THE IMPACT OF ADVERSE CHILDHOOD EXPERIENCES ON DISSOCIATION

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Jessica Scoggins

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DEDICATION

This dissertation is dedicated to all the clients I have worked with who have survived severe trauma and all those yet to come in my career. Despite everything inflicted upon them or withheld from them, they survived because of dissociation and other coping skills. I hope that this study can contribute to the knowledge of other clinicians in the mental health field about people who dissociate. It is my hope that we, as mental health professionals, can learn to understand what clients who dissociate experience so that we can help them live the fulfilling lives that they deserve.

ABSTRACT

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The effects of childhood trauma on dissociation has been documented in research, but there are few articles exploring the fine details of the assessments that allow for the examination of this relationship. This study utilized the Adverse Childhood Experience Questionnaire (ACEQ), the Dissociative Experience Scale II (DESII), and the Dissociative Experience Scale II Taxon (DES-T) to evaluate the relationship between childhood trauma and dissociation in a community outpatient population at a counselor training clinic in Texas. Each subscale of the DESII (ie: amnesia, depersonalization/derealization, and absorption) were included in these analyses, as were all 10 of the individual ACEQ items and its total score. The results of the regression analyses showed the total ACEQ scores were significantly able to predict total DESII scores and DESII amnesia scores. Such results support childhood trauma and dissociation being a part of a standard intake assessment process.

KEY WORDS: Dissociation, Adverse Childhood Experiences (ACE), Dissociative Experience Scale II (DESII), Dissociative Experience Scale II Taxon (DES-T), Childhood trauma.

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CHAPTER I

Introduction

In 1998, Felitti et al. published the study on adverse childhood experiences (ACEs) and how they affect adults later in life. More specifically, this study focused on medical conditions and the impact that ACEs have on healthcare spending. Childhood trauma is known to affect various aspects of development and have effects on a person into their adulthood as well (van der Hart et al., 2006). Such effects have been studied over the years in connection with various mental and physical disorders.

Of those who have studied dissociation, childhood trauma has been found to be one circumstance strongly connected to symptoms of dissociation (Fung et al., 2019; Parfait et al., 2022; Putnam, 2009; Thomson & Jaque, 2018). There are still competing theories on dissociation (e.g., Briere, 2002; Spiegel, 1963; van der Hart et al., 2006); however, each of the authors of these theories noted the significance of the connection between dissociation and childhood trauma. Briere (2002) and Putnam (2009) both noted that trauma that affected attachment in early childhood was related to more dissociative experiences. Van der Hart et al. (2006) expanded upon this, stating that the development of a dissociative disorder depends on occurrences of abuse or neglect being recurrent and often, including a betrayal by a caregiver. Despite having much research and theoretical support for this connection of dissociation and childhood trauma, there are still those who dispute it (Loewenstein, 2018; Lynn et al., 2014).

Furthermore, among researchers, there is not yet consensus on what types of trauma lead to pathological dissociation that is thought to be present in the dissociative disorders, such as DID and OSDD. A few have explored this (Fung et al., 2019; Kate et

al., 2021), but there is very little research utilizing Adverse Childhood Experience Questionnaire (ACEQ) to study dissociation. Furthermore, at this point in time, no articles were found evaluating the relationship between each type of childhood trauma, as represented on the ACEQ, and dissociation. There also is little research on the ACEQ and the Dissociative Experiences Scale-Taxon (DES-T), despite calls for more on these assessment tools (Ross, 2021; Spitzer et al., 2006). Only two articles were found using the DES-T and the ACEQ (Fung et al., 2019; Thomson & Jaque, 2018). This research will contribute to the knowledge of the relationship between dissociation and childhood trauma by exploring the types of childhood trauma that predict dissociation.

Statement of the Problem

Dissociation is a common symptom across many disorders, but it is rarely identified and treated (Sar, 2006; Spitzer et al., 2006). Identifying the types of trauma and number of types of trauma that lead to more dissociation can help clinicians screen for and treat this symptom. Rafiq et al. (2018) found that childhood trauma was strongly related to increased dissociation but called for more research on which types of trauma lead to more dissociation. Kate et al., (2021) found that trauma alone is not enough to produce a dissociative disorder, but that it has more to do with the number of types of trauma, how many times it occurred, and the identity of the offenders. There is a lack of research on what types of childhood trauma lead to dissociation using the ACEQ, as well as the DES-T. The proposed study will focus on the types of trauma in childhood, as defined by the ACEQ, and their relationship with dissociation experienced by adults, utilizing the DESII and the DES-T.

Purpose of the Study

Presently, there is little research using the ACEQ focusing on what type of childhood trauma contributes most significantly to dissociation. I will use the ACEQ, DES-II, and DES-T to assess the relationship between dissociation and adverse childhood experiences. The ACEQ addresses five types of abuse or neglect and five household dysfunction circumstance items. This research could provide insight into how these types of trauma affect dissociation and pathological dissociation using the DESII and DES-T. The purpose of this study is to examine the relationship between adverse childhood experiences and dissociation, as well as which types of adverse childhood experiences can predict different types of dissociation.

Significance of the Study

This study would not only contribute to the research literature on dissociation, but also the debate that surrounds dissociation and dissociative disorders and their connection to childhood trauma. Identifying which types of trauma can predict dissociation in terms of amnesia, depersonalization/derealization, and absorption, as well as pathological dissociation, would have a clinical impact on how these assessments could be utilized as a part of assessing for dissociation.

Definition of Terms

Adverse Childhood Experiences

Adverse Childhood Experiences are defined by the ACE study to be: physical, emotional, or sexual abuse; physical or emotional neglect; household dysfunction defined as mental illness, incarcerated relative, mother treated violently, substance use, and divorce (Felitti et al., 1998). Notably, the term “childhood trauma” is often used in the

literature and the theoretical framework. For the purpose of this study, childhood trauma is to be included in the term adverse childhood experiences.

Dissociation or Dissociative Symptoms

Dissociation is a symptom that the *Diagnostic and Statistical Manual 5* (*DSM-5*) defines as "… a disruption, interruption, and/or discontinuity of the normal integration of consciousness, memory, identity, consciousness, emotion, perception, body representation, motor control and behavior" (American Psychological Association [APA], 2013, p. 291). Dissociation will include all three subtypes identified in the DESII: absorption, depersonalization/derealization, and amnesia (Carlson & Putnam, 1993). It will also include additional features from other assessments: identity confusion and fragmentation, loss of control (DIS-Q; Riley, 1988); tunnel vision, auditory distancing, muscle contractions, psychogenic blindness, insensitivity to pain, psychogenic paralysis, non-epileptic seizures (SDQ-20; Nijenhuis et al., 1996).

Pathological Dissociation

Pathological dissociation consists of severe dissociative symptoms most common in the severe dissociative disorders. It is said to be present in an estimated 3.3% of the population and found in the dissociative disorders in the DSM-5 (APA, 2013): DID, dissociative amnesia, depersonalization/derealization disorder, OSDD, and unspecified dissociative disorder (Waller & Ross, 1997).

Severe Dissociative Disorder

Severe dissociative disorders includes Dissociative Identity Disorder (DID) and Otherwise Specified Dissociative Disorder (OSDD) from the DSM-5 (APA, 2013), as well as Partial Dissociative Identity Disorder from the ICD-11 (World Health Organization [WHO], 2019).

Theoretical Framework

The continuum theory of dissociation, a unidimensional school of thought that had been widely accepted in the past, was summated by Spiegel (1963) and explained to be a variety of experiences that ranged from dissociated to associated. When a distressing experience causes one's awareness to increase, the brain tries to constrict awareness (i.e., dissociation) in order to decrease anxiety during a distressing event. The brain then works to reintegrate the distressing fragments of that experience. Thus, this process would bring about association. When reassociating traumatic experiences, over time, this process assists in the reassociating of the dissociated fragments of traumatic experiences (Spiegel, 1997). This theory acknowledges the dissociation/association processes in the brain that are operating in order to reintegrate information in individuals' daily lives. It also leaves room for the simultaneous existence of different types of dissociation, including pathological dissociation, which the research literature supports may be a type of dissociation most necessary in the face of severe trauma in childhood (Ross & Waller, 1997; van der Hart et al., 2006). It is notable that not all individuals experiencing childhood trauma will develop pathological dissociation (Irwin, 1999; McLewin & Muller, 2006). A survivor of childhood trauma can experience other symptoms of dissociation without receiving a diagnosis of a severe dissociative disorder. These

individuals may meet criteria for another disorder such as Post-Traumatic Stress Disorder (PTSD). Based on the continuum theory, everyone falls somewhere on the continuum including “normal” individuals, as well as those who have been severely traumatized or meet criteria for any other disorder.

Research Questions

1. Do overall scores on the ACEQ predict the total score on the DESII?
2. Do ACEQ scores predict scores on the DESII subscales?
3. Do overall scores on the ACEQ predict scores on the DES-T?
4. How do items on the ACEQ predict dissociation?

Hypotheses

1. Higher ACEQ scores will predict higher scores on the DESII across all types of dissociation (Fung et al., 2019; Thomson & Jaque, 2018).
2. The abuse and neglect items on ACEQ (i.e., items 1-5) will predict severe dissociation on scores of the DES-T, the DESII, and the DESII amnesia and depersonalization/derealization subscales (Fung et al., 2019; Irwin, 1999; Soffer-Dudek et al., 2015).

Limitations

Because this data was collected previously, I will not have any follow up ability. This should not be necessary for this study. With the retroactive nature of an assessment such as the ACEQ, some concern about the need for follow ups has come up; however, Karatekin and Hill (2019) found that the retrospective reporting did not affect validity when reported ACEs were corroborated.

Another notable limitation is that these were administered as initial intake assessments prior to the client's first counseling session. It is possible this affected their reporting of dissociation on the DESII as there was not yet a therapeutic relationship built with their counselor. Some people may feel uncomfortable to report yet, be concealing their dissociative symptoms, or be unaware of their dissociation due to its severity (Ross, 2015).

Delimitations

There are other screeners available to evaluate dissociation. I chose the DESII because it is the most widely used assessment for dissociation in research and clinical work (Kate et al., 2020). However, it measures only three types of dissociative symptoms. Other measures address more and assess somatic symptoms (i.e., SDQ-20).

The ACEQ is not a screening tool. Rather, it is a questionnaire to measure whether or not 10 specific types of childhood trauma occurred. The ACEQ does not cover all types of childhood trauma indicated in the research related to dissociative disorders; nor does it ask for details about the extent or frequency of the trauma (Felitti et al., 1998).

This data was previously collected and utilized for the purpose of this study. Because of that, only one counselor training clinic was used. Within this data set, all participants were ages 18+. Child clients were seen and some data was collected, but it was not a part of this data set.

Special Note

This data was collected previously (2017-2020) before the pandemic. A pandemic fits the definition of a global trauma and a shared trauma (Bell & Robinson, 2013), which may have affected dissociation levels of clients presenting to training clinics at the time of this study. However, because the data being utilized in this study was previously collected, conclusions related to the impact of COVID19 on dissociation cannot be drawn or assumed.

Organization of the Study

The present dissertation will be organized into five chapters. Chapter 2 will cover the current literature related to dissociation and its presence across various disorders, the continuum theory of dissociation, assessment tools for dissociation, evaluation of childhood trauma in adults, and clients presenting to training clinics statistics. Chapter 3 will describe the research design, participants, instruments, data collection, and data analysis of this study. Chapter 4 will provide descriptive information, analyses, and results of the data collection. The last chapter will contain the discussion, implications, and recommendations for future research.

CHAPTER II

Literature Review

Dissociation is a term that has many definitions. The theory of structural dissociation defines it as a division of thoughts and psychobiological systems that create the whole personality of an individual (van der Hart et al., 2006). This theory's definition is based on Janet's definition of dissociation from 1907, a division among "systems of ideas and functions that constitute the personality" (1907, p. 332). Other researchers such as the creators of a common assessment tool for dissociation, the Dissociative Experiences Scale (DESII; Carlson & Putnam, 1993), have defined dissociation as disturbances of memory, identity, awareness, and cognition that are usually labeled as amnesia, depersonalization/derealization, and absorption and imaginative involvement. In the latest version of the *Diagnostic and Statistical Manual 5* (*DSM-5*), it was defined as "… a disruption, interruption, and/or discontinuity of the normal integration of consciousness, memory, identity, emotion, perception, body representation, motor control and behavior" (American Psychological Association [APA], 2013, p. 291). The *International Classification of Diseases 11th Revision (ICD-11)* uses a definition that is quite similar, yet noting that the disruption is involuntary by stating "involuntary disruption or discontinuity in the normal integration of one or more of the following: identity, sensations, perceptions, affects, thoughts, memories, control over bodily movements, or behaviour" (World Health Organization [WHO], 2019). Additionally, a support organization for people who have dissociative disorders called First Person Plural defines dissociation as "flashbacks, out of body experiences, derealization, depersonalization, revictimization, amnesia, fugue state, disturbance in sense of self, and

it can leave the person vulnerable to developing other psychiatric disorders, including the complex dissociative disorders e.g. DID" (Richardson, 2019, p. 5). An organization that treats traumatic stress and dissociative disorders, the Sidran Institute, defines dissociation on their website as a "separation of ideas, feelings, information, identity, or memories that normally would go together" (Sidran Institute, n.d.). There are similarities in these definitions, but there is still some disagreement on this term in the literature and in the mental health field. However, what is evident is that dissociation has an effect on memory, consciousness, and identity that can cause impairment in daily life requiring treatment and assessment (Ross, 2015).

Beyond definitions, researchers disagree on the existence of a typological construct of dissociation. Historically, Janet (1889) viewed dissociation as a clinical construct, rarely occurring in healthy people, while others at the time argued that dissociation existed on a continuum, representing a greater or lesser degree in any individual, healthy or otherwise (van der Hart & Dorahy, 2009; Waller et al., 1996). Later, van der Hart et al., (2006) expanded on Janet's construct of dissociation to state that dissociation is only a pathological division of the personality structure. More on this will be discussed in the theoretical framework section; however, the debate on whether dissociation is pathological or nonpathological is still ongoing today. Notably, Waller et al. (1996) explored a taxometric method of assessment to separate pathological dissociation, severe symptoms existing in severe dissociative disorders, from nonpathological dissociation, experiences within normal range for healthy individuals or symptomatic of other disorders. From their Taxon Model work, and that of others (see

Allen et al., 2002; Ross et al., 2002; Ross & Waller, 1997), it is possible to measure both types of dissociation- pathological and nonpathological.

Why we need to Assess Dissociation

When clients have dissociative symptoms, it can be difficult for the counselor to treat the client adequately if the counselor is unaware or undereducated on this symptomatology (Coy et al., 2020; International Society for the Study of Trauma and Dissociation [ISSTD], 2011). Much of this is because clients with pathological dissociation tend to conceal their dissociative symptoms (American Psychiatric Association [APA], 2013; Paulsen & Lannis, 2014; van der Hart et al., 2006). The disruption of memory caused by dissociation also may leave the individual completely unaware that this is occurring (Briere, 2002; Ross, 2015). These factors can lead individuals not to report their dissociative symptoms of their own accord (Nijenhuis et al., 2010; van der Hart et al., 2006). Furthermore, there are some dissociative disorders that require specialized training, such as dissociative identity disorder (DID), in order to treat clients ethically and sufficiently (Ross, 2015; ISSTD, 2011). Such hidden symptoms make it difficult to properly diagnose and treat clients for pathological dissociation. Because clients may be unaware or withholding of dissociative symptoms, the responsibility to detect and screen for such symptoms, administer appropriate treatment, and/or provide referrals resides with the clinician treating them (Ross, 2015; Sar, 2011; Sar et al., 2007). Thus, adequate knowledge about dissociative disorders is crucial but all too often is sorely lacking.

Lifetime prevalence rates for dissociative disorders vary across studies around the world but have been noted as high as 10% in some countries (Sar, 2011). Clients with

severe dissociation, such as DID, have been shown to go seven or more years without an accurate diagnosis and treatment (Putnam et al., 1989; Ross, 2015; Ross et al., 1989; van der Hart et al., 2006). Many counselors are not identifying such severe dissociative disorders, nor are they screening for identified risk factors, such as childhood abuse and neglect (Sar, 2011; Sar et al., 2007). An accurate diagnosis is key to treating any disorder, but it is particularly prudent when working with severe dissociative disorders as they require specialized treatments (ISSTD, 2011; Nijenhuis et al., 2010; Ross, 2015). Kluft (1985) found the success rate of clients with severe dissociative disorders being treated by someone adequately trained to be 91-94% and those being treated by a clinician who did not address dissociation directly to be 2-3%. Some researchers worry that a reliance on the assumption that more typical or standard therapeutic interventions can treat all disorders leads to a failure to assess and address dissociative symptoms in clients (Søndergaard, 2017). Unfortunately, dissociative symptoms are not typically included in standard clinical questionnaires or intake assessments (Coy et al., 2020). Neither is childhood trauma exposure, a risk factor for increased dissociation and pathological dissociation, despite a call for this in research literature (Briere, 2002; Putnam, 2009; Rafiq et al., 2018; Ross, 2015). Because the literature shows that these severe dissociative disorders cannot be adequately treated with general therapeutic interventions, the assessment of dissociative symptoms and childhood trauma is the first critical step for a positive prognosis of recovery for the client (ISSTD, 2011; Kluft, 1985; Ross, 2015). The present lack of assessment of dissociation impedes the path to a proper diagnosis and treatment.

Diagnoses with Dissociative Symptoms

The term dissociation has been used to refer to many symptoms present in dissociative disorders such as dissociative trance, dissociative amnesia, dissociative fugue, depersonalization, derealization, dissociative absorption, and somatic symptoms (Hudziak et al., 1996; Sar, 2011; Sar et al., 2007; Saxe et al., 1994). These reflect many of the dissociative disorders in the DSM-5. However, meta-analyses have found dissociation in other disorders beyond just the dissociative disorders (Sar, 2006; Spitzer et al., 2006). The Taxon Model of dissociation suggests that there are two types of dissociation: nonpathological dissociation and pathological dissociation. Clients with nonpathological dissociative symptoms can be treated without specialized training (Loewenstein, 2018; Waller et al., 1996), whereas pathological dissociation requires specialized training (ISSTD, 2011). Researchers have identified different groups of dissociative symptoms indicating overlap between these groups of symptoms (Briere, 2002; Putnam & Carlson, 1993). Disorders presenting with more pathological dissociation (i.e., belonging to the taxon from the Taxon Model, estimated to be 3.3% of the population; Waller & Ross, 1997) are thought to be the dissociative disorders [i.e., DID, dissociative amnesia, depersonalization/derealization disorder, otherwise specified dissociative disorder (OSDD), and unspecified dissociative disorder (APA, 2013)]. However, other disorders may have nonpathological dissociation (Waller & Ross, 1997). Some of these disorders include post-traumatic stress disorder (PTSD) dissociative type, borderline personality disorder (BPD), obsessive compulsive disorder (OCD), attention-deficit/hyperactivity disorder (ADHD), bipolar disorder, and eating disorders (Hyland et

al., 2020; Laddis et al., 2017; Soffer-Dudek, 2019; Tuineag et al., 2020; Nilsson et al., 2020).

Dissociation presentation and its effect on treatment across disorders have been noted in the research literature. In a meta-analysis of clinical trials, Hoeboer et al. (2020) found that dissociation is common in PTSD, but that the presence of dissociative symptoms did not affect treatment outcomes. Complex PTSD is relatively new as a diagnosis, but recent research literature supports dissociation as a typical symptom that needs to be considered in treatment (Longo et al., 2019). Additionally, Hyland et al. (2020) found three complex PTSD symptom clusters that were associated with dissociation: affective dysregulation, re-experiencing, and disturbed relationships. In regard to BPD, a study exploring the dissociative symptoms present in BPD versus those in DID indicated that the dissociation present in BPD may not be the same type of dissociation that is present in DID. Instead, these symptoms may be specifically related to mechanisms occurring exclusively in BPD (Laddis et al., 2017). Additionally, Soffer-Dudek (2019) found that dissociative absorption is common in OCD and ADHD, making a differential diagnosis challenging, but that dissociation needs to be included in treatment. Others even argue that OCD calls for a specific type of dissociation: obsessional dissociation (Yildirim & Boysan, 2019). Even in mood disorders, dissociation has been shown to be present in bipolar disorder (Tuineag et al., 2020) with others showing childhood emotional trauma as a contributing risk factor to developing bipolar disorder (Kefeli et al., 2018). Demirkol et al. (2020) echoed this in a study where they found that dissociation was a mediating factor in childhood trauma for suicide risk, leading to an increase in suicide attempts. Rafiq et al. (2018) included bipolar with

personality disorders, and schizophrenia-spectrum disorders when considering the effects of childhood trauma on dissociation, finding that exposure to childhood trauma was associated with heightened dissociation across these diagnostic groups. Lastly, dissociation has also been found in eating disorders as well, both psychoform and somatoform dissociation (Nilsson et al., 2020). Dissociation is present across many disorders, but the dissociation in each disorder may present differently.

Theoretical Framework

The foundation for the proposed research is in the continuum theory of dissociation. Across the literature, this concept is acknowledged without a specific name or creator but references back to the late 1800s and early 1900s with William James and Morton Prince (Van der Hart & Dorahy, 2009). Often an explanation from Spiegel (1963) is referenced which describes what he called the dissociation - association continuum. Spiegel proposed that dissociation is the mind's attempt to decrease anxiety by constricting awareness. The various strategies of dissociation help the individual to sustain an adaptive level of awareness of the dissociated fragments in order to later reintegrate them (i.e., reach association on the continuum) and expand awareness (see Van der Hart & Dorahy, 2009). Later, Spiegel (1997) continued work on the continuum theory stating that dissociative experiences can not only be simple or more complex, but also physical, emotional, sensory, or memory related. This continuum theory is the foundational framework for the Dissociative Experiences Scale (DESII; Carlson & Putnam, 1986), which will be used in this research study to measure experiences of dissociation. Literature supports the idea of this continuum Spiegel (1997) discussed and

he was one of many Freudian trained professionals who assumed dissociation to be a type of complex defense mechanism (Brenner, 1999; van der Hart & Horst, 1989).

Opposing theories of dissociation exist in contrast to this unidimensional view of dissociation, such as a multidimensional theory by Briere (2002). Briere argues that there are multiple dimensions of dissociation that can overlap each other; therefore, information cannot be drawn from a single score, as is done in many assessments for dissociation. Additionally, the theory of structural dissociation perceives dissociation as pathological, deriving from a split in the structure of the personality and only existing in PTSD, complex PTSD, trauma-related BPD, OSDD, or DID (van der Hart et al., 2006). It is notable that this theory is newer than the continuum theory, but there is research to support the ideas and assumptions of this theory as well (Brenner, 1999; Kluft, 1985; van der Hart & Horst, 1989). It is also important to note that the theory of structural dissociation sees dissociation as only related to trauma and only structural, whereas the continuum theory and the multidimensional theory do not propose this requirement. The theory of structural dissociation does not explain other types of dissociative experiences that are represented in the multidimensional theory and the continuum theory (van der Hart et al., 2006; Briere, 2002; Putnam & Carlson, 1986). Rather, these other two theories suggest that trauma is a mediating factor for symptoms of dissociation which will be discussed later in this manuscript.

Assessment of Dissociation

The ISSTD (2011) provides direction for diagnostic assessments for dissociative disorders, as well as self-report assessment screening tools for dissociation symptoms. Self-report screeners are not diagnostic but are a helpful start to the overall diagnostic

process (Coy et al., 2020). These screening assessments for dissociation report the highest scores for people diagnosed with DID or OSDD across all three instruments: Dissociative Experiences Scale (DES), Dissociation Questionnaire (DIS-Q), and Somatoform Dissociation Questionnaire (SDQ-20) (van der Hart et al., 2006). The Dissociative Experiences Scale-Taxon (DES-T) focuses on identifying pathological dissociation present in dissociative disorders; therefore, despite individuals having high scores on the DES, just 3.3% of people belong to the taxon (Waller & Ross, 1997). A lesser known self-report screener is the Multiscale Dissociative Inventory (MDI), which will also be discussed below. The DES has been updated in a second version as of 1993 by its same creators and will be referred to as the DESII henceforth. The DESII, DIS-Q, and SDQ-20 are supported by the ISSTD as most appropriate to use when assessing dissociation and evaluating the extent and severity of dissociative symptoms (ISSTD, 2011).

Diagnostic Interviews

There are two structured clinical interviews to diagnose dissociative disorders: the Structured Clinical Interview for DSM-IV Dissociative Disorders- Revised (SCID-D-R; Steinberg, 1994) and the Dissociative Disorders Interview Schedule (DDIS; Ross et al., 1990). Both of these diagnose dissociative disorders. The DDIS was updated for the DSM-5; the SCID-D-R was not updated for the DSM-5 but both are still in use and have much research to support them. The SCID-D-R is 227 items that assess amnesia, depersonalization, derealization, identity confusion, and identity alteration. It takes anywhere from 45 minutes to 180 minutes to administer to a client. Its results report scores that reflect the frequency and intensity of symptoms. The DDIS is 132 items and

takes just 30 to 60 minutes to complete. It measures the criteria of dissociative disorders, somatization disorder, borderline personality disorder, and major depression disorder. There is also assessment of Schneiderian first-rank symptoms, trance, childhood abuse, secondary features of DID, and supernatural/paranormal experiences. The DDIS produces diagnoses but does not assess the frequency or severity of symptoms (ISSTD, 2011). There is one self-report instrument that is a diagnostic tool called the Multidimensional Inventory of Dissociation (MID; Dell, 2006). It consists of 218 items and assess 23 dissociative symptoms has built in validity scales. It takes 30 to 90 minutes to complete. When the counselor scores the MID, they generate scale scores and diagnoses (ISSTD, 2011).

Self-Report Screening Assessments

In addition to diagnostic tools, there exist screening assessments that clients can complete themselves. These are typically short and simple assessments that provide the counselor with information on the client's symptoms. However, results do not lead to a diagnosis. Instead, they are an early step in the diagnostic process to direct the counselor which diagnoses to consider and explore further. Typically, these are followed up with a clinical interview or a diagnostic interview using one of the instruments discussed above.

Dissociative Experiences Scale (DESII) The DESII (Carlson & Putnam, 1993) is a self-report measurement for dissociative experiences. It has 28 items which are assessed by the client on a likert scale of 0% to 100% how often that symptom occurs, never to always respectively, in increments of 10%. There are three subscales this assessment evaluates: amnesia; depersonalization and derealization; and absorption and imaginative

thinking. This tool is not used to diagnose, but it evaluates dissociative symptoms and those with severe dissociative disorders score highest (Carlson & Putnam, 1993).

Dissociative Experiences Scale Taxon (DES-T) The DES-T was developed by Waller et al. (1996) after using taxometric methods to evaluate the DESII and finding a group of people (i.e., membership in the taxon) belonging who presented with more pathological dissociation. Waller and Ross (1997) found an estimated 3.3% of the population belong to this taxon. It is an eight-item assessment consisting of items 3, 5, 7, 8, 12, 13, 22, and 27 on the DESII. Each item is exactly the same as on the DESII and scored the same by the client.

Dissociation Questionnaire (DIS-Q) The DIS-Q (Vanderlinden, 1993) is also a self-report instrument, but it has 63 items. Its items are pooled from the DES, the perceptual Alteration Scale (Sanders, 1986), the Questionnaire of Experiences of Dissociation (Riley, 1988), and other items created from interviews with dissociative patients. In addition to absorption and amnesia, the DIS-Q also measures identity confusion and fragmentation and the loss of control. This screener is most often used in Europe; it is used less in studies and practice in North America (ISSTD, 2011).

Multiscale Dissociation Inventory (MDI) The MDI (Brier, 2002) is a self-report assessment tool consisting of 30 questions about dissociative experiences that are answered on a likert scale of 1 (never) ... 5 (very often). This instrument is based in Briere's theory that there are multiple dimensions of dissociation: disengagement, identity dissociation, emotional constriction, memory disturbance, depersonalization, and derealization. It is noteworthy that Briere's theory of multidimensional dissociation differs from the continuum theory of dissociation which is unidimensional.

Somatoform Dissociation Questionnaire (SDQ-20) The SDQ-2 (Nijenhuis et al., 1996) is another self-report instrument for screening that has 20 items and uses a 5-point Likert scale. This tool assesses somatoform dissociation. Its items explore tunnel vision, auditory distancing, muscle contractions, psychogenic blindness, difficulty urinating, insensitivity to pain, psychogenic paralysis, non-epileptic seizures, etc (Nijenhuis et al., 1996). There is a shorter version of it to screen for dissociative disorders called the SDQ-5 (ISSTD, 2011). This is similar to how the DES-T derives from the DESII to screen for pathological dissociation, potentially DID.

Evaluating Childhood Trauma and Dissociation in Adults

As mentioned previously, the continuum theory, the multidimensional theory, and the theory of structural dissociation all acknowledge trauma exposure as a contributing factor to symptoms of dissociation (Briere, 2002; Putnam 2009; van der Hart et al., 2006). Putnam (2009) highlighted the impact of attachment to a caregiver and childhood trauma affecting dissociation. Similarly, Briere (2002) noted the impact of early childhood trauma contributing to dissociative symptoms, particularly during the early ages of caregiver-child attachment experiences. Both authors theorized that trauma impacting attachment could result in dissociative experiences. Van der Hart et al. (2006) supports that exposure to traumatic events in childhood is the key factor in the development of complex forms of structural dissociation. Further, the theory of structural dissociation believes that severe dissociative disorders occur due to the recurring nature of trauma in childhood, and especially its occurrence on multiple levels of safety such as violence, threats to life, attachment inhibition, and betrayal by an attachment figure (Søndergaard, 2017; van der Hart et al., 2006).

Much of the literature supports the connection between dissociation symptoms and disorders with childhood trauma (ISSTD, 2011; Kate et al., 2021; Ross, 2015; Sar, 2011; Sar et al., 2007; van Der Hart et al., 2006). In 2006, Sar analyzed the current literature at the time and found that dissociation presenting from many different disorders may be a response to adapting to traumatic experiences. In order to identify this in clients, Ross (2015) suggested that counselors should collect information about trauma history in childhood from the client, as well as collateral history, if at all possible, to assess the extent of the abuse in childhood which could be an indication of a severe dissociative disorder. Childhood trauma history has shown to be predictive of severe dissociative disorders; Loewenstein (2018) even stated that "[e]very study that has examined the question of early life trauma and DID has found the highest rates of childhood adversity… in the histories of DID individuals, compared with any other diagnostic group" (p. 237). However, researchers have found different results in terms of which childhood traumas are most predictive of dissociation or dissociative disorders. Historically, sexual abuse at a young age was considered the culprit for severe dissociative disorders (Kate et al. 2021). However, Kate et al. (2021) found that instances of physical abuse such as choking, smothering, assault that resulted in broken bones or teeth, being shot, or stabbed, or being tied up or locked in a confined space predicted higher levels of dissociation. They also found that exposure to childhood trauma itself was not enough to have to develop a severe dissociative disorder; it was the severity- the number of types of abuse, number of times it occurred, and if the perpetrators were caregivers that are most associated with severe dissociative disorders. They used a revised version of the Betrayal Trauma Index to measure childhood trauma and the

Multidimensional Inventory of Dissociation (MID) to identify dissociative symptoms and disorders. Other instruments exist to measure childhood trauma, but have not been explored as much in the research in conjunction with the DESII or the DES-T.

One way to evaluate childhood trauma is the Adverse Childhood Experiences Questionnaire (ACEQ) (Felitti et al., 1998). This is not a standardized assessment, but it has been used as one in many studies as a research tool. Its validity and reliability also have been explored and will be discussed in the methodology section of this manuscript. Some studies have looked at childhood trauma and dissociation, with just a few having used the ACEQ. Authors such as Fung et al. (2019) and Thomson and Jaque (2018; 2019) used the ACEQ (Felitti et al., 1998) to assess childhood trauma. Fung et al. (2019) found that higher dissociative symptoms were positively correlated to higher numbers of ACEs reported. They used both the DESII and the SDQ-20 to measure the dissociative symptoms. Notably, the relationship between dissociation and ACEs was stronger if only the first five items of the ACEQ were considered, which are the abuse and neglect items. Thomson and Jaque (2018) explored depersonalization and childhood trauma and found that emotional and physical neglect were most indicative of depersonalization dissociation using the ACEQ and the DESII. Rafiq et al. (2018) found that all types of abuse showed a significant relationship with dissociation in their study with those who have a severe mental illness (defined as personality disorders, bipolar disorder, or schizophrenia-spectrum disorders), but that emotional abuse showed the most robust predictor of dissociation. Other authors (Schalinski et al. 2016) found results dependent on frequency of abuse or neglect, as did Kate et al. (2021). Using the Maltreatment and Abuse Chronology of Exposure, an expansion of the ACEQ, and the Shutdown

Dissociation Scale, Schalinski et al. (2016) found that the number of times a child endured abuse or neglect led to more severe dissociation, depression, and post-traumatic stress disorder (PTSD) symptoms and that it was also better predicted by emotional or physical neglect. Frewen et al. (2019) found results that support this as well; ACEQ scores strongly correlated to DSM-5 PTSD symptoms, ICD-11 PTSD and Complex PTSD (cPTSD) symptoms, and Dissociative-PTSD (D-PTSD) subtype symptoms (i.e., dissociative subtype of PTSD as added in the DSM-5). Furthermore, they found that ACEs were uniquely predictive of these diagnoses compared to non-traumatic stress experiences in adulthood. It does seem that traumatic severity (Kate et al., 2021; Schalinski et al., 2016) and abuse in childhood play a big part in the development of severe dissociative disorders. Beyond this, the research supports that emotional and physical abuse and neglect are of significant importance in predicting dissociative symptoms specifically, which contradicts a common misconception that sexual abuse produces the most dissociative symptoms later in life (Kate et al., 2021).

A way to evaluate dissociation, as seen in some articles mentioned above, is the DESII (Carlson & Putnam, 1993) and the DES-T (Waller et al., 1996). The DESII is very often used in research, but rarely are the subscales assessed. Most often, an overall DESII score for dissociation is used. Limited articles have specifically looked at the absorption subscale (Thomson & Jaque, 2019) compared to childhood trauma, but each subscale has not been evaluated as specifically as in this proposed study with childhood trauma. The DES-T is used significantly less in research literature, with the few articles published calling for more research (Allen et al, 2002; Leavitt, 1999; Ross, 2021). Recently, Thomson and Jaque (2019) noted that there are still concerns about the DES-T

discriminating pathological dissociation (Leavitt, 1999; Maaranen et al., 2008) despite support that has been found for it (Ross et al., 2002; Thomson & Jaque, 2012), thus representing a need for further research as well.

Furthermore, there is limited research on using the ACEQ to predict dissociation on the DESII or the DES-T. Studies looking at dissociation have measured child abuse using other tools such as the Betrayal Trauma Index (Goldberg & Freyd, 2006) or an extended version of the ACEQ (Kate et al., 2021; Schalinski et al., 2016) and others have used the DESII, SDQ, MDI, or the Shut-D to measure dissociation (Fung et al., 2019; Parfait et al., 2022; Schalinski et al., 2016; Thomson & Jaque, 2018). However, few have utilized the ACEQ with the DESII (Thomson & Jaque, 2019) or the DES-T (Thomson & Jaque, 2019). Because we do not yet know what types of trauma lead to more dissociative experiences or pathological dissociation (Rafiq et al., 2018; Kate et al, 2021), more research on this connection is needed to specify what contributes the most to increased dissociation.

Despite the strong connection of childhood trauma and dissociation indicated in research, there are still many who doubt its connection to DID and otherwise specified dissociative disorder (OSDD). Ross (2015) discussed many myths that mental health professionals believe about these severe dissociative disorders that impede treatment for these clients. The trauma model views dissociation as a response to a traumatic event. Despite evidence for this, this model is met with skepticism by those who may believe disproven myths about dissociation and ascribe more so to the fantasy model instead. The fantasy model views dissociation as a psychological process that is not related to traumatic events. Instead, dissociation is thought to be experienced due to an individual's

proneness to fantasy thought, suggestion, and cognitive distortions (Dalenberg et al., 2012). Such academic debate is seen in a study by Dalenberg et al. (2012) challenging the fantasy model, that was quickly met with a rebuttal by Lynn et al. (2014), arguing that their data was flawed and cited the lack of corroboration of abuse. There are overlaps between the fantasy and the trauma models of dissociation that both articles did address, but they are not in agreement on the significance of the impact of trauma on severe dissociative disorders. There are other studies as recent as Kate et al. (2020) that have found evidence against the fantasy model, yet still some argue that childhood trauma does not lead to severe dissociative disorders or pathological dissociation (Merckelbach et al., 2021; Reyes et al., 2017).

Clients Presenting to Training Clinics

Clients present with a variety of psychological issues in university training clinic. The focus of this manuscript is on dissociation found in training clinic adult populations, for which there is little to no data; however, there is some information that is fairly recent on the national estimates of traumatic exposure from the National Institute of Health (NIH). The NIH found that 89.7% of people have been exposed to at least one event that would meet criteria for PTSD in the DSM-5 or DSM-IV-TR (Kilpatrick et al., 2013). Looking at the data provided, 53.1% of the participants reported physical or sexual assault. There is not data on emotional abuse nor on neglect, as these were not criteria for the DSM-5 diagnosis of PTSD, but as discussed above, physical and emotional neglect consistently show up in the research as indicative of dissociative symptoms or dissociative disorders (Kate et al., 2021; Thomson & Jaque, 2018). With half of the

population in the United States experiencing events that could potentially lead to dissociation or dissociative disorders, adequate assessment of dissociation is warranted.

Given that the Center for Disease Control reports that 61% of people in the United States report at least one ACE, 1 in 6 people report four or more, 1 in 7 people experience childhood abuse or neglect, 1 in 4 women experience childhood sexual abuse, and 1 in 13 men experience childhood sexual abuse, ACEs clearly address a common public health issue needing treatment from the healthcare system (CDC, 2021). There are nonprofit organizations who believe that the statistic for the childhood sexual abuse of boys is even higher than the 1 in 13 reported by the CDC. One such organization is called 1 in 6 after the statistics found in Dube et al. (2005). Another organization for survivors of sexual assault, Rape and Incest National Network, report that one third of all sexual assaults of people under the age of 18 are under the age of 12 (United States Department of Health and Human Services, 2018). These are prevalence rates of sexual assault, which is just one of the items on the ACEQ. Individuals who report more than four ACEs, have higher relative rates of attempted suicide (18.3%), alcoholism (16.1%), and illicit drug use (28.4%) (Felitti et al., 1998). There are additional demographics factors that increase the likelihood of having higher ACEQ scores such as race, education, income levels, employment status, and sexual orientation (CDC, 2021). Since the original release of the ACE study (Felitti et al., 1998), there have been calls to address the impact that childhood trauma has on people physically and mentally, yet few believe that this has been achieved thus far. As mentioned above, those who are skeptical of the significant impact and lingering effects of childhood trauma (e.g., dissociation) later in adulthood contribute to this lack of progress (see rebuttal article by Lynn et al., 2014). Dissociation continues to

be an under-assessed symptom, even when there is significant childhood trauma present, despite its supported connection (Coy et al., 2020; ISSTD, 2011; Ross, 2015).

This study aims to address gaps discussed above in the literature related to the topic of childhood trauma and dissociation, as well as with some of the assessments that I will use. Continued research is needed to support the connection between childhood trauma and dissociation (the trauma model) because there are still proponents of the fantasy model (Lynn et al., 2014; Reyes et al., 2017). The DESII (Carlson & Putnam, 1993) has been utilized often in research, but its subscales have had less attention. This study will focus on a more fine-grained examination of dissociative symptoms with the DESII subscales and their connection to childhood trauma, not just overall scores. The DES-T (Waller et al., 1996) has limited research published, with the few articles in existence calling for more research (Allen et al., 2002; Leavitt, 1999; Maaranen et al., 2008; Ross, 2021). For childhood trauma, the ACEQ is often utilized as well in research, but rarely are individual items assessed. This study will more closely explore which ACEQ items affect dissociation. The examination of each item of the ACEQ was only found to have been done in one study with emotional regulation (Poole et al., 2018). This study would provide further literature on the connection between dissociation and childhood trauma, as well as utilize the DESII, DES-T, and ACEQ in new ways.

CHAPTER III

Methodology

The purpose of this quantitative study is to understand the relationship between childhood trauma and dissociation, measured by the ACEQ, the DESII, and the DES-T.

Participants

For the purpose of this study, the population of interest is adults ages 18 or older who present to a university counselor training clinic for counseling services from masters' students training in a CACREP accredited Clinical Mental Health Counseling program. This population is chosen because they are the clientele of a counseling training clinic. Clients are referred to this clinic in many ways including community counselors, local mental health authorities, local k-12 schools, students from the university, and word of mouth. Presenting issues relate to diagnoses of depressive disorders, anxiety disorders, PTSD, and more. This represents various populations in the community, which is reflective of the diverse types of clients that seek counseling services at a university counselor training clinic. Previously discussed literature shows that 53.1% of people in the USA having reports of physical or sexual abuse (Kilpatrick et al., 2013) and that demographics factors of race, education, income levels, employment status, and sexual orientation are related to higher reports of ACEs (CDC, 2021). This clinic collected information on all of these factors except for sexual orientation. Income brackets were collected, but the majority of cases were missing this data. Having this information in this data set indicates that this population is relevant to explore the relationship of childhood trauma and dissociation.

Sampling Procedure

I will use participants from a previously collected data set at a particular counselor training clinic at a university in Texas with two locations. Data was collected for 152 clients that presented to this counselor training clinic during 2017-2020 when this data was collected, who were over the age of 18. Of these, 94 met the criteria of having completed the DESII, DES-T, and ACEQ to be included in this study. This was a purposive sampling technique based on convenience of an adult sample.

Instrumentation

I will use the information collected on demographics information from a preexisting data set. To assess dissociation symptoms, I will use the Dissociative Experiences Scale II (DESII; Carlson & Putnam, 1993) to assess overall dissociation symptoms and the Dissociative Experiences Scale-Taxon (DES-T; Waller et al., 1996) to assess pathological dissociation. To assess childhood trauma, I will use the Adverse Childhood Experience Questionnaire (ACEQ; Felitti et al., 1998).

Demographics Questionnaire

Participants were asked to indicate their age, gender, ethnicity, marital status, employment status, socioeconomic income bracket, highest degree earned, if they have children, if they have financial problems, and if they have legal problems.

Adverse Childhood Experience Questionnaire (ACEQ)

The ACEQ is a self-report questionnaire that has been used in the medical community to identify patients who later in life will have high healthcare needs and costs (Felitti et al., 1998). Furthermore, the original study found that what was correlated to these high healthcare needs and costs were ten items related to childhood abuse, neglect,

and household dysfunction. There are only two response options for each item: yes / no. The purpose of the questionnaire is to identify risk factors for physical and mental healthcare needs in adulthood. The higher the ACEQ score, the more adverse experiences the individual has experienced.

Reliability. Karatekin and Hill (2019) reviewed the research on the psychometric properties of the original ACEQ, which is what will be used in this study. They found research literature supported that this scale has an acceptable internal consistency reliability across studies (Bruskas &Tessin, 2013, Cronbach's alpha = .81; Ford et al., 2014, Cronbach's alpha = .78). Test-retest reliability for the sum of all items is acceptable up to 20 months; however, individual item responses may vary (Dube et al., 2004; Mersky et al., 2017, Cohen's Kappa = .90). Higher levels of stress and mental health issues are associated with higher ACEQ scores consistently in the literature according to their review.

Validity. Additionally, Karatekin and Hill (2019) found that the research literature supported satisfactory convergent validity when compared to the Childhood Trauma Questionnaire. Construct validity has been in debate for the ACEQ, but the factor analyses have indicated that there are three factors within the construct of adverse childhood experiences that the ACEQ measures: household dysfunction, physical/emotional abuse, and sexual abuse. These emerging factors are moderately correlated with each other. There has been concern about the validity of the ACEQ since it involves retrospective recall of early adverse experiences prior to the age of 18. Thus, an adult is remembering back to their childhood in order to answer the questions, which can affect validity. However, studies have indicated that the relationship between

reported ACEs and outcomes are consistent and there has not been any recall bias or time effects found (Hardt et al., 2010; Scott et al., 2010).

Dissociative Experiences Scale II (DESII)

The DESII is a brief, 28 question, self-administered assessment of dissociative experiences for adults ages 18 and older that was developed by Eve Bernstein Carlson and Frank Putnam. Through inquiry of dissociative experiences in daily life, the DESII measures multiple traits of dissociation, based on their recollection of dissociative experiences. Each question is a statement of a dissociative experience to which the participant indicates on a scale of 0%-100% their answer. The numbers "0%, 10%, 20%...100%" are listed equidistant from each other for each time based on 10% increments. Participants circle which number represents the percent of the time that they experience what is stated. Each item is divided into three subscales that were created from factor analyses: amnesic dissociation, absorption and imaginative involvement, and depersonalization and derealization (Carlson & Putnam, 1993). Amnesia items are 3, 4, 5, 6, 8, 10, 25, and 26; DPDR items are 7, 11, 12, 13, 27, and 28; absorption items are 2, 14, 15, 16, 17, 18, 20, 22, and 23 (Chu, 2011). At this point in time, the DESII is the most commonly used assessment for dissociation in research and clinically (Kate et al., 2020), making it the most appropriate choice for this study.

Reliability. In the original study (Bernstein & Putnam, 1986), test-retest reliability is reported as .84 ($p < .0001$, $n = 26$), which would indicate good internal reliability. These authors also reported that there was no need for interrater reliability because it is a self-report tool; however, Frischholz et al. (1990) explored this anyway and found an interrater reliability coefficient of .99 ($n = 20$), which is very high. A good

split-half reliability was found as well (Berstein & Putnam, 1986; Pitbaldo & Sanders, 1991). These indicate high internal consistency for the DESII.

Validity. In terms of content validity, Carlson and Putnam (1993) discussed the content validity as being high because when compared to the Diagnostic Statistical Manual III (DSM III) diagnostic criteria for dissociative disorders, clients diagnosed with dissociative disorders also had higher scores on the DESII. This was expected and was discussed in relation to the construct validity as well. Those who were expected to score high, those with multiple personality disorder based on the DSM III criteria, did score high; those who were expected to score low, the normal individuals, also did score lower. It seems that this could also be evidence for concurrent validity. Furthermore, the college students scored moderately high, which corresponded with the previous research literature on late adolescents. Carlson and Putnam (1993) also supported the construct validity by comparing the DESII to other scales such as the Perceptual Alteration Scale which produced a Pearson coefficient of .52 and .82 in various studies. This was noted to fare very well when compared to other accepted instruments, such as the MMPI, which had an average validity coefficient of .46 in a meta-analysis study. Criterion validity was reported as strong as well. The researchers used a Kruskal-Wallis test in their original study to compare DESII scores across the groups and yielded a x2 value of 93.57 (N = 192, df = 7, $p < .0001$) (Bernstein and Putnam 1986). The use of the DESII is common in clinical and nonclinical settings to screen for dissociative symptoms indicating acceptability and good social validity (Carlson & Putnam, 1993)

Dissociative Experiences Scale Taxon (DES-T)

Waller et al. (1996) developed the DES-T, which consists of eight specific items on the DESII (3, 5, 7, 8, 12, 13, 22, and 27) that correlate to pathological dissociation. Items are listed and scored the same as on the DESII with 10% increments from 0% to 100% yielding 11 selection options for each item.

Reliability. Results found by Watson (2003) echoed those found by Waller et al. 1996 indicating replicability of the DES-T. However, Watson (2003) noted that dissociation remains temporally unstable leading to low retest reliability. Ross et al. (2003) looked at a clinical population and interrater reliability between the DES-T and the Dissociative Disorders Interview Schedule (DDIS; Ross et al., 1990), Structured Clinical Interview for DSM-IV Dissociative Disorders- Revised (SCID-D-R; Steinberg, 1994), and clinical interview for diagnoses of dissociative identity disorder (DID) or otherwise specified dissociative disorder (OSDD) versus no dissociative disorder diagnosis. They found Cohen's kappas of .81 for the DDIS and DES-T, .76 for the SCID-D-R and DES-T, and .76 for clinical interview and DES-T indicating good interrater reliability for the DES-T.

Validity. Validity has been explored by a few studies. Waller and Ross (1997) found discriminant validity between pathological dissociation (membership in the taxon) and nonpathological dissociation (nonmembership in the taxon). They estimated that 3.3% of the general population would fall into the pathological taxon group. Allen et al. (2002) reported good discriminant validity with clinical diagnosis of major depression in a population of inpatient women who had trauma disorders. Watson (2003) explored the construct validity of the DES-T and found consistent taxon distribution and prevalence,

as well as good indicator validity on all eight items. This study was conducted with a nonclinical population where the DES-T was not considered valid due to stability concerns; however, Watson suggested that the DES-T validly assesses an inherently unstable construct (i.e., dissociation). Ross et al. (2003) noted that the DES-T is a practical tool because a clinician can use the average cutoff score of 20 with good concurrent validity. Most recently, Ross (2021) found the DES-T to have a false positive rate of just 5.4% in a clinical population confirmed with DID.

Data Collection

Because this data set was collected previously, I will obtain a letter of permission to use this data from Dr. Lawson at Sam Houston State University who collected the data from 2017-2020. I will then submit this along with my Institutional Review Board (IRB) application to Sam Houston State University. Upon approval, I will utilize the data for my project. Participants have already completed the assessments that I will use for my project and will not be contacted for more information; therefore, there will not be a debriefing of participants.

Data Analysis

Statistical analysis will be done using SPSS, version 27, statistical software. I will use linear and multiple regressions to analyze the data set for this study. To assess the assumptions of linear regression, I will evaluate for linearity, homoscedasticity, independence, and normality before the linear regressions are run. Any violations will be noted. To assess the assumptions of multiple regression, I will evaluate for linearity, multicollinearity, homoscedasticity, independence, and multivariate normality before the multiple regressions are run. Any violations will be noted.

Research Question 1: Do Overall Scores on the ACEQ Predict the Total Score on the DESII?

For the first research question, I will run a linear regression using the ACEQ total score as the independent variable and the DESII total score as the dependent variable. Previous researchers have found that higher ACEQ scores predicted higher levels of dissociation (Fung et al., 2019; Thomson & Jaque, 2018).

Research Question 2: Do ACEQ Scores Predict Scores on the DESII Subscales?

For the second research question, I will run three linear regressions with the ACEQ total score as the independent variable and one of each of the three the DESII subscale scores as the dependent variables.

Research Question 3: Do Overall Scores on the ACEQ Predict Scores on the DES-T?

For the third research question, I will run a linear regression using the ACEQ total score as the independent variable and the DES-T score as the continuous dependent variable. Little research has been done with the DES-T, despite articles calling for more further research (Ross & Waller, 1997; Ross, 2021; Waller et al., 1996).

Research Question 4: How Do Items on the ACEQ Predict Dissociation?

For the fourth research question, I will use five multiple regressions. Poole et al. (2018) utilized regression with the ACEQ and assigned each item a 0 or 1 in order to do this. In order to avoid a type II error, I will do a multiple regression to account for interaction effects instead of the 10 two-stage hierarchical linear regressions that was used in their study. I will run a multiple regression using the scores on the items of the ACEQ (10 items total) as the independent variables and the DES-T score as the dependent variable. This will be repeated using the DESII total score and each of the

three subscales as the dependent variables, respectively, with the ACEQ items as the independent variables.

Previously, Fung et al. (2019) found that the first five items on the ACEQ were positively correlated with higher levels of dissociation using the DESII total score. Others have also found that abuse and neglect as measured with other assessments (Kate et al., 2021; Schalinski et al., 2016) indicated higher levels of severe dissociation. The DESII subscale of absorption has been noted to affect the overall score and possibly indicate other types of pathology (i.e.; not a hallmark of dissociative disorders) than other items on this assessment (Soffer-Dudek et al., 2015). Irwin (1999) found that dissociative absorption was not related to childhood trauma; however, pathological dissociation was related to childhood trauma. Thus, I hypothesize that I will find the first five items (ie: abuse items) to predict higher scores of pathological dissociation on the DES-T and higher scores of nonpathological dissociation on the DESII total score, the amnesia subscale, and the depersonalization/derealization subscale. Rafiq et al. (2018) noted that we do not yet know what types of childhood trauma lead to higher rates of dissociative experiences. This research question will allow for a more fine-grained look at the ACEQ, DESII, and DES-T in evaluating which childhood trauma experiences may predict various types of dissociation (ie: pathological, absorption, depersonalization/derealization, and amnesia).

Hypotheses

Firstly, I hypothesize that higher ACEQ scores will predict higher scores on the DESII across all types of dissociation (Fung et al., 2019; Thomson & Jaque, 2018). Secondly, I hypothesize that the abuse and neglect items on ACEQ (i.e., items 1-5) will

predict severe dissociation on scores of the DES-T, the DESII, and the DESII amnesia and depersonalization/derealization subscales (Fung et al., 2019; Irwin, 1999; Soffer-Dudek et al., 2015).

Limitations and Delimitations

Some limitations to this study include the following. Because this is a previously collected data set, there is no follow up ability. Because the ACE has been found to be a valid instrument even with retroactive reporting (Karatekin & Hill, 2019), this is an acceptable limitation. These assessments were administered as intake assessments, prior to the establishment of a counseling relationship. It is possible that this may affect reporting of dissociative experiences and trauma history, or that they were not aware of their dissociation at the time of the assessments' administration (Nijenhuis et al., 2010; Ross, 2015; van der Hart et al., 2006). Delimitations of this study include that I chose to use a previously collected data set from just one counselor training clinic. This data set only included adults ages 18+. However, this would have been the population I would have chosen to focus on anyway, so this data fit what I wanted to study perfectly.

Summary

This chapter provided an overview of the research methods that I will use in this study. The purpose of this study is to evaluate the relationship between childhood trauma and dissociation. This will be done by evaluating how ACEQ scores and specific items affect scores on the DESII and the DES-T. I will utilize linear regressions and multiple regressions to do this using SPSS 27 statistical software. Purposive sampling was done by choosing an existing data set collected in 2017-2020. Data from the collected demographics questionnaire, the ACEQ, the DESII, and the DES-T will be used in my

analyses. I will also provide descriptive statistics of this data set for these assessments. Chapter 4 will discuss the results of this study and Chapter 5 will include the discussion, limitations, implications, and recommendations.

CHAPTER IV

Results

Description of the Sample

The data set included 152 clients. The data was first adjusted to exclude all cases that did not have the ACE, the DESII, and the DES-T scores in the SPSS file; all were required to be included in this study. Once the incomplete cases were removed, 94 intact cases remained. Of the 94 participants included in this study, age, gender, ethnicity, marital status, employment, and the highest degree of education completed were collected. Three of these demographic variables had missing data for 1-3 cases: ethnicity, employment, and highest degree of education completed. The average age of this sample was 38.62 years old. A majority of the participants were female (72.3%; female $n = 68$; male $n = 26$). This sample was majority white in terms of ethnicity (68.1%) and employed (65.6%). Full descriptive demographic statistics of the sample can be found in Table 1.

Table 1

Sample Descriptive Characteristics

Variable	Sample $N = 94$	Missing Cases
Age [*M* (*SD*)]	38.62 (12.5)	$n = 0$
Gender [*n* (%)]		
Male	26 (27.7%)	$n = 0$
Female	68 (72.3%)	

(continued)

Variable	Sample $N = 94$	Missing Cases
Ethnicity [*n* (%)]		
Caucasian or White	62 (68.1%)	$n = 3$
African American or Black	6 (6.6%)	
Hispanic	13 (14.3%)	
Asian	1 (1.1%)	
Multiple Heritage or Mixed	7 (7.7%)	
Other	2 (2.2%)	
Marital status [*n* (%)]		
Single Never Married	40 (42.6%)	$n = 0$
Married	25 (26.6%)	
Separated	8 (8.5%)	
Widowed	3 (3.2%)	
Divorced	18 (19.1%)	
Employment [*n* (%)]		
Employed	61 (65.6%)	$n = 1$
Unemployed	26 (28%)	
Leave of Absence or Disability	6 (6.5%)	
Highest degree or level of education completed [*n* (%)]		
Less Than High School	6 (6.5%)	$n = 2$
High School Graduate or GED	12 (13%)	
Some College, No Degree	26 (28.3%)	
Associate's Degree	16 (17.4%)	
Bachelor's Degree	16 (17.4%)	
Graduate or Professional Degree	5 (5.4%)	
Some Graduate or Professional, No Degree	7 (7.6%)	
Ph.D., Law, or Medical Degree	1 (1.1%)	
Vocational/Certificate	3 (3.3%)	

Note. M = mean; SD = standard deviation; N = total number in study; n = number in variable

Descriptive Data of the Measures

Descriptive data for the measures of this sample can be found in Table 2 and Table 3.

Table 2

Descriptive Statistics of the Measures

Variable	*n*		*Percent*	
ACEQ Items	yes	no	yes	no
Verbal Abuse	56	38	59.6%	40.4%
Physical Abuse	45	49	47.9%	52.1%
Sexual Abuse	32	62	34%	66%
Attachment	52	42	55.3%	44.7%
Neglect	16	78	17%	83%
Parents Separated or Divorced	58	36	61.7%	38.3%
Witness Abuse	27	67	28.7%	71.3%
Lived with Problem Drinker or Drug User	39	55	41.5%	58.5%
Lived with Household Member with Mental Illness	52	42	55.3%	44.7%
Household Member Went to Prison	13	81	13.8%	86.2%
DESII Total	13.69	13.37	0	65.36
DESII Amnesia	7.18	10.93	0	62.5
DESII Depersonalization/Derealization	6.61	11.59	0	56.67
DESII Absorption	19.43	18.37	0	83.33
DESII Taxon	7.1	11.46	0	60

Note. *M* = mean; *SD* = standard deviation; *n* = number in variable (outliers included)

Correlation Matrix

The correlation matrix showed that the ten ACEQ items and the total ACE scores were all significantly correlated at the .01 level. Similarly, the DESII total scores and the subscales and the DES-T were all significantly correlated at the .01 level. The ACEQ item of witnessing abuse was significantly correlated with the DESII total scores (r = .248) at the .05 level and the DESII absorption subscale (r = .281) at the .01 level.

Table 3

Correlation Matrix Variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Verbal Abuse	-															
2. Physical Abuse	.616**	-														

(continued)

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
3. Sexual Abuse	.089	.031	-													
4. Attachment	.437**	.347**	.013	-												
5. Neglect	.315**	.303**	.153	.179	-											
6. Parents Separated or Divorced	.109	.098	.104	.128	.066	-										
7. Witness Abuse	.331**	.333**	.189	.239*	.088	.210*	-									
8. Lived with Problem Drinker or Drug User	.034	.101	.124	.149	.308*	.219*	.086	-								
9. Lived with Household Member with Mental Illness	.350**	.176	.149	.268**	.122	.084	.287**	.236*	-							
10. Household Member Went to Prison	.016	.048	.232*	.050	.065	.062	.086	.163	.112	-						
11. ACEQ Total Score	.665**	.614**	.400**	.571**	.485**	.419**	.565**	.476**	.562**	.313**	-					
12. DESII Total Score	.162	.170	.028	.125	-.028	-.010	.248*	-.012	.088	.101	.173	-				
13. DESII Amnesia	.068	.087	-.002	-.002	-.042	-.011	.146	-.045	-.021	.015	.039	.887**	-			
14. DESII DPRDR	.115	.094	-.065	.123	-.043	.012	.149	-.080	.132	.109	.107	.814**	.802**	-		
15. DESII Absorption	.125	.162	.066	.135	-.024	-.004	.281**	-.037	.086	.093	.183	.962**	.802**	.693**	-	

(continued)

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
16. DESII Taxon	.092	.066	-.039	.086	-.071	-.001	.193	.017	.076	.075	.090	.926**	.887**	.878**	.847**	-

Note. *p < .05; **p < .01; outliers included

Assumptions of Linear Regression

Prior to evaluating the regression. I used SPSS to check the assumptions for linear regression, which are: linearity, homoscedasticity, independence, and normality.

Research Question 1: Do Overall Scores on the ACEQ Predict the Total Score on the DESII?

A scatterplot of these data showed that the relationship between the DESII total score (DV) and the ACEQ total score (IV) is linear. The casewise analysis identified case #13 as an outlier. The plot of standardized residuals vs standardized predicted values showed no obvious signs of funneling, suggesting that homoscedasticity was met. The values of residuals are independent as evidenced by a Durbin-Watson value close to 2 (Durbin-Watson = 1.818). The P-P Plot suggests that the assumption of normality is violated; however, this is common in real world clinical samples.

Research Question 2: Do ACEQ Scores Predict Scores on the DESII Subscales?

A scatterplot of these data showed that the relationships between each of the three DESII subscale scores (DV) and the ACEQ total score (IV) were all linear. The casewise analysis identified case #13 and #54 as outliers for the DESII amnesia subscale; #13, #81, and #92 as outliers for the DESII DPDR subscale; and #9, #13, and #24 as outliers for the DESII absorption subscale. The plots of standardized residuals vs standardized predicted values showed no obvious signs of funneling for any of the three subscales, suggesting

that homoscedasticity was met for all three. The values of residuals are independent as evidenced by a Durbin-Watson value close to 2 (DESII amnesia Durbin-Watson = 1.900; DESII DPDR Durbin-Watson = 1.985; DESII absorption Durbin-Watson = 1.673). All three of the P-P Plots suggest that the assumption of normality is violated. However, this is common in real world clinical samples.

Research Question 3: Do Overall Scores on the ACEQ Predict Scores on the DES-T?

A scatterplot of these data showed that the relationship between the DESII Taxon score (DV) and the ACEQ total score (IV) is linear. The casewise analysis identified cases #9 and #13 as outliers. The plot of standardized residuals vs standardized predicted values showed no obvious signs of funneling, suggesting that homoscedasticity was met. The values of residuals are independent as evidenced by a Durbin-Watson value close to 2 (Durbin-Watson = 1.964). The P-P Plot suggests that the assumption of normality is violated; however, this is common in real world clinical samples. The histogram also showed a positive skew.

Assumptions of Multiple Regression

Prior to evaluating the regression. I used SPSS to check the assumptions for multiple regression, which are: linearity, multicollinearity, homoscedasticity, independence, and normality.

Research Question 4: How do Items on the ACEQ Predict Dissociation?

A scatterplot of these data showed that the relationships between each of the three DESII subscale scores, the DESII Taxon, and the DESII total score (DV) with the ten ACEQ items (IV) were all linear. The casewise analysis identified case #13 as an outlier for the DESII total; #9, and #13 as outliers for the DESII Taxon; #13 as an outlier for the

DESII amnesia subscale; #13, #81, and #92 as outliers for the DESII DPDR subscale; and #13 as an outlier for the DESII absorption subscale. Analysis of collinearity statistics showed that no assumptions of multicollinearity were met. VIF scores were well below 10, and tolerance scores above 0.2. The highest correlation was $r = .616$. The plots of standardized residuals vs standardized predicted values showed no obvious signs of funneling for any of the three subscales, suggesting that homoscedasticity was met for DESII Total, DESII amnesia, and DESII absorption. However, the assumption of homoscedasticity was violated for DESII Taxon and DESII DPDR. The values of residuals are independent as evidenced by a Durbin-Watson value close to 2 (DESII Total Durbin-Watson = 1.908; DESII Taxon Durbin-Watson = 2.022; DESII amnesia Durbin-Watson = 1.944; DESII DPDR Durbin-Watson = 2.138; DESII absorption Durbin-Watson = 1.763). All three of the P-P Plots suggest that the assumption of normality is violated, but again, this is common in real world clinical samples.

Results by Research Question

Research Question 1 Results: Do Overall Scores on the ACEQ Predict the Total Score on the DESII?

Simple linear regression was used to test if the ACEQ total score significantly predicted DESII total scores. One outlier was identified (#13) and removed. The results of the regression indicated that the ACEQ scores explained 7.5% of the variation in DESII total scores [$F(1,91) = 7.350$, $p = .008$], which was significant at a .01 level. A small to medium effect size was found ($r = .273$). Therefore, more ACE items checked predicted higher elevation of overall dissociative experiences. Of this sample, it is notable that 56.4% reported 4 or more ACEs on the ACEQ.

Research Question 2: Do ACEQ Scores Predict Scores on the DESII Subscales?

Amnesia. Simple linear regression was used to test if ACEQ total score significantly predicted DESII amnesia scores. Two outliers were identified (#13 and #54) and removed. The results of the regression indicated that the ACEQ scores explained 6.7% of the variation in DESII amnesia scores [$F(1,90) = 6.567$, $p = .013$], which was significant at a .05 level. A small to medium effect size was found ($r = .259$). Thus, more ACE items checked predicted higher elevation of amnesia symptoms.

Depersonalization/Derealization. Simple linear regression was used to test if ACEQ total score significantly predicted DESII Depersonalization/Derealization scores. Three outliers were identified (#13, #81, and #92) and removed. The results of the regression indicated that the ACEQ scores explained .8% of the variation in DESII Depersonalization/Derealization scores [$F(1,89) = .758$, $p = .386$], which was not significant. A negligible effect size was found ($r = .092$).

Absorption. Simple linear regression was used to test if ACEQ total score significantly predicted DESII absorption scores. Three outliers were identified (#9, #13, and #24) and removed. The results of the regression indicated that the ACEQ scores explained 4.1% of the variation in DESII absorption scores [$F(1,89) = 3.815$, $p = .054$], which was near significant at a .05 level. A small to medium effect size was found ($r = .203$). Thus, more ACE items checked predicted a tendency toward a higher elevation of absorption symptoms.

Research Question 3: Do Overall Scores on the ACEQ Predict Scores on the DES-T?

Simple linear regression was used to test if ACEQ total score significantly predicted DESII Taxon scores. Two outliers were identified (#9 and #13) and removed.

The results of the regression indicated that the ACEQ scores explained 2.2% of the variation in DESII Taxon scores [$F(1,90) = 2.014$, $p = .159$], which was not significant. A small effect size was found ($r = .148$)**.**

Research Question 4: How do Items on the ACEQ Predict Dissociation?

Further data for RQ4 is found in Table 4 at the end of this section.

DESII Total Score. Standard multiple regression was used to assess the ability of 10 levels of the predictor variable which as each item on the ACEQ (verbal abuse, physical abuse, sexual abuse, attachment, neglect, parents separated or divorced, witness abuse, lived with problem drinker or drug user, lived with household member with mental illness, and household member went to prison) to predict DESII Total scores for participants in this sample. The descriptive statistics for DESII Total scores were $n = 93$; $M = 13.13$; $SD = 12.31$. ACEQ items were scored nominally with 0 indicating a "no" response and 1 indicating a "yes" response.

Results of the standard regression analysis indicated that the total variance explained by the model as a whole was 14.3%, $F(10, 82) = 1.365$; $p = .211$, which was not statistically significant. Evaluation of each of the independent variables indicated that none of the predictor variables contributed to the prediction of the dependent variable at a statistically significant level.

DESII Taxon. Standard multiple regression was used to assess the ability of 10 levels of the predictor variable which as each item on the ACEQ (verbal abuse, physical abuse, sexual abuse, attachment, neglect, parents separated or divorced, witness abuse, lived with problem drinker or drug user, lived with household member with mental illness, and household member went to prison) to predict DESII Taxon scores for

participants in this sample. The descriptive statistics for DESII Taxon scores were $n = 93$; $M = 6.535$; $SD = 10.1$. ACEQ items were scored nominally with 0 indicating a "no" response and 1 indicating a "yes" response.

Results of the standard regression analysis indicated that the total variance explained by the model as a whole was 11%, $F(10,82) = 1.012$; $p = .440$, which was not statistically significant. Evaluation of each of the independent variables indicated that none of the predictor variables contributed to the prediction of the dependent variable at a statistically significant level.

DESII Amnesia Subscale. Standard multiple regression was used to assess the ability of 10 levels of the predictor variable which as each item on the ACEQ (verbal abuse, physical abuse, sexual abuse, attachment, neglect, parents separated or divorced, witness abuse, lived with problem drinker or drug user, lived with household member with mental illness, and household member went to prison) to predict DESII amnesia scores for participants in this sample. The descriptive statistics for DESII amnesia scores were $n = 93$; $M = 6.586$; $SD = 9.331$. ACEQ items were scored nominally with 0 indicating a "no" response and 1 indicating a "yes" response.

Results of the standard regression analysis indicated that the total variance explained by the model as a whole was 6.8%, $F(10,82) = .594$; $p = .815$, which was not significant. Evaluation of each of the independent variables indicated that none of the predictor variables contributed to the prediction of the dependent variable at a statistically significant level.

DESII Depersonalization/Derealization Subscale. Standard multiple regression was used to assess the ability of 10 levels of the predictor variable which as each item on

the ACEQ (verbal abuse, physical abuse, sexual abuse, attachment, neglect, parents separated or divorced, witness abuse, lived with problem drinker or drug user, lived with household member with mental illness, and household member went to prison) to predict DESII DPDR scores for participants in this sample. The descriptive statistics for DESII DPDR scores were $n = 91$; $M = 5.11$; $SD = 8.175$. ACEQ items were scored nominally with 0 indicating a "no" response and 1 indicating a "yes" response.

Results of the standard regression analysis indicated that the total variance explained by the model as a whole was 11.3%, $F(10,80) = 1.022$; $p = .433$, which was not statistically significant. Evaluation of each of the independent variables indicated that none of the predictor variables contributed to the prediction of the dependent variable at a statistically significant level.

DESII Absorption Subscale. Standard multiple regression was used to assess the ability of 10 levels of the predictor variable which as each item on the ACEQ (verbal abuse, physical abuse, sexual abuse, attachment, neglect, parents separated or divorced, witness abuse, lived with problem drinker or drug user, lived with household member with mental illness, and household member went to prison) to predict DESII absorption scores for participants in this sample. The descriptive statistics for DESII absorption scores were $n = 93$; $M = 18.793$; $SD = 17.388$). ACEQ items were scored nominally with 0 indicating a "no" response and 1 indicating a "yes" response.

Results of the standard regression analysis indicated that the total variance explained by the model as a whole was 14%, $F(10,82) = 1.343$; $p = .222$, which was not significant. Evaluation of each of the independent variables indicated that 1 of the

predictor variables, witness abuse (*beta* = 9.944, *p* = .027), contributed to the prediction of the dependent variable at a statistically significant level.

Table 4

RQ 4 Regressions of ACEQ Items and DESII Total Score, DESII Amnesia Subscale, DESII Depersonalization/Derealization Subscale, DESII Absorption Subscale, and DES-T.

Variable	*B*	*SE*	*t*	*p*
DESII Total Scores				
ACEQ Items				
Verbal Abuse	1.769	4.050	.437	.663
Physical Abuse	2.071	3.681	.563	.575
Sexual Abuse	-.525	3.123	-.168	.867
Attachment	1.173	3.199	.367	.715
Neglect	-3.260	4.183	-.779	.438
Parents Separated or Divorced	-1.875	3.004	-.624	.534
Witnessing Abuse	6.228	3.487	1.786	.078
Lived with Problem Drinker or Drug User	-.382	3.183	-.120	.905
Lived with Household Member with Mental Illness	-.218	3.182	-.069	.946
Household Member Went to Prison	3.596	4.195	.857	.394
DESII Amnesia Subscale				
ACEQ Items				
Verbal Abuse	1.136	3.411	.333	.740
Physical Abuse	1.187	3.101	.383	.703
Sexual Abuse	-.386	2.630	-.147	.884
Attachment	-.985	2.694	-.366	.715
Neglect	-1.834	3.523	-.521	.604
Parents Separated or Divorced	-.771	2.530	-.305	.761
Witness Abuse	3.752	2.937	1.278	.205
Lived with Problem Drinker or Drug User	-.380	2.681	-.142	.888
Lived with Household Member with Mental Illness	-1.461	2.680	-.545	.587
Household Member Went to Prison	.665	3.533	.188	.851
DESII Depersonalization/Derealization Subscale				
ACEQ Items				
Verbal Abuse	.548	3.540	.155	.877
Physical Abuse	.518	3.218	.161	.872

(continued)

Variable	*B*	*SE*	*t*	*p*
Sexual Abuse	-2.766	2.730	-1.013	.314
Attachment	1.650	2.796	.590	.557
Neglect	-1.419	3.657	-.388	.699
Parents Separated or Divorced	-.015	2.626	-.006	.996
Witness Abuse	2.838	3.048	.931	.355
Lived with Problem Drinker or Drug User	-2.839	2.783	-1.020	.311
Lived with Household Member with Mental Illness	2.442	2.782	.878	.383
Household Member Went to Prison	4.394	3.668	1.198	.234
DESII Absorption Subscale				
ACEQ Items				
Verbal Abuse	-.117	5.530	-.021	.983
Physical Abuse	3.184	5.027	.633	.528
Sexual Abuse	.846	4.265	.198	.843
Attachment	2.640	4.368	.604	.547
Neglect	-4.263	5.713	-.746	.458
Parents Separated or Divorced	-2.891	4.102	-.705	.483
Witness Abuse	10.369	4.762	2.178	.032
Lived with Problem Drinker or Drug User	.441	4.347	.101	.920
Lived with Household Member with Mental Illness	-1.014	4.346	-.233	.816
Household Member Went to Prison	3.686	5.729	.643	.522
DES-T				
ACEQ Items				
Verbal Abuse	1.157	3.527	.328	.744
Physical Abuse	-.310	3.207	-.097	.923
Sexual Abuse	-1.962	2.720	-.721	.473
Attachment	.863	2.786	.310	.758
Neglect	-2.729	3.644	-.749	.456
Parents Separated or Divorced	-.846	2.616	-.323	.747
Witness Abuse	4.771	3.037	1.571	.120
Lived with Problem Drinker or Drug User	-.802	2.773	-.289	.773
Lived with Household Member with Mental Illness	.710	2.772	.256	.799
Household Member Went to Prison	2.826	3.654	.773	.442

Note. Outliers were excluded based on casewise analyses results for each multiple regression

CHAPTER V

Discussion

Dissociation is a symptom that has been observed across many disorders, but dissociation presents at higher levels in individuals who have experienced childhood trauma (Kate et al., 2021; Rafiq et al., 2018; Sar, 2011). One measure of childhood trauma, the Adverse Childhood Experience Questionnaire (ACEQ; Felitti et al., 1998), was used to explore studies along with the DESII (Fung et al., 2019; Thomson & Jaque, 2018; Thomson & Jaque, 2019). These studies all supported findings of the connection between dissociation and childhood trauma. However, there are some scholars who still question this connection and argue for the need for more research (Lynn et al., 2012; Merckelbach et al., 2021; Reyes et al., 2017). Research using outpatient community population samples is limited, as many studies have utilized clinical inpatient populations (Rafiq et al., 2018). The current study explored the relationship between childhood trauma and dissociation in an outpatient community clinic.

The four research questions were designed to examine the relationship between childhood trauma and dissociation using the ACEQ, DESII, and DES-Taxon using regression analyses. Of the regression analyses, the ACEQ significantly predicted the total DESII scores at the .01 level and DESII amnesia subscale scores at the .05 level. None of the multiple regressions were significant. These results support the proposition that childhood trauma, as measured by the ACESQ, predicts dissociation as measured by total scores on the DESII and scores on the DESII amnesia subscale, but not depersonalization/derealization or absorption. Further, childhood trauma did not predict pathological dissociation on the DES-T. Finally, the results indicated that individual

childhood trauma items on the ACEQ did not predict scores on the DESII, DESII subscales, or the DES-T.

Research Question 1

For the first research question, I examined if childhood trauma could predict total dissociation in this sample. I hypothesized that higher ACEQ scores would predict higher scores on the DESII across all types of dissociation (Fung et al., 2019; Thomson & Jaque, 2018). This was found to be true in this study- ACEQ scores predicted the total DESII scores. These results indicated that increases in the number of different types of childhood trauma experienced predicted increasing levels of severity of dissociative symptoms in adulthood. This is consistent with present literature findings (Frewen et al., 2019; Fung et al., 2019; Thomson & Jaque, 2018) and suggests that dissociation may function as a coping mechanism with respect to childhood trauma. This was also suggested by Brenner (1999) and van der Hart and Horst (1989) who postulated that dissociation is a type of complex defense mechanism in the brain that protects an individual's development and survival. However, the more exposure to different types of abuse may lead to greater severity of dissociative experiences which could significantly interfere with daily functioning and relationships (Schimmenti, 2016) and in some cases a higher risk of revictimization (Zamir et al., 2018). Recently, Demirkol et al. (2020) found that dissociation was a mediating factor for suicide attempts in those with childhood trauma, supporting the idea that dissociation may increase the likelihood of suicide attempts. Ford and Gomez (2015) reviewed some current studies at the time looking at non-suicidal self-injury (NSSI) and dissociation and reported that these studies suggest that dissociation serves as a mediating factor for NSSI. In some studies, when

dissociation was low, it led to less NSSI; but when dissociation was high or a dissociative disorder was diagnosed, NSSI increased.

Research Question 2

In the second research question, I explored in greater depth the relationship between the ACEQ total scores and dissociation by evaluating the DESII subscales: amnesia, depersonalization/derealization, and absorption. This analysis examined which types of dissociation were most influenced by childhood trauma experiences. Based on my first hypothesis, the ACEQ scores did predict the DESII amnesia subscale scores. Contrary to my first hypothesis, the ACEQ scores did not predict DESII absorption or depersonalization/derealization scores. Of the three regressions analyses, only one was significant, amnesia. A similar pattern was found with respect to RQ1: increases in the number of different types of childhood trauma experienced predicted increasing levels of severity of amnesia in adulthood. No literature was found exploring the DESII amnesia subscale of the DESII with which to compare these results. However, others have noted the effects of childhood trauma on memory. Brown et al. (2007) found that experiencing multiple forms of child maltreatment increased memory disturbances related to childhood. Such memory disturbances can occur with childhood trauma experiences that can affect an individual into adulthood with short-term memory deficits as well (Bremner et al., 1995). Further evidence from neurobiology and epidemiology studies suggest that early life stressors may alter brain structure and function, particularly in the hippocampus, resulting in long term consequences for memory (Anda et al., 2006).

The DESII absorption subscale was near significant, with a p value of .054. Although caution must be exercised in interpreting this result, a similar pattern might be

considered to the significant results in the two previous questions. Increases in the number of different types of childhood trauma experienced predicted increasing levels of severity of absorption in adulthood. Others have found a significant relationship using other analyses between the ACEQ scores and the DESII absorption subscale (Thomson & Jaque, 2019). It is possible that the p value in this sample was slightly below significance due to sample size.

Research Question 3

The third research question looked at if the ACEQ could predict scores on the DES-Taxon, which measures pathological dissociation. Contrary to my first hypothesis, the ACEQ scores did not predict the DES-T scores. These results were not significant. This was surprising as the research indicates that more childhood trauma can lead to pathological dissociation; however, the literature has found that this is dependent on the trauma being repeated and severe (Kate et al, 2021; Schalinski et al., 2016). Because the ACEQ measures only nominal information (i.e., yes this happened to me, no this did not happen to me), information on frequency and severity is not captured by the ACEQ. This may be why it is a poor predictor of pathological dissociation.

It is also notable that the estimated rate of pathological dissociation in the population is just 3.3% based on the taxometric properties of the DESII (Waller & Ross, 1997). Some participants in this sample met the cut off score of 20 for the DES-T (n = 11), making the percentage of this sample that would belong to the taxon would have been 11.7%. This higher percentage could perhaps be because of the size and makeup of this particular sample. This sample potentially showed a higher rate of pathological dissociation, but this was not predicted by the ACEQ score.

Research Question 4

Lastly, the fourth research question aimed to take a fine grain look at the ACEQ to see if each item could significantly predict higher dissociation scores across all of the dissociation measures. I hypothesized that the abuse and neglect items on ACEQ (i.e., items 1-5) would predict severe dissociation on scores of the DES-T, the DESII, and the DESII amnesia and depersonalization/derealization subscales (Fung et al., 2019; Irwin, 1999; Soffer-Dudek et al., 2015). This did not prove true in this sample. None of the results from these multiple regressions were significant. With multiple regression, it is desirable to have at least 10 participants per predictor variable (Hair et al., 2014), which was not possible in this sample (n = 94) for 10 predictor variables of the ACEQ items. This could have contributed to the non-significant regression model. However, the DESII absorption subscale was significantly predictive at the .05 level for the witnessing abuse item, despite the model being non-significant.

In this sample, these results suggest that witnessing abuse of a parent is related to dissociation and may even predict dissociation. Because the model was not significant, but the item for witnessing abuse was statistically significant as a predictor of the DESII absorption subscale, further exploration is needed. Witnessing abuse was reported by just 28.7% of participants. This item is not one of the abuse or neglect items; it is considered a household dysfunction item. The findings of this study differ from other literature which has identified abuse or neglect items (ACEQ items 1-5) as most impactful on the relationship between dissociation and childhood trauma (Fung et al., 2019). However, others have found that repetition and severity of abuse or neglect are what increase dissociation (Kate et al, 2021; Schalinski et al., 2016). Therefore, it is possible that

repeated exposure to witnessing abuse of a parent in the household as a child could have a similar effect on the need for dissociative mechanisms in the developing brain. The ACEQ does not capture repetition or severity.

Implications for Practice

Dissociation is noted as a symptom across many disorders, but it is rarely identified and therefore, it is undertreated (Sar, 2006; Spitzer et al., 2006). Across counselor education programs and other similar graduate programs, dissociation is a topic that students are undereducated on (Coy et al., 2020; ISSTD, 2011). It often remains a hidden symptom that needs to be assessed in order to be identified (Ross, 2015). The DESII screens for dissociative experiences; it does not diagnose (Carlson & Putnam, 1993). Knowing that the total DESII scores and the DESII amnesia subscale scores in this study were predicted by total ACEQ scores and that the CDC (2021) reports that 1 in 6 people report four or more ACEs, clinicians would benefit from learning more about the assessment of dissociation in their graduate programs. There have been calls for more comprehensive training on trauma and dissociation that have yet to be answered (Courtois & Gold, 2009). It is the hope that this study further calls attention to this need in graduate training programs to more adequate help treat our clients.

Furthermore, administering the ACEQ as a part of the assessment process is an aspect of clinical practice for current practicing clinicians that would benefit clients who experience dissociation greatly. Because the ACEQ can predict DESII total scores and DESII amnesia subscale scores, the ACEQ could be a helpful screening tool guiding the clinician to explore dissociation further or not. If higher ACEQ scores are present, then administering the DESII could be a productive next step. Putnam (2009) stated that the

ability to measure dissociation was on par with anxiety and depression and that it should be included in a standard battery of assessments. However, assessments for dissociation, such as the DESII, are not commonplace for many clinicians and many are unaware of its existence and utility, having learned very little about dissociation in their graduate programs (Kumar et al., 2019).

Clinicians active in medical prevention have called for a response to the ACE study since its publication, stating that we have not done enough with the information from the ACE (Whitfield, 1998). More recently, Rafiq et al. (2018) called for an assessment of childhood trauma because of the relation to dissociation. The ACEQ is a quick, simple assessment that can be a step in the intake process to screen for such risk factors of childhood trauma leading to dissociation. Yet, it has not been utilized by the healthcare system as the original researchers hoped. Because of its prediction abilities with dissociation, it could help clinicians identify a need to further explore and treat dissociation in clients. Beyond the importance of accurate assessment and treatment, some researchers suggest that dissociation can lead to revictimization, which could be decreased through adequate assessment and treatment dissociation (Cloitre & Rosenburg, 2006).

Contribution to Literature

This study took a new look at the relationship between childhood trauma and dissociation by diving deeper into the individual ACEQ items, all three DESII subscales, and the DES-Taxon. Findings that support the ACEQ's ability to predict overall scores on the DESII and the DESII amnesia subscale is significant and contributes to supporting the trauma model of dissociation in lieu of the fantasy model of dissociation that is still hotly

debated in research literature. There were no significant results from using the DES-T except for the correlation related to witnessing abuse. Little research exists using the DES-T; this study helps grow that body of research. Lastly, this study contributes to the literature by identifying a potential predictor that may lead to dissociation- witnessing abuse.

Recommendations for Further Research

The results of this study showed the relationship between childhood trauma and dissociation with the ACEQ scores being able to predict total DESII scores and DESII amnesia subscale scores. More research is needed to evaluate potential mediating demographic factors. This study did not control for gender, ethnicity, etc or explore their impact on dissociation and childhood trauma. The demographics of this sample size was mostly single, white women. Larger sample sizes may assist with a more diverse sample. Further exploration of the relationship between childhood trauma and dissociation overall and dissociative amnesia is needed with more diverse participants. Additionally, research exploring the effects of adverse childhood experiences on memory in relation to dissociation would help clarify the nature of the relationship that was shown in RQ2. A curious potential predictor that appeared in this study was witnessing abuse of a parent in the household, which needs further exploration in a larger sample.

Conclusion

The purpose of this study was to examine the relationship between adverse childhood experiences and dissociation, as well as which types of adverse childhood experiences can predict different types of dissociation. After a literature review was completed, I received permission to use a previously collected data set. Then, I analyzed

the data using SPSS, version 27. The ACEQ was chosen to capture experiences of abuse, neglect, and household dysfunction that participants may have experienced as children. The DESII and DES-Taxon measured non pathological and pathological dissociation, respectively. The results of this study indicated that the overall ACEQ score is able to predict higher scores on the DESII total score and the DESII amnesia subscale. This provides support for the role that childhood trauma plays in the experience of dissociation in adulthood. Based on the results of this study, I conclude that the ACEQ is able to predict the symptom of dissociation.

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APPENDIX

IRB Documentation

Sam Houston State University
Member of The Texas State University System
Huntsville, Texas 77341-2119 * 936.294.4148 * Fax 936.294.4277

Department of Counselor Education

April 22, 2022

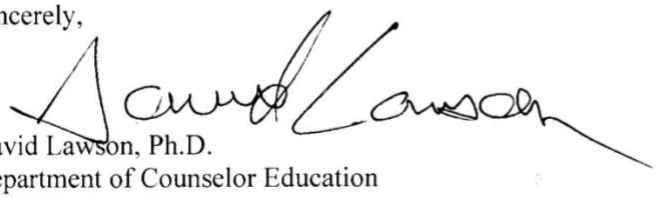
Sharla Miles
IRB

Dear Sharla,

I give Jessica Scoggins, a doctoral student in Counselor Education, permission to use my data set from an earlier project (IRB 2019-45 Relationship between Trauma Symptoms and Treatment Outcome Symptoms) for her dissertation topic, "Effects of Adverse Childhood Experiences on Dissociation."

Please feel free to contact me if you have any questions about this issue.

Sincerely,



David Lawson, Ph.D.
Department of Counselor Education
dxl028@shsu.edu
936-615-4008

Sam Houston
STATE UNIVERSITY
A Member of The Texas State University System

Date: May 6, 2022 4:58:03 PM CDT

TO: Jessica Scoggins David Lawson
FROM: SHSU IRB
PROJECT TITLE: The Impact of Adverse Childhood Experiences on Dissociation
PROTOCOL #: IRB-2022-114
SUBMISSION TYPE: Initial
ACTION: Exempt
DECISION DATE: May 6, 2022
EXEMPT REVIEW CATEGORY: Category 4. Secondary research for which consent is not required: Secondary research uses of identifiable private information or identifiable biospecimens, if at least one of the following criteria is met:

(i) The identifiable private information or identifiable biospecimens are publicly available;

(ii) Information, which may include information about biospecimens, is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained directly or through identifiers linked to the subjects, the investigator does not contact the subjects, and the investigator will not re-identify subjects;

(iii) The research involves only information collection and analysis involving the investigator's use of identifiable health information when that use is regulated under 45 CFR parts 160 and 164, subparts A and E, for the purposes of "health care operations" or "research" as those terms are defined at 45 CFR 164.501 or for "public health activities and purposes" as described under 45 CFR 164.512(b); or

(iv) The research is conducted by, or on behalf of, a Federal department or agency using government-generated or government-collected information obtained for nonresearch activities, if the research generates identifiable private information that is or will be maintained on information technology that is subject to and in compliance with section 208(b) of the E-Government Act of 2002, 44 U.S.C. 3501 note, if all of the identifiable private information collected, used, or generated as part of the activity will be maintained in systems of records subject to the Privacy Act of 1974, 5 U.S.C. 552a, and, if applicable, the information used in the research was collected subject to the Paperwork Reduction Act of 1995, 44 U.S.C. 3501 et seq.

OPPORTUNITY TO PROVIDE FEEDBACK: To access the survey, click **here**. It only takes 10 minutes of your time and is voluntary. The results will be used internally to make improvements to the IRB application and/or process. Thank you for your time.

Greetings,

Thank you for your submission of Initial Review materials for this project. The Sam Houston State University (SHSU) IRB has determined this project is EXEMPT FROM IRB REVIEW according to federal regulations. You may initiate your project.

We will retain a copy of this correspondence within our records.

*** What should investigators do when considering changes to an exempt study that could make it nonexempt?**

It is the PI's responsibility to consult with the IRB whenever questions arise about whether planned changes to an exempt study might make that study nonexempt human subjects research.

In this case, please make available sufficient information to the IRB so it can make a correct determination.

If you have any questions, please contact the IRB Office at 936-294-4875 or irb@shsu.edu. Please include your project title and protocol number in all correspondence with this committee.

Sincerely,
SHSU Institutional Review Board

VITA

Educational Background

Doctorate of Philosophy in Counselor Education and Supervision, CACREP Accredited Program
Currently Enrolled (4.0) Expected Graduation Date: August 2022
Sam Houston State University, Huntsville, TX

Master of Arts in Clinical Mental Health Counseling (4.0)
CACREP Accredited Program
Summa Cum Laude, May 2017
Sam Houston State University, Huntsville, TX

Bachelor of Arts in Psychology (3.8) and Spanish (4.0)
Magna Cum Laude, May 2014
Texas A&M University, College Station, TX

Student Scholarships Received

- SHSU Counseling Department Scholarship, 2020
- SHSU Graduate Student Scholarship, 2019
- Arthur Mays Scholarship, 2019
- SHSU Graduate Student Scholarship, 2017
- Houston Counseling Association Scholarship, 2016
- James O. Mathis Scholarship, 2016
- Texas A&M Regent's Scholar, 2011-2014
- Texas A&M Gilman Scholar, 2013

Awards

- Outstanding Doctoral Research Award, Fall 2021

Honor Societies

- Chi Sigma Iota, Counseling Honor Society
- Phi Beta Kappa, International Liberal Arts Honor Society
- Psi Chi, International Psychology Honor Society
- Sigma Delta Pi, Hispanic Honor Society

Higher Education Teaching Experience

Undergraduate Level at Sam Houston State University in Huntsville, TX (August 2019-present)
Title: Instructor
Teaching ~70 undergraduate students each semester. Creating engaging lecture materials. Facilitating class discussion to promote learning. Teaching remotely, online, and blended hybrid as required to accommodate for COVID19.
Courses Taught:

- COUN3321 Introduction to Helping Relationships

- COUN3331 Introduction to Principles of Counseling
- COUN3322 Career Development

Course Development:

- COUN3321 Introduction to Helping Relationships- online version

Graduate Level Teaching Internship at Sam Houston State University in Huntsville, TX (August 2021- December 2021)
Course: COUN5334 Effective Human Behavior
Details: Cotaught this online course and was responsible for 50% of all grading, communication with students, lecture material, etc. This course teaches students the *DSM5*, diagnosing processes, and treatment planning.

Guest Speaker for Master's Level Counseling Crisis & Trauma Class at Sam Houston State University in Huntsville, TX (July 2021)
Topics:

- Mindfulness for trauma clients (via zoom)
  *As a part of College Teaching course for doctoral program

Guest Speaker for Masters' Level Counseling Supervised Practicum Class at Sam Houston State University in Huntsville, TX (March 2021; April 2021)
Topics:

- Teaching mindfulness to clients
- Suicidal gestures vs. nonsuicidal self-injury in clients

Guest Speaker for Master's Level Crisis & Trauma Class at Charleston Southern University in Charleston, South Carolina (October 2019; October 2020; October 2021)
Topics:

- Dialectical Behavioral Therapy (using Blackboard Collaborate Ultra)
- Stalking and how to help clients who are being stalked (using zoom)
- Borderline Personality Disorder (using zoom)

Guest Speaker for Undergraduate Level Psychology Class at Blinn College in Bryan, TX (Nov. 2016; March 2017; April 2017; October 2017; November 2017)
Topics:

- Domestic Violence and Sexual Assault
- Stalking and how to help people who are being stalked

Teaching Related Training and Certifications

- Faculty Certification for Online Instruction, Sam Houston State University (May 2020)
- COVID Zoom Training, Sam Houston State University (March 2020; July 2020)

Technology Platform Proficiencies

- Blackboard and Collaborate Ultra
- Google Web Apps- Drive, Slides, Sheets, Docs, Forms

- Zoom- live and recordings
- Kaltura
- Poll Everywhere
- Microsoft Office and Office360
- Canva

Supervision Experience

Graduate Student Supervisor at Sam Houston State University

- Spring 2021: 30 direct hours
  - Supervised four masters level students taking supervised practicum triadically.
  - Assisted with management of the on campus counseling clinic. *As a part of the supervision course
- Fall 2021: 30 direct hours
  - Supervised one masters level student taking supervised practicum individually.
  - Colead group supervision.
- Spring 2022: 30 direct hours
  - Supervised four masters level students taking supervised practicum triadically.

Professional Licensing and Certification Information

Jessica Endres, Texas LPC #78014, issued August 2017
NBCC, National Certified Counselor ID #830635, expires July 2022
Om Grown Yoga School, Yoga Alliance, Yoga Teacher 200hr Training, completed May 2017

Relevant Licensed Clinical Experience

Private Practice: Red Oak Therapy PLLC in Dallas, TX (July 2022- present)
Title: Counselor

- Counseling adults with trauma and dissociative disorders virtually.
- Maintaining two weekly DBT skills groups for adults virtually.
- Presenting and speaking events on dissociation for various local organizations, virtually and in person.

Private Practice at Oakwood Collaborative in College Station, TX (July 2019- June 2022)
Title: Counselor

- Counseled adults with trauma and dissociative disorders virtually and in person.
- Maintained a DBT offering by leading two weekly DBT skills groups for adults virtually.

- Contracted with a local rehab, More Than Rehab, to provide DBT group weekly to their milieu (7/2019-2/2020)

Oakwood Roots in College Station, TX (August 2018- June 2019)
Title: Counselor, under supervision

- Counseled adults with trauma and dissociative disorders.
- Initiated, maintained, and taught weekly DBT skills groups, one for adults and one for high schoolers.
- Participated in and assisted with monthly training and group consultations.

Sexual Assault Resource Center in Bryan, TX (1 year 6 mos; August 2017-January 2019)
Title: Staff Counselor, under supervision

- Provided counseling to primary and secondary adult and adolescent survivors of sexual assault.
- Supervised volunteer advocate group leaders and student counseling interns.
- Created, managed, and taught a weekly DBT skills program as of January 2018. Supported volunteer advocates as staff on call. .

Master's Level Internship Experiences

- *Sexual Assault Resource Center in Bryan, TX (8 mos; October 2016-May 2017)*
- *Twin City Mission Domestic Violence Services in Bryan, TX (10 mos; August 2016-May 2017)*

Other Relevant Mental Health Experience

Mental Health Mental Retardation Authority of Brazos Valley in Bryan, TX (1 year 8 mos; February 2015- September 2016)
Title: Recovery Facilitator Caseworker on Level of Care 3 and Level of Care 4/ACT Team

- Taught Illness Management and Recovery (IMR) curriculum, Supported Employment, and Supported Housing to promote independence.
- Advocated for clients in the community when necessary.
- Coordinated community resources to help clients meet their needs within their community.
- Evaluated clients in mental health crises in order to determine the least restrictive treatment possible to maintain safety of each client.

Rock Prairie Behavioral Health-Strategic Behavioral Health LLC in College Station, TX (9 mos; May 2014- Jan 2015)
Title: Mental Health Technician

- Supervised patients during daily scheduled activities at an inpatient psychiatric hospital.
- Maintained patient safety and completed daily risk assessment of patients.
- Encouraged patient participation in treatment.
- Taught goals and mental illness education groups to adults and adolescents based on IMR curriculum.

Clinical Training and Certifications

- Gottman Level 1 & 2 Trainings (2021)
- Assisting Individuals in Crisis (Critical Incident Stress Management- CISM) (2019)
- Group Crisis Intervention (Critical Incident Stress Management- CISM) (2019)
- Advanced EMDR Training PRECI & IGTP-OTS (2019)
- Bringing Trauma-Informed Yoga into Mental Health Clinical Practice (2018)
- Aggie Ally LGBTQ+ Training (2018)
- Eye Movement Desensitization and Reprocessing Basic Training (2018)
- Dialectical Behavioral Therapy Training (2017)
- Sexual Assault Prevention and Crisis Services, Texas Office of Attorneys General (2016)
- SASSI: Adult Substance Abuse Subtle Screening Inventory-3 (2016)
- Psychological First Aid (2015)

Grants Received

- Professional Development Grant: Office for Victims of Crime (2019)
    - Obtained to attend Nuestras Voces, a national bilingual sexual assault conference put on by rape crisis agencies from across the country in Milwaulkee, WI in 2019
- Educational Endowment Fund: Texas Counseling Association (2022)
    - Obtained to attend the International Society for Study of Trauma and Dissociation annual conference in Seattle, WA in 2022

Professional Affiliations

- Texas Counseling Association
- International Society for Study in Trauma and Dissociation

Research Experience

Graduate Student at Sam Houston State University in Huntsville, TX (January 2021-present)

- Researched literature, interviewed experts, and will submit an article to the *Journal of Trauma & Dissociation* for publication entitled *Barriers to the Diagnosis of Dissociative Identity Disorder: Interviews with Experts*.
- Contributed to an article for Dr. Lawson *Dissociative Identity Disorder: Implications for Training and Supervision* which is submitted for publication to the *Journal of Trauma & Dissociation*.
- Organized and checked data for the *Sam Houston State University Center for Clinical Research & Training in Trauma.*.
- Organized Spring 2021, Fall 2021, and Spring 2022 workshops for the *Sam Houston State University Center for Clinical Research & Training in Trauma.*
- Coordinated bringing in Dr. Colin Ross, renowned researcher and clinician with trauma and dissociative disorders and creator of the Dissociative Disorders Interview Scale (DDIS), for the Spring 2021 workshop.

Undergraduate Research Assistant at the Peer Relations and Adjustment Lab at Texas A&M University in College Station, TX (1 year; June 2013-May 2014)

- Coded collected research data from an after school program at Davila Middle School.
- Applied as an author of a paper presentation *Academic engagement, achievement, & homophily: The impact of student's individual academic engagement on the formation of suburban & urban peer groups, 2013* at the Society for Research with Adolescents, March, 2013.

Articles Submitted for Publication

Title: *Dissociative Identity Disorder: Implications for Training and Supervision*
Author: Dr David Lawson, Jessica Scoggins
Journal: *Journal of Counselor Education and Supervision*

Title: *Barriers to the Diagnosis of Dissociative Identity Disorder: Interviews with Experts*
Authors: Jessica Scoggins, Dr David Lawson
Journal: *Journal of Trauma & Dissociation*
**Pending submission

Professional Presentations, Trainings, and Speaking Events

Presented at International Society for the Study of Trauma and Dissociation (ISSTD) in Seattle, WA (April 2022)
Topic: Being a Detective on the Case: Following the Clues to a DID Diagnosis

Presented for the Trauma Education Association, virtually (March 2022)
Topic: What is Dissociation??

Presented for Association of College Unions International, virtually (October 2021)
Topic: Emotional Wellness for Students

Accepted Presentation at Nuestras Voces National Bilingual Sexual Assault Conference in Phoenix, AZ (May 2020- canceled due to COVID)
Title: EMDR Demystified: A Discussion and Live Demonstration

Accepted Poster at American Counseling Association Conference in San Diego, CA (April 2020- canceled due to COVID)
Title: Counseling Sex Offenders: Basic Competencies for Professional Counselors

Presented at Oakwood Collaborative: Oakwood Roots in College Station, TX (November 2020)
Topic: Mindfulness and Self Care for Counselors
*Oakwood Roots consists of LPC-Associates, LMFT-Associates, LMSWs working on

their LCSW, and graduate students in internship and practicum.

Copresented at Sam Houston State University's Center for Clinical Research & Training in Trauma in The Woodlands, TX (November 2020)
Topic: Dissociative Identity Disorder 101
*Panel and symposium style presentation about DID cases, symptoms and identification, phase 1 treatment strategies, and counselor care with Dr Lawson and Dr Akay-Sullivan

Presented at Oakwood Collaborative in College Station, TX (October 2020)
Topic: Identifying and treating dissociation in clients- types of dissociation and dissociative disorders, how to identify dissociation, when to suspect DID/OSDD, how to evaluate and screen, and when to make referrals
*Oakwood Collaborative consists of LPCs, LMFTs, LCSWs, and Psychologists.

Presented at Oakwood Collaborative in College Station, TX (July 2019)
Topic: What is Eye Movement Desensitization and Reprocessing?? For Non EMDR Trained Counselors- basics of what EMDR is and how to make referrals

Presented at Sexual Assault Resource Center (SARC) Volunteer Advocate Training in College Station, TX (February 2019; June 2019)
Topic: Stalking- signs of stalking, what to do if a survivor is being stalked, and cultural normalization of stalking behaviors

Presented at Oakwood Collaborative: Oakwood Roots in College Station, TX (December 2018)
Topic: Mindfulness for Counselors- for the counselor as self care and how to teach skills to clients effectively

Presented at More Than Rehab in Bryan, TX (June 2018)
Topic: Dialectical Behavioral Therapy for Addictions

Presented at SARC Volunteer Advocate Training in College Station, TX (January 2017; June 2017; October 2017; January 2018; June 2018; October 2018; January 2019)
Topic: Self-Care for Advocates of Survivors of Sexual Assault

Presented at A&M Consolidated Middle School in College Station, TX (Sept. 2016- Suicide Awareness Week)
Topic: Suicide Awareness & Prevention

- Presented to four health classes and four wellness classes over two days on suicide.
  *As a part of master's degree course requirement.

Copresented at the Drug and Alcohol Summit at Sam Houston State University in Huntsville, TX (Sept. 2015)
Topic: The Pros and Cons of the Legalization of Marijuana

- Researched both sides of this debate using peer reviewed articles as well as public opinion in order to participate in any debates that occurred during the presentation.

- Presented with Dr. Richard Henriksen, Ph.D to a group of 25 undergraduate students in a discussion format in order to enhance their knowledge of both sides of the debate of marijuana's legalization.
- Provided empirically based information and answered questions that arose from the attending students.

Service and Community Involvement

Domestic Violence Coalition Brazos Valley- Fundraising Chair in Bryan, TX (May 2019-August 2021)

- Organized fundraising activities for the coalition which supports Twin City Domestic Violence Services and their shelter Phoebe's Home.
- Managed volunteers for events.

Sexual Assault Resource Center- Volunteer Advocate in Bryan, TX (October 2016- June 2019)

- Volunteered for shifts overnight and on weekends to support survivors of sexual assault.
- Provided crisis intervention on the crisis hotline and at the hospitals face to face.
- During employment dates, served as Staff on Call to support volunteers or to fill in to cover the overnight shifts.

Brazos Interfaith Immigration Network- Spanish Language Citizenship Class Teacher in Bryan, TX (June 2013- May 2015)

- Cotaught the citizenship test material in Spanish to adults (age 50+).
- Built relationships with and between students to foster community.

Baptist Student Ministries- English Teacher in College Station, TX (August 2011-May 2014)

- Prepared written lessons for international students.
- Helped students with verbal speaking skills.
- Engaged students in American culture.
- Led 4 other teachers.

International Experience and Diversity Training

DEEDS (Diversity Education, Engagement, Development, & Support) Certificate Program (Fall 2021- Spring 2022)

- Completed 25 hours of workshops on various diversity, equity, and inclusion topics focused on a variety of populations.
- Gained knowledge in three areas of competencies: self-awareness/reflection, methods/application, and culturally proficient practices.

Study Abroad- La Universidad Latina en Heredia, Costa Rica (January 2013-April 2013)

- Completed 15 hours of Spanish language coursework.
- Attended cultural events at the university and as organized by the study abroad program.
- Immersed in cultura and language.
- *Hogar Infantil (January 2013-April 2013) in Santo Domingo, Costa Rica*
    - Volunteered with children (ages 6 and under) who were removed from their homes for abuse/neglect or abandoned by their parents.
    - Participated in various activities with the children to keep them safe and active.
    - Saw the power of play as the language of children.
    - Learned how poverty and parental behaviors affect children.
    - Gained knowledge of how to work with children who have been abused or neglected.

Reach The World Travel Correspondent in Bronx, New York (January 2013-June 2013)

- Partnered with an inner city classroom at MS331 through Reach The World and the Gilman Scholarship Program.
- Wrote weekly subject based articles and personal journals with photos of my time spent in Costa Rica used in an after school program that focused on studying food security and social activism in Latin America.

Other Work Experience

Teaching Various Yoga Classes in Bryan/College Station Area (May 2017-present)

- Yoga styles: hatha, gentle, vinyasa, restorative, and yin
- Incorporating mindfulness, meditation, and appropriate yoga poses into therapeutic settings

Languages

Spanish

- Ability to read, write, understand, and communicate verbally
- Advanced conversational proficiency