study participants who identified as gay, lesbian, questioning, or chose to self-identify their sexual orientation reported significantly more emotional-physical-

sexual multi-type trauma based on cross tabulation analyses. It is likely that both direct and indirect processes contribute to higher rates of more complex childhood maltreatment for sexual and gender minorities (Austin et al., 2008). For example, targeted violence perpetrated in response to sexual orientation and gender expression considered unacceptable by important others represents a potential direct path to greater experiences of trauma. Additionally, social isolation and negative self-concept may place sexual and gender minority youth in situations that increase risk of abuse and represent a more indirect path to greater experiences of trauma (Austin et al., 2008). Given high rates of childhood victimization, as well as the unique developmental tasks this population often faces during emerging adulthood (e.g., coming-out, transitioning), research that focuses exclusively on sexual and gender minority emerging adults may help to further illuminate the types of support that may be most useful for these marginalized groups as they adjust to both college and adulthood.

Given the consistency of marginalized group overrepresentation in the current study, it is vital to discuss the intersectionality of identities both within the current sample, specifically, and on college campuses, in general. Although, there is substantial evidence that individuals who identify as differently abled or disabled, as a member of a racial/ethnic minority, as first generation, and/or as a member of a sexual and/or gender minority are at increased risk for childhood trauma and adult revictimization, little is known about how the intersections of these marginalized identities impact experiences of childhood trauma and later emerging adult development. Future research should aim to further nuance the similarities and differences between survivors with a variety of identities and experiences of marginalization in order to most fully support the

increasingly diverse students attending institutions of higher education. Qualitative research maybe one useful avenue through which to illuminate such nuance and complexity (Bowleg, 2008).

Risk and protective factors. The childhood trauma survivors included in the current study endorsed several risk and protective factors at rates that varied substantially from those reported by the CCMH (2017). The majority of risk and protective factors results were in expected directions; however, others were contrary to extant literature and/or hypothesis. For example, the majority of the current sample was in their first two years of college, which represents a time period of relative risk for college students. Across institutions of higher education, the first two years of college have the highest rates of student drop-out (Attewell, Heil, & Reisel, 2011). Given this, it seems typical that students in their first two years of college may be experiencing greater distress, making them more likely to present for services.

College student belonging is one of the strongest predictors of success (Strayhorn, 2012). Self-efficacy and students' sense of purpose are additional factors that promote success for students (Seider, Clark, & Soutter, 2015). Given the intra- and inter-personal impact childhood trauma can have on emerging adult development, it is likely that many emerging adult childhood trauma survivors lack in belonging, self-efficacy, and purpose as college students. It has been posited that interventions focused on consciousness-raising have the potential to impact belonging, efficacy, and purpose for students (Seider et al., 2015). Consciousness-raising interventions for trauma survivors (e.g., cognitive reappraisals) are also associated with healing and increased functioning (Goldsmith, Barlow, & Freyd, 2004). It may be that these efforts could be combined to offer students

with childhood trauma histories the most opportunity for success. Research on such outreach has the potential to identify decreased rates of drop-out, increased academic and social success, and decreased distress across adulthood.

Consistent with extant research, trauma survivors in this sample were more likely than a national general sample of help-seeking emerging adults to endorse non-suicidal self-injurious behaviors (NSSIBs), suicidal ideation (SI), and suicide attempts (Arens et al., 2014; Chapman et al., 2007; De Bellis & Zisk, 2014). Nearly half of study participants (43.1%) endorsed engaging in NSSIBs at some point in their lives, compared to 25.5% of the general sample (CCMH, 2017). Approximately 47% of current study participants reported experiencing SI across their lifetime and nearly 17% endorsed attempting suicide at least one time. In contrast 33.2% of the general sample endorsed suicidality and 9.3% reported a past suicide attempt (CCMH, 2017). Additionally, the experience of multi-type trauma was related to more severe SI and a greater number of suicide attempts, which is consistent with the extant literature (e.g., Chapman et al., 2007).

Emerging adults have the highest rates of engagement in NSSIBs of any age group, and childhood maltreatment is associated with increased frequency of self-harm (Arens et al., 2014). Child abuse is also consistently associated with increased SI and suicide attempts during adolescence and young adulthood (Chapman et al., 2007; Dunn, McLaughlin, Slopen, Rosand, & Smoller, 2013). Emotion dysregulation has been suggested as a significant contributor to the relationship between childhood trauma and later NSSIBs and SI (Arens et al., 2014) and fits with the high rates of anxious and depressive symptoms endorsed by the current sample. Structural changes to the

amygdala that increase risk for problems with emotion regulation have been found for survivors of childhood trauma (Grant et al., 2014), which may help to illuminate underlying reasons for increased NSSIBs, SI, and suicide attempts in the present sample.

Interventions that target increased distress tolerance and emotion regulation (e.g., dialectical behavioral therapy [DBT]) have the potential to decrease NSSIBs and SI as well as anxious and depressive symptoms (Bradley & Follingstad, 2003; Neacsiu, Eberle, Kramer, Wiesmann, & Linehan, 2014), particularly for survivors of multi-type trauma who disproportionately experienced SI and past suicide attempts. Accordingly, it would seem that these interventions would also decrease overall distress. Given that group-based DBT has been found to be effective for use in college counseling center settings (Uliaszek, Rashid, Williams, & Gulamani, 2016) this may be a particularly promising intervention to explore with emerging adult survivors of childhood trauma without encountering the barriers associated with community-based therapy (e.g., cost, transportation, use of parental insurance).

For the present study, interpersonal violence (IPV) victimization and unwanted sexual experience data was omitted from main study analyses because it was unclear whether some participants were referring to the same events in response to both childhood trauma questions and IPV or unwanted sexual experiences questions. However, both variables were included in descriptive analyses, as patterns in these variables may still be of interest despite the interpretative difficulty. Significant relationships were found between childhood trauma type and IPV as well as childhood trauma type and unwanted sexual experiences. Participants who reported more frequent IPV across their lifetime (i.e., more than three times) were more likely to have

experienced childhood emotional-physical-sexual multi-type trauma, and participants who endorsed childhood sexual single-type abuse were more likely to endorse one or fewer experiences of IPV. Additionally, participants who endorsed childhood multi-type abuse that included sexual victimization were more likely to endorse unwanted sexual experiences. These experiences may be related to their childhood trauma or related to revictimization, which is highly prevalent for childhood trauma survivors (e.g., Barnes, Noll, Putnam, & Trickett, 2009; Gobin & Freyd, 2009; Widom et al., 2008). Based on existing research, women with childhood trauma histories are more likely to experience IPV (e.g., Capaldi, Kim, & Pears, 2009; Kuijpers, van der Knaap, & Winkel, 2012); however, scholars have not previously found differences in frequency of IPV victimization based on type of childhood trauma experienced.

Descriptive analyses also revealed that 50% of participants endorsed the experience of unwanted sexual contact on at least one occasion. In contrast, 20.7% of the general sample endorsed unwanted sexual experiences (CCMH, 2017). This is a startling result; however, it should be interpreted with caution because of the way the survey measure was constructed and the use of a selected sample. For example, the types of questions asked of participants did not provide information about when unwanted sexual experiences or experiences of IPV occurred (e.g., childhood, adolescence, adulthood); thus, we cannot differentiate these reports from reports of childhood sexual abuse, particularly since this study used a selected sample that intentionally surveyed survivors of childhood sexual abuse. Given the survey materials and subsequent results, information about which participants have experienced sexual violence revictimization is unavailable; thus, IPV and unwanted sexual experiences could not be utilized as

covariates for main study analyses. Overall, it is unclear whether results related to IPV and unwanted sexual relationships in the current study reflect genuine relationships between the variables or spurious relationships. It is important for ongoing research studies to gather information about revictimization in a way that clearly separates it from childhood trauma because experiences of high betrayal trauma in childhood, whether sexual or not, increase the risk for revictimization in late adolescence and emerging adulthood (Gobin & Freyd, 2009).

Perceived family and social support was varied for the current sample. Notably, 57% of participants endorsed a lack of familial support and 49% reported a lack of social support. Interestingly, reports of familial and social support did not vary by trauma type. Social support has consistently been one of the strongest predictors of posttraumatic growth identified within the extant literature (Evans et al., 2013; Guay, Billette, & Marchand, 2006; Markowitz, Milrod, Bleiberg, & Marshall, 2009; Sperry & Widom, 2013), and an individual's lack of social support is the single strongest predictor of maladaptive outcomes following trauma (Brewin, Andrews, & Valentine, 2000). In the extant literature, individual's perceptions of their access to advice, belonging, companionship, and tangible support have previously been investigated (Evans et al., 2013; Sperry & Widom, 2013). Because of the unique developmental tasks associated with emerging adulthood (e.g., their need for simultaneous autonomy and scaffolding; Tanner & Arnett, 2009), family members often act as a part of emerging adults' perceived support system (Arnett & Tanner, 2006); however, because childhood maltreatment often involves family-based trauma, accessing support from the very people who caused harm to an emerging adult is typically not an option.

Additionally, many trauma survivors lose familial support after disclosing their trauma and others report difficulty trusting supportive attachments after navigating significant betrayal during childhood (Brenner & Ben-Amitay, 2015; Lowell et al., 2014). Assessment of social support is particularly important for survivors of childhood trauma because of the significant interpersonal problems, including lower rates of received social support, associated with childhood maltreatment across the lifespan (Connolly, 2014; Elliott et al., 2009; Reyome, 2010a, 2010b; Sperry & Widom, 2013). Practitioners within a brief treatment model, like that which many UCCs ascribe to, may choose to focus on building connectedness and support rather than processing trauma. This type of approach has the potential to facilitate decreased acuity of symptoms, increased motivation for participation in long-term, community-based therapy focused on trauma processing, and bolster coping strategies for managing difficult emotions regardless of the type of trauma experienced. Moving forward, it will be important to measure and bolster types of support that are developmentally relevant to emerging adults (e.g., romantic partners and friends as primary supports, family as secondary supports; perceived autonomy granting as an additional form of perceived support) rather than utilizing more general measures of social support as have been used in the extant literature to date.

This sample of help-seeking participants reported higher than average experiences of past therapy (i.e., 62% of study participants, compared to 50% of the general sample; CCMH, 2016). It would be normative for survivors of childhood trauma to access therapy support at higher rates than their peers in the general sample, which included but was not entirely comprised of trauma survivors. Children who have experienced complex trauma are more likely to experience problems with affect regulation, behavioral

control, dissociation, somatization, attachment, cognition, and self-concept during childhood and adolescence (Cook et al., 2005), all of which may result in increased service utilization. Further, given the aforementioned discussion about family support (and lack thereof), greater support outside of the family context, and in this case in the form of clinical systems, is often necessary and healing for child abuse survivors.

The quality of such therapeutic experiences was not measured. Individuals who received helpful therapeutic intervention during childhood and/or adolescence may have had the opportunity to increase their coping strategies, process their trauma, and facilitate closure (Cohen et al., 2012), which is likely to alter their long-term outcomes.

Alternately, other individuals who received therapeutic intervention early in life may have received services that were not grounded in evidence-based practices, that caused harm in some way, or that did not provide the type and amount of support necessary to successfully navigate the transition to adulthood. Because of the variety of therapy experiences (i.e., quality, frequency, duration, reasons for accessing therapy), past therapy may be an important factor to consider in research and practice with survivors of childhood trauma. For example, researchers might explore how duration, timing, and structure of therapy across the lifespan, including emerging adulthood, influences mental health symptoms and distress.

Beyond the overrepresentation of transgender participants, gender was not clearly defined as a risk or protective factor in the current study. Men in the sample were overrepresented in the childhood physical-emotional multi-type trauma group. This finding is consistent with existing literature suggesting that boys are more likely to be victims of physical abuse (CDC, 2014; Thompson, Kingree, & Desai, 2004). Few gender

differences have been identified within the extant literature with regard to emotional abuse, particularly given the lack of empirical attention dedicated to this typology; however, an argument could be made that physical abuse often does not exist in isolation (Arata et al., 2005). It is likely that for many children, particularly those for whom abuse is perpetrated by a caregiver (Esernio-Jenssen et al., 2011), the threats and intimidation associated with chronic physical abuse may be indicative of simultaneous emotional trauma, making some boys more likely to experience emotional-physical multi-type trauma rather than physical single-type trauma as previous literature suggests. On the other hand, children who experience childhood physical abuse perpetrated by a family member they rarely have contact with may not experience the same emotional trauma. Research that considers unique combinations of trauma types, data about the perpetrator of abuse, and gender differences may provide additional explanation for current study findings and add more context to the extant literature.

Contrary to existing literature, no significant findings were found for women in the current study (e.g., that women experience higher rates of sexual abuse; CDC, 2014b; MacMillan et al., 2013). For many survivors, shame and secrecy are often associated with trauma histories (Feiring, 2005; van Delft, Finkenauer, Clasien De Schipper, Lamers-Winkelmann, & Visser, 2015). For men, shame and secrecy may keep them from endorsing abuse in the first place, which may partially explain the lower than expected number of men in the sample. In line with traditional gender role norms, women tend to downplay their experiences of abuse, particularly those associated with greater levels of shame (i.e., sexual abuse; Morrow & Smith, 1995; West, 1998; Winkelmann & Shearer-Cremean, 2004). Given that rates of emotional abuse were markedly higher than all other

abuse types in the current study, it may be that women underreported sexual abuse and reported their experiences of maltreatment as emotional abuse, which tends to be less shame-inducing. The lack of findings for transgender and gender-nonconforming participants was likely due to small cell size ($n = 30$).

A relationship between participants' reported religiosity and trauma type was found such that participants who endorsed emotional-physical-sexual multi-type trauma were more likely to report more significant religious beliefs and participants who reported experiencing physical single-type trauma more likely to endorse very low religious importance. It is likely that religiosity served as a risk factor for some emerging adults and as a protective factor for others. For example, very strict forms of religiosity have been linked with more authoritarian parenting styles, which for some cultural groups and communities serves as a risk factor for child maltreatment and for other communities serves to protect children from maltreatment and violence (Deater-Deckard et al., 1996; Ellison & Bradshaw, 2009). Alternately, it may be that participants who experienced more complex trauma turned toward religion as a means of coping and support. Given the lack of empirical foundation related to this result, additional research would be necessary to provide greater insight into potential relationships between childhood trauma type and religion.

Implications

Overarching research and clinical implications for the current study are detailed in the following section.

Contextualization of trauma types. Historically, researchers have almost exclusively differentiated childhood abuse by type and focused on certain types of abuse

to the exclusion of others (e.g., sexual abuse in the 1990s; Briere & Runtz, 1993; Neumann et al., 1996). The three standardized abuse types (i.e., emotional, physical, sexual) dominate the way in which childhood trauma is discussed in the literature. Given that 36% of participants in the current study endorsed experiencing more than one type of childhood abuse and that significant symptomatic differences were found based on the type of multi-type trauma experienced, it appears that the use of three standard abuse typologies does not provide a complete picture of individuals' experiences of trauma.

The recognition that other forms of adversity impact childhood development arose in the late nineties with the ACE Study (Felitti et al., 1998), and the new millennium brought research focused on polyvictimization (Ford et al., 2011; Richmond et al., 2009). The ACE Study and empirical research focused on the concept of polyvictimization suggested that the more adversity a child experiences, the greater the likelihood of developing patterns of maladaptive development. This finding is well established and not what was challenged with this study. Instead, the aim of this study was to highlight what scholars have traditionally neglected to explore: any differences in risk or resilience based on the unique combination of types of adversity experienced and the comparison of those multi-type traumas to the more commonly utilized single-types.

For example, does the experience of emotional-physical multi-type abuse of one child vary from the experience of emotional-sexual multi-type abuse of another child? Is their risk for maladaptive development roughly equal because they have both experienced two types of maltreatment (as is implicitly suggested within the extant literature), or is there more nuance to their experiences and the impact those experiences may or may not have on their development? Although the present study cannot provide answers to these

larger questions, it provides preliminary evidence that people experience different mental health symptoms based on differences in some abuse types and combinations of types. Predicting health consequences is quite complex and cannot be determined based on typology alone; however, current findings are important because they suggest that gaining a more nuanced perspective on the nature of childhood trauma and the way in which abuse types blend together in more ways than they are distinct is a promising area of inquiry.

Overall, it appears that the way in which experiences of childhood trauma and their impact are being measured in many research studies, including in the current study, may be acontextual and narrow in scope. Many current measures that assess for childhood trauma ask items in ways that lack the nuance associated with experiences of violence, maltreatment, and abuse, particularly that which is interpersonal in nature. In particular, many current approaches to measuring and discussing childhood trauma are lacking with regard to vital information about the chronicity, frequency, severity, betrayal, and complexity of trauma experienced. This study is, in and of itself, representative of that limitation. Participants were only able to check whether or not they identified with an emotional, physical, or sexual childhood abuse history. What those abuse types meant to each participant is unknown, as is information about their perpetrators, the frequency of their abuse, and abuse severity. Additionally, the sample only included participants who labeled their childhood experiences within the narrow choices provided on the survey and did not assess the experiences of non-help-seeking students. Without this more nuanced type of data, researchers may risk missing vital information key to providing a valid and reliable interpretation of results and practitioners

may risk obscuring important relationships that may impact the course of prevention and intervention for survivors of childhood trauma. It will be important for the larger field of psychology to follow the lead of preeminent trauma researchers and adapt measures such that they are more sensitive to cultural diversity, individual experiences of trauma, and the age at which trauma occurred and include information about chronicity, frequency, severity, betrayal, and complexity of trauma (e.g., Brief Betrayal Trauma Survey – Modified for Ethno-Cultural Betrayal Trauma, Sexual Experiences Survey – Modified for Ethno-Cultural Betrayal Trauma; Cloitre et al., 2012; Cohen et al., 2012; Goldberg & Freyd, 2006; Gómez, 2017; Koss & Oros, 1982).

The current study involved the use of assessment measures endorsed by the CCMH. Study results suggest that the CCMH could make some useful changes to their intake questionnaire to more fully assess for the diversity of traumatic experiences emerging adults may have experienced. It may be useful to add dropdown boxes following questions about specific trauma types (i.e., childhood abuse types and interpersonal violence victimization) that assess for perpetrator (e.g., caregiver/parent, friend, partner, acquaintance, stranger, other), frequency (e.g., 1 time, 2-3 times, 4-5 times, more than 5 times), and age at which the trauma occurred. Options to choose multiple ages for chronic abuse or adult revictimization also may increase contextualization of traumatic experiences without significantly increasing the overall length of the assessment.

Decreasing distress for emerging adult survivors. Overall, the psychological symptoms and aspects of distress endorsed by study participants were more elevated than those of the general group (CCMH, 2015a). At least 25% of participants were above the

clinical cut points for all psychological symptom and distress scales. Furthermore, the means for the current sample were higher than the means for the normative group on seven of the eight subscales and the Overall Distress scale of the CCAPS-62. Study results were most heavily influenced by generalized anxiety and family distress, two areas of symptomology that were distinguished by trauma type and substantially increased overall distress. Additionally, depressive symptoms were high for the overall sample, which is consistent with previous research connecting the experience of childhood trauma to emerging adult depression (Frye & Liem, 2011; Goldstein et al., 2013; Grant et al., 2014). These symptom clusters may be important to focus on in future research, in terms of trauma-treatment to further the healing process.

Clinical practice with survivors of trauma is inherently less focused on typology than empirical research. Instead, clinical practice tends to focus on increasing protective factors and decreasing risk factors regardless of trauma type (Cloitre et al., 2010; Cohen et al., 2012). Given the wide variety of risk and resilience factors reported by participants, the current study emphasized the importance of clinicians conducting thorough, ecological assessments in order to best understand the unique aspects of risk and resilience present for individual emerging adult childhood trauma survivors. These assessments also have the potential to help clinicians gain vital information about the betrayal, complexity, frequency, and severity associated with childhood experiences of trauma. Additionally, it is important for practitioners working with help-seeking college students to recognize that their emerging adult clients with childhood trauma histories may be at heightened risk to experience above-threshold distress, in particular generalized anxiety, family distress, and depression.

Many current study findings highlight the value of exploring the impact of childhood trauma across the lifespan, generally, but there are also implications unique to emerging adult survivors of child abuse, specifically. Namely, research that focuses on this population is both relevant and necessary. Since emerging adulthood was first conceptualized (Arnett, 2000), it has gained both popular and empirical attention. Despite knowledge that areas of functioning influenced by childhood trauma are the same areas in which developmental growth is expected during emerging adulthood, research focused on emerging adult survivors of child abuse is extremely limited. Further, there are currently no empirically-based best practices or trauma-informed treatments for emerging adults. Emerging adulthood is a critical stage for the promotion of developmental malleability following trauma based on the potential for substantial changes across nearly every area of development (Schulenberg et al., 2004). By increasing the empirical attention focused on emerging adult survivors of childhood trauma, researchers have the opportunity to decrease the life-long burden of childhood trauma across levels of ecology by promoting individual healing, interrupting the familial cycle of abuse, creating best practice recommendations for treatment, and reducing the public health burden associated with un- or under-treated childhood trauma, which was previously estimated at \$103 billion per year, as well as the additional public health concern related to untreated mental health problems amongst college students (Crusto, 2014; Zivin et al., 2009).

Table 7.

Descriptive Summary of Results

Abuse Type	Result	Potential Implications
Emotional Abuse	Most commonly reported abuse type	Emotional abuse may be more common than the extant literature suggests
Physical Abuse	More likely to be reported alongside another abuse type than in isolation	Physical abuse may be less likely to occur in isolation than previously thought
Sexual Abuse	More likely to be reported alongside another abuse type than in isolation;	Sexual abuse may be less likely to occur in isolation than previously thought;
	Consistently less likely to associated with increased emerging adult distress	Participants who reported sexual abuse may have been less likely to encounter high-betrayal trauma
Emotional-Physical Abuse	Most common type of multi-type abuse;	Trauma that included emotional-physical multi-type abuse in the current study may have represented high-betrayal traumas for participants
	Consistently associated with greater generalized anxiety and family distress	
Physical-Sexual Abuse	Consistently less likely to be associated with generalized anxiety and family distress	Participants who reported sexual abuse may have been less likely to encounter high-betrayal trauma
Emotional-Physical-Sexual Abuse	Consistently associated with greater generalized anxiety and family distress	Trauma that included emotional-physical multi-type abuse in the current study may have represented high-betrayal traumas for participants

Future research directions. These broad implications can also be narrowed to include more tangible directions for future research. First, symptom cluster analyses

similar to those used in the current study could be utilized to create trauma history profiles (e.g., severity, frequency, recency, and perpetrator, in addition to type); this could be one way to delineate a trauma history variable that may more accurately capture the context of participants' experience. This avenue of inquiry has the potential to improve prevention and intervention efforts for emerging adults with varying childhood trauma histories by expanding our contextualization of trauma and the ways in which it may impact symptomology. Targeting such risk profiles is consistent with the developmental literature and empirical evidence showing that early mental health symptoms and risk behavior leads to a range of risk outcomes later in adulthood (Dodge, Greenberg, & Malone, 2008; Masten & Cicchetti, 2010).

Second, conducting longitudinal research that explores how brief therapy at UCCs may impact the presenting concerns and relative distress of emerging adult college students with childhood trauma histories is another promising area of investigation. Because more and more young people are attending institutions of higher education (National Center for Education Statistics, 2014), UCCs have the opportunity to play a vital role in mental health prevention, treatment, and management for a large portion of the adult population. UCCs are currently underfunded and understaffed making in-house research nearly impossible to complete. Research that empowers UCC clinicians to provide empirically-based treatment for childhood trauma survivors is likely to have a significant public health impact by fostering improved success of intervention at a pivotal period of human development.

Third, qualitative research that investigates self-reported risk and resilience factors of emerging adult childhood trauma survivors in college via open-ended interview

questions as opposed to survey instruments may offer an alternative to the quantitative methodological challenges inherent to assessing childhood experiences post-hoc. A qualitative or mixed-methods approach to conducting this research may inform more accurate, contextually-grounded assessments that increase participants buy-in to both research and treatment. Further, qualitative research may help more effectively identify the nuanced relationships between trauma type, intersectional identity statuses, and mental health implications (Bowleg, 2008).

Study Limitations

Current study results must be considered in light of several study limitations. The reliance on self-report limits the validity and generalizability of present study findings. Although the overall sample size was adequate, the frequencies for each trauma type varied substantially, with very few participants reporting certain trauma types. Due to low cell size, the physical-sexual multi-type abuse variable was dropped and those participants included in the emotional-physical-sexual group; thus, the current study does not accurately represent the experiences of those participants who endorsed childhood physical-sexual multi-type abuse. The decision to sample a specific population (i.e., help-seeking college students who chose to endorse childhood trauma) was intentional for reasons outlined in the literature review, but this sample selection also resulted in biases. The current sample inherently missed out on young adults who did not pursue higher education, who had not yet labeled their experiences as abusive, who chose not to identify themselves as a survivor of childhood trauma because of potential stigma or fear, and/or who attended university in different geographic locations. Additionally, the normative group included, but was not entirely comprised of trauma survivors; thus, these

data provide context rather than direct comparison for study results.

The interpretability of the data is limited given what it did not include. Because an existing dataset was utilized, the design could not be tailored to answer some important research questions related to perpetrator type, age or stage of development in which abuse occurred, abuse frequency, and abuse severity. As previously mentioned, there were also several potentially confounding variables included in the dataset, but not included in main study analyses as covariates, namely interpersonal violence and unwanted sexual experiences. Although these variables likely interacted with study results, they could not be adequately controlled for because of the manner in which they were measured (i.e., not assessing when the violence occurred and whether it was related to childhood trauma or not). Additionally, because of the choice to use data from a UCC, certain clients were screened out of the sample prior to the intake process. It may be that additional clients with childhood trauma histories presented to the UO-UCTC for services, but were referred out through the UO-UCTC triage system for one reason or another (e.g., desire for long-term therapy, access to insurance resources, and/or severity of distress).

In addition to these limitations, other threats to validity were present based on the types of analyses and measures that were utilized. A non-random, non-experimental design was used, which eliminated the ability to make causal inferences. The study was cross sectional rather than longitudinal in design, which resulted in no access to information about diagnosis or treatment outcomes. Such information may have helped to clarify and expand the usefulness of results. Because the univariate regression analyses used to answer research questions three and four require theoretical

prioritization of dependent variables, pairwise comparisons were necessary to assess the unique relationships between trauma types. These pairwise comparisons control type 1 error rate at the expense of power; thus, there may have been significant relationships that were not made empirically evident with this analytical technique. In addition, more basic scale analyses were used for this study (e.g., reliability scale analysis), and more sophisticated analyses may have been used to form stronger study constructs.

Further, although the intake questionnaire provided important information about participants' demographics, risk and protective factors, and trauma histories, it was not a measure for which psychometric information was available. The CCAPS-62 has strong psychometric support, however, the general group for this measure was somewhat divergent from the current sample. In particular, participants in the current study were more diverse than in the CCAPS-62 general group based on their ethnic/racial and gender identities. Comparing results from the current study to those of the general sample may obscure the experiences of some of the people of color and transgender participants.

A final study limitation was the inability to assess construct validity for study variables. There were few items, based on content and participant response options that could be used to calculate different forms of validity. Most importantly, the current study could not assess the validity of the three trauma types (i.e., emotional, physical, and sexual child abuse) as robustly as desired because important questions about how participants interpreted the three abuse types were unanswerable. For example, it is likely that the term "physical abuse" was interpreted differently by participants based on their life experiences and cultural lenses (e.g., Deater-Deckard et al., 1996). The inclusion of descriptive trauma items (e.g., Were you kicked by a parent or caregiver

during childhood?) has the potential to increase the validity of future abuse type assessments.

Summary and Conclusions

Emerging adulthood is an important and distinct period of human development, and the majority of emerging adults attend college (Arnett, 2000; National Center for Education Statistics, 2014). Roughly half of the children in the United States experience maltreatment (NSCH; 2011, 2012), and childhood trauma is consistently associated with maladaptive development across the lifespan (Cloitre et al., 2009; Cook et al., 2005; Ogle et al., 2013). Emerging adulthood is a key period of development during which to explore the negative impact childhood trauma may have on development and to introduce treatment approaches that may help to interrupt negative cascades of risk.

Given that UCCs operate as the front lines of mental health prevention and intervention for many college students and that the transition away from family during college provides a context in which trauma survivors may increase their awareness of adverse childhood experiences, a help-seeking, emerging adult population that endorsed experiencing childhood trauma while utilizing UCC services was chosen for the current study. Previous research has largely focused on the type of abuse an individual experienced (i.e., emotional, physical, or sexual) and/or the number of aversive experiences they encountered. The current study explored multi-type abuse as a fourth abuse typology. Multi-type abuse was further differentiated based the unique combination of abuse types endorsed by participants (i.e., emotional-physical, emotional-sexual, and emotional-physical-sexual multi-type abuse). This was a contribution to the literature, because no previous study has considered the unique relationships between

different combinations of multi-type abuse and aspects of distress.

Study findings highlight diverse demographic and descriptive features of this moderately sized sample. Unique differences in the type and severity of distress participants reported based on the type of childhood trauma they experienced were also significant. In particular, multi-type traumas were associated with a higher likelihood of experiencing and greater severity of family distress and generalized anxiety symptoms. These multi-type traumas were also predictive of more severe overall distress. Because several of the anxiety symptoms assessed on the study survey are also consistent with PTSD, these differences may also highlight increased trauma response symptoms.

It is recommended that future research use expanded definitions of trauma type; create research methods that allow for increased contextualization of trauma assessment; and further develop theory, research, and practice recommendations unique to emerging adult survivors of childhood trauma, particularly those who present to UCCs. It is hoped that the present study findings encourage researchers to continue exploring trauma types and distress in ways that positively impact public health outcomes associated with the emotional, financial, and social burden of childhood trauma and emerging adult mental health concerns.

APPENDIX A

INTAKE QUESTIONNAIRE ITEMS

Column Name	Description
Q58	Date of Birth
Q1852	Gender Identity
Q1853	Self-identify Gender Identity
Q1859	Race / Ethnicity
Q62	Self-identify Race/Ethnicity
Q64	What is your country of origin?
Q65	Are you an international student?
Q1855	Sexual Orientation
Q66	Relationship Status
Q1856	Self-identify sexual orientation
Q74	Are you the first generation in your family to attend college?
Q2010	Are you a member of the Pathway Oregon program?
Q75	How would you describe your financial situation right now
Q2023	Based on how you feel today, how many appointments do you estimate would be helpful (this is to help with an initial idea of your preference, and your options will not be limited based on your answer)
Q2046A3440	How did you learn about the Counseling Center? ANSWER: Website
Q2046A3441	How did you learn about the Counseling Center? ANSWER: Brochure
Q2046A3432	How did you learn about the Counseling Center? ANSWER: Faculty
Q2046A3433	How did you learn about the Counseling Center? ANSWER: Friend
Q2046A3431	How did you learn about the Counseling Center? ANSWER: Parent/s
Q2046A3430	How did you learn about the Counseling Center? ANSWER: Partner/Spouse
Q2046A3428	How did you learn about the Counseling Center? ANSWER: Health Center- Psychiatrist
Q2046A3429	How did you learn about the Counseling Center? ANSWER: Health Center- Other
Q2046A3436	How did you learn about the Counseling Center? ANSWER: Res Life/University Housing
Q2046A3438	How did you learn about the Counseling Center? ANSWER: Interactive Screening Prgm (ISP)
Q2046A3485	How did you learn about the Counseling Center? ANSWER: Workshop/Presentation on Campus
Q2046A3434	How did you learn about the Counseling Center? ANSWER: Dean of Students
Q2046A3435	How did you learn about the Counseling Center? ANSWER: Academic Advising
Q2046A3439	How did you learn about the Counseling Center? ANSWER: Orientation/Registration
Q2046A3437	How did you learn about the Counseling Center? ANSWER: Student Conduct and Community Standards
Q2046A3442	How did you learn about the Counseling Center? ANSWER: Other
Q2009	Health Insurance
Q2034	Are you required to be in counseling?
Q23	Academic Status

Q32	Transfer Student
Q33	GPA
Q25	Graduate Program
Q26	Graduate Other
Q68	Do you participate on an athletic team that competes with other colleges or universities?
Q69	Are you a member of ROTC?
Q1862	Have you ever served in any branch of the US military (active duty, veteran, National Guard or reserves)?
Q71	Did your military experiences include any traumatic or highly stressful experiences which continue to bother you?
Q34	Extra-Curriculars
Q67	Extra-Curricular Hours
Q73	What is the average number of hours you work per week during the school year (paid employment only)?
Q28	Housing
Q29	Housing Other
Q30A1345	Living with ANSWER: Alone
Q30A1346	Living with ANSWER: Spouse, partner, or significant other
Q30A1347	Living with ANSWER: Roommate(s)
Q30A1348	Living with ANSWER: Children
Q30A1349	Living with ANSWER: Parent(s) or guardian(s)
Q30A1350	Living with ANSWER: Family other
Q30A1351	Living with ANSWER: Other (please specify)
Q31	Living with Other
Q248	Are you registered, with the office for disability services on this campus, as having a documented and diagnosed disability?
Q2396A3521	If you selected, "Yes" for the previous question, please indicate which category of disability you are registered for (check all that apply) ANSWER: Difficulty hearing
Q2396A3522	If you selected, "Yes" for the previous question, please indicate which category of disability you are registered for (check all that apply) ANSWER: Difficulty seeing
Q2396A3523	If you selected, "Yes" for the previous question, please indicate which category of disability you are registered for (check all that apply) ANSWER: Difficulty speaking or language impairment
Q2396A3524	If you selected, "Yes" for the previous question, please indicate which category of disability you are registered for (check all that apply) ANSWER: Mobility limitation/orthopedic impairment
Q2396A3525	If you selected, "Yes" for the previous question, please indicate which category of disability you are registered for (check all that apply) ANSWER: Traumatic brain injury
Q2396A3526	If you selected, "Yes" for the previous question, please indicate which category of disability you are registered for (check all that apply) ANSWER: Specific learning disabilities
Q2396A3527	If you selected, "Yes" for the previous question, please indicate which category of disability you are registered for (check all that apply) ANSWER: ADD or ADHD
Q2396A3528	If you selected, "Yes" for the previous question, please indicate which category of disability you are registered for (check all that apply) ANSWER: Autism spectrum disorders
Q2396A3529	If you selected, "Yes" for the previous question, please indicate which category of disability you are registered for (check all that apply) ANSWER: Cognitive difficulties

- or intellectual disability
- Q2396A3530 If you selected, "Yes" for the previous question, please indicate which category of disability you are registered for (check all that apply) ANSWER: Health impairment/condition, including chronic conditions
- Q2396A3531 If you selected, "Yes" for the previous question, please indicate which category of disability you are registered for (check all that apply) ANSWER: Psychological or psychiatric condition
- Q2396A3532 If you selected, "Yes" for the previous question, please indicate which category of disability you are registered for (check all that apply) ANSWER: Other
- Q55 Other disability
- Q56 Family Support
- Q57 Social Support
- Q1861 Religious or spiritual preference
- Q21 Other religious or spiritual preference
- Q22 To what extent does your religious or spiritual preference play an important role in your life?
- Q53 Think back over the last two weeks. How many times have you had: five or more drinks* in a row (for males) OR four or more drinks* in a row (for females)? (* A drink is a bottle of beer, a glass of wine, a wine cooler, a shot glass of liquor, or a mixed drink.)
- Q2053A2738 Please check any other substances you have ever used ANSWER: Tobacco
- Q2053A2726 Please check any other substances you have ever used ANSWER: Cocaine/Crack
- Q2053A2727 Please check any other substances you have ever used ANSWER: Ecstasy
- Q2053A2728 Please check any other substances you have ever used ANSWER: LSD
- Q2053A2729 Please check any other substances you have ever used ANSWER: PCP
- Q2053A2730 Please check any other substances you have ever used ANSWER: Heroin
- Q2053A2731 Please check any other substances you have ever used ANSWER: Methamphetamine
- Q2053A2732 Please check any other substances you have ever used ANSWER: Inhalants
- Q2053A2733 Please check any other substances you have ever used ANSWER: Prescription drugs (non-medical use)
- Q2053A2734 Please check any other substances you have ever used ANSWER: Other
- Q2395 Think back over the last two weeks. How many times have you used marijuana?
- Q35 Attended counseling for mental health concerns
- Q36 Taken a prescribed medication for mental health concerns
- Q1864 Been hospitalized for mental health concerns
- Q1865 Been hospitalized for mental health concerns (Last time)
- Q1866 Felt the need to reduce your alcohol or drug use
- Q1867 Felt the need to reduce your alcohol or drug use (Last time)
- Q1868 Others have expressed concern about your alcohol or drug use
- Q1869 Others have expressed concern about your alcohol or drug use (Last time)
- Q1870 Received treatment for alcohol or drug use
- Q1871 Received treatment for alcohol or drug use (Last time)
- Q1872 Purposely injured yourself without suicidal intent (e.g., cutting, hitting, burning, etc.)
- Q1873 Purposely injured yourself without suicidal intent (e.g., cutting, hitting, burning, etc.) (Last time)
- Q1874 Seriously considered attempting suicide
- Q1875 Seriously considered attempting suicide (Last time)

Q1876	Made a suicide attempt
Q1877	Made a suicide attempt (Last time)
Q1878	Considered causing serious physical injury to another person
Q1879	Considered causing serious physical injury to another person (Last time)
Q1880	Intentionally caused serious physical injury to another
Q1881	Intentionally caused serious physical injury to another (Last time)
Q1882	Someone had sexual contact with you without your consent (e.g., you were afraid to stop what was happening, passed out, drugged, drunk, incapacitated, asleep, threatened or physically forced)
Q1883	Unwanted Sexual Exp. (Last time)
Q1884	Experienced harassing, controlling, and/or abusive behavior from another person (e.g., friend, family member, partner, or authority figure)
Q1885	Harassment/Abuse (Last time)
Q2067	Have you heard strange voices in your head?
Q2070	Have you suffered a loss?
Q1886	Experienced a traumatic event that caused you to feel intense fear, helplessness, or horror
Q1887	Experienced a traumatic event that caused you to feel intense fear, helplessness, or horror (Last time)
Q1863A1403	Please select the traumatic event(s) you have experienced ANSWER: Childhood physical abuse
Q1863A1404	Please select the traumatic event(s) you have experienced ANSWER: Childhood sexual abuse
Q1863A1405	Please select the traumatic event(s) you have experienced ANSWER: Childhood emotional abuse
Q1863A1406	Please select the traumatic event(s) you have experienced ANSWER: Physical attack (e.g., mugged, beaten up, shot, stabbed, threatened with weapon)
Q1863A1407	Please select the traumatic event(s) you have experienced ANSWER: Sexual violence (rape or attempted rape, sexually assaulted, stalked, abused by intimate partner, etc.)
Q1863A1408	Please select the traumatic event(s) you have experienced ANSWER: Military combat or war zone experiences
Q1863A1409	Please select the traumatic event(s) you have experienced ANSWER: Kidnapped or taken hostage
Q1863A1410	Please select the traumatic event(s) you have experienced ANSWER: Serious accident, fire, or explosion (e.g., an industrial, farm, car, plane, or boating accident)
Q1863A1411	Please select the traumatic event(s) you have experienced ANSWER: Terrorist attack
Q1863A1412	Please select the traumatic event(s) you have experienced ANSWER: Near drowning
Q1863A1413	Please select the traumatic event(s) you have experienced ANSWER: Diagnosed with life threatening illness
Q1863A1414	Please select the traumatic event(s) you have experienced ANSWER: Natural disaster (e.g., flood, quake, hurricane, etc.)
Q1863A1415	Please select the traumatic event(s) you have experienced ANSWER: Imprisonment or Torture
Q1863A1416	Please select the traumatic event(s) you have experienced ANSWER: Animal attack
Q1863A1629	Please select the traumatic event(s) you have experienced ANSWER: Other
Q52	Other traumatic event

APPENDIX B

CCAPS-64 ITEMS

CCAPS-62

Name: _____ Date: _____

INSTRUCTIONS: The following statements describe thoughts, feelings, and experiences that people may have. Please indicate how well each statement describes you, during the past two weeks, from "not at all like me" (0) to "extremely like me" (4), by marking the correct number. Read each statement carefully, select only one answer per statement, and please do not skip any questions.

	Not at all like me			Extremely like me
1. I get sad or angry when I think of my family	0	1	2	3	4
2. I am shy around others	0	1	2	3	4
3. There are many things I am afraid of	0	1	2	3	4
4. My heart races for no good reason	0	1	2	3	4
5. I feel out of control when I eat	0	1	2	3	4
6. I enjoy my classes	0	1	2	3	4
7. I feel that my family loves me	0	1	2	3	4
8. I feel disconnected from myself	0	1	2	3	4
9. I don't enjoy being around people as much as I used to	0	1	2	3	4
10. I feel isolated and alone	0	1	2	3	4
11. My family gets on my nerves	0	1	2	3	4
12. I lose touch with reality	0	1	2	3	4
13. I think about food more than I would like to	0	1	2	3	4
14. I am anxious that I might have a panic attack while in public	0	1	2	3	4
15. I feel confident that I can succeed academically	0	1	2	3	4
16. I become anxious when I have to speak in front of audiences	0	1	2	3	4
17. I have sleep difficulties	0	1	2	3	4
18. My thoughts are racing	0	1	2	3	4
19. I am satisfied with my body shape	0	1	2	3	4
20. I feel worthless	0	1	2	3	4
21. My family is basically a happy one	0	1	2	3	4
22. I am dissatisfied with my weight	0	1	2	3	4
23. I feel helpless	0	1	2	3	4
24. I use drugs more than I should	0	1	2	3	4
25. I eat too much	0	1	2	3	4
26. I drink alcohol frequently	0	1	2	3	4
27. I have spells of terror or panic	0	1	2	3	4
28. I am enthusiastic about life	0	1	2	3	4
29. When I drink alcohol I can't remember what happened	0	1	2	3	4
30. I feel tense	0	1	2	3	4
31. When I start eating I can't stop	0	1	2	3	4
32. I have difficulty controlling my temper	0	1	2	3	4
33. I am easily frightened or startled	0	1	2	3	4

CCAPS-62

34. I diet frequently	0	1	2	3	4
35. I make friends easily	0	1	2	3	4
36. I sometimes feel like breaking or smashing things	0	1	2	3	4
37. I have unwanted thoughts I can't control	0	1	2	3	4
38. There is a history of abuse in my family	0	1	2	3	4
39. I experience nightmares or flashbacks	0	1	2	3	4
40. I feel sad all the time	0	1	2	3	4
41. I am concerned that other people do not like me	0	1	2	3	4
42. I wish my family got along better	0	1	2	3	4
43. I get angry easily	0	1	2	3	4
44. I feel uncomfortable around people I don't know	0	1	2	3	4
45. I feel irritable	0	1	2	3	4
46. I have thoughts of ending my life	0	1	2	3	4
47. I feel self conscious around others	0	1	2	3	4
48. I purge to control my weight	0	1	2	3	4
49. I drink more than I should	0	1	2	3	4
50. I enjoy getting drunk	0	1	2	3	4
51. I am not able to concentrate as well as usual	0	1	2	3	4
52. I am afraid I may lose control and act violently	0	1	2	3	4
53. It's hard to stay motivated for my classes	0	1	2	3	4
54. I feel comfortable around other people	0	1	2	3	4
55. I like myself	0	1	2	3	4
56. I have done something I have regretted because of drinking	0	1	2	3	4
57. I frequently get into arguments	0	1	2	3	4
58. I find that I cry frequently	0	1	2	3	4
59. I am unable to keep up with my schoolwork	0	1	2	3	4
60. I have thoughts of hurting others	0	1	2	3	4
61. The less I eat, the better I feel about myself	0	1	2	3	4
62. I feel that I have no one who understands me	0	1	2	3	4

APPENDIX C

CONSENT FORM

**University of Oregon Counseling & Testing Center
1590 E. 13th Ave., Eugene, OR. 97403
541-346-3227**

Consent Form

IMPORTANT

PLEASE READ BEFORE YOU MEET WITH YOUR COUNSELOR

Services at the University Counseling and Testing Center (UCTC) are partially funded by Health fees and are only available to currently enrolled students who have paid these fees. Individual, couple, and group counseling are available and require a prior screening or initial assessment interview. Individual sessions normally run 45-50 minutes. The Center is typically open from 8:00 am to 5:00 pm, Monday through Friday, with the exceptions of Thursday mornings, 8 am to 10:30 am, and official University holidays. A support/crisis telephone service is available during the hours that the UCTC is closed. This service is contracted through ProtoCall and staffed by mental health professionals who work closely with the UCTC clinical staff to provide the best possible care.

LIMITS ON COUNSELING

Like many non-profit service centers, the Counseling Center experiences a high demand for its limited resources, which makes it necessary to use our professional time optimally. We ask that you notify the Center at least 48 hours in advance if you cannot make your scheduled appointment. Should you miss two sessions without canceling in advance, another client may be assigned to fill your time slot. We understand that illnesses and other unexpected emergencies occasionally will require a shorter cancellation period.

To meet the needs of as many students as possible, most clients are seen in a brief therapy format, i.e., from one to ten sessions. Counseling is concluded at the point when clients seem to have the capacity to work out their own problems without undue difficulty. If longer term counseling is indicated, it may be necessary to receive this elsewhere. Your counselor or another staff member can help with possible referrals to other providers as needed.

WAITING LIST PROCEDURES

In light of high demand on our services, the Counseling Center operates with a waiting list at times, the size of which fluctuates during the year. We

encourage you to speak with your assessment counselor about the length of wait, if any, and to discuss other options, such as obtaining outside referrals, if necessary. If you are placed on our waiting list, we will contact you by email or phone when an opening becomes available. Should you feel the need for crisis assistance or support while you are waiting for ongoing sessions, please feel free to contact us at any time (24/7).

PROBLEMS WITH YOUR COUNSELOR OR THE CENTER

A trusting relationship is a key ingredient of successful counseling. Conflicts and tensions are sometimes a normal part of the therapeutic process. If you experience this, you are encouraged to bring it up with your counselor. When such issues cannot be resolved through discussion, the counselor's responsibility is to facilitate a transfer to another counselor or service as appropriate. As a client, you always have the right to raise a concern about your treatment with the counselor, the Clinical Director, or Director. The front desk staff may be able to answer any questions you might have about who can help you with your concerns.

CONFIDENTIALITY

The University Counseling and Testing Center (UCTC) provides confidential psychological services to students, consistent with the parameters of state and federal laws. Providing confidential services means that Counseling Center staff members do not release your information outside the UCTC without your permission.

The main, but not only, exceptions to confidentiality may arise in situations involving danger to yourself or others, abuse or neglect of a child or vulnerable adult, court orders or subpoena of records, or your emotional condition being used as a claim or defense in a legal situation.

Information regarding students is routinely shared internally among Counseling Center staff, primarily for case consultation and therapist supervision. The Counseling Center may exchange information regarding your treatment with other health care professionals for the purposes of coordinating care without your written consent, as specified by law

If you are a student majoring in a professionally regulated area (e.g., Law), or if your work requires government security clearance (e.g., Department of Defense), please be advised that those regulatory boards may ask you to authorize disclosure of your Counseling Center records.

The information you provide may be used in aggregate form, i.e. all information uniquely identifying any individual is removed, for the purposes of maintaining accurate statistics and conducting research.

The Counseling Center offers students the option of using email as one mode of communication, usually for scheduling purposes. Please be aware that the privacy of email cannot be guaranteed. If you choose to use email to communicate with your counselor, do so carefully and with the knowledge that any information sent could be access by outside parties even after being

deleted. Our preference would be to use email primarily for scheduling purposes.

Please contact the Counseling Center or talk with your therapist if you have more specific questions about confidentiality at the Counseling and Testing Center.

AFTER HOURS CRISIS

The UCTC contracts with a professional support/crisis counseling service to assist students when our center is closed. That service is through ProtoCall Services. This service is staffed by qualified mental health professionals who work closely with the UCTC to provide you the best quality care. The UCTC receives confidential reports regarding services ProtoCall provides.

APPOINTMENT REMINDERS

The Counseling Center utilizes an automated system for delivering appointment reminders through text messaging and/or University of Oregon email accounts. The scope of information contained in these reminders will be limited to dates and times of Counseling Center appointments. You may opt out of receiving reminders at any time by advising administrative staff (front desk) that you no longer wish to receive reminders by text, email or either method.

FOR STUDENTS NOT ENROLLED FOR THE CURRENT TERM

I understand that I may be eligible for services between enrolled terms, only if I was registered the previous term and I am already enrolled for the next academic term. Your university account will be billed a "stop-out" fee. See table for current fees. It is my responsibility to establish a relationship with another health care provider in the community if I think I might not re-enroll. Upon my written authorization, the Counseling Center will arrange to have copies of my counseling records sent to this new provider for continuity of care. I also understand I will be responsible for all testing charges.

FALL	\$33.00
WINTER	\$33.00
SPRING	\$33.00
Law (Fall Semester)	\$50.00
Law (Spring Semester)	\$50.00

MISSED APPOINTMENT/LATE-CANCELLATION FEE:

There is a \$25 missed appointment/late-cancellation fee. All appointments must be cancelled or rescheduled by 1 p.m. of the previous day (or by 1 p.m. on Friday for a Monday appointment), to avoid charges for a missed appointment or late-cancellation. A missed appointment fee may also be incurred if arriving late results in a canceled or rescheduled appointment. Missed appointment and late-cancellation fees will be billed to your UO account.

TAPING OF SESSIONS

A number of our counselors are professionals in training who are required to tape sessions as a part of their supervision. All taping is done with the client's consent. Tapes are used only within the Center and only for training or supervision purposes. Audio and video tape recordings are given the same protection as other confidential information, and are erased when the therapy relationship ends. Giving your permission may make it easier to assign you to a counselor if the decision is made for receiving services from this counseling center.

Please choose one of the three options below. If you have any questions or reservations, please discuss them with your drop in counselor.

- I have read the above and by checking this box, give my consent to audio/video tape.
- I have read the above and do NOT give my permission to audio/video tape.
- I have read the above and will discuss my option with the intake therapist.

In case of emergency (such as hospitalization, ER visit, serious concerns about your risk for suicide), or if a counselor is unable to reach you for an extended period, is there someone you give the counselor permission to contact?

Emergency Contact Name, Relationship, and Phone Number

I acknowledge that I have read and understand the above information regarding services at the University of Oregon Counseling & Testing Center. I understand that if I have any questions regarding this information I can discuss them with my counselor.

Client Signature

Date

APPENDIX D

IRB EXEMPTION



UNIVERSITY OF OREGON

DATE: October 30, 2015 IRB Protocol Number: 10052015.005

TO: Anna Reichard, Principal Investigator
Department of Counseling and Testing Center

RE: Protocol entitled, "Childhood trauma and emerging adult psychological functioning: How trauma type and severity impact college student psychological symptoms"

Notice of IRB Review and Exempt Determination
as per Title 45 CFR Part 46.101 (b)(4)

The above protocol has been reviewed by the University of Oregon Institutional Review Board and Research Compliance Services. This is a minimal risk research protocol that qualifies for an exemption from IRB review under 45 CFR 46.101(b)(4) for research involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are publicly available or if the information is recorded by the investigator in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects.

Please note the IRB/HIPAA Privacy Board has made the following additional determinations:

- The IRB or Privacy Board has granted a waiver (or an alteration) of the Authorization requirement for the research use or disclosure of Protected Health Information ("PHI") including access to PHI by UCTC to create a limited data set for this research. Please note that the protocol indicates that data recorded for this research will not be individually identifiable, e.g., date of birth will be converted to age, etc.

Please note that you will not be required to submit continuing reviews for this protocol, however, you must submit any changes to the protocol to Research Compliance Services for assessment to verify that the protocol continues to qualify for exemption. This exempt determination will expire October 29, 2020. Should your research continue beyond expiration date, you will need to submit a new protocol application.

Your responsibility as a Principal Investigator also includes:

- Obtaining written documentation of the appropriate permissions from public school districts, institutions, agencies, or other organizations, etc., prior to conducting your research
- Notifying Research Compliance Services of any change in Principal Investigator
- Notifying Research Compliance Services of any changes to or supplemental funding
- Retaining copies of this determination, any signed consent forms, and related research materials for five years after conclusion of your study or the closure of your sponsored research, whichever comes last.

As with all Human Subject Research, exempt research is subject to periodic Post Approval Monitoring review.

If you have any questions regarding your protocol or the review process, please contact Research Compliance Services at ResearchCompliance@uoregon.edu or (541)346-2510.

Sincerely,

A handwritten signature in black ink, appearing to be 'S. Reichard'.

COMMITTEE FOR THE PROTECTION OF HUMAN SUBJECTS II RESEARCH COMPLIANCE SERVICES
677 E. 12th Ave., Suite 500, 5237 University of Oregon, Eugene OR 97401-5237
T 541-346-2510 F 541-346-5138 <http://humansubjects.uoregon.edu>

An equal opportunity, affirmative action institution committed to cultural diversity and compliance with the Americans with Disabilities Act

APPENDIX E

CROSS TABULATION OUTPUT

```
summary(gender_xtab)
## Call: xtabs(formula = ~trauma_type_collapse + gender, data = data_new)## Number of
cases in table: 433 ## Number of factors: 2 ## Test for independence of all
factors: ## Chisq = 33.51, df = 15, p-value = 0.003991 ## Chi-squared approximation may
be incorrect
assocstats(gender_xtab)
##          X^2 df P(> X^2) ## Likelihood Ratio 33.891 15 0.0035270 ##
Pearson      33.508 15 0.0039905 ## ## Phi-Coefficient : NA ## Contingency Coeff.:
0.268 ## Cramer's V      : 0.161
mosaic(gender_xtab, shade = TRUE, legend = TRUE)
```

```
race_xtab <- xtabs(~trauma_type_collapse + race, data=data_new)summary(race_xtab)
## Call: xtabs(formula = ~trauma_type_collapse + race, data = data_new)## Number of cases
in table: 432 ## Number of factors: 2 ## Test for independence of all factors: ## Chisq =
46, df = 35, p-value = 0.1011 ## Chi-squared approximation may be incorrect
intl_xtab <- xtabs(~trauma_type_collapse + intl, data=data_new)summary(intl_xtab)
## Call: xtabs(formula = ~trauma_type_collapse + intl, data = data_new)## Number of cases
in table: 336 ## Number of factors: 2 ## Test for independence of all factors: ## Chisq =
2.3697, df = 5, p-value = 0.796 ## Chi-squared approximation may be incorrect
sexual_xtab <- xtabs(~trauma_type_collapse + sexual)summary(sexual_xtab)
## Call: xtabs(formula = ~trauma_type_collapse + sexual)## Number of cases in table: 426
## Number of factors: 2 ## Test for independence of all factors: ## Chisq = 60.49, df =
25, p-value = 8.949e-05 ## Chi-squared approximation may be incorrect
assocstats(sexual_xtab)
##          X^2 df P(> X^2) ## Likelihood Ratio 50.449 25 0.00187553 ##
Pearson      60.489 25 0.00008949 ## ## Phi-Coefficient : NA ## Contingency Coeff.:
0.353 ## Cramer's V      : 0.169
mosaic(sexual_xtab, shade = TRUE, legend = TRUE)
```

```
rel_status_xtab <- xtabs(~trauma_type_collapse + rel_status,
data=data_new)summary(rel_status_xtab)
## Call: xtabs(formula = ~trauma_type_collapse + rel_status, data = data_new)## Number of
cases in table: 423 ## Number of factors: 2 ## Test for independence of all
factors: ## Chisq = 38.43, df = 25, p-value = 0.042 ## Chi-squared approximation may be
incorrect
assocstats(rel_status_xtab)
##          X^2 df P(> X^2) ## Likelihood Ratio 28.240 25 0.296932 ##
Pearson      38.427 25 0.042002 ## ## Phi-Coefficient : NA ## Contingency Coeff.:
0.289 ## Cramer's V      : 0.135
mosaic(rel_status_xtab, shade = TRUE, legend = TRUE)
```

```
first_gen_xtab <- xtabs(~trauma_type_collapse +
```

```

data_new$first_gen)summary(first_gen_xtab)
## Call: xtabs(formula = ~trauma_type_collapse + data_new$first_gen)## Number of cases in
table: 433## Number of factors: 2## Test for independence of all factors:## Chisq =
15.879, df = 5, p-value = 0.007199
assocstats(first_gen_xtab)
##          X^2 df P(> X^2)## Likelihood Ratio 16.062 5 0.0066681##
Pearson      15.879 5 0.0071994## ## Phi-Coefficient : NA## Contingency Coeff.:
0.188## Cramer's V      : 0.191
mosaic(first_gen_xtab, shade = TRUE, legend = TRUE)

```

```

assoc(first_gen_xtab)

```

```

pathway_xtab <- xtabs(~trauma_type_collapse + pathway,
data=data_new)summary(pathway_xtab)
## Call: xtabs(formula = ~trauma_type_collapse + pathway, data = data_new)## Number of
cases in table: 424## Number of factors: 2## Test for independence of all
factors:## Chisq = 3.516, df = 5, p-value = 0.621## Chi-squared approximation may be
incorrect
financial_xtab <- xtabs(~trauma_type_collapse + financial,
data=data_new)summary(financial_xtab)
## Call: xtabs(formula = ~trauma_type_collapse + financial, data = data_new)## Number of
cases in table: 433## Number of factors: 2## Test for independence of all
factors:## Chisq = 28.218, df = 20, p-value = 0.1043## Chi-squared approximation may be
incorrect
ac_status_xtab <- xtabs(~trauma_type_collapse + ac_status,
data=data_new)summary(ac_status_xtab)
## Call: xtabs(formula = ~trauma_type_collapse + ac_status, data = data_new)## Number of
cases in table: 433## Number of factors: 2## Test for independence of all
factors:## Chisq = 36.99, df = 35, p-value = 0.3774## Chi-squared approximation may be
incorrect
transfer_xtab <- xtabs(~trauma_type_collapse + data_new$transfer)summary(transfer_xtab)
## Call: xtabs(formula = ~trauma_type_collapse + data_new$transfer)## Number of cases in
table: 422## Number of factors: 2## Test for independence of all factors:## Chisq =
11.534, df = 5, p-value = 0.04176## Chi-squared approximation may be incorrect
assocstats(transfer_xtab)
##          X^2 df P(> X^2)## Likelihood Ratio 11.270 5 0.046277##
Pearson      11.534 5 0.041763## ## Phi-Coefficient : NA## Contingency Coeff.:
0.163## Cramer's V      : 0.165
mosaic(transfer_xtab, shade = TRUE, legend = TRUE)

```

```

assoc(transfer_xtab)

```

```

disability_xtab <- xtabs(~trauma_type_collapse + disability,
data=data_new)summary(disability_xtab)
## Call: xtabs(formula = ~trauma_type_collapse + disability, data = data_new)## Number of
cases in table: 418## Number of factors: 2## Test for independence of all
factors:## Chisq = 7.411, df = 5, p-value = 0.1918## Chi-squared approximation may be
incorrect

```

```

fam_support_xtab <- xtabs(~trauma_type_collapse + fam_support,
data=data_new)summary(fam_support_xtab)
## Call: xtabs(formula = ~trauma_type_collapse + fam_support, data = data_new)## Number
of cases in table: 433 ## Number of factors: 2 ## Test for independence of all
factors: ## Chisq = 27.384, df = 20, p-value = 0.1248 ## Chi-squared approximation may be
incorrect
soc_support_xtab <- xtabs(~trauma_type_collapse + soc_support,
data=data_new)summary(soc_support_xtab)
## Call: xtabs(formula = ~trauma_type_collapse + soc_support, data = data_new)## Number
of cases in table: 402 ## Number of factors: 2 ## Test for independence of all
factors: ## Chisq = 19.77, df = 20, p-value = 0.4724 ## Chi-squared approximation may be
incorrect
religious_xtab <- xtabs(~trauma_type_collapse + religious,
data=data_new)summary(religious_xtab)
## Call: xtabs(formula = ~trauma_type_collapse + religious, data = data_new)## Number of
cases in table: 427 ## Number of factors: 2 ## Test for independence of all
factors: ## Chisq = 52.22, df = 45, p-value = 0.2137 ## Chi-squared approximation may be
incorrect
religious_imp_xtab <- xtabs(~trauma_type_collapse +
data_new$religious_imp)summary(religious_imp_xtab)
## Call: xtabs(formula = ~trauma_type_collapse + data_new$religious_imp)## Number of
cases in table: 425 ## Number of factors: 2 ## Test for independence of all
factors: ## Chisq = 47.07, df = 20, p-value = 0.0005744 ## Chi-squared approximation may
be incorrect
assocstats(religious_imp_xtab)
##          X^2 df  P(> X^2) ## Likelihood Ratio 42.703 20 0.00223744 ##
Pearson      47.066 20 0.00057441 ## Phi-Coefficient : NA ## Contingency Coeff.:
0.316 ## Cramer's V      : 0.166
mosaic(religious_imp_xtab, shade = TRUE, legend = TRUE)

assoc(religious_imp_xtab)

aod_misuse_xtab <- xtabs(~trauma_type_collapse + aod_misuse,
data=data_new)summary(aod_misuse_xtab)
## Call: xtabs(formula = ~trauma_type_collapse + aod_misuse, data = data_new)## Number
of cases in table: 433 ## Number of factors: 2 ## Test for independence of all
factors: ## Chisq = 23.906, df = 25, p-value = 0.5248 ## Chi-squared approximation may be
incorrect
past_counseling_xtab <- xtabs(~trauma_type_collapse + past_counseling,
data=data_new)summary(aod_misuse_xtab)
## Call: xtabs(formula = ~trauma_type_collapse + aod_misuse, data = data_new)## Number
of cases in table: 433 ## Number of factors: 2 ## Test for independence of all
factors: ## Chisq = 23.906, df = 25, p-value = 0.5248 ## Chi-squared approximation may be
incorrect
psych_med_xtab <- xtabs(~trauma_type_collapse + psych_med,
data=data_new)summary(psych_med_xtab)
## Call: xtabs(formula = ~trauma_type_collapse + psych_med, data = data_new)## Number of
cases in table: 427 ## Number of factors: 2 ## Test for independence of all

```

```
factors:## Chisq = 11.498, df = 15, p-value = 0.7165## Chi-squared approximation may be incorrect
```

```
nssib_xtab <- xtabs(~trauma_type_collapse + nssib, data=data_new)summary(nssib_xtab)
```

```
## Call: xtabs(formula = ~trauma_type_collapse + nssib, data = data_new)## Number of cases in table: 427## Number of factors: 2## Test for independence of all factors:## Chisq = 27.119, df = 20, p-value = 0.132## Chi-squared approximation may be incorrect
```

```
si_xtab <- xtabs(~trauma_type_collapse + si, data=data_new)summary(si_xtab)
```

```
## Call: xtabs(formula = ~trauma_type_collapse + si, data = data_new)## Number of cases in table: 428## Number of factors: 2## Test for independence of all factors:## Chisq = 28.422, df = 20, p-value = 0.09978## Chi-squared approximation may be incorrect
```

```
si_attempt_xtab <- xtabs(~trauma_type_collapse + data_new$si_attempt)summary(si_attempt_xtab)
```

```
## Call: xtabs(formula = ~trauma_type_collapse + data_new$si_attempt)## Number of cases in table: 427## Number of factors: 2## Test for independence of all factors:## Chisq = 42.05, df = 20, p-value = 0.002726## Chi-squared approximation may be incorrect
```

```
assocstats(si_attempt_xtab)
```

```
## X^2 df P(> X^2)## Likelihood Ratio 39.451 20 0.0058561##
```

```
Pearson 42.048 20 0.0027259## ## Phi-Coefficient : NA## Contingency Coeff.: 0.299## Cramer's V : 0.157
```

```
mosaic(si_attempt_xtab, shade = TRUE, legend = TRUE)
```

```
assoc(si_attempt_xtab)
```

```
vi_xtab <- xtabs(~trauma_type_collapse + vi, data=data_new)summary(vi_xtab)
```

```
## Call: xtabs(formula = ~trauma_type_collapse + vi, data = data_new)## Number of cases in table: 426## Number of factors: 2## Test for independence of all factors:## Chisq = 23.575, df = 20, p-value = 0.2614## Chi-squared approximation may be incorrect
```

```
unwanted_sex_xtab <- xtabs(~trauma_type_collapse + data_new$unwanted_sex)summary(unwanted_sex_xtab)
```

```
## Call: xtabs(formula = ~trauma_type_collapse + data_new$unwanted_sex)## Number of cases in table: 423## Number of factors: 2## Test for independence of all
```

```
factors:## Chisq = 124.78, df = 20, p-value = 3.696e-17## Chi-squared approximation may be incorrect
```

```
assocstats(unwanted_sex_xtab)
```

```
## X^2 df P(> X^2)## Likelihood Ratio 122.60 20 1.1102e-16##
```

```
Pearson 124.78 20 0.0000e+00## ## Phi-Coefficient : NA## Contingency Coeff.: 0.477## Cramer's V : 0.272
```

```
mosaic(unwanted_sex_xtab, shade = TRUE, legend = TRUE)
```

```
assoc(unwanted_sex_xtab)
```

```
ipv_xtab <- xtabs(~trauma_type_collapse + data_new$ipv)summary(ipv_xtab)
```

```
## Call: xtabs(formula = ~trauma_type_collapse + data_new$ipv)## Number of cases in table: 430## Number of factors: 2## Test for independence of all factors:## Chisq = 75.63, df = 20, p-value = 2.139e-08## Chi-squared approximation may be incorrect
```

```
assocstats(ipv_xtab)
```

```
## X^2 df P(> X^2)## Likelihood Ratio 79.651 20 4.4993e-09##
```

```

Pearson      75.629 20 2.1392e-08### Phi-Coefficient : NA### Contingency Coeff.:
0.387### Cramer's V      : 0.21
mosaic(ipv_xtab, shade = TRUE, legend = TRUE)

```

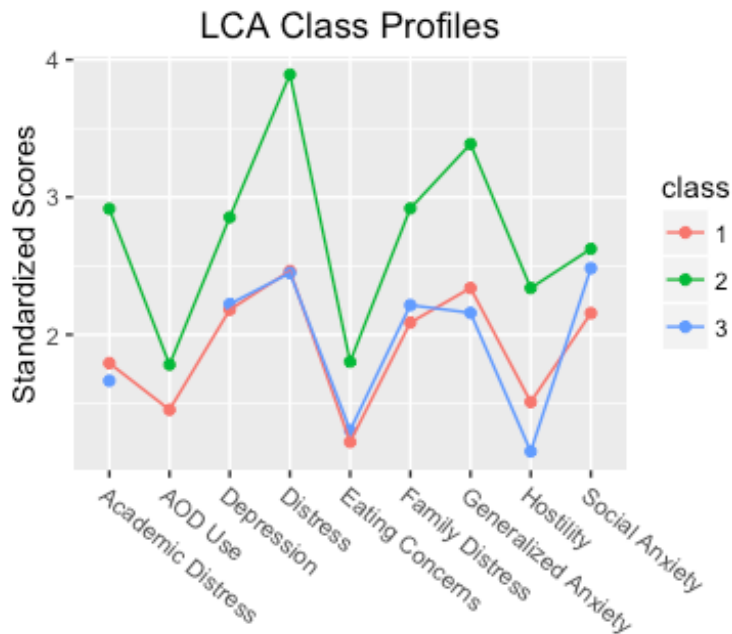
```

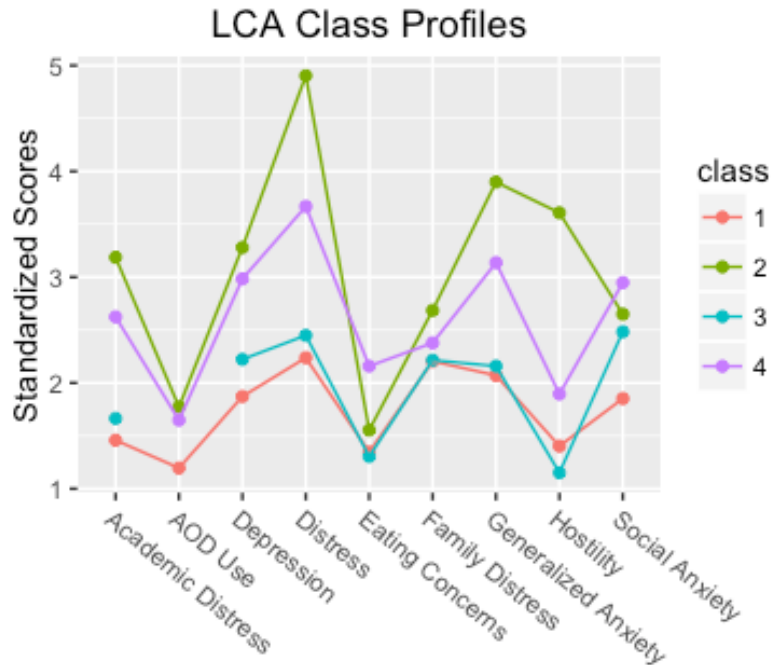
assoc(ipv_xtab)
hallucin_xtab <- xtabs(~trauma_type_collapse + hallucin,
data=data_new)### summary(hallucin_xtab)
## Call: xtabs(formula = ~trauma_type_collapse + hallucin, data = data_new)### Number of
cases in table: 425### Number of factors: 2### Test for independence of all
factors:### Chisq = 10.885, df = 15, p-value = 0.7607### Chi-squared approximation may be
incorrect
loss_xtab <- xtabs(~trauma_type_collapse + loss, data=data_new)### summary(loss_xtab)
## Call: xtabs(formula = ~trauma_type_collapse + loss, data = data_new)### Number of cases
in table: 422### Number of factors: 2### Test for independence of all factors:### Chisq =
16.334, df = 15, p-value = 0.3602### Chi-squared approximation may be incorrect

```

APPENDIX F

THREE AND FOUR CLASS SOLUTIONS





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