5-2024

The Impact of Death Anxiety on Counselors'-in-Training Efficacy With Substance Use Populations

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The Graduate School

THE IMPACT OF DEATH ANXIETY ON COUNSELORS'-IN-TRAINING EFFICACY WITH SUBSTANCE USE POPULATIONS

A Dissertation Submitted in Partial Fulfillment
of the Requirements of the Degree of
Doctor of Philosophy

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College of Education and Behavioral Sciences
Department of Applied Psychology & Counsel Education
Counselor Education and Supervisor

May 2024

This Dissertation by: Jason Rose

Entitled: *The Impact of Death Anxiety on Counselors'-in-Training Efficacy With Substance Use Populations*

has been approved as meeting the requirement for the Degree of Doctor of Philosophy in College of Education and Behavioral Sciences in Department of Applied Psychology & Counselor Education, Program of Counselor Education and Supervision.

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ABSTRACT

Rose, Jason. *The impact of death anxiety on counselors'-in-training efficacy with substance use populations*. Published Doctor of Philosophy dissertation, University of Northern Colorado, 2024.

Death anxiety has been an unremitting agent of the human experience. The psychological dilemma posed by the awareness and forecasting of death can increase anxiety, thus affecting well-being through the compulsive desire or will to persist (Becker, 1973; Yalom, 1980). Such psychological armor can manifest in conscious and unconscious behaviors, thoughts, and emotions to which persons utilize psychological, social, and cultural defenses to manage anxiety (Becker, 1973; Solomon et al., 2015). Across all levels of counseling, there has been a deficiency in awareness and discussion of death-related fears within the therapeutic process (Lacocque & Loeb, 1988). Therefore, due to the enduring and immutable conflict of prospective non-being, death anxiety has been directly operational during psychotherapeutic sessions for all in the counseling room. As an enhancement to counseling training, an exploration into death anxiety and its encumbered defenses, both inside and outside the counseling room, has proposed significant influences on counselors'-in-training (CITs') understanding of themselves and their respective influence on client experiences (Routledge & Juhl, 2010). This study was designed to explore the hypothesized relationship of the effects of death anxiety on CITs' overall efficacy in treating clients presenting with substance use disorders by answering the question, to what extent does death anxiety and substance use bias explain graduate students' perceptions of self-efficacy, and which, if any, of these variables contributes distinctively to the explanation after controlling

for age, gender, and the combined effect of years of work experience in human services status and gender? Furthermore, the study explored the secondary and tertiary questions: do years of work experience in human services impact students' perception of self-efficacy when working with substance use disorder populations, and to what extent do CITs' gender and death anxiety explain their perceptions or biases toward a substance use population? Data from 94 participants were analyzed using hierarchical regression, considering demographic variables. Contrary to expectations, death anxiety ($p > .05$) and substance use bias ($p > .05$) did not significantly predict self-efficacy, leading to the rejection of the initial hypotheses. However, work experience in human services emerged as a statistically significant predictor of self-efficacy ($p = .007$), affirming its expected importance. Gender and death anxiety were not significant predictors of bias towards substance use populations ($p > .05$ for both), which led to the dismissal of the third set of hypotheses. These results suggest that practical experience was a key factor in developing self-efficacy for counselors-in-training (CIT), while death anxiety and substance use bias have had limited influence. The findings informed clinical practice and suggested future research directions, particularly in investigating other potential influences on counselor self-efficacy.

Keywords. Terror Management, Death Anxiety, Counselor Education, counselors-in-training (CITs), High mortal salience populations, Substance use populations.

ACKNOWLEDGEMENTS

My journey, both academic and beyond, has been a process of continual becoming, each marked by a series of divergences and creative encounters that propelled me sideways, backward, and forward. In recognition of this fact, I am deeply indebted to those who have supported and inspired me, acknowledging that, much like rhizomatic structures, my path has been non-linear, interconnected, and enriched by a multitude of influences as I rely on the constituency that surrounds me.

I am grateful to my doctoral committee, whose guidance has acted as a sounding board, enabling my thoughts to evolve in unexpected directions. Your support has been instrumental in navigating the intricate landscape of my research. To my Research Chair, Dr. Heather Pendleton-Helm, thank you for embracing the unpredictability of this process, guiding me through the shifts in my thinking, for your support, and for your belief in my work. The doctoral program changed my life; thank you for giving me a chance. To Dr. Angela Vaughan, thank you for all the years teaching University 101 and all the mentorship and support; I am the teacher I am because of you.

I am also extraordinarily thankful to my peers and colleagues, with whom I have shared many late nights and long days; nonetheless, each interaction enriched my personal growth. Most importantly, from this group, I want to extend my profound gratitude to Dr. Claire Critchlow. For the late-night parking lot discussions, your feedback, friendship, building a master's program together, and unwavering support, I am deeply indebted to you.

My family's support has been the most profound and enduring, a space of unconditional love and acceptance from which I could venture forth and always return. Your belief in me has been the foundation of my resilience and determination. My deepest and heartfelt love and thank you to my parents, Sandy and Tim, for their immeasurable contribution to my journey. To my brothers, Kyle and Andrew, your companionship, friendship, love, and encouragement have provided comfort and motivation throughout our great years together. To my nephew, Hugo, you have brought such light and laughter in your not-yet-two years on earth. I cannot wait to watch you grow.

To my partner/wife, Abby, your unwavering love, support, and patience have been an anchor. In the quiet and chaotic moments, your presence has been a source of inspiration, comfort, and a catalyst that has continued to push me to pursue my dreams. My deepest gratitude and love are unequivocally yours for the sacrifices you've made and the joy you've brought into my life. And tag, you're it; the next dissertation is yours to write.

In memoriam: To my father, Chuck, who conveyed an unwavering confidence in my potential and supported me with pride at every step. His absence has left a void in this moment, and yet his legacy of encouragement and love has been a guiding light throughout this process. Although my dad did not live to see the completion of this dissertation and degree, both achievements are imbued with the spirit and dedication he instilled in me. To my dad, my gratitude is as boundless as your influence on my life and the dreams you had for me.

Finally, this dissertation is not just a reflection of my work but a map of the myriad connections, influences, and divergences that have brought me to this point. Therefore, I must thank past teachers and professors who helped lead me here: Ms. Carrie Ross, Mr. W.L. Whaley, Mrs. Debbie Miller, Mr. Daniel Snare, Professor Gavin Mayer, Professor John David Earnest,

Professor Dave Glenn, Dr. Lee Thompson, Dr. Robert Bode, and Dr. Susan Pickett. Thank you to all who have been part of this journey and not listed here.

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CHAPTER I

INTRODUCTION

Existential psychotherapy has posited that psychological movement, growth, and resiliency stem from one's willingness to examine subjective freedoms while simultaneously recognizing that those freedoms were limited and bounded by psychological, social, and biological frameworks (Farber, 2010; Rose, 2019; Yalom, 1980). Furthermore, early existential philosophers also utilized the a posteriori certainty that increased individual awareness of self was akin to the phenomenological term authenticity (Rose, 2019). Nevertheless, they noted a dissimilarity in the latter's definition in which authenticity was the process of one becoming aware of the limitations of their life rather than the essentialist views that preceded this type of existential inquiry (Heidegger, 1977; Rose, 2019). In this way, existential questions have looked to quarry beyond the day-to-day disappointments and anxieties to illuminate the ultimate concerns that accost the living: Death, Freedom, Isolation, and Meaninglessness (Feifel, 1990; Yalom, 1980). There has been an unparalleled universality to these ultimate concerns, none more so than death; death incessantly has eroded and limited life. Nonetheless, existential philosophers and psychotherapists alike have noted that there was a price to pay for increased self-awareness and for grasping the inexorability of death (Becker, 1973; Yalom, 1980). Such knowledge and its subsequent impact could manifest in both conscious and unconscious behaviors, thoughts, and emotions to which persons may utilize psychological, philosophical, religious, social, cultural, and physical defenses to manage the anxiety of their awareness of death (Becker, 1973; Juhl & Routledge, 2016; J. S. Sawyer et al., 2019; Solomon et al., 2015).

Across all levels of counseling, from novice trainees to senior practitioners, there has been a deficiency in awareness and discussion of death-related fears within the therapeutic process (Lacocque & Loeb, 1988; Vance, 2013). Death anxiety has been an unremitting agent of the human experience, albeit not always conscious. Therefore, due to the enduring and immutable conflict of prospective non-being, death anxiety has been directly operational during psychotherapeutic sessions for all in the counseling room (Becker, 1973; Lacocque & Loeb, 1988). Nonetheless, there has been an intense effort to master death, in and outside the counseling process, whether through medical exploration towards increased permanency or the avoidance of the topic altogether. Psychologically, persons, including counselors, often prospectively forecasted distant futures and moved through life, questioning the truism of the inevitability of non-being, opting instead to feel as if there was corporeal immortality (Becker, 1973, 2010; Zilboorg, 1943). Lacocque and Loeb (1988) noted that death was so unpleasant a topic for clients and counselors alike that there was an avoidance of it across all levels of psychotherapy and its research until the middle of the 20th century (Feifel, 1990; Rosenthal, 1963).

This study was designed to explore the hypothesized relationship of effects of death anxiety on CITs' overall efficacy in treating clients presenting with substance use disorders. In doing so, this research was designed to provide counselors with a means of recognizing and addressing personal attributes of death anxiety and its impact on counselor efficacy in populations of high mortal salience, which were populations who were aware of the inevitability of death which may be based on high-risk behaviors and observational data of their contemporaries. Psychometric constructs correlated to death anxiety, counselor self-efficacy, and personal bias toward substance use clients were appraised using previously established and

robustly validated measures developed to ascertain individual similarities and differences across the research participants (Gesser et al., 1988; Murdock et al., 2005; Palamar et al., 2011; Templer et al., 2006; Wong et al., 1994). The phenomenological model of death anxiety and empirical terror management theory have conveyed a distinctive perspective in which to see personal meaning-making, existentialism, and culture at large and their subsequent philosophical, psychological, and behavioral consequences.

As an enhancement to counseling training and the practice of counseling, an exploration into death anxiety and its encumbered defenses, both inside and outside the counseling room, has proposed significant influences on both CITs' understanding of themselves and their respective influence on client experiences (Routledge & Juhl, 2010; Servaty-Seib & Tedrick Parikh, 2013). Furthermore, existential psychotherapy has sought to explore dynamic meaning-making and efficacy across the ultimate concerns; nesting existential dilemmas into death anxiety or terror management theory have provided an overarching theoretical framework for understanding how counselors' anxieties and assuaging symbolic ethos could effectively enrich or detract from their clinical observations, judgments, and interventions with data that informs counselor education practices (Becker, 1973; Rosenthal & Terkelson, 1978; Yalom, 1980, 2008).

Death Anxiety

Humans have known death simply by existing in the world. The fear of death or annihilation of being, known as Thanatophobia, came from the Greek words Thanatos (death) and phobia (fear); McClatchey & King, 2015; Yalom, 2008). Under examination, Thanatophobia psychometrically was parsed into eight components: the fear of (a) the process of dying, (b) premature death, (c) death as a whole, (d) concern for significant others, (e) the unknown, (f) annihilation anxiety (the fear of the annulment of personal individuation), (g) the body after

death, and (h) the dead (Hoelter & Hoelter, 1978; McClatchey & King, 2015). Likewise, all persons have had a précis, a foreshadowing of death in sleep, where Thanatos (death) and Hypnos (sleep) were twins of the underworld in Greek mythos (Yalom, 2008). The experience of sleep or unconsciousness have been conditions for rehearsing death, as they were unassuming states devoid of the conscious knowledge of self (Yalom, 2008).

Humans have been part of a species that inventively, as a result of evolutionary chance, used intelligence to become conscious of themselves and all that follows as biological beings. Equally as important, humanity used that same intelligence and ingenuity to create powerful and sweeping tactics to keep the awareness of existential dread and death-related fears at bay (Arndt et al., 2004). Homo sapiens were part of a genus that created culture to generate meaning via narratives regarding the supposed nature of reality, life, and beyond (Becker, 1973). To survive on this planet, humans had to design and build their own constraints of awareness and serenity. Thus, the essence of psychodynamics, the study of the creation of the human character, is the study of consequence of human and biological limitations (Becker, 1973). The mechanism for creating such a potent formation was borne from all culture, which was the cradle of human meaning-making that protectively imbued its constituents with value, moral rectitude, and a solution to death anxiety (Arndt et al., 2004).

The exploration into the holistic aspects of the phenomenon of death anxiety, as mentioned above, from creatureliness (our baser animal-driven instincts) to the formation of culture and our endless attempts at heroics (motivations and methods toward literal or symbolic immortality) were the satire of the human condition, to which all humans, counselors included, were not spared (Becker, 1973). Nonetheless, these relativistic mythoi, in the direction of immortality and the assuagement of death anxiety, were burdened by an overproduction of truth;

consequently, there was not a singular or correct path concerning the theme of heroics, as holding a linear or prefabricated relationship to the topic would undermine the distinctive nature of personal scaffolding attained through introspection, cultural narratives, or personal meaning-making. In full acknowledgment, these ideas came from Dr. Earnest Becker and his 1973 Pulitzer prize-winning book, *The Denial of Death*. In chase of these human phenomena, Becker outlined epistemological assumptions regarding the exploration of human motivation: (a) no single discipline comprised the holistic truth, and the examination of death anxiety and its defenses must come from an interdisciplinary inquiry; (b) the discovery of foundational human behavior will only come through empirical research; (c) in adherence to the early 20th century Pragmatists, acquired knowledge was useful in the fact that it informed action, where one could take an understanding of human behavior and apply it to better themselves and the world around them; and (d) all understanding of animal behavior, humans included, must be grounded in evolutionary tenets (Becker, 2010; Solomon, 2011).

Terror Management Theory

Approximately 13 years after the publication of *The Denial of Death*, based heavily on the ideas and epistemological notions codified and propagated by Becker, Terror Management Theory would become the theoretical underpinnings to a quantifiable permutation of said philosophies on death anxiety in a psychologically grounded theory; it was here that this study was nested, a quantitatively testable hypothesis. Terror management theory (TMT) was put forth by psychologists in 1986 to name and quantify the mechanisms and mitigations of death anxiety, along with their impact demographically and on overall well-being (Greenberg et al., 2011). Terror Management Theory, as with Becker, posited that the psychological dilemma posed by the awareness and forecasting of death had the potential to increase anxiety, thus, adversely

affecting well-being as there was a struggle between known information regarding death and the desire or will to persist (Greenberg et al., 2011; Yalom, 1980). Moreover, Terror Management Theory proposed that continual and crippling bouts of death anxiety were buffered through personal psychological structures in which persons actively created symbolically perceived worth and meaning in their life that transcended the corporeal self (Bohart & Bergland, 1978; Juhl & Routledge, 2016). Death was, of course, the ultimate limit to the bounds of existence in which each being desired to persist as they were, as they had been, or as they prospectively forecasted, they may be (Gilbert et al., 1998; Yalom, 2008). Nonetheless, locked by the confines of death, this was not possible, and, as noted above, the tension and anxiety here arose from the desire to endure, despite the awareness of death (Yalom, 1980). The irony here was that, while one may wish to rid oneself of the fate of death and the anxieties that stem from it, it was life and the consciousness that followed that awakened us to this looming end; yet, in awareness, recoiling, and symbolically assuaging the anxieties of death, we may mute all of the experiential engagements life extended to the living (Frie, 2013; Yalom, 1980).

As noted above, the fear of death has shaped the essence of personal and collective identity. In this way, the meaning of life became to deny death as each person sought strategies to avoid such anxiety (Becker, 1973; Bohart & Bergland, 1978). Therefore, cultural narratives concerning how to live were concealed assuagements of death anxiety, including counselors perceived self-efficacy regarding their profession. These codified rules of meaning allowed one to function automatically and uncritically in the world. Through familial and cultural socialization, abstractions of meaning and worth, which allowed a people to manage repressed death-related fears, were introduced in childhood (Arndt et al., 2004). While temporarily beneficial, this compulsory and unconscious introduction and interaction may ultimately subdue

authentic growth, advantageous personal assessment and connection, expressions of freedom, and other means of meaning-making: The antithesis of the aspirations of existential psychotherapy (Frie, 2013; A. M. Lewis, 2013; Yalom, 1980).

Rationale

Death Anxiety and Counselors-In-Training

All persons, with no exception, have experienced some amount of death anxiety as they labored to create meaning in their lives and those around them; CITs then must have the accompanying defenses of terror management towards death anxiety and desires for symbolic or literal heroic immortality through culture, including the culture of being a counselor. There were early scholastic attempts to understand parts of the issue of death and terror management and the felt competency and efficacy of CITs surrounding death and bereavement (Gamino & Ritter, 2012; Howze, 2001; Sanders, 1984). A 1978 survey of CITs, counselors, and counselor educators assessed information and attitudes regarding death education, training in death and dying, and the appropriateness of dealing with death in schools (Rosenthal & Terkelson, 1978). These results showed that an overwhelming majority of the respondents felt that, specific to the study, school counselors should pursue topics of death with students. It was interesting to note that of the respondents, 83% reported that they had counseled grieving students and 80% reported that they would feel comfortable dealing with the issue of bereavement with their clients. However, there was a significant drop in noted competence surrounding death anxiety, where only 45% of the counselors stated that they felt prepared to counsel a client who exhibited fears of dying (Rosenthal & Terkelson, 1978).

Through the lens of death anxiety, underneath an actuating sense of insecurity, dearth of relational closeness, or feelings of dissuasion and depression, has lurked a basic fear of death;

this anxiety of non-being, though simple and natural at a preliminary glance, was intricately intertwined and confounded within a conscious or symbolic being (Becker, 1973; Zilboorg, 1943). Death fear has assumed complex and elaborate manifestations, presenting as unfettered anxieties or adherences to good and corrupt, or moral and immoral, all of which may inflame the counselors' own fears and personal death anxiety; thereby, the counselor may unconsciously avoid death-related topics in the counseling room, both intra- and interpersonally, no one more so than those in the beginning stages of the profession (Howze, 2001; Lacocque & Loeb, 1988; Rosenthal, 1963). A hallmark of the fear of non-being was that one failed to recognize mortal terror when it arose (Becker, 1973). Nonetheless, mental health and substance use counselors have regularly addressed the issues of death and dying with clients as a tenet of the profession, especially concerning work on grief and loss (Krichberg et al., 1998). Despite this fact, CITs have continued to report discomfort and a lack of competence in discussing issues related to death and dying than other presenting problems (Krichberg et al., 1998). Moreover, CITs have recounted and experienced overall subtherapeutic levels of empathy toward clients with death-related concerns (Harrawood et al., 2011; Krichberg et al., 1998). A possible explanation for this low empathetic response from CITs was related to pre-existing attitudes toward death and their personal expression of death anxiety and fear of non-being (Krichberg et al., 1998).

Counseling professionals have been further constrained on death topics through both historical and managed care consequences, which asserted that pathology primarily resulted from neurobiology, neurochemical disparities, trauma, and the inability to engage in, or failure of, formative relationships (Lacocque & Loeb, 1988; Moncrieff et al., 2022; Vance, 2013). In this way, counselors may work with clients to intercept and address terrestrial anxieties, depressive states, and other maladapted thoughts and behaviors, both the client's and their own, while

systematically ignoring the proverbial elephant in the room, as if there was a conspiracy in which all levels of society were to deny mortality (Howze, 2001; Lacocque & Loeb, 1988). By focusing on an object, a tangible aspect of the client's life, the counselor could rationalize away the issue of death, unconnected to the presenting pathology, maladaptive defenses, or phenomenological experiences of the client in front of them, while simultaneously uncritically avoiding their own (Lacocque & Loeb, 1988). In a direct correlative relationship, the greater the degree of death anxiety experienced, the more uncomfortable and possibly less efficacious the counselor would be when working with clients presenting with their existential anxieties and death fear (Feifel, 1990; Howze, 2001; Kirchberg & Neimeyer, 1991; Langs, 1997).

A 1986 study comparing degrees of death anxiety in medical students and CITs found that the CITs had significantly higher levels of death anxiety than the medical students (Jordan et al., 1986). However, these results could not provide support within the monolithic study to assert that the students' anxiety levels may have impacted their attitudes toward clients or their efficacy as counselors. Nevertheless, it has been suggested, and was the working hypothesis of this research, that when CITs have high levels of death anxiety, it impacted their proficiencies and efficacy when working with a client who brought death-related issues, none more so than fear of death and death anxiety. Compounding contemporary death fears, the still present global pandemic COVID-19, aggressively escalated death anxiety as loss of human life became visible and omnipresent; 40% of adults in the United States sought services due to increased anxiety, counselors, of course, included (Kaus, 2022; Menzies & Menzies, 2020; Panchal et al., 2021).

Additionally, there was a lack of training to perceive prospective death as an issue within the therapeutic process; disengagement or dismissal of this certitude within the counseling relationships became a game of whose mask, the client's or the counselor's, was more enduring

to the persistent existential dilemma (Cleckley, 1982; Lacocque & Loeb, 1988; Rosenthal & Terkelson, 1978; Sanders, 1984; Vance, 2013). Fundamentally, counselors have often experienced denial in the transference, especially with a challenging client. It may be more acceptable to find a real and objective reason to disengage from specific clients than to acknowledge and process what they invoked in the counselor (Lacocque & Loeb, 1988; Sanders, 1984; Winnicott, 1994). There was an impending problem with using an objective view to countertransference as it may allow the practitioner to rationalize away their discomfort and anxieties in the therapeutic process (Winnicott, 1994). Curiously, well-trained counselors have frequently recognized a presenting phobia as a pretense of a social or moral demand that was deemed objectionable; however, this awareness may be lost in confrontation with a client who wrenched the practitioner into the room through intrapersonal challenges that brought untenable feelings to the psychotherapist, in which they may feel unstable, incapable, inept, and aware of their finitude (Lacocque & Loeb, 1988; Winnicott, 1994). As true with any profession, neophyte counselors have particularly felt unprepared to work with specific clients, diverse or challenging populations, and presenting issues and may experience a heightened pull of countertransference and anxiety (Kaus, 2022; Lacocque & Loeb, 1988; Wass, 2004)

Mortality Salience, Terror Management Theory, and Counselors-In-Training

According to terror management theory, individuals, including counselors, have responded to reminders of mortality by using defenses to seek psychological security and bolster self-esteem through an operational retraction into their own held beliefs in an attempt to assuage death fears (Becker, 1973; Greenberg et al., 2011; Juhl & Routledge, 2016). As a counselor engaged in a therapeutic relationship with a client and, with acknowledgment of the foundational ethical codes of a counselor, such attempts to seek psychological security and symbolic

immortality in session would be unethical and damaging (American Counseling Association [ACA], 2014). In all human society, one of the most central constructs to enhance self-importance, dismiss awareness of one's mortality, and direct behavior was power. Power has been a primary organizing force within all bioecological systems of civilization and influences essential cultural aspects of individuating sects across history (Belmi & Pfeffer, 2016; Bronfenbrenner, 2000; Vries, 1991). The regular examination into the motivations towards power procurement, aggression, and dominance over another has tended to focus on individuals and the opulence or freedom that power brought, where presumed power acquisition stemmed from characterological differences across persons (Belmi & Pfeffer, 2016; McGregor et al., 1998; Vries, 1991). However, from a terror management view, enjoying power could alleviate peoples' fear of non-being (Belmi & Pfeffer, 2016). Correspondingly, the opposite could also true; reminders of mortality could increase peoples' motivations to acquire power (Belmi & Pfeffer, 2016; Vries, 1991). Once again, counselors and CITs have not been immune to this attempt to quiet anxieties, and without awareness of these ingrained attempts to moderate awareness of mortality, there could be ethical and relational harm to clients (Howze, 2001; Kirchberg & Neimeyer, 1991; Lacocque & Loeb, 1988; Langs, 1997).

Building from above, the awareness of one's mortality, or mortality salience, could directly influence cognition and behavior in or out of the counseling room (Howze, 2001; Langs, 1997). This unique awareness of the inevitability of death again gave rise to defensive strategies, both proximal and distal, to manage such an existential unease (Pyszczynski et al., 1999; Solomon et al., 2015; Xu et al., 2022). In alleviating death anxiety, proximal defenses have coped with a direct thought of death immediately upon exposure, and the distal defenses act as diversionary mental or emotional tasks to further avoid the catalytic mortality prompt

(Pyszczynski et al., 1999; Xu et al., 2022). Within the terror management framework, self-esteem has been a protectant against death fears, and likewise, social cooperative emotional states, such as guilt and shame, have been indicators of moral transgressions by the individual that may undercut feelings of self-esteem, leaving one with a breach in their existential armor (Rose & McGrath, 2018; Sznycer, 2019; Xu et al., 2022). Previous studies have shown that death prompts reduced activity in a specific part of the brain (the insula), which reflected cognitive suppression of salient self-awareness (Han et al., 2010; Klackl et al., 2013; Shi & Han, 2012; Xu et al., 2022). The employment of proximal and distal defenses within a counseling relationship would again remove the client from the central focus, and unethically, a counselor employing such defenses may, both consciously and unconsciously, avoid topics or direct the counseling session (Howze, 2001; Lacocque & Loeb, 1988; Langs, 1997).

Substance Use Populations and Mortality Salience

While there was a robust body of literature regarding death anxiety and terror management across multiple aspects of high mortality salience professions, counselors explicitly working with clients presenting with substance use disorders have faced unique challenges as multiple aspects of a client's motivations to use may erode personal and cultural assuagement of fears of non-being. Substance misuse or substance use disorders were often associated with health and legal consequences and widespread social stigma (Palamar et al., 2013; Palamar et al., 2011). Additionally, substance use populations present with a high mortality salience as death was a common yet heartbreaking outcome as estimates suggest that there were approximately 140,000 deaths related to substance misuse in 2020 in the United States alone (National Institute on Drug Abuse [NIDA], 2021; Sperandio et al., 2022). While the complexity of substance use and addiction remain holistically out of the grasp of the scientific community for the moment,

social and personal motivations to use substances varied across all persons, and yet research has shown sources of anxiety, feelings of inadequacy, or powerlessness were present across the majority of habitual users; all of which coincided with presentations of death anxiety (Becker, 1973; Viney et al., 1985). Furthermore, Viney et al. (1985) found that the most common type of anxiety amongst substance users was anxieties associated with shame, which undercut self-esteem and removed them from the culture at large, thereby, increasing feelings of death anxiety. The authors found that individuals engaged in habitual substance use consistently presented with increased death anxiety compared to the study's controls (Viney et al., 1985).

Substance use, as a phenomenon, could be broadly classified as a high-risk behavior, not only for personal outcomes and risks due to the substance itself but because of lowered inhibition to engage in supplementary high-risk behaviors under the acute intoxication of a substance. Research has shown that adolescent engagement in high-risk behaviors was negatively correlated with death anxiety (Cotter, 2003). Additionally, a 1976 study looking at risk-taking behavior did not find significant relationships regarding risk-taking as a correlate to death anxiety; however, both Cotter (2003) and Mc Donald (1976) independently found that self-identified females across chronological age presented with amplified death anxiety. Nevertheless, despite the lack of current research regarding the connection between risk-taking behavior and death anxiety, such a relationship was hypothesized by terror management theory. As noted above, humans have exploited several additional psychological measures to overcome death fears aroused by dangers within the living world. One such tactic for alleviating these fears was to maintain the conviction that one was stronger than the dangers one faced: to believe oneself more potent than death (Becker, 1973; Solomon et al., 2015; Zilboorg, 1943). In such a narrative, one will speak of themselves as the singular exception to the grasp of death, where engagement in risk-taking

was an effort to prove one's fearlessness in the face of death. So strong was this propensity to theatrically duel with death that all societies held proprietors of dangerous sports in high esteem (Zilboorg, 1943). It has been hypothesized that motivations toward substance use may fulfill the same nonchalance combat with death as a way to avowal one's bravado and move towards symbolic meaning and immortality, despite the glaring and pervasive risks. The patterns of death anxiety presented in risk-taking and substance use must be considered as they hold inherent implications for treatment and the omnipresent possibility of inflaming the CITs' existential fears (Lacocque & Loeb, 1988; Viney et al., 1985)

Problem Statement

While there was a robust body of literature across multiple aspects of high mortality salient professions regarding death anxiety and defenses implemented through the works belonging to the terror management theory, there remained only a select few studies that focused on the impact of CITs and the holistic bearing of death anxiety and its effect on personal philosophies and phenomena. Additionally, there was an accompanying marginal body of literature exploring the influence of terror management defenses and retractions on a CIT's professional and ethical behavior, engagement in therapeutic relationships, and clinical effectiveness. Moreover, there was a noticeable gap in the literature regarding death anxiety and CITs specific to substance use populations, which, on the whole, presented with increased death fears, mortality salience, and suicide as compared to the general population (Fruhbauerova & Comtois, 2019; Viney et al., 1985). The noticeable gaps in the literature regarding death anxiety and CITs outlined above contoured the concerns that CITs presented with a lack of awareness of their own fears of non-being, which may subtly or egregiously impact counselor efficacy, adherence to the ethical codes, and the therapeutic relationship.

Statement of Purpose

This study postulated awareness of the influence of death anxiety across developmental levels of CITs with substance use populations. Specifically, this study was designed to explore the hypothesized relationship of effects of death anxiety on CITs' overall efficacy in treating clients presenting with substance use disorders. This research permutation stemmed from a robust body of literature regarding death anxiety and exploring how intellectualized and cultural fortifications may provide CITs and counselor educators essential insights regarding foundational aspects of cultural meaning-making, fears of non-being and loss, and countertransference. The hope was to shed light on the direct impact of death anxiety on counselor trainees to personal counselor efficacy when working with high mortality salient and high-risk populations.

Research Questions

This study was designed to explore the hypothesized relationship of effects of death anxiety on CITs' overall efficacy in treating clients presenting with substance use disorders by answering the following research questions.

Q1 To what extent does death anxiety and substance use bias explain graduate students' perceptions of self-efficacy, and which, if any, of these variables contributes distinctively to the explanation after controlling for age, gender, and the combined effect of years of work experience in human services status and gender?

Q2 Do years of work experience in human services impact students' perception of self-efficacy when working with substance use disorder populations?

Q3 To what extent do CITs' gender and death anxiety explain their perceptions or biases toward a substance use population?

Definition of Key Terms

Annihilation Anxiety. Such anxieties were prompted by a survival threat that may be real or perceived and may be cognitive, emotional, or physical. Moreover, annihilation anxiety may stem from a danger experienced due to a current risk or as anticipatory anxiety of an impending catastrophe (Hurvich, 2003; Kira et al., 2012). Derivatives of underlying annihilation anxiety were fears of being overwhelmed, merged, abandoned, fragmented, and destroyed. Such experiences may occur in pre-symbolic form or be associated with symbolic fantasies regarding conflict or lack of compromise and were connected with concerns over the dissolution of personal individuation. All of the derivatives, as mentioned above, were considered motives for personal defense and may be associated with refractory resistance in the person experiencing anxiety (Hurvich, 2003).

Culture. Cultures were humanly constructed beliefs about the nature of reality and beyond. Individuals shared these beliefs across organizational groupings such as geography, historical ancestry, or colonization. Such proliferated cultural semiotics manage or mitigated existential and death anxiety by conferring value and meaning to its constituents by offering an account of the origin of the earth, life, and the universe as well as an indispensable sense that life is meaningful (Becker, 1973; 2010).

Death. Following heart stoppage and the lack of blood flow to the brain, the then isoelectric neurons underwent a spontaneous, nonlinear propagation in the ion gradients of the cellular membranes. Neuronal depolarization develops simultaneously from multiple foci and spreads through the neural tissue as a self-propagating wave or tsunami; this depolarization was fundamentally irreversible (Dreier et al., 2018).

Death Anxiety. Cultural anthropologist Ernest Becker (1973) popularized this term in his ninth and final book, *The Denial of Death.* This book was the accumulation of his life's work. Predominantly, Becker searched for explanations regarding the formulation and development of human societies. Most notably, he was interested in why social groupings tended to be intolerant and vile towards each other, often acting in violence. Becker (1973) hypothesized that one's sense of vulnerability, insecurity, and knowledge of human mortality gave rise to a background state of anxiety. In order to assuage these anxieties, humans devised all sorts of strategies to subjugate or escape the awareness of their impending demise. According to Becker, this psychological and corporeal denial of was one of the most fundamental drives of individual behavior across all cultures and groups. Correspondingly, in Becker's (1973) theory, the function of culture was to help persons successfully circumvent symptoms of their mortality. Such monumental suppression of awareness played a vital role in day-to-day functioning, for if one were consistently aware of their fragility, such persons would be paralyzed to any action or meaning-making. Culture allowed for the crucial conquest, via repression, needed to function as social and cultural groupings, in relationship or religion, symbolically interweaving us in league with the permanent, invulnerable, and immortal that lies beyond our grasp (Becker, 1973)

Essentialism. The belief that things have a set of characteristics that make them what they are and that the task of science, philosophy, and religion is their discovery and expression; the doctrine that essence is prior to existence.

Existential Psychotherapy. Existential psychotherapy was a style of psychodynamic therapy based on existential philosophy. This theory noted that the dynamic forces at play in a

person that fueled anxieties were not unrequited desires, as in psychoanalytic theory, but rather anxieties that naturally arose from the awareness of the givens and bounds of life itself (Yalom, 1980). In this way, existential psychotherapy emphasized understanding human experience and focuses on the holistic client rather than their symptomology. In this theory, psychopathologies and maladaptive behaviors resulted from an inhibited ability to make authentic, meaningful, and self-directed choices about how to live. Consequently, existential psychotherapeutic interventions aimed to increase client self-awareness and self-understanding. Foundationally, structuring in existential psychotherapy was primarily propelled by an epistemology of ethics and personal meaning rather than assuming an ontology of transcendence.

Existentialism. Existentialists asserted that humans were born into an absurd and indifferent universe; there was no prearranged meaning. Therefore existence ("being in the world") preceded consciousness and was the ultimate reality. Existentialism was the view that humans defined meaning in life; the doctrine that existence precedes essence.

Literal Immortality. It was the belief presented by essentialism in which one was afforded an immortal soul that could reside in heaven, an afterlife, or be reincarnated contingent on one's association with culture and religion. The anthropomorphic stated in which personal identity was conserved through a persistence beyond corporeal reality.

Mortal Salience. A term derived from Terror Management Theory alludes to the extent that an individual is aware of the inevitability of death.

Symbolic Meaning or Symbolic Immortality. In form, symbolic meaning was a representation of something that had a greater meaning than what it was because of what it represents. Concerning death anxiety and Terror Management Theory, humans possessed a symbolic

self that elevated them promptly out of nature. Humans retained a symbolic identity in which they embraced a name, recounted personal history, imagined wonders and legacy, forecasted infinity, and endured a reflective knowledge of death, mitigated only by illustrious cultural adherence in which meaning was created (Becker, 1973; Solomon et al., 2015). Such a symbolic self, once removed from the body, conserved and was the source of personal identity and had qualities overlapping with the religious-based notion of a "soul."

Terror Management Theory (TMT). Terror management theory was conjointly an empirically based, social and evolutionary psychology theory put forth by psychologists Jeff Greenberg, Sheldon Solomon, and Tom Pyszczynski, born from the codified theories of death anxiety outlined by Becker in his 1973 Pulitzer prize-winning book, The *Denial of Death* This theory posited that, while all life forms were subjected to a biological predisposition regarding self-preservation, humans ere distinctive, as they alone possessed the ability for symbolic thought. This conscious and prospective capacity fostered cognitive and affective reflection and forecasting. However, existential consideration came with a price, as humans were subjected to the knowledge and inevitability of their mortality. Knowledge of mortality could manifest as fear, terror, and anticipatory anxiety across conscious and unconscious behaviors, thoughts, and emotions. Humans may employ several psychological, philosophical, religious, and physical defenses to mitigate and manage anxiety in response to a death stimulus. Terror Management Theory exclusively noted that the awareness of death, and the incited terror, was managed by the creation, conviction, and conservation of cultural worldviews to confirm meaning and value to the ephemeral human life (Solomon et al., 2015). Such

meaning-making was accomplished through social roles and their associated standards of being. An individual's mastery of such personal standards delivered a sense of personal significance, self-esteem, and psychological equanimity. Ultimately, TMT asserted that all cultures provide an underpinning of meaning by offering origin stories, protocols for behavior, connection to something larger or whole, criteria to cleave the population into groups by their perceived value or adherence to the cultural standards, and assurances of literal or symbolic immortality for those who comply with the edifying parameters of the dominate culture at hand.

CHAPTER II

REVIEW OF LITERATURE

This chapter reviews the theoretical and research origins, developments, and philosophical foundations of death anxiety and terror management theories across cognitive, social, and individual psychology and counseling practices (Becker, 1973; Solomon et al., 2015). Additionally, major theoretical writings and research studies on CITs efficacy and substance use bias were recapitulated and investigated. Through a thorough examination of both the current terror management theory and self-efficacy theories, an examination of the theoretical and practical grounding of terror management's impact on CITs was explored. The constructs and nesting of micro-supplementary theories included in terror management and death anxiety are discussed in detail, with an aim toward the potential implications for the recognition of death anxiety as a tool for CITs' efficacy in counseling populations with high mortality salience.

Death: An Evolutionary Perspective

Despite the egotistical and myopic focus on death as a human phenomenon, death and even the awareness of death have been more accurately a transbiological quandary, a product of chemistry, meiosis, and evolutionary history (Langs, 1997; Ohkura, 2015). Prior to the evolutionary predilection towards multicellular organisms, who utilize meiosis in their reproduction, the first living organisms were single-celled and capable of metabolism and replication. In a sense, the direct replication of mitosis made these creatures immortal as they did not die per se; they just kept replicating. As such, there was an unbroken chain of existence for

some 3.8 billion years hidden within the taxonomic rank Domain: Bacteria (Langs, 1997; Margulis & Sagan, 1995; Cain, n.d.).

The incorporation of cellular symbiosis paved the way for the first multicellular organisms which sprung forth from newly cooperative cellular arrangements (Langs, 1997; Lyons & Kolter, 2015). These more complex organisms no longer simply divided themselves as a way to replicate; they possessed nuclei in forged offspring by combining genetic material from other organisms within their cells in a rudimentary sexual process (Langs, 1997; Lyons & Kolter, 2015). Multicellularity and the resulting sexual reproductive procedure allowed phenotypic development and diversification through the outgrowth of differentiated cellular structures within an organism (Lyons & Kolter, 2015). The billion years sole reign of these proto-bacteria was overthrown as evolution and natural selection opted to exchange biological simplicity, asexual replication, and genetic immortality for multicellular complexity, sexual reproduction, genetic variation, and ultimately, death (Langs, 1997).

Since the introduction of multicellularity and sexual reproduction, death and its substantial impact has become an a priori and an adaptive hurdle for all living organisms as all biological creatures possess means of sensing and responding to threats of annihilation towards the propagation of their species (Langs, 1997). The awareness of death, whether instinctual trepidation or truly a cognitive capability, forged by one's perception of the world, has been a fundamental force of learning, adapting, and defensive behaviors in all living creatures, which historically operates as a reproductive selection constraint towards protective and adaptive capabilities (Becker, 1973; Langs, 1997). While these cognitive abilities brought considerable adaptive benefits, such as long-term planning, prospective forecasting, and imagination, they also rendered humans aware of their mortality (Becker, 1973; Greenberg et al., 2011; Vail et al.,

2012). Nevertheless, the extent and pervasiveness of the awareness of death are acutely realized within humans as a direct result of our ability to symbolically define and represent threats of death (Becker, 1973; Langs, 1997). Such symbolic representation and prospectively persistent understanding of personal and collective finitude, alongside the mounds of life-threatening dangers at play, birthed both anxieties and adaptive strategies to quell them (Becker, 1973; Greenberg et al., 1994). These capabilities came with a cost, and death anxiety and its accompanying adaptive and maladaptive consequences were the prices humans paid for their extraordinary skills of symbolism and meaning-making (Becker, 1973; Langs, 1997; Routledge & Juhl, 2010).

Death as a Study of Interest

While death has been a definitive element of the human condition, and despite universal exploration of death, meaning, and spirituality across all known cultures, for centuries, death contemplation has remained solely in the realm of religion and philosophy (Becker, 1973; Feifel, 1990; Howze, 2001; Nyatanga & de Vocht, 2006). Nevertheless, death was integrally and openly seen as the natural order of life and was formational to societal, familial, and religious customs and rites (Cable, 1983; Fulton & Owen, 1988; Howze, 2001). During the era of the early 20th century, as well as those preceding, daily obligations were focused on specific needs of basic survival, including food and water cultivation, shelter procurement, and essential attempts to ward off natural disasters such as weather, fires, drought, and disease (Fulton & Owen, 1988; Howze, 2001). The visibility of death and dying was palpable, immediate, and omnipresent as all illness, dying, and death occurred in the home, observationally and emotionally accessible to children and adults alike (Fulton & Owen, 1988). As a result of this intertwined integration of death into everyday life, psychological inquiry into death was paradoxically impeded, and “death

became a wall rather than a doorway" where death was entrenched in religious and daily life that many were blind to the psychological impacts of death awareness and bearing witness to holistic mortality (Feifel, 1990, p. 537).

True scientific endeavors regarding the psychology of death were not seen until the mid-20th century. The end to such delays in methodically exploring the heuristics of death came about partly due to fundamental shifts in society regarding how people collectively dealt with death and supported the dying (Feifel, 1990; Howze, 2001). The progress of medical science, technological inventions, and the resulting demographic changes in the population allowed for social and cultural shifts in how death played out in personal and social stages (Fulton & Owen, 1988). The impact of industrialization and the specialization of the world's workforce fundamentally changed the care of the dying and dead, including opting for the body absent memorial service over the traditional funerary services of the past (Feifel, 1990; Fulton & Owen, 1988; Howze, 2001). A gradual shift of death study and its ensuant psychological phenomena from metaphysical to an outgrowth of logical positivism brought an attempt to operationalize discernment through standards of evidence; however, these attempts to dissect death into a biological or behavioral binary negated the existential richness and fears of annihilation anxiety (Feifel, 1990; Howze, 2001; Hurvich, 2003).

The recapitulation of existential richness into the psychological examination of death and dying was forced back into research consciousness through the grotesque atrocities and xenophobia of the holocaust and other like-minded crimes (Feifel, 1990). Such large-scale challenges to civic foundations, coupled with new research in psychology regarding the malleable interplay of nature and nurture across development, drove psychology to look beyond traditional positivism (Feifel, 1990; Howze, 2001).

The most forceful push into necessitated consideration of death came on July 16, 1945, where, in a flash from fission, all of humanity encountered the first possible human-made existential risk in New Mexico, just before 5:30 a.m. The desert outside of Alamo Gordo was the site of the first detonation of a nuclear bomb in human history; this blast was called the Trinity shot (Alvarez, 1945; Feifel, 1990; U.S. Department of Energy-Office of History and Heritage Resources, n.d.). The bomb's detonated 21 kilotons was more luminous than the sun, and the desert landscape was eerily bathed in beautiful gold, gray, blue, and violet. At this precise moment, the world was brought into the atomic age, an age of anxiety amongst all peoples of the earth that life on the planet could end (Feifel, 1990; Howze, 2001). Collective death anxiety reigned. Furthermore, the bomb brought with it not just the first potential, human-born, existential risk, but it thrust upon an unsuspecting world the awareness that those alive in the present were part of a tiny group responsible for the future of humanity: prospective annihilation anxiety (Hurvich, 2003).

Much of the early research conducted during the Death Awareness Movement that arose in the 1960s was a direct result of changing social attitudes, increased secularization, distance from funeral processes, scientific discovery, as well as the omnipresent embodiment of existential annihilation and death anxiety that emerged as a result of the cataclysms of World War II (Feifel, 1990; Fulton & Owen, 1988; Howze, 2001). These empirical findings from the foundational studies in the early Death Awareness Movement examined preliminary measurements of attitudes toward death (Feifel, 1990; Howze, 2001). Moreover, this early research led to clinical insights into the significant discrepancies in people, as the fear of death was not a unilateral or monolithic variable but comprised of stacked divisions of explicit death anxieties (Feifel, 1990; Howze, 2001).

Death Anxiety Theoretical Underpinnings

Death anxiety has been a subverted expression of the, ultimately, futile instinct towards self-preservation which functions as determination to surmount mortal threats and obstacles in life. Correspondingly, the fear of non-being has also been a strident manifestation of normal functioning, attuned to seek corporeal permanence via attempts at literal or symbolic immortality, void of the substantive comfort of knowing what truly lies beyond or after death (Arndt et al., 2004; Becker, 1973; Nyatanga & de Vocht, 2006; Solomon et al., 2015; Zilboorg, 1943). The known and incommutable nature of death, coupled with the indiscriminate arrival, method, and protraction of death, only worked to increase anxiety (Becker, 1973; McGregor et al., 1998; Nyatanga & de Vocht, 2006). Historically, and for the foreseeable future, humans failed to appropriately, cogently, and affectedly forecast death and its dissentions; therefore, the psychological construction of death and its meaning fluctuated from culture-to-culture, person-to-person, and era-to-era. Nonetheless, to the majority of people, the aura of death was customarily negative, fueled by the destructive and disruptive qualities it brought to the living; all of the above unknowns phenomenologically bowed towards anxiety (Nyatanga & de Vocht, 2006). However, despite its daily function, the awareness of death and the anxiety of non-being could not constantly be present in the day-to-day thoughts of humans as it may overwhelm the cognitive and emotional systems, rendering a person muted and functionally stuck (Becker, 1973; Heidegger, 1977; Zilboorg, 1943). The strategic employment of death fear properly repressed allowed for comfort and action as a living, death-aware being. However, the reduction in symptomology, or even the disappearance of anxiety and fear of death through the use of repression, failed to mean it was never present (Becker, 1973). Negation was not the role of repression, and it was unassumingly not a deconstructive force opposing life's energies or

anxieties. Accurately, repression was the creative use of such anxieties in which fears were redirected and absorbed by striving to expand life with content and symbolic meaning (Alexander et al., 1957; Becker, 1973). The inherent impulse towards immortality, be that literal or symbolic, was not merely a reflective act of death anxiety but a reaching out with the totality of being toward life and its luminol expanses (Becker, 1973). Exploring the above interplay between death anxiety and repression, Becker (1973) wrote,

> Nature seems to have built into our organisms an innate healthy mindedness; it expresses itself in self-delight, in the pleasure of unfolding one's capacities into the world, in the incorporation of things in that world, and in feeding on its limitless experiences. This is a lot of very positive experience, and when a powerful organism moves with it, it gives contentment. As Santayana once put it: A lion must feel more secure that God is on [its] side than a gazelle. On the most elemental level the organism works actively against its own fragility by seeking to expand and perpetuate itself in the living experience; instead of shrinking, it moves toward more life. Also, it does one thing at a time, avoiding needless distraction from all-absorbing activity; in this way, it would seem, fear of death can be carefully ignored or actually absorbed in the life-expanding processes. (p. 21)

Grasping both the awareness of death, a blight requisitioned only for earthly beings, juxtaposed against the limitless power of narratives to assuage it, humans were a paradox, born half animal and half symbolic (Becker, 1973). Humans' lofty symbolic identity elevated them above nature with a mind that explores the cosmos, yet simultaneously; their bodies bound them to the dirt to which they would return (Becker, 1973). Such a pairing brings forth the paradoxical aspects of humans, an existential dualism that entombs persons into an irreconcilable dilemma, as they were out of nature and yet hopelessly beholden to it (Becker, 1973). This bereft existential

paradox of the genus Homo could be called "[a] condition of individuality with finitude" (Becker, 1973, p. 26). Bound to such a dissonant condition, anxiety resulted from discernment of reality; humans were a "self-conscious animal" (Becker, 1973, p. 87). Such existential anxiety resulted from active perception regarding the truth of one's human condition as an evanescent, self-conscious animal, and this truth bled into well-being (Becker 1973). All the approaches mentioned above to mitigating death anxiety stemmed from fear, yet fear was humbly an expression of the instinct of self-preservation. Alternatively, and more delineated, fear was the reality of holistic creation concerning our powers and powerlessness; this perpetual expression of self-preservation functions as a drive to maintain life and minimize and master existing and prospective dangers and mortal threats. In the correlative relationship between death anxiety and the drive to persist, there was an underlying connection to typical human functioning. One seemingly could not exist without the other; self-preservation was born out of death anxiety, and they worked in tandem (Becker, 1973; Solomon et al., 2015).

Becker also noted that, throughout history, individuals' creatureliness, the consciousness that came from our biological nature, was always absorbed by culture. In this, as stated above, culture opposed nature, subverted it, and fundamentally transcended it, with the aim that culture, in its most intimate intent, was the heroic denial of biological limitations and creatureliness (Becker, 1973). Additionally, Becker (1973) noted that throughout history, Homo sapiens' creatureliness was constantly assailed by strategically spun cultural narratives; scarecrows to frighten away biological truisms (Arndt et al., 2004; Pyszczynski et al., 1999; Rosenthal, 1963). A person fundamentally experiences an inner and external world in which they existed simultaneously as both *a self* and *a body*, and from the initiation of perceptual consciousness, there was confusion about where *They* actually *are* (Becker, 1973; Watter, 2018; Yalom, 1980).

Each phenomenological realm was distinctive, and the inner self represented the freedom of thought, imagination, and the infinite reach of symbolism. However, the body represented determinism and boundness, and the person progressively learned that freedom, as a unique being, was sequestered by the physical, by the body and its appendages (Barker, 2011; Becker, 1973; Watter, 2018). Therefore, through the lens of death anxiety, sex may be difficult without guilt, as the body casted a shadow on the person's inner freedom, the *real self* that was being forced into a standardized, mechanical, biological role void of freedom and autonomy (Barker, 2011; Becker, 1973; Goldenberg & Roberts, 2013; Watter, 2018). Such guilt may make the inner self shrink and threaten to dissolve. Persons engaged in sexual activity may request reassurance that their prospective partner desired *me* and not *just my body*; acutely aware that the inner self, their symbolic meaning might be relinquished during the act, a reduction of the personality to that of the body (Becker, 1973; Goldenberg & Roberts, 2013). The individual temporarily became their physical self, so relieving themselves of the existential paradox's torque and the guilt associated with sex (Becker, 1973; Watter, 2018).

Conversely, an increased fixation or preoccupation with sexual ideas and acts might also result from a fear of mortality, as being of the body, sex may be perceived as a source of life, the antithesis of death and its anxieties that might momentarily alleviate the fear of one's impermanence (Barker, 2011; Ford et al., 2004; Watter, 2018). Sex may be regarded as "death-defeating" for specific individuals due to the fact that death was associated with dullness and ordinariness, but sex promised to be adventurous beyond day-to-day drudgery (Watter, 2018). Psychologist Gurit Birnbaum (2012) wrote on this topic:

> The awareness that death is inescapable, coupled with the instinctive desire to live, can constitute an unbearable paradox. To escape this potentially paralyzing terror and to

> maintain psychological equanimity, some people may employ certain defense mechanisms, which are designed to remove the awareness of death from conscious thoughts by imbuing the world with meaning, order, and permanence. Often people will reach for symbols of immortality. And sex can be a big one. (para. 1)

Again, through the lens of death anxiety, signified cultural narratives of meaning towards the symbolic transcended the biological, where the idea of love was one of the most extraordinary interpretations of this kind of sexuality as it enabled the person to collapse into the visceral realm without guilt but rather with confidence (Becker, 1973; Watter, 2018). In this, as stated above, culture opposed nature, subverted it, and fundamentally transcended it, with the aim that culture, in its most intimate intent, was the heroic denial of our biological limitations and creatureliness. After all, what was fear but the awareness of the reality of creation and the world in relation to one's prospects, personhood, and operational power (Becker, 1973).

Though the whims of the incubating culture, transference, and heroic narratives were the last, few most pervasive and powerful tactics to assuage death anxiety, Becker (1973) wrote, "our sense of worth is constituted symbolically, our cherished narcissism feeds on symbols, on an abstract idea of our own worth and idea composed of sounds of words and images" where too much possibility or megalomania are the attempts by the person to overvalue either of the powers of the symbolic or creature self (p. 2). This symbolic importance came with the hope and belief that all the things that humankind created within a society or culture brought lasting worth and meaning, that they would outlive or outshine death. Think of all the monuments of the ancient world. In this way, heroism, immortality through culture, was, first and foremost, a reflection of our terror of death.

Morality as Symbolic Heroism

Furthermore, the original designation for the eligibility to live beyond this realm towards immortality was steeped in the culturally defined behavioral bounds of good and bad or, more fundamentally, good and evil (Becker, 1973; Solomon et al., 2015). Inexplicitly linked with these tropes were affairs of human connection, being liked or disliked by an emotionally significant person whose affections worked to forge our personalities (Becker, 1973; Zebrowitz et al., 2008). Through these interactions, characterological stylings were not *found* or *discovered*, as in essentialism but made and forged through the connections, invitations, and retractions of those culturally significant, in proximity, and those of whom one held in esteem. All of this occurred within the cultural framework of behaviors, beliefs, and narratives deemed *good*, and the exploration into the meaning of *good* as well as its access and membership were inevitable protractions that arose from societal introspection and comprehensive evaluation of proposed social contracts, intersectionality, death anxiety, and oppression (Becker, 1973; Rose, 2017; Solomon et al., 2015). A culture or society that encouraged a reflective practice in this manner fundamentally grasped the wisdom and value of citizen education as a scaffolding towards improved relations and advances regarding universal morality and equity. In this way, the enhancement of personal understanding of death anxiety worked to structure and mitigate individual bias, subjugated stagnation, and internal hierarchies (Becker, 1973; Plato, 1971; Rose, 2017).

There has been tension in life between the body, the psychological need for individuation, and the acknowledgment of one's unique and special gifts. The expression of individuality necessitated that the human being stand in stark contrast to the rest of nature, creating intolerable isolation (Becker, 1973; Tangney, 2004). Being a member of the group while

also being unique exposed both the insignificance of the individual and the degree to which they stood out from the crowd, thus, creating a dissimilarity that ultimately proved burdensome (Becker, 1973). This was the inherent sense of guilt and anxiety bestowed on humans from the tension of being of two worlds, the symbolic and the corporeal. This tension may cause an individual to have feelings of *unworthiness* or *badness* as well as a dull sadness steeped in nihilism (Becker, 1973; Tangney, 2004). In contrast to the rest of nature, which was, and has remained, corporeal, the symbolic creation of humans meaning making could fail, and fear and powerlessness may dominate to a debilitating degree.

The question of the theory of death anxiety then became how to free oneself of badness and innate guilt, which was actually a matter of inverting or elevating one's position in the universe. Achieving size, significance, and longevity required figuring out how to be bigger and better than one was, at least figuratively. To have the urge to act morally, at its core, was the aspiration to be something of lasting value and was out of and opposed to nature (Becker, 1973). Humans touted their moral superiority to other animals because, unlike other animals, they wheeled observable consciousness of their state and the future. In two distinct ways, people have employed morality in an endeavor to establish a place in the universe where they could feel a feeling of particular belonging and enduring existence. First, humans overcame badness (smallness, insignificance, and finitude) by adhering to the rules sat by the representatives of natural authority (the transference-objects), therefore, ensuring their belongingness to the group as a whole (Becker, 1973). Additionally, humans coached and praised a child when they acted *properly* so they did not fear being punished or castigated from the group (Becker, 1973).

Death-related attitudes changed across all bioecological systems, from the individual to the entire society (Corr, 2015; Kaus, 2022). Jean Piaget (1965), the famed child psychologist,

expressed a distinctive origin of morality where “all morality consists in a system of rules, and the essence of all morality is to be sought for in the respect which the individual acquires for these rules” (p. 1). In this way, persons and cultural groups mirrored the construct of mortality or belief they were given with sweeping narratives towards symbolic persistence in the belief that they alone were in league with the *Truth* and have the promises of symbolic or literal immortality (Becker, 1973).

Outside of direct promises of immortality, through the belief in the conservation of self, through death, cultural narratives also offered the hope of symbolic immortality through the sense that we were part of something greater than ourselves and, in essence, our impact on earth would persist long after we died. Through striving for a heroic narrative for self, one became part of an influential group through which an ephemeral being could have a lasting impact on a permanent world. For example, collective cultural narratives toward immortality may include the labels: The Good, The Giving, The Moral, The Cunning, The Just, The Parent, The Pious, and even The Wicked (Becker, 1973; Tangney, 2004). These cultural labels were reflective of what society was and always has been, a symbolic action system, a structure of statuses and roles, customs and rules for behavior, a hero-making system designed to serve as a vehicle for the spectrum of hominid meaning-making, of customs and procedures for conduct, a hero making system designed to serve as a vehicle for earthly heroism (Becker, 1973).

The social maturation of human culture seemingly sprung forth as an advantageous evolutionary expansion of the relatively small-scale biology, connection, and meaning-making from familial ties. Friendship, trading, or pair bonding, such as marriage, were ways to culturally canonize relationships with non-kin persons to enlarge the sphere of favoritism beyond biology, a division of resource acquisition and allegiance (Asma, 2012). The ballooning of affective

communities of human population clusters that shared cultural, emotional, and physical connections were the foundational maps in which large narrative culture was born.

Becker (1973) noted that within humans, some degree of inherent narcissism was conflated and inseparable from personal self-esteem, worth, and social value. In fact, Adlerian social development models denoted this same interlacing, in which personal security was entangled with subjective notions of personal worth and esteem (Adler, 2009; Becker, 1973). The cleaving point here was that meaning and personal worth, as noted above, were not tangible, objective, or given through an ontology of immanence. Rather, they germinated from a construct of culturally applicable symbols and abstract ideas used as psychological armor into immortality (Deleuze, 1997; Deleuze & Guattari, 2009). Through this beguiling incorporation of symbolic expansion, intellectual and meaningful individual legacies could be fashioned and employed without the inconvenience of corporal engagement; this was no more so seen than in childhood, where the struggle towards claiming esteem was thinly veiled (Becker, 1973; Cioran, 1998; Solomon et al., 2015).

According to Becker (1973) and Adler (2009), children were unashamed regarding their needs and wants. Such as with a child, Becker denoted that all persons sought to justify themselves as an object of primary value to, and in, the world; they desire to stand out, accrue power, be a hero, and make unique and lasting contributions to the world, show that they held meaning, that they held cosmic significance (Adler, 2009; Becker, 1973).

Aging and its Effect on Death Anxiety

As the life expectancy, outside of the past years as related to COVID-19, has continued to increase; coupled with declining birth rates, the proportion of older adults in the world population was increasing (Depaola et al., 2003; Mohammadpour et al., 2018). According to the

United States 2020 Census, persons 65 and older now accounted for more than 16.8% of the U.S. population (U.S. Census Bureau, 2020). Appropriately, as the number of older adults has continued to grow in numbers, the specific needs and challenges of this population have gained recognition in the research community, including exploration of this unprecedented cohort's attitude towards death and what factors influenced terror management and overall psychological well-being (Depaola et al., 2003).

While death and its prospective anxiety emanated with an unavoidable inevitability, aging was a death-adjacent phenomenon encompassed within the human condition. Aging, or more aptly stated, the process of aging, may be seen as a multifaceted process of changes across the physical, mental, social, and psychological aspects of human life over time (Rose, 2019). At the same time, older age was a necessary and distinctive period in the development of human beings, also associated with physiological, social, and psychological declines that may alter previous thoughts and beliefs regarding long-held schemas and the assuagement of anxieties (Jose et al., 2018; Rose, 2019). Such modifications to previously discovered psychological defenses may significantly influence the reality of aging for specific individuals as they employed new or disposed of previous narratives of meaning-making and distal defense (Jose et al., 2018). The physical, social, and psychological retractions that may occur throughout the process of aging may work to highlight one's limitations, thereby, enacting comparisons to the past self or others (Rose, 2019). However, despite age being a related variable across all death anxiety psychometrics, the association between the fear of being and chronological age was not fully clear (Depaola et al., 2003). At these points in life, when mortality salience increased, the effects of death anxiety may reanimate, and the awareness of death necessitated psychological defenses to circumvent anxiety and preserve well-being (Juhl & Routledge, 2016). This cyclical

development of the above anthropological process permeated the very nature of what it was to be human and, as a result of this recurrent movement to reorganize and reestablish elemental aspects of death defense via way of novel interactions and experiences, fundamentally implied and codified experiential learning throughout the lifespan (Rose, 2019; Yalom, 1980). Nevertheless, death has become more important over time, and as people age, previously battle-tested defenses failed, allowing anxieties that were formerly tempered, and these anxieties were an affront to continued overall mental health (Jose et al., 2018).

The social maturation of human culture seemingly sprung forth as an advantageous evolutionary expansion of the relatively small-scale biology, connection, and meaning-making from familial ties. Friendship, trading, and pair bonding, such as marriage, served as cultural mechanisms to establish and legitimize relationships with individuals who were not biologically related. These practices expanded the scope of favoritism beyond biological ties, facilitating the acquisition of resources and the formation of alliances. (Asma, 2012). The expansion of affective communities within human population clusters, characterized by shared cultural, emotional, and physical relationships, served as the fundamental framework from which origin-story culture germinated.

Sex, Gender and Age Differences in Death Anxiety

Death anxiety in aging populations across the world, according to a 2016 article, was now a public health challenge as it was one of the main concerns experienced by older adults, and yet, stigma and cultural norms worked as barriers for family and care providers, to frank and meaningful discussions regarding end-of-life issues (Assari & Moghani Lankarani, 2016). Additionally, death anxiety in aging populations may be acutely elevated due to increased experience with physical pain, reduced mobility and overall autonomy associated with the

decomposition or decay of the body and mind, retrospective consequences of religious transgressions, and the prospective or felt loss or separation of loved ones (Assari & Moghani Lankarani, 2016; Rose, 2019). Additionally, there were other, more terrestrial influences on death anxiety, such as age, sex or different demographics, illness, despair, loneliness, social-economic status, and cultural beliefs (Assari & Moghani Lankarani, 2016; Jose et al., 2018; J. S. Sawyer et al., 2019)

When discussing demographic differences across existential and death anxiety, numerous studies have found that cisgender women endorsed higher levels of existential anxiety than cisgender men (Harding et al., 2005; J. S. Sawyer et al., 2019). This binary and, therefore, non-encompassing gendered discrepancy appeared to hold when controlled for cultural gender differences regarding self-disclosure and social desirability, suggesting that differences in existential anxieties were universal to all humans, which undercut the influence of cultural beliefs and norms of gender (Harding et al., 2005; Rose, 2019; J. S. Sawyer et al., 2019). The presence of such discrepancies in death anxiety across gender was seemingly steeped in something more deeply rooted in cultural and possibly biological expressions of sex (J. S. Sawyer et al., 2019). Brewster's (2013) article hypothesized a possible reason for this decreased presentation of death anxiety categorically in males stating that it may be due to increased risk-taking or aggressive behaviors typically associated with biological men. Consequently, the care-taking roles that were socially typical for socialized females, in opposition to increased risk-taking through increased social bonding, may account for the increased presentation of existential and death anxiety (Brewster, 2013; J. S. Sawyer et al., 2019). It should be noted that little current research was found that expressed any consideration for gender discrepancies

considering death anxiety and gender expression as a spectrum. The only scholarly work regarding the above was “pending” and not yet available (Tassos et al., n.d.).

In addition to cleaving the proclivity for death anxiety across gender demographics, age seemed to influence death anxiety in unexpected means. While it was correct that increased age statistically brought one in closer proximity to their death, older adults tended to endorse lower levels of death anxiety, according to one study (Rose, 2019; J. S. Sawyer et al., 2019). While this research, along with other previous studies, appeared to substantiate the hypothesis that older age was not associated with increased fear of death and dying, there were other studies on age-related to the fear of non-being that indicated that death anxiety decreased overall, with age (Rose, 2019). Still, confounded by selection bias that occurred through the omission of high-risk takers, the severely physically ill, or those who had already died, other studies struggled to confirm unilateral death anxiety reduction with age (J. S. Sawyer et al., 2019). Nonetheless, cross-sectional studies included such groups with a sample of cisgender men (20-70 years old) who self-identified as a high-risk group for risk-taking and illness (i.e., ongoing substance use issues, prisoners, police officers as well as person server as experiential controls) found participants reported a 44% decrease in death anxiety as they aged, whereas only 16% noted an increased fear of death across the same period of aging; the other 40% reported no change in existential dread (Feifel & Nagy, 1980; Rose, 2019; J. S. Sawyer et al., 2019). Examinations into other causes of existential dread have found correlations to decreased physical health along with the persistence and prevalence of psychological health throughout the lifespan (Assari & Moghani Lankarani, 2016; Jose et al., 2018; Juhl & Routledge, 2016; J. S. Sawyer et al., 2019)

Outside of the high-risk groups noted above, a 2016 study examining gender, age, and race differences in older adults’ death anxiety found no statistically significant difference in the

presentation and amplitude of death anxiety between self-identified men and women. Nor were financial stress and current physical health conditions noted by the regression model statistically significant in explaining levels of existential dread/death anxiety (Assari & Moghani Lankarani, 2016). In spite of the lack of statistical significance for gender, financial, and health-stress as illustrative to death anxiety, the regression analysis established that self-rated health status, race, age, and perceived control of life were all significant explanatory factors for participants' presentation of death anxiety (Assari & Moghani Lankarani, 2016; Rose, 2019). Although age was found to be a significant factor only for females and of the binary race categories of White and Black, only White was found to be significantly contributing to the presentation of death anxiety (Assari & Moghani Lankarani, 2016).

Concurrent with the above, other research studies produced consistent findings associated with death anxiety, age, and gender. Past research has found a specific age effect, in which young adults, up through their 20s and across gender, reached their lifetime peak of death anxiety, followed by a significant decline in anxiety and preoccupation (Russac et al., 2007). However, unlike the first presented research, a 2007 exploration into the dynamism of death anxiety across the lifespan exposed peaks in heightened fear of death occurring in the mid to late 20s for both males and females and a secondary, bimodal peak of death anxiety for biological females around the age of 50 (Russac et al., 2007). This secondary peak of existential dread was not seen in all subsets of males in the study, whose fear of death declined from age 30 to 60 with a slight increase beyond 60 years old (Russac et al., 2007). Before Russac et al.'s. results, it was categorically assumed that, once a person matured to an older adult, controlling for some catastrophic trauma or change in health status, age had little effect on anxieties and existential dread once a sophisticated and mature understanding of death was achieved (Rose, 2019; Russac

et al., 2007). Ultimately, outside of the bimodal peaks suggested by Russac et al. and higher overall scores for women regarding death anxiety, the remaining literature on existential dread and overall death anxiety coalesced around a common finding: there seemed to be a negative correlation between death anxiety and age (Assari & Moghani Lankarani, 2016; Jose et al., 2018; Juhl & Routledge, 2016; Russac et al., 2007; J. S. Sawyer et al., 2019).

Death of a Partner and Death Anxiety

As the world has continued to increase in high-tech methods of connection and longevity, whether through social media, living longer through medicine, or the privilege of more healthy lives, grief, and death still have been holistically consuming across multiple points across the lifespan (Rose, 2019). A crushing experiential aspect has spanned physical and psychological realms and wholly disrupted habituated patterns in thoughts, emotions, beliefs, and life satisfaction; this could significantly impact the reality of aging (Jose et al., 2018). As one ages, the recurrent incidence of loss throughout the lived decades has forced a re-evaluation of companionship, meaning-making, and mortality (Rose, 2019). The death of an intimate partner brought its own set of challenging issues, mainly a recapitulation of an introspective identity search, “who am I without them?” This existential quest for meaning and identity reclamation may present across different psychological defenses: denial, suppression, sublimation, or an inability to cope with this loss may lead to suffering in the form of depression, anxiety, or physical illness (Jose et al., 2018; Rose, 2019). Furthermore, devastating losses, subsequent grief, and one of the many mental health concerns may lead to suicide or increased death anxiety (Jose et al., 2018).

A 2015 research article on death anxiety geared towards existential dread over the fore-coming loss of a spouse explored how death anxiety was transferred to a loved one and

worked to identify gender-unique correlates that modified death anxiety regarding a spouse (Momtaz et al., 2015). The above researchers categorized marriage as "one of the most important resources for the production of comfort, stimulation, and affection for husbands and wives" (Momtaz et al., 2015, p. 71). As a person ages, the interdependence on an intimate partner increased, whereas habituated reliance on one another could be accompanied by fears surrounding the enviable isolation. Upon the death of their long-term partners, older cisgender males in a heterosexual relationship may become more dependent on instrumental support from their partners as they were more likely to experience physical disabilities (Momtaz et al., 2015; Rose, 2019). Whereas cisgender women, following the death of their long-term partner and through gendered roles and among other wage and job discrepancies, were more likely to be financially supported in marriage, where the death of their spouse may increase financial strain at a time when earning potential had decreased (Momtaz et al., 2015; Rose, 2019).

Habitual gender differentiations regarding death anxiety related to the death of a spouse persisted in older age as older adult heterosexual, cisgender men were more likely to cope with the loss of a spouse with remarriage (G. R. Lee et al., 2001; Momtaz et al., 2015). Despite the noted gender-specific proclivity to remarry, remarriage was a luxury more afforded to biological females since biological males tended to die sooner than their female partners. As a result of this lifespan disparity, at any given time, there was a shortage of older men (Carr, 2004; Momtaz et al., 2015; Rose, 2019). One study found that older men were approximately five times more likely to remarry after widowhood than older women (G. R. Lee et al., 2001; Momtaz et al., 2015). Additionally, sociocultural contexts surrounding gender and older age may significantly impact the desire to remarry. While older women tended to have higher instances of behavioral confirmation, social expectations led to adopting behaviors that conformed to or confirmed these

expectations; it was also possible in males (G. R. Lee et al., 2001; Rose, 2019). These culturally enforced habituated roles throughout a marriage may lead to increased stress due to identity loss following the death of a partner (Momtaz et al., 2015). Finally, each pairing of partners continually created, constellated, and reinforced a unique, dyadic culture that may shape and bend beliefs and reactions toward death and loss. In this way, the dyadic sociocultural design within a marriage or partnership would fundamentally influence the norms and expectations of anticipatory fear and prospective grief in response to the death of a partner (Momtaz et al., 2015).

As noted, the awareness of death, be that in self, partner, family, or friends, necessitated psychological safeguards to mitigate or circumvent anxiety toward maintaining comfort (Becker, 1973; Rose, 2019). While the presence and discussion of these psychological barriers against death anxiety may ultimately impede growth to true existential individuation in meaning-making, they certainly provided needed safeguards and benefits (Assari & Moghani Lankarani, 2016; Jose et al., 2018; Juhl & Routledge, 2016; Russac et al., 2007; J. S. Sawyer et al., 2019). Researchers have found that overall self-worth, personal meaning in life, and other traits that fostered the creation of life meaning, such as nostalgia, religious beliefs, ego or self-transcendence, and independence, could help to protect an individual from existential dread (Juhl & Routledge, 2016). However, the presence of these same protective emotions or psychological states worked in conjunction with bias, and the increasing awareness of death or mortality salience augmented a person's connections and overall identification with their most habituated and comforting social groups (Greenberg et al., 2011). The impulse of social grouping and cultural habituation was seemingly a way in which humans assessed a product, action, or outcome as "suitable" or "good;" however, this act, in itself, was constructed by creating an "In

Group" and "Out Group." Individual alignment with a group increased the belief in personal status and feelings of moral superiority (Becker, 1973; Greenberg et al., 2011; Rose, 2019). This hyper-identification with social groups allowed one to temporality transcend death anxiety for the belief that they were connected to something bigger, almost eternal, through the affixing identity to a group or an idea or ideology over the ephemeral distinctiveness of being a person (Juhl & Routledge, 2016). One of the significant challenges across all cultures was to reconcile the fundamental, unalienable rights of all with the favoritism of kin, chosen kin, and other like-minded individuals through which symbolic immortality brought selective relief from death anxiety through the propagation of the group.

Religious Belief and Death Perspectives

One of the most widely used assuagements of death anxiety was the idea of an afterlife or some aspect of religion that assumed a transcendent quality to the experience of death. Recent empirical research has offered some evidence for Terror Management Theory's overall assertion that religion reduced death fear and provided meaning through the feeling of possessing coveted and special knowledge of "the Truth." Research in 2005 centered on parishioners of an Episcopal church that found belief in God and the afterlife was negatively connected with death anxiety (Harding et al., 2005; J. S. Sawyer et al., 2019). Numerous other studies have suggested similar conclusions regarding religiosity as an essential factor in buffering death anxiety. For example, Henrie and Patrick (2014) found that, in a group of religiously diverse people, religiousness was adversely associated with death fear, but religious uncertainty was positively associated with death anxiety (J. S. Sawyer et al., 2019).

The correlation between religiosity and decreased death anxiety was strongly noted through research throughout the Terror Management Theory literature. While the concept that

belief in a higher power was historically seen as the most effective or even essential way of managing death anxiety, as shown by the prevalent opinion that there were “no atheists in foxholes,” however, atheists and other nonbelievers employed cognitive mechanisms comparable to religious belief to cope with death dread and misery (J. S. Sawyer et al., 2019). Contrary to colloquial knowledge regarding nonbelievers turning to religion when faced with their mortality, research has shown that death prompted, that is to say, reminders of mortality, boosted religiosity in Christians and agnostics but had no impact on atheists (J. S. Sawyer et al., 2019; Vail et al., 2012). This finding was the core of all terror management theory in which, when presented with reminders of mortality, persons tended to retract into their stated and known beliefs be that across morals, science, or religion; hence, according to one study, it was not the fact that one believed or the quality of the item that one believed in that reduced death anxiety, but rather the power and strength of their belief (Henrie & Patrick 2014; J. S. Sawyer et al., 2019; Solomon et al., 2015). In this way, all beliefs and attempts at symbolic immortality would fit under the above definition and phenomenon. Therefore, atheism, strictly speaking, was the lack of belief in gods, did not exclude persons from utilizing atheistic principles as an intellectual and symbolic platform towards immortality where researchers had hypothesized that atheists were more likely to be driven by an urge toward knowledge and self-mastery (Farias, 2013; J. S. Sawyer et al. 2019). In a study focused on nonbelievers and death anxiety, participants primed with thoughts of their own death endorsed much greater levels of belief in science compared to the control group, again strengthening the hypothesis that death anxiety induced a “doubling down” on one’s own beliefs, no matter what one believed (Farias, 2013; Farias et al., 2013; J. S. Sawyer et al., 2019). The authors of this study observed that science might be utilized in a manner similar to

religious beliefs for addressing death phobia (Farias, 2013; Farias et al., 2013; J. S. Sawyer et al., 2019).

Assessing Death Fears

Initially, psychological researchers interested in death anxiety were stunted in their scientific pursuits as early attempts at quantifying that anxiety proved confounding by lacking rigor, reliability, and validity to unconscious or conscious death fears (Howze, 2001; Neimeyer & Van Brunt, 1995). It was the assumption in the early days of death anxiety research that many individuals would outright reject their dread of dying or death anxiety and, therefore, the capturing of valid data would be impossible (Howze, 2001). As a result of this assumption, several researchers used indirect assessment procedures such as imagery tasks or other indirect methods of assessment in order to circumvent the participants' denial of their death anxiety (Feifel, 1955; Howze, 2001). Unfortunately, the lack of validity and dependability of these indirect assessment methods, as well as the intrusive intensity and lengthy duration of indirect techniques, led many researchers to forsake their usage for more brief and direct measures such as interviews and questionaries (Howze, 2001).

Learning from the past attempts at indirect measurement of death fears, currently, more than 95% of the research on death anxiety to date has included direct assessment of death orientation to capture the conscious experience of death anxiety (Howze, 2001; Neimeyer, 1997; Neimeyer & Van Brunt, 1995; Wass et al., 1985). Since those early days, a number of scales and questionnaires have been developed to capture conscious reports of death anxiety. As these new measures presented with high levels of psychometric competence and account for the bulk of death anxiety and Terror Management Theory research published to date, an exploration of death anxiety scale is included below (Howze, 2001).

Self-Efficacy in Counselors-In-Training

Nationally and internationally, the number of students who sought a counseling degree and wanted to practice professionally has grown over the past 3 decades (Hohenshil, 2015; C. Sawyer, 2013). As an essential part of the counseling profession, both through education and gatekeeping, the work of counselor educators has intricately been intertwined with and dependent upon the faculty providing competent instruction, growth, and support to CITs as they transitioned from student to emerging practitioner across academic, emotional, and effective meta-cognitive development. Fostering such development in a trainee has been one of Counselor education's most foundational aspects and aims (Rose & Persutte-Manning, 2020). However, increased interest in the counseling profession has strained the gatekeepers of the profession, as student clinical and interpersonal performances that demonstrated an inability or failure to fulfill fundamental competence criteria challenged the instructors and the established norms of classroom cohesiveness in every professional counseling program (Elman & Forrest, 2007; Kallaugher & Mollen, 2017; Rose & Persutte-Manning, 2020). Moreover, counseling students with the challenges of professional competence might harm the competent students both in and out of the classroom as they have required increased time, attention, and other resources (Rose & Persutte-Manning, 2020). With the rise in interest in counselor training programs, it was crucial to understand the elements that influence counseling development and overall efficacy, as self-efficacy was a known characteristic that contributed to the development of counseling attitudes, abilities, and behaviors in students and professional counselors (Barnes, 2004, C. Sawyer, 2013). Previous research suggested that counseling training could increase observed and felt self-efficacy over time, mitigating the experience of death anxiety (Becker, 1973; Melchert et al., 1996; Mullen et al., 2015). Correspondingly, broad-spectrum counselor self-efficacy was

positively associated with counselor training and clinical experience, measured as relevant work experience, prior and current to practice as a professional counselor (Mullen et al., 2015; Tang et al., 2004).

Self-efficacy, as related to counseling and other actions, has referred to a person's views or evaluations of one's own capacity to execute a particular goal, task, or skill across stable and new environments (Bandura, 1995). According to Bandura's 1977 Social Cognitive Theory, there were four strategies to increase self-efficacy: (a) mastery experiences, (b) vicarious learning, (c) social reinforcement, and (d) emotional arousal. Mastery experiences were the most effective in improving self-efficacy; in counselor training, such master experiences exposed the counselor trainee to direct use of their clinical skills such as practicum and internship (Bandura, 1997; Barnes, 2004). Mullen et al. (2015) found that CITs' efficacy increased across three data points collected in their master's program, from 57.09 at new student orientation to 83.04 at the final internship group supervision meeting. In addition, self-efficacy was a recognized measure of growth in the counseling profession, had a favorable effect on task competence and completion and, therefore, served as an outcome and developmental factor for counselor training (Larson & Daniels, 1998; Mullen et al., 2015). Noting those as mentioned above, while imperative to task fulfillment, self-efficacy could not be willed or created through a singular moment as self-efficacy was a continual process mirrored and supported by not only self-belief in a specific task but self-esteem as a whole (Becker, 1973; Mullen et al., 2015; Solomon et al., 2015). There was a direct association between self-efficacy, introspection, meaning-making, alleviation of death fears, and counseling skills components, instillation of hope, empathy, resilience, existential well-being, and symbolic immortality (Becker, 1973; Mullen et al., 2015; C. Sawyer, 2013; Yalom, 2008).

However, efficacy was not ubiquitously constructed, and there were factors that impacted one's efficacy within groupings. Ethnicity, gender, and age were essential aspects of the diversity status of counselor trainees that may impact self-efficacy. The effect of ethnicity on professional effectiveness has been demonstrated in various contexts. Klassen (2004), for instance, found from a study of 20 studies on self-efficacy that non-Western cultural groups had a lower degree of self-efficacy. Lam et al. (2012) found no significant variations between gender and age categories; however, there were considerable variances across ethnic groupings. Moreover, in the same study, across a number of counseling-specific categories, Asian and White students were found to have similar and lower levels of self-efficacy than the other ethnic groups in the sample (Lam et al., 2012).

Self-Efficacy, Self-Esteem, and Death Anxiety

Adjacent and undercutting the idea of self-efficacy has been the notion of self-esteem; a holistic view of oneself, feeling good about oneself in the world, and reasoning that one was a worthy individual; worthy of freedom, autonomy, contributions to society, relationships, and life itself. It was a concept that most people grasped only superficially (Becker, 1973; Solomon et al., 2015). The source of self-esteem, generally speaking, was not fully formed and sprung forth from a deep inner self; instead, the meaning-making ascribed to the self-echoes the roles, rules, and values provided by one's cultural schemas across all ecological levels of society (Becker, 1973; Greenberg et al., 2011; Solomon et al., 2015). Understanding morality, social value, and belief of your inherent value as a living being solely depended on one's worldview, which, in turn, was constructed from contextual clues of the incubating culture. Effectively, self-esteem was the inherent reach and conviction that they were a valuable and permanent participant in the universe (Becker, 1973; Greenberg et al., 2011; Solomon et al., 2015). This candle of

consciousness outlined and illuminated the feeling of personal significance against the darkness of the unknown; it kept our deepest fears, fears of inadequacy, and death, detained (Becker, 1973; Greenberg et al., 2011; Jung, 2011; Solomon et al., 2015).

The Buffering of Death Anxiety Through Self-Esteem

A positive correlation has existed across hundreds of studies between robust and durable high self-esteem and increased physical and mental health compared to those with a wavering sense of self-worth (Becker, 1973; Greenberg et al., 2011; Solomon et al., 2015). These givens impacted how humans interacted with and connected to themselves, others, and the world, regardless of intellectual knowledge. Persons who failed to comprehend the relationship between these existential issues may act inauthentically in connection to their primary principles as a front or to foster distraction (Becker, 1973; Solomon et al., 2015; Temple & Gall, 2018). In the end, self-esteem has been a phenomenological experience that encompassed both the self and worldview and distorted or contoured all perceptive contemplation. There was substantial evidence through terror management theory that demonstrated self-esteem controlled the physiological response to worry and anxiety, which forced personal moral retractions when confronted with death prompts (Becker, 1973; Greenberg et al., 2011; Tangney, 2004; Temple & Gall, 2018). In this way, we could strive for increased self-esteem in the face of one's mortality, in which we worked harder to "leave our mark on the world" (Solomon et al., 2015, p. 47).

Earnest Becker (1973) referred to high self-esteem as heroism or the attempt at heroism, noting:

> The problem of heroics is the central one of human life, that it goes deeper into human nature than anything else because it is based on organismic narcissism and on the child's need for self-esteem as *the* condition for his life. Society itself is a codified hero system,

> which means that society everywhere is a living myth of the significance of human life, a defiant creation of meaning. (p. 7)

The opposite would not be confirmed if there were any doubt about this. However, people with decreased self-esteem or lose faith in groups of people, or cultural world views, became disillusioned as they lacked a foundational blueprint for their reality; the rules and codifying methods towards meaning and self-esteem were banished (Becker, 1973; Greenberg et al., 2011; Solomon et al., 2015). It would appear that every culture reserved societal positions for the classification of less than or inferior humans, cultural, or heroic narratives. While having socially sanctioned groups of individuals to degrade was psychologically uplifting for those oppressors, there was little question that those who were denigrated frequently struggled to feel good about themselves (Becker, 1973; Greenberg et al., 2011; Temple & Gall, 2018). The cost associated with low self-esteem and oppression, in which an individual was unable to achieve a codified heroic narrative, was nearly limitless in terms of health, mental health, anger, hostility, substance abuse, risk-taking, murder, and suicide, as well as other behavioral and psychological responses (Becker, 1973; Greenberg et al., 2011; Temple & Gall, 2018).

Self-Efficacy in Treatment with Clients Presenting with a Substance Use Diagnosis

Substance use and other behavior-related addiction diagnoses have remained critical concerns for healthcare providers, most pointedly, counselors (Hagedorn, 2009; T. K. Lee, 2014). Professional counselors, or those CITs in programs leading to licensure as a professional counselor or an addiction counselor, had the most significant proportion of clients diagnosed with substance misuse compared to social workers, psychologists, and psychiatrists (Harwood et al., 2004; T. K. Lee, 2014). Academic and civil researchers have long acknowledged the importance of substance use education for all mental health professionals; where a study by

Cellucci and Vik (2001) indicated that 89% of 144 psychologists in Idaho interacted with substance abusers, although the majority of them assessed their graduate education as poor preparation for practice (Chandler et al., 2011). According to Renner (2007), even medical doctors and psychiatrists have not received appropriate training to treat persons with drug use problems (as cited in Chandler et al., 2011). Although several groups of mental health professionals have expressed concern about the absence of substance use training for counselors and other mental health providers, only small steps have been seen. Due to the prevalence of these issues, it was imperative that substance use education, and the larger, more holistic category of addiction education, was seen as essential for all counseling students, regardless of their area of concentration (T. K. Lee, 2014; Madson et al., 2008). Unfortunately, as above, evidence suggested that many CITs did not receive appropriate information regarding addiction leading to a decreased self-efficacy in treating such issues, despite the fact that a majority of their prospective clients would present with some substance use concerns, be they personal or familial (Harwood et al., 2004).

Despite the introduction of licensed addiction counselors and other certified addiction counselors to the discipline of counseling within the past several years, a majority of persons presenting with substance use issues were seen by mental health counselors and other mental health workers prior to addiction-specific work (Harwood et al., 2004; Taleff & Swisher, 1997). Nonetheless, substance-specific educational requirements have increased, and both addiction-specific and mental health counselors were required to have knowledge of substance use that extended beyond training within their degree programs (Taleff & Swisher, 1997). A survey of 62 Council for Accreditation of Counseling and Related Educational Programs (CACREP) revealed that courses were incorporating addiction counseling content into their curricula, hiring faculty

with experience in addiction counseling, and tackling the skill practice competency by increasing the number of credit hours in addiction counseling and through the utilization of constructivist and didactic pedagogy (Chasek et al., 2015).

Despite the calls for, and move towards, increasing counselors'-in-training education regarding addiction treatment, there were few studies in the existing literature that investigated the direct association between counselor self-efficacy and substance use. Tangentially, a study by Gregoire (1994) did investigate the impact of ongoing education on the perceptions of child welfare professionals about substance addictions where public child welfare employees were invited to participate in a 7-hour training session on the influence of addiction on childcare practice (Chandler et al., 2011). Prior to the intervention, participants were given a written survey to see whether their opinions changed as a result of the training, with a post-survey following the intervention. At the completion of the program and during follow-up, participants demonstrated a positive attitude shift and felt more confident in their capacity to deal effectively with clients who presented with substance misuse difficulties. As noted, attitudes and self-efficacy beliefs were positively connected (Bandura, 1977; Chandler et al., 2011). Consequently, continuing education might be good for boosting counselors' confidence and sense of competence when they provided addiction counseling services.

In pursuit of this increased education around addiction-specific counseling, addiction curriculum was added as a component of professional therapy training (CACREP, 2016). Yet, there has remained a unique licensure path for the addiction counseling profession. Morgen et al. (2012) argued that, if the practice of addiction counseling was truly a part of counseling, then it may be time to assess the counseling profession in order to align more closely with an encompassing and unifying professional counseling identity that included addiction counseling.

Thus, building and strengthening all counselors' efficacy with addiction-specific practice (Morgen et al., 2012).

Mirroring the above research on the topic of self-efficacy within addiction counseling, all CITs are now required to assess and treat substance use clients as a part of their master education; however, few scales have been created to collect data in the realm (CACREP, 2016). Nonetheless, the measures demonstrated high levels of psychometric validity to quantifiably explore addiction counseling and self-efficacy.

The Impact of Stigma and Discrimination Toward Client's Presenting with Substance Use

Around 140,000 fatalities a year have been attributed to substance use in the United States alone, according to combined estimates of multiple healthcare organizations (Murthy, 2017; Sperandio et al., 2022). Mapping this trend, the United States endured the deadliest year for overdose deaths in 2019 to date, with 70,630 persons losing their lives (National Institute on Drug Abuse [NIDA], 2021). Such continued and pervasive death across the populace directly impacted individuals, families, and larger social systems comprising all healthcare professionals, including counselors (Rubel, 2004; Sperandio et al., 2022). A 2004 study highlighted this fact and documented that mental health workers were left with "a residue of sadness with no formal relationship to the mourning process" (Rubel, 2004, p. 1). When a client died suddenly while receiving professional care, no matter the method of death, such an occurrence could undermine the personal meaning-making process for the professional. Through the increased presentation of death anxiety, a retraction of non-judgment and other core counseling principles may occur, to which the counselor may present more dialectically rigid across their professional and personal interactions (Becker, 1973; Rubel, 2004; Solomon et al., 2015; Sperandio et al., 2022).

In addition to the aforementioned significant concerns of death, substance use frequently has had social repercussions due to the stigmatization of drug use where, like those with other forms of mental health concerns, people with substance use experienced the destructive impact of self and social stigma in addition to problematic symptoms of the presenting illness (Crapanzano et al., 2018; Evans-Lacko et al., 2011). Consequently, stigma may severely impact achievement in all aspects of life, including job, relationships, health, and the sinking of or adherence to life-saving health and mental health care (Crapanzano et al., 2018). On a macro level, stigma had led to broad social and economic burdens via decreased productivity and employment rates, decreased overall functioning, and higher and prolonged rate of hospitalization (Alonso et al., 2009; Evans-Lacko et al., 2011; Rüsch et al., 2009; Sharac et al., 2010). The experience of self-stigma, which was the process in which a person applied and internalized stigmatizing attitudes and beliefs held by the public, was associated with all the above negative impacts of stigma as well as lowered self-efficacy, which was correlated with increased death anxiety (Becker, 1973; Corrigan et al., 2009; Link et al., 2001; Solomon et al., 2015).

Over the last few decades, stigma towards persons presenting with a mental health disorder has persisted despite the increased progress regarding holistic education among healthcare practitioners and the general public about the biological and social bases of these presentations. Regrettably, stigma against individuals with mental illness emanated from both the general public and mental health professionals (Kopera et al., 2014). While mental health education, counseling skills, and professional training were connected with a decrease in stigma overall, research findings comparing the explicit attitudes of mental health professionals and the general community toward persons with mental illness were inconsistent. Specifically, Kingdon

et al. (2004) noted that psychiatrists' sentiments toward people who had mental disorders were more favorable than those of the general community, and yet another study reported findings that psychiatrists had more negative attitudes toward clients with mood disorders in a sample from the general population (Kopera et al., 2014; Nordt et al., 2006). Persons with a mental health disorder, such as substance use, were frequently stigmatized by caregivers. There was a belief that people with substance use disorders should be able to control their behavior, resulting in presenting symptoms such as continued use, being viewed as manipulation, or rejecting help (Volkow et al., 2021). Bias among medical professionals and mental health service providers might diminish the probability that clients with mental disorders would obtain or be provided adequate treatment or be sent to specialty care (Crapanzano et al., 2018; Evans-Lacko et al., 2011; Kopera et al., 2014; Volkow et al., 2021).

As noted, both public and self-stigma impacted individuals with mental health issues and stigma and discrimination against individuals with mental illness was a global issue with significant public health implications (Crapanzano et al., 2018; Evans-Lacko et al., 2011). Low levels of awareness, stigmatizing attitudes, and discriminatory behavior were correlated to decreased rates of mental illness help/treatment-seeking behaviors, undertreatment, and social isolation (Evans-Lacko et al., 2011). Apart from other health illnesses, the stigma associated with drug use disorders was unique as it hindered attempts for social acceptance of clients but was perceived as self-induced and such stigma sustained a moral model argument void of the neurobiological and social underpinnings associated with addiction (Kopera et al., 2014). Stigma towards persons with a substance use disorder (SUD) was prevalent across many communities worldwide. In 12 out of 14 nations polled by the World Health Organization (WHO), drug use was rated first or second among 18 different health disorders regarding unilateral stigmatization.

In contrast, disordered alcohol use alone was seen slightly more favorably, placing between second and seventh of stigmatized disorders across the 14 nations identified in the study (Crapanzano et al., 2018; Evans-Lacko et al., 2011).

The effects of self and social stigmatization significantly impacted persons with substance use disorders, and they may be hesitant to seek professional help because of fear of disapproving prejudice both out of and within the mental health system (Kopera et al., 2014; Link et al., 2001). Thus, it was essential for mental health professionals responsible for treating persons with mental illness to comprehend the phenomena of stigma and unfavorable attitudes towards mental health diagnoses and the persons who carried such labels (Kopera et al., 2014). One 2009 study demonstrated the importance of practitioner word choice in discussing treatment options with persons presenting with a substance use disorder (Kelly & Westerhoff, 2010; Volkow et al., 2021).

In another study using case vignettes, doctoral-level clinicians were more likely to favor punishment (a jail sentence) over treatment for a character described as a "substance abuser" as opposed to a "substance use disorder;" all other words in the descriptions were identical (Kelly & Westerhoff, 2010; Volkow et al., 2021). Such results of retraction to personal moral semiotics by the clinician allude to the idea that choice in language when describing and labeling a person could activate or reduce personal death anxiety in the speaker. This outcome of semantic awareness has been confirmed by mental health specialists working in substance use populations (Becker, 1973; Volkow et al., 2021). Given the existence of implicitly stigmatizing labels such as "addict," "alcoholic," "abuser," etc., even in professional literature, it was probably not unexpected that the treatment gap for substance use disorders was considerably worse than for other mental health disorders (Substance Abuse and Mental Health Services Administration

[SAMHSA], 2021 Volkow et al., 2021). Moreover, SAMHSA (2021) also found that more than 17% of persons with a substance use issue said they did not seek treatment out of fear that their neighbors or community would judge them (Volkow et al., 2021). This stigma, in addition to past traumatic encounters with prejudice in healthcare settings, may discourage individuals with disordered substance use from seeking treatment, and such internalized was a continuing source of personal shame that could contribute to continued use.

The above research captured the importance of language and exploration of personal bias, noting that mental health professionals, including counselors and their health profession counterparts, could significantly impact seeking treatment or adherence to therapy through unconscious or conscious displays of stigma towards clients presenting with a substance use disorder. Therefore, it would be imperative to understand the impact of practitioner bias on substance use disorder treatment to evaluate the impeded to a practitioner's ability to engage with a client meaningfully. While few scales/questionnaires existed to explore practitioner bias, the measure discussed below demonstrated high levels of psychometric validity to quantifiably analyze this construct.

Summary Statement

Counselors have noted a cost connected with heightened self-awareness and the realization that death was inevitable. The knowledge of one's mortality and its influence could emerge in conscious and unconscious behaviors, thoughts, and emotions, to which individuals employ mental, philosophical, religious, and physical defenses to handle the anxiety associated with this knowledge (Becker, 1973; Juhl & Routledge, 2016). It was observed that death was such an uncomfortable issue for both clients and counselors that it was avoided at all stages of psychotherapy (Lacocque & Loeb, 1988). Counselors may work with clients to resolve terrestrial

worries, depressed states, and other maladaptive ideas and actions while systematically ignoring the proverbial *elephant in the room*, the avoidance of the subject of dying (Howze, 2001). By focusing on an object, a tangible aspect of the client's life, the counselor could rationalize away the issue of death, which was unrelated to the presenting pathology, maladaptive defenses, or phenomenological experiences of the client in front of them, while uncritically avoiding their own mortality (Lacocque & Loeb, 1988). Death anxiety has been a factor in the therapeutic process; denial of this certainty within counseling partnerships has become a game of whose mask, the client's or the therapist's, was more resilient to the recurring existential crisis (Lacocque & Loeb, 1988). Essentially, counselors frequently encountered denial in the transference, particularly with difficult clients. It may be more acceptable for a counselor to find a *true and objective* reason to disconnect from certain clients than to acknowledge and process the emotions they evoked (Winnicott, 1994). A client who forced the practitioner into the room through intrapersonal issues may cause the counselor to feel unstable, helpless, incompetent, and conscious of their own mortality. As a supplement to counseling training, an investigation of death anxiety and its associated defenses, both inside and outside the counseling room, suggested considerable implications for CITs' understanding of themselves and their respective influence on client experiences (Routledge & Juhl, 2010).

Moreover, the exploration into the impact of death anxiety on CITs intertwines with CITs' views of themselves, their personal and learned culture, their views of clients presenting with substance use, and their overall personal schemas, as well as how they mediated personal discord and existential dread. Integrating and collecting data from these variables could provide CITs, counselors, and counselor educators with insight regarding how to address and mitigate death anxiety and its accompanying defenses within the counseling room. Therefore, this study

was designed to explore the hypothesized relationship of effects of death anxiety on CITs' overall efficacy in treating clients presenting with substance use disorders.

CHAPTER III

METHODOLOGY OVERVIEW

This study was designed to explore the hypothesized relationship of effects of death anxiety on CITs' overall efficacy in treating clients presenting with substance use disorders by answering the question, to what extent does death anxiety and substance use bias explain graduate students' perceptions of self-efficacy, and which, if any, of these variables contributes distinctively to the explanation after controlling for age, gender, and the combined effect of years of work experience in human services status and gender? In addition, hierarchical regression was used to examine how substance use bias and relevant work experience predicted CITs' efficacy when working with clients with a substance use disorder. Finally, this study aimed to discern to what degree gender and death anxiety explained substance use bias in CITs and did this differ across years of relevant human services work experience?

Population

A quantitative, hierarchical multiple regression was utilized to analyze survey data of master's level, counselor trainees, across CACREP-accredited, non-profit, and private postsecondary institutions in the United States who were at least 18 years of age. No other inclusion or exclusion criteria were utilized. Surveys were issued to these graduate students via convenience sampling to obtain the data. Data were collected through a Qualtrics link to capture demographic and survey data. Further details of this research plan, including the methodology, participants, procedures, analysis, and any ethical concerns are outlined within this chapter.

Operational Definition of Variables

The study consisted of five predictor variables, they are as follows, in order of the nested model (a) the students' chronological age, (b) the students' gender identity, (c) the students' years of experience in human services, (d) students' score on the Drug Use Bias Scale, and (e) students' score on the Death Anxiety Scale. The criterion variable was the student's self-efficacy when counseling persons presenting with a substance use concern.

Student chronological age (AGE). Age was measured using student self-report (Appendix A).

Student gender identity (GEN): This variable was measured using student self-report across field selection of Female, Male, or Gender Non-Conforming (write-in; Appendix A).

Student work experience in human services (EXP): This variable was also be measured by student self-report by a question "please specify, the number in number of years and months, your work and/or volunteer experience in human services, including practicum and internship, if applicable: (examples of human services work experience--case management, addiction counseling/treatment, social worker, behavioral technician, probation or parole office, child welfare specialist, occupational therapist etc.)" (Appendix A).

Death Anxiety (DA). This variable was measured by Death Anxiety Scale-Extended. The scale uses 51 items which were rated true or false (Appendix B).

Drug Use Bias (DUB). This variable was measured by the Stigma of Drug Users Scale across 10 questions assessing 5 commonly used drugs, and the scores ranged from (1) *Strongly Disagree* to (5) *Strongly Agree* (Appendix C).

Student Counselor Self-Efficacy Working with Clients Presenting with a Substance Use Disorder (SESUD): This criterion variable was measured by the Addiction Counseling Self-

Efficacy scale, which was a scale consisting of 32 items with 5 sub-scales. The items were rated across a 5-point Likert-type scale where (1) = *Not Confident* and (5) = *Highly Confident* (Appendix D).

Research Questions

This study, as previously noted, was designed to explore the hypothesized relationship of effects of death anxiety on CITs' overall efficacy in treating clients presenting with substance use disorders by answering the following questions.

Q1 To what extent does death anxiety and substance use bias explain graduate students' perceptions of self-efficacy, and which, if any, of these variables contributes distinctively to the explanation after controlling for age, gender, and the combined effect of years of work experience in human services status and gender?

Q2 Do years of work experience in human services impact students' perception of self-efficacy when working with substance use disorder populations?

Q3 To what extent do CITs' gender and death anxiety explain their perceptions or biases toward a substance use population?

Methodology

A hierarchical regression was tasked for this study as this type of regression model could be utilized to evaluate the contributions of predictors beyond those previously entered to statistically control variables, produce nested models, and assess incremental validity (M. Lewis, 2007; Pedhazur, 1997). A regression represented the grouping of inferential statistics in which the values for one or more predictor variables were used to predict values on an outcome variable resulting in an estimated model. A hierarchical regression was a sequential process involving the progressive introduction of predictor (independent) variables for the analysis and was a common technique for analyzing the effect of a predictor variable following the control of other factors (M. Lewis, 2007; Pedhazur, 1997). Such statistical control was accomplished by calculating the

adjusted R^2 at each step of the analysis, thus, describing the increase in variance when each variable (or group of variables) was added to the regression model, thus, giving the model more predictive power (M. Lewis, 2007; Pedhazur, 1997). Additionally, hierarchical regression was an appropriate method of analysis when the variation of a criterion (dependent) variable was also explained by interrelated predictor variables (M. Lewis, 2007; Pedhazur, 1997). Ultimately, a hierarchical regression was used to test theoretical hypotheses and evaluate the extent to which factors introduced later in the analysis explained for variance in the criterion beyond that accounted for by variables put earlier in the analysis (M. Lewis, 2007; Pedhazur, 1997; Petrocelli, 2003).

Unlike in other regression models, which may randomize or use an algorithm to pick the order of variables in a hierarchical regression, the sequence of the variable introduction into the analysis is determined by the concept, which, in turn, was based on the research questions and the contextual body of knowledge the research was nested within (M. Lewis, 2007; Pedhazur, 1997). Therefore, based on the above research and theoretical underpinnings and research questions, the order for this hierarchical regression model was: Age, Gender, Years of Relevant Work Experience, Death Anxiety, and Drug Use Bias where $\Upsilon = \beta_0 + \beta_1(X_1) + \beta_2(X_2) + \beta_3(X_3) + \beta_4(X_4) + \beta_5(X_5) + \mathcal{E}$, where β_0 represented the Y-intercept value and β_1 through β_5 represented the standardized regression coefficient of the five predictor variable plus unknown error was in relation to Y, which represented the criterion variable, Addiction Counseling Self-Efficacy. Due to the prevalence of linked variables in social sciences research, particularly educational research, hierarchical regression was a helpful tool (M. Lewis, 2007; Pedhazur, 1997).

Statistical Software Package and Sample Size

The analysis for this study utilized International Business Machine's (IBM) Statistical Package for the Social Sciences (SPSS) Statistics version 28.0 analytics software to analyze and interpret the data obtained using a hierarchical regression analysis for this research's methodology. This quantitative research design yielded data that supported or failed to support a relationship between the predictor variables of CITs' self-efficacy and the criterion variables of death anxiety, substance use bias, years of human services work experience, and gender. Through the utilization of G*Power, a collection of a sample data set of $n = 92$ was found to be appropriate (Faul et al., 2009). This sample size was calculated accounting for five (age) predictors, where the effect size (f^2) was equal to a medium effect of .15, the $\propto = .05$, and the Power $1 - \beta = .80$. Under these conditions mentioned above, the likelihood for an effect to be seen by chance alone was small (Cohen, 2013).

Hierarchical Regression Assumptions

Prior to conducting a hierarchical multiple regression, the relevant assumptions of this statistical analysis must be examined and met. Firstly, a sample size of $n = 92$ was deemed adequate, given the 5 independent variables to be included in the analysis (Tabachnick & Fidell, 2000. The data were clean and missing variables, and outliers were identified and removed. The assumption of singularity was also needed to be met as the independent variables (death anxiety, substance use bias, related work experience, age, and gender) must not be a combination of other independent variables. An examination of correlations between these predictor variables ran in order to establish that no independent variables were highly correlated. Furthermore, the collinearity statistics was utilized to inform if the assumption of multicollinearity was met as well (Coakes, 2005; Hair et al., 1998). Should the data be presented with extreme univariate

outliers, such identified outliers were addressed in initial data screening (Coakes, 2005; Hair et al., 1998). Furthermore, an examination of Mahalanobis Distance scores was calculated to identify and address multivariate outliers. Finally, residual and scatter plots were consulted to confirm the assumptions of normality, linearity, and homoscedasticity were all satisfied (Hair et al., 1998; Pallant & Pallant, 2001).

Hierarchical Regression Cautions

A 2003 article exploring the use and misuse of hierarchical multiple regressions in counseling research warned that, when employing hierarchical regression as a data-analytic method, it was essential to be aware that findings may be highly dependent on the order in which variables were input for analysis (Cohen & Cohen, 1983; Petrocelli, 2003). Hence, questions, hypotheses, and the rationale behind the sequence of predictor variable entry must be theory-based and detailed. An "atheoretical" application of this type of nested regression model may be as unsuitable as the empirical use of stepwise regression (Petrocelli, 2003, p. 14).

Cohen and Cohen (1983) suggested essential approaches for guiding the hierarchical input of predictor variables. First and most important, the order of entry for each predictor variable must be compatible with the expected causal priority (the direction of causal flow; Petrocelli, 2003). Noting if there were causal relationships between the predictor variables, then the causes should be included in the analysis before their effects (Petrocelli, 2003). According to Cohen and Cohen (1983), adherence to this rule resulted in two important advantages of hierarchical regression: (a) extraction of as much causal inference as the data will allow and (b) a unique partitioning of the entire variance of the criteria that could be accounted for by separate predictors, as indicated by the increase in R^2.

Because of the model of hierarchical regression, the variance of the criterion variable that resulted due to a predictor variable depended on the predictor variable's relationship with the criterion as well as the previous inclusions to the model (Petrocelli, 2003). If causal priority was overlooked in the ordering of predictor variables, Petrocelli (2003) warned a researcher ran the risk of attributing variations in the explained variance of the criterion to the effect that would otherwise be attributed to a cause. Therefore, in order to avoid this effect and control for multicollinearity effects by adding static demographic variables in subsequent phases, the most diligent researchers generally included research variables that pertain to the qualities of interest (Petrocelli, 2003). As such, for this hierarchical regression model, the demographic variables of age and gender was entered first into the model to mitigate attributing variations due to the predictor variable relationship with the criterion variable (Tang et al., 2004).

The second essential approach to a hierarchical regression outlined by Cohen and Cohen (1983) was that, in certain studies, one predictor may be more significant than another based on a certain theoretical underpinning, and as such, the significance of each predictor to the criterion may determine the entry order of predictor variables (Petrocelli, 2003). Therefore, based on this discussion, death anxiety as a predictor variable was entered last into the model based both on causal priority and theoretical justification (Becker, 1973; Greenberg et al., 2011).

Finally, as with other research models, the utilization of hierarchical regression as a data-analytic method necessitated the formulation of particular questions (Huberty & Hussein, 2003; Petrocelli, 2003). Such a nested regression model should only be used when the alternative hypothesis was grounded theoretically and was focused on identifying the extent predictor variables when layered chronologically into the model, and such analysis accounted for variance in the criterion beyond those entered earlier in regression modeling (Petrocelli, 2003). Therefore,

again the nested model order utilized within this study was grounded theoretically, and the alternative hypothesis was that death anxiety constituted a greater explanation of cancer efficacy than all the other models in this regression combined.

Instruments/Scales

Validity of the Death Anxiety Scale-Extended (DAS-E)

Only in the past 50 years has quantitatively oriented research on death anxiety been pursued or published, with the majority of these examinations into the subject of death anxiety occurring after the formalized establishment of the Death Anxiety Scale (DAS; Rasmussen, 1996; Templer, 1967, 1970). One's score on the Death Anxiety Scale has been correlated with a large number of factors; however, the foundation for Templer's (1976) two-factor theory of death anxiety was supplied by correlational investigations into group differences and research establishing the change in death fear over time. The hypothesis laid out by the original DAS scale proposed that degrees of death anxiety were influenced by both general psychological health and life encounters with death, the dying, and other such reminders of the corporeal actuality in which we exist (Rasmussen, 1996).

The objective of developing a scale to measure death fear as a concept and construct began immediately after the development of death as a function of research in the 1950s and 1960s. As a result of this philosophical and psychological investigation into the quantification of death dread, Templer (1970) developed the Death Anxiety Scale, which has remained one of the most extensively used measures of death attitudes in the scientific literature to this day (Lonetto & Templer, 1986; Neimeyer, 1997; Templer et al., 2006). The scale consisted of 15 true/false items, ranging from true/false phrases such as "I am scared of death" (Templer et al., 2006, p. 210). The DAS's shortness, transparent scoring, and name familiarity have contributed to its

adoption in hundreds of investigations examining the association between death anxiety and factors such as locus of control, self-esteem, religion, employment, and demographics (Lonetto & Templer, 1986; Templer et al., 2006).

Several foundational studies indicated a positive correlation between the Death Anxiety Scale score and a range of psychopathological variables, in which persons presenting with a preexisting mental health diagnosis tended to have higher scores on the DAS than normal individuals (Lonetto & Templer, 1986; Rasmussen, 1996; Templer, 1970). Moreover, lived experience and adjacency to death-related events were supported by research findings of positive Death Anxiety Scale correlations among family members. The correlations were more significant for same-sex parent-adolescent dyads than for opposite-sex parent-adolescent dyads (Rasmussen, 1996, Templer, 1970; Templer et al., 2006).

The original creation and validation of the Death Anxiety Scale in 1967 established strong psychometric properties across test-retest reliability where over a 3-week period of time the DAS achieved a test-retest reliability of 0.83 (Templer, 1967, 1970; Templer et al., 2006). Furthermore, based on the Kuder-Richardson Formula 20, the scale's internal consistency coefficient was 0.76 (Templer et al., 2006). The ordinal scale did not correlate with social desirability (Templer, 1970; Templer et al., 2006).

The secondary validation procedure of the Death Anxiety Scale in 1970 was two-fold; in the initial phase, the names of state hospital patients who verbally affirmed death anxiety concerns to chaplains or nurses were compiled. Based on their diagnoses, approximate age, and gender, researchers paired these people with a control group. Their DAS score was much higher than the control group's (Templer, 1970; Templer et al., 2006). During the second phase of the validation of the initial Death Anxiety Scale, students were administered the DAS, the Minnesota

Multiphasic Personality Inventory (MMPI), and the Fear of Death Scale, an unpublished doctoral dissertation by Boyar (1964) that Templar deemed of excellent quality but with little item content (Tellegen & Ben-Porath, 2011; Templer et al., 2006). Nevertheless, despite Boyar's scale being unpublished and missing some item content, the overall relationships between the two scales supported the construct validity of the DAS (Templer et al., 2006).

In order to prove discriminant validity, the DAS was tested and revealed significant and positive correlations with three MMPI special anxiety scores but lesser correlations with Boyar's Fear of Death Scale (Boyar, 1964; Tellegen & Ben-Porath, 2011; Templer et al., 2006). Based on diagnosis, sex, and approximate age, these individuals were matched with a control group. Their DAS score was much greater than that of the control group.

Prior to the release of the extended edition, The Death Anxiety Scale was widely used and, as such, had been normed and translated for the following populations and languages: Afrikaans, Arabic, Chinese, Dutch, Farsi, French, German, Hindi, Hmong, Italian, Japanese, Korean, Portuguese, Russian, Spanish, and Swedish (Templer et al., 2006). These translated and adjusted scales have remained in a true-false and Likert question format where the true-false question format has been standardized and normed to the required populations (McMordie, 1979; Stevens et al., 1980; Templer et al., 2006).

Since the initial creation in the validation of the DAS, many subsequent studies have utilized the scale, increased its validity, and exposed and expanded the use of the scale both through new populations and foci of investigative interest. In pursuit of the expanded scale, Templer et al. (2006) summarized and highlighted significant findings in replicated studies worldwide.

1. The DAS tended to be favorably connected with psychopathology measures and adversely correlated with adjustment measures;

2. The DAS scores of very religious individuals were often lower than nonreligious individuals;

3. There was a negligible correlation between DAS scores and age between adolescence and late middle age. Nonetheless, older adults tended to have lower overall DAS scores;

4. On average, biological females scored higher than biological males on the DAS;

5. Familial DAS scores presented similarity amongst members;

6. Factor analysis research has produced four to six components to the DAS;

7. The majority of documented attempts to reduce death dread utilizing behavioral or didactic methods have failed; and

8. The most often referenced theoretical formulation for the DAS was the two-factor theory stated above in the first permutation of the DAS.

However, Lonetto and Templer (1986) reached the conclusion that another factor may be at play in the DAS and they proposed “a third factor, possibly of an existential nature and possibly independent of both psychological health and learning, including one’s sense of one’s place in the universe, how one’s life conforms to this scheme, and how the fact of death renders life meaningless or meaningful” (p. 37). Subsequent factor analysis by Tomás-Sábado and Gómez-Bentio (2005) yielded evidence for an internally generated death anxiety factor and an externally generated death anxiety factor that expanded the scale to the three-factor permutation (Templer et al., 2006).

With the identification of a third factor, the authors made the decision to expand the items for the Death Anxiety Scale-Extended, in which the first 15 questions were identical to those of the Death Anxiety Scale and the remaining items included new queries which further captured a more holistic dimensionality of death anxiety (Templer et al., 2006). In a sense, DAS extended, foundational built what has come before where the first 15 items were the original Death Anxiety Scale score that could be correlated with established norms and previous research, and the remaining new 36 items, along with the original DAS, comprised the Death Anxiety Scale-Extended (Templer et al., 2006).

Internal consistency for the Death Anxiety Scale-Extended, measured by the Kuder Richardson (KR-20) coefficient, was .76, where 0 indicated no reliability and 1 represented perfect test reliability (Payne & Anderson, 1968; Templer et al., 2006). A KR-20 score above 0.70 was commonly considered to represent a reasonable level of internal consistency reliability (Payne & Anderson, 1968).

A Death Anxiety Scale-Extended with 51 items withstood content validity assessments and correlated at .001 with individuals from three out of four normed groups, one Kuwaiti, one Sudanese, and two American (Templer et al., 2006). Additionally, the overall correlation between the original Death Anxiety Scale and the Death Anxiety Scale-Extended was found to be .81. The 36 new items had a correlation coefficient of 0.64 with the Death Anxiety Scale and a correlation coefficient of 0.97 with the Death Anxiety Scale-Extended (Templer et al., 2006). Based on the above, the validation analysis indicated a three-factor explanation and, thus, established the reliability and validity of the factors. Findings revealed that the present scale was a valid and reliable instrument that could be used in the assessment of death anxiety in the normed populations (Templer et al., 2006).

Validity of the Addiction Counseling Self-Efficacy Scale (ACSES)

As the world has continued to grapple with the opioid crisis and addiction in general, as well as the multitude of deaths that resulted from overdoses and secondary issues related to substance use, the development of an addiction treatment counseling workforce capable of delivering superior services to the millions who require treatment for alcohol and drug use or co-occurring mental health disorders was vital (Murdock et al., 2005; SAMHSA, 2021). The assembling of this addiction-competent workforce was one of the overarching objectives of the Substance Abuse and Mental Health Services Administration (SAMHSA, 2021; Gallon et al., 2003; Murdock et al., 2005). Nevertheless, research indicated that training was not sufficient to create self-efficacy within counselors working within a substance use population as an investigation into the topic of counselor efficacy within substance use populations indicated that counselor characteristics (e.g., personality, interpersonal functioning, or professional beliefs) accounted for more variance in client outcomes than differences between treatment types or baseline client characteristics (Luborsky et al., 1997; Murdock et al., 2005; Najavits & Weiss, 1994; Project MATCH Research Group, 1998).

While interpersonal functioning, professional attitude and beliefs, and overall counter personality were variables that impact substance use treatment, one specific variable of counselor self-efficacy in working with substance use clients was connected with the development of counseling abilities and training among mental health and addiction counselors (Murdock et al., 2005). As an operational definition, self-efficacy referred to a counselor's confidence in their ability to plan and execute specified courses of action and counseling skills to accomplish a goal or situation-specific activity (Bandura, 1977, 1982; Murdock et al., 2005). Such beliefs have had a significant impact on self-regulation and the quality of human functioning as they determined

the objectives and professional goals that individuals sat for themselves, as well as their grit and tenacity in pursuing those goals and the use of problem-solving strategies (Bandura, 1997; Barone et al., 1997; Murdock et al., 2005).

Prior to its application in addiction to counseling, the self-efficacy theory has previously been applied to mental health-specific counseling, void of substance use treatment, which resulted in a positive relationship between counselors' self-efficacy attitudes and training levels, amount of supervision, perceptions of the training or work environment, and counseling performance overall (Efstation et al., 1990; Friedlander & Snyder, 1983; Larson et al.,1998; Melchert et al., 1996; Murdock et al. 2005). In support of the benefits of self-efficacy towards productive outcomes in a profession, empirical evidence from a variety of adjacent helping professions exhibited that persons presenting with higher levels of self-efficacy were less likely to experience burnout and increased persistence in their chosen profession, as well as exhibit, decreased death anxiety (Becker, 1973; Caprara et al., 2003; Evers et al., 2001; Murdock et al., 2005). Although the self-efficacy theory was a valuable framework that has been applied to several professional areas, including counselor training, a specific measure of addiction counselors' beliefs of their skills and components of counseling performance supported researchers investigating the process and outcomes of addiction counseling. Likewise, as with other counseling professions, self-efficacy may aid toward persistence in the face of unique substance treatment-specific challenges such as client relapse, training needs, and the death anxiety stemming from the high mortality salience across substance-specific treatment (Murdock et al., 2005).

Through the process of norming and validating the ACSES measure, a principal components factorial found that 5 factors of the scale accounted for 65% of the overall variance

in the 32 items scale. The factors found and utilized were: (a) Specific Addiction Counseling Skill--eight items assessed this area accounting for 15.3% of the overall variance and demonstrated strong internal consistency with α = .92 ; (b) Assessment and Treatment Planning and Referral Skills--9 items assess this area accounting for 13.99% of the overall variance demonstrated strong internal consistency with α = .90; (c) Co-Occurring Disorders Skills--six items assessed this area accounting for 13.18% of the overall variance demonstrated strong internal consistency with α = .89; (d) Group Counseling Skills--five items assessed this area accounting for 12.53% of the overall variance demonstrated strong internal consistency with α = .87; (e) Basic Counseling Skills--4 items assess this area accounting for 10.53% of the overall variance demonstrated strong internal consistency with α = .87 (Murdock et al., 2005). The ACSES measure as a whole also exhibited strong internal consistency with overall α = .89 (Murdock et al., 2005). All of the above significant factors came from data collected from participants who spanned four indicators regarding the level of expertise (certifications status, level of education, years of experience, and type of work experience) and addiction counseling self-efficacy scores (Center for Substance Abuse Treatment, 2017; Murdock et al., 2005). Therefore, according to reliability estimations, the ACSES was internally reliable as found through comparisons of certified/licensed and noncertified/licensed addiction counselors on ACSES scores, as well as the level of expertise and knowledge in the addiction field, other professional activities and ACSES scores (Murdock et al., 2005). All of the above corroborated the initial validity of the scale for this normed population (Murdock et al., 2005).

Validity of the Stigma of Drug Users Scale

In the United States, both historically and currently, illicit substance use, across all types of substances, were stigmatized, where control, access to such drugs as well as the punishment

for its use cleaved upon the dominant social lines of power and oppression (Palamar et al., 2011). There was, of course, variance across classifications of illegal drugs, including deleterious effects on the user, impacts on the community, and associated social penalties or disapproval (Gable, 2004; Johnston et al., 2011; Nutt et al., 2007; Palamar et al., 2011). Nevertheless, despite potential medical, legal, psychological, and social consequences, psychoactive and addictive substances continued to be widely used across multiple strata of society, with the highest frequency of substance usage being historically within the age group 18 to 25 years old and, therefore, the psychometric evaluation of the Stigma of Drug Users Scale was normed across this specific population (Johnston et al., 2011).

As noted above, and within the age group highlighted, persons may experience stigma, defined as the negative labeling of an individual or their behavior as shameful or "a severely discrediting feature" (Goffman, 1963, p. 3). As a direct incursion to the initial expressions of cooperation, the competing notions of stigma and oppression, as well as fear, all played a part in conceptualizing how and why people form divisions in social groups, with the stigma and social ignominy being leverage used to cleave persons into in-groups and out-groups (Rose, 2017). The revision and consciousness of these arbitrary social rules of stigma, forged through the execution of power and oppression, led to murky waters of favoritism, othering, and ascribed value (Link & Phelan, 2001; Palamar et al., 2011; Rose, 2017; Wills, 1981). The intent behind the utilization of denouncing, labeling, or stereotyping others' behaviors was to impose social control by reinforcing their superior social standing by comparing others negatively and directly links to death anxiety and the attempt at symbolic immortality by codifying one's own behaviors and demonizing those who challenged ones grasp on morality (Becker, 1973; Link & Phelan, 2001; Palamar et al., 2011; Rose, 2017; Wills, 1981). While past and current research on the topic of

the stigma associated with illegal drug use was sparse yet growing; nonetheless, the data to date demonstrated that the amount of stigma varied according to the perceived danger and social acceptability of each substance (Palamar et al., 2011).

In order to norm and validate the Stigma of Drug Users Scale, the authors utilized the sample of both self-reported users and nonusers of illicit drugs to quantify two concepts of stigma: (a) stigmatization of users and (b) perceived public stigma associated with users (Palamar et al., 2011). In order to operationalize the definition of the first concept, stigma to illicit substance users, the authors of the Stigma of Drug User Scale employed theoretical underpinning for this term established by Gilmore and Somerville (1994), who posited that stigmatization was the process of negatively naming or branding an individual as despicable in reaction to a particular defect (Palamar et al., 2011). Therefore, in reference to the above delineation, the authors defined the stigmatization of users of drugs as the adverse societal or familial response to illegal substance users (Palamar et al., 2011).

The second concept measured by the Stigma of Drug Users Scale, perceived public stigma, was defined as an individual's view to which the public collectively stereotyped or discriminated against a stigmatized individual or group, in this case, users of illicit substances (Palamar et al., 2011). More than just the people in their lives, it was probable that witnessing or experiencing stereotyping or discrimination by organizations, government, or larger social systems as a whole added to the impression of public stigma and therefore, quantifying this second concept encapsulated a more extensive bioecological system (Corrigan, 2004; Palamar et al., 2011). The authors sited that the mainstream population condemns illicit drug use; however, the degree of disapproval differed across the substance of use and across persons who used substances and nonusers (Johnston et al., 2011; Palamar et al., 2011). Finally, perceived public

stigma positively correlated to persons' internalized stigma or self-stigma; nevertheless, internalized stigma and oppression were out of the scope of the study and scale (Link, 1987; Palamar et al., 2011).

The Stigma of Drug Users Scale was substantiated for five commonly used substances, marijuana, cocaine, ecstasy, and nonmedical use of opioids and amphetamine (Palamar et al., 2011). Additionally, the validation research on the scale indicated strong links between the underlying components of this scale, particularly in demonstrating that perceived public stigma and stigmatization of drug users were separate but connected concepts (Palamar et al., 2011). These two kinds of stigma were negatively associated with the degree of exposure to users; hence, respondents who reported higher levels of stigmatization or more perceived public stigma tended to have less exposure to users (Palamar et al., 2011).

The development of this scale and its validation was one of the first empirical analyses of the stigma associated with illegal drug use. Findings provided valid and stable concepts for this scale, allowing for continued investigation of these stigma and substance use phenomena. In this regard, the data implied that high levels of perceived public stigma and stigmatization had a negative relationship with the degree of exposure to substance users (Palamar et al., 2011). High levels of perceived public stigma and stigmatization and low exposure to users were demonstrated to be protective variables against recent use of marijuana, cocaine, ecstasy, and nonmedical opioids and amphetamine (Palamar et al., 2011). At the same time, stigma appeared to be a protective factor against drug use. Nonetheless, the validation study cited that future research must study such correlations to comprehend better how stigma influences substance users' psychological health (Palamar et al., 2011).

Procedures

Prior to any data collection, exempt status, as noted by the university Institution Review Board (IRB), was applied for, and only upon the grating of exempt status was data collection begun (Appendix E). Following IRB approval, participants were recruited from universities and colleges with master's level, CACREP-accredited, counseling programs across the United States. Access to these populations was requested through each respective program director or chair (Appendix F). Each student who wanted to participate was given access to a Qualtrics link containing the surveys (Appendix G). Should the number of participants from the above procedure be below the power needed for analysis, additional students were sought using national counseling listservs such as CESnet, as well as convenience sampling across universities that met the same criteria as noted above. All participants were informed of the purpose of the study and that participation was entirely voluntary.

The normed scales utilized for this study, as well as a rudimentary demographics questionnaire, was administered using a university-owned and password protected, Qualtrics account (http://unco.qualtrics.com), and the informed consent (Appendix H), which was the first page of the survey, notified potential participants that by initiating the survey by clicking "Start," they consented to the study conditions, attested that they were 18 years or older and were currently enrolled in a masters-level counseling program.

Following the informed consent, the second page of the online survey detailed the process regarding the random drawing for three $50 Amazon.com gift cards. To be eligible for the prize drawing, participants were required to complete all survey questions and provide their email addresses. Participants were given a number in which they submitted their completed survey by Qualtrics, and following the completion of the data collection, an online random

number generator was used to pick three numbers that would correspond to three participants; these were the winners of the gift cards.

The subsequent online survey pages included the researcher-created demographics questionnaire and the three identified instruments. Included in Appendix D, the demographics questionnaire, were questions regarding age, gender identity, work/volunteer experience in human services, as well as questions regarding practicum status and program CACREP-accreditation status. The three previously normed instruments were the Death Anxiety Scale-Extended (DAS-E; 51 true-false-type items), the Stigma of Drug Users Scale (a 10-question inventory, Likert-type items), and the addiction counseling Self-Efficacy Scale (ACSES; 32, Likert-type items).

As before, there were no known risks associated with participation in this study minor emotional or psychological stress that came from thought and questions regarding death and death anxiety and those typically associated with survey administration across academic and university settings (Labott et al., 2013). Moreover, the hierarchical multiple regression analysis was not focused on individual survey responses but on the aggregate of all collected data. Survey data were stored and manipulated on a password-protected computer that was securely stored in the researcher's locked office on a university campus.

Ethical Assurances

Ethical assurance was scrutinized prior to the collection and analysis of data. However, this research was approved by both the above-noted dissertation committee and the University of Northern Colorado's Institutional Review Board (IRB) prior to any data collection.

Summary

This chapter contains the research method and designs appropriate for this quantitative research and dissertation which utilized a hierarchical or nested regression model to predict the impact of substance use bias and death anxiety on counselor self-efficacy when working with substance use clients while controlling for age and gender. The instruments used included the stigma of Drug Users Scale, the Addiction Counseling Self-Efficacy Scale and the Death Anxiety Scale-Extended, alongside student self-report for demographic and human services work experience information.

This chapter provides the findings of the quantitative analysis conducted in this study. The initial section presented data regarding participant demographics, along with descriptive statistics, multivariate normality, homogeneity of variances, and internal consistency estimates for the instruments. The subsequent part contained findings pertaining to the subsequent five research inquiries. The concluding part offered a concise assessment of the consequences arising from the findings of the study. The statistical analyses were conducted with a significance level of $\alpha = 0.05$.

CHAPTER IV

RESULTS

The following chapter delivers the findings of the quantitative analysis conducted in this dissertation study. The first section below presents participant demographic data, descriptive statistics, a hierarchical regression, and all accompanying assumptions. The subsequent section contains findings pertaining to the subsequent three research inquiries aimed at exploring how death anxiety affected the perceived self-efficacy of CITs when they were working with clients who had substance use disorders. The concluding section offers a concise assessment of the consequences arising from the findings of the study. The statistical analyses were conducted with a significance level of $\alpha = 0.05$. Below are the research questions.

Q1 To what extent do death anxiety and substance use bias explain graduate students' perceptions of self-efficacy, and which, if any, of these variables contributes distinctively to the explanation after controlling for age, gender, and the combined effect of years of work experience in human services status and gender?

Q2 Do years of work experience in human services impact students' perception of self-efficacy when working with substance use disorder populations?

Q3 To what extent do CITs' gender and death anxiety explain their perceptions or biases toward a substance use population?

Preliminary Analyses

Demographic Data

The initial collected sample consisted of 118 master's level CITs across non-profit and private postsecondary institutions in the United States who were at least 18 years of age. The survey response rate was 11.2% when removing duplicated communications due to an

inactive link in Qualtrics. Moreover, 23 survey responses were removed due to failure to complete the survey, leaving a total of 95 completed surveys for analysis. In these 95 completed surveys, there was no missing data. All participants answered a researcher-developed demographics questionnaire disclosing age, gender identity, work and/or volunteer experience in human services, including practicum and internship, CACREP-accreditation status of their program, the state in which their master's program was located, and if they had completed their practicum experience. While the survey requested all participants to come from CACREP-accredited master counseling programs, and a question in the demographics was meant to confirm this, 90 respondents indicated their program was CACREP accredited. In contrast, another five participants noted they came from a non-CACREP-accredited program. The five respondents from a non-CACREP-accredited program were not removed but were indicated as a study limitation. Of the 95 participants, 78 (82.1%) reported their gender identity as female, 12 (12.6%) reported their gender identity as male, and 5 (5.3%) reported their gender identity as non-conforming. As was specified in the researcher-developed demographics questionnaire, the five participants who identified their gender identity as non-conforming were requested to write in their preferred gender identity. Three of those five wrote in their gender identity as non-binary, one identified as genderqueer and one identified as A gender (see Table 1). The gender identity composition of this sample was divergent but comparable to the student gender distribution for the entirety of masters CACREP-accredited programs in the United States. As noted in the 2019 CACREP vital statistics national survey, it was found that of all master's students in CACREP programs, 80.56.% identified as female, 17.8% identified as male, and 2.2% identified as an alternative identification (CACREP, 2022).

Table 1

Gender Identity Descriptive Statistics

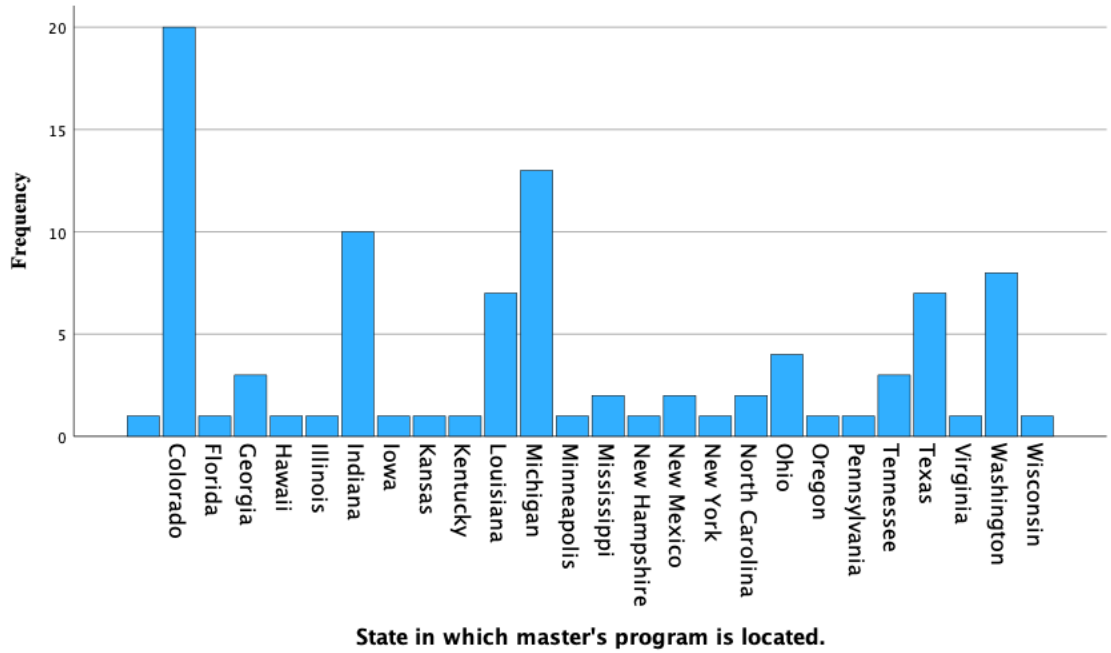
	Frequency	%	Cumulative %
Male	12	12.6	12.6
Female	78	82.1	94.7
Gender Non-Conforming	5	5.3	100.0
Total	95	100.0	100.0

Note. $N = 95$

Finally, participants were asked to record the state in which their master's program was located to ensure a robust and representative sample (see Table 2). The dataset encompassed data from a total of 25 states. Colorado had the highest frequency, with 20 occurrences, making up 21.1% of the dataset. Michigan followed with 13 instances, constituting 13.7% of the total. Indiana was represented by 10 occurrences, equating to 10.5%. Both Louisiana and Texas were present seven times in the set, each comprising 7.4% of the data. Washington accounted for eight occurrences or 8.4%. Ohio saw four instances, representing 4.2%, while Georgia and Tennessee each had three occurrences, accounting for 3.2%. Mississippi, New Mexico, North Carolina, and Pennsylvania each had two instances, contributing 2.1%. Florida, Hawaii, Illinois, Iowa, Kansas, Kentucky, Minneapolis, New Hampshire, New York, Oregon, Virginia, and Wisconsin each had one occurrence, individually adding 1.1% to the total count. Racial, cultural, or ethnic identity data were not collected.

Table 2

Location of Participants Master's Program by State



Note: $N = 95$

Instrumentation

The hierarchical multiple regression analysis utilized the following five instruments as independent variables: (a) the age of the respondents, denoted by the variable label AGE; (b) the gender identity of the respondents, denoted by the variable label GEN; (c) work and/or volunteer experience in human services, including practicum and internship designated in years and months, denoted by the variable label EXP; (d) the summative score on the Drug Use Bias scale, denoted by the variable label DUB; and (e) the summative score on the Death Anxiety Scale-Extended (DAS-E), denoted by the variable label DA. For the purpose of hierarchical regression analysis, the sole instrument utilized as the dependent variable was the participants' summative score on the Addiction Counseling Self-Efficacy Scale (SESUD). Every normed scale employed in the model required a True-False response or a Likert score coded as 1-5. As a result, each

question was regarded as ordinal data, except for AGE and EXP, which were treated as scale variables because EXP was converted from years and months of experience to months. In contrast, GEN was classified as a nominal variable.

After completing the data collection process and eliminating incomplete survey responses, as mentioned earlier, the negative questions (2, 3, 5, 6, 7, and 15) of the Death Anxiety Scale-Extended were subjected to inverse coding as required by the normed scale and the language of the questions. Subsequently, each participant's ordinal data obtained from the Drug Use Bias Scale, the Addiction Counseling Self-Efficacy Scale, and the Death Anxiety Scale-Extended with its inverse coding were summed. This addition of the individual scale questions resulted in the creation of the new construct scale variables DA, DUB, and SESUD, which were incorporated into the hierarchical regression model.

Assumptions

An assessment was made to determine whether the dataset adhered to the hypotheses underlying hierarchical multiple regression analyses. The following criteria were assessed: (a) linearity, (b) homoskedasticity, (c) error independence, (d) independence of independent variables, and (e) normality.

Linearity

When comparing the means of variables meanSESUD_log and EXP_log, the ANOVA table showed a significant interaction between the two, where the variation between groups were significant ($F = 2.191$, $p = .004$), indicating a meaningful linear interaction effect. This clear linear component was observed ($F = 11.203$, $p = .001$), along with significant non-linearity ($F = 1.900$, $p = .016$). The within-group variation was not reported to be significant, focusing the attention on the interaction effects between the variables. Nonetheless, the data for EXP_log was

comprised of multiple entries of zero months of experience, which was to be expected from a representative sample of CITs in a master's program. Therefore, these were not removed as outliers, and the data remained in violation of the linearity assumption, which was noted as a limitation (M. Lewis, 2007; Pedhazur, 1997).

Homoskedasticity

Upon examination of the standardized residual scatterplot and the corresponding LOESS (locally estimated scatterplot smoothing) line of fit, it was determined that the data satisfied the assumption of homoscedasticity (Coakes, 2005). The scatterplot revealed a consistent spread of residuals without any discernible pattern or shape that would suggest variance differing from the predicted values. The LOESS line, utilized to fit the data trends, remained approximately horizontal and did not indicate any systematic increase or decrease in variability.

Error Independence

The standardized residual scatterplot study revealed that the error independence assumption was satisfied. The scatterplot's random pattern of residuals indicated that the errors lacked obvious autocorrelations or sequential relationships (Coakes, 2005). Therefore, the randomness of the residual plot indicated independent residuals, which was a necessary assumption for the validity of regression analysis results.

Independence of Independent Variables

The independent variables in the regression model were continuous and demonstrated independence from each other, as evidenced by a simple linear regression analysis (Coakes, 2005). However, an exception to this independence was observed between AGE and DA, which were significantly correlated, as indicated by a p-value of $< .001$. Nonetheless, the correlation between AGE and DA aligned with established content literature, and this covariance was

anticipated. The structure of the hierarchical regression model worked to control this correlation by entering AGE and DA at different stages, mitigating interrelated effects (M. Lewis, 2007; Pedhazur, 1997).

Multivariate Normality

In preparation for hypothesis testing, the data were meticulously evaluated to identify any outliers and examined the normality of distributions among the scores. Acknowledging the complex process of assessing the normality of distributions across multiple variables and the regression assumptions that needed to be satisfied, the analysis first concentrated on conducting a comprehensive examination of normality tests and predictors of outliers. The methodological decision was consistent with the suggestions of previous research, which documented the difficulties in assessing the normality distributions of multiple variables (Coakes, 2005; Kline, 2005). Therefore, the method employed to evaluate normality accurately identified that the hypotheses underpinning the statistical analyses were thoroughly established.

The sample distributions of the variables AGE, GEN, EXP, DUB, DA, and SESUD displayed non-normality, indicated by the skewness values of -0.507 for AGE, -0.625 for DA, -0.907 for EXP, and -0.617 for SESUD. Such numbers indicated a significant deviation from the standard normative curve (Coakes, 2005). The positive skew for AGE and EXP indicated a right-skewed distribution, while the negative skew observed in the DUB, DA, and SESUD data suggested a left-skewed distribution. The kurtosis values, specifically for EXP (3.413), indicated that the distribution was leptokurtic, distinguished from a normal distribution by a more prominent peak and longer tails (Coakes, 2005; Green et al., 2023). On the other hand, the kurtosis of the GEN (2.611) exhibited a more linear apex, which was consistent with a platykurtic distribution (Coakes, 2005; Green et al., 2023). The kurtosis values of the remaining

variable, SESUD, approached zero, which usually indicated a normal distribution; however, when these values were combined with the skewness and the discrepancies between the means and medians, it became evident that the distribution was abnormal (Coakes, 2005; Green et al., 2023; Kline, 2005; see Table 3).

Moreover, the descriptive statistics identified non-normality in the variables of current AGE, GEN, and EXP, as evidenced by the *p*-values of less than .001 for the Kolmogorov-Smirnov and Shapiro-Wilk tests, which indicated significant departures from normal distribution (Coakes, 2005; Kline, 2005). Nonetheless, the Shapiro-Wilk test indicated that Drug Use Bias did not deviate significantly from normality (p =.128). However, the Kolmogorov-Smirnov test indicated a non-significant trend (p =.200), necessitating cautious interpretation given the lower bound of true significance (Green et al., 2023; Kline, 2005). As a result of all of the above, the data presented in the sample provided significant evidence against the assumption of a normal distribution.

Table 3

Descriptive Statistics for Variables

	Mean	*Median*	*SD*	Min	Max	Range	Skewness	Kutosis
Age (AGE)	32.536	28.000	10.325	20.000	62.000	42.000	.907	-.178
Gender identity (GEN)	1.926	2.000	.419	1.000	3.000	2.000	-.491	2.611
Human services experience (in months) (EXP)	38.642	24.000	44.549	0.000	204.000	204.000	1.872	3.413
Drug use bias (DUB)	182.263	182.000	19.433	120.000	223.000	103.000	-.507	.832
Death anxiety (DA)	87.284	89.000	8.432	66.000	102.000	36.000	-.625	-.381
Self-efficacy working with substance use clients (SESUD)	115.578	117.000	24.616	44.000	159.000	115.000	-.617	.033

Note. $N = 95$. Standard of error for Skewness was .247 and standard of error for Kurtosis was .490 for all variables listed.

To identify potential outliers within the dataset and possibly increase the normality of the data presented, the Mahalanobis Distance for each observation was computed. The highest recorded Mahalanobis Distance among the observations was 20.718. This extremity was then evaluated against the critical values of the Chi-Squared distribution, with the degrees of freedom equal to the number of predictors used in the model, in this instance, five (Coakes, 2005; Hair et al., 1998). Upon this comparison, the dataset revealed a participant with a Mahalanobis Distance corresponding to a *p*-value of .00092 when evaluated against the Chi-Squared distribution. The statistical significance of this *p*-value strongly suggested that the participants' data were an outlier (Coakes, 2005; Hair et al., 1998). Consequently, in adherence to standard statistical practices, this data point was excluded from further analysis. Therefore, with the removal of the outlier, as noted above, the descriptive statistics and gender identity frequencies were rerun to assess the regression assumption of normality (see Tables 4)

Table 4

Gender Identity Descriptive Statistics--With Outlier Removed

	Frequency	%	Cumulative %
Male	12	12.6	12.6
Female	78	81.1	94.7
Gender Non-Conforming	1	5.3	100.0
Total	94	98.9	------
Removed	1	1.1	------
Total	95	100.0	100.0

Note. $N = 94$ with the outlier removed.

Following the removal of the singular outlier, as detailed above, the descriptive statistics for the variables AGE, GEN, EXP, DUB, DA, and SESUD were calculated. The accompanying new mean values for these variables were expressed as 32.404, 1.952, 36.882, 182.819, 87.276, and 115.361, respectively. Moreover, upon the removal of the outlier, the skewness and kurtosis variables slightly shifted and recalculated to .944 and -.090 for AGE, -.483 and 2.553 for GEN, and so on, with the remaining variables indicating minor adjustments from their previous values (see Table 5). The normality test of Kolmogorov-Smirnov and Shapiro-Wilk tests continued to affirm the non-normal distribution of the variables, with significance levels below .001 for AGE, GEN, EXP, and DA, substantiating significant deviations from a normal distribution. The intended dependent variable of SESUD was calculated closer to normality but still showed a deviation with a Shapiro-Wilk *p*-value of .025. Only the DUB variable showed a less than significant deviation from normality with a Shapiro-Wilk *p*-value of .128. Despite the exclusion of the identified outlier, the descriptive statistics indicated that the data for the variables AGE, GEN, EXP, DUB, DA, and SESUD still did not conform to a normal distribution as evidenced by the skewness and kurtosis values and the normality tests, which remained indicative of non-normality (see Table 5).

Table 5

Descriptive Statistics for Variables--With Outlier Removed

	Mean	*Median*	*SD*	Min	Max	Range	Skewness	Kutosis
Age (AGE)	32.404	27.500	10.299	20.000	62.000	42.000	.944	-.090
Gender identity (GEN)	1.925	2.000	.421	1.000	3.000	2.000	-.483	2.553
Human services experience (in months) (EXP)	36.882	24.000	41.338	0.000	180.000	180.000	1.796	3.154
Drug use bias (DUB)	182.819	182.500	18.763	120.000	223.000	103.000	-.423	.832
Death anxiety (DA)	87.276	89.000	8.476	66.000	102.000	36.000	-.619	-.411
Self-efficacy working with substance use clients (SESUD)	115.361	117.000	24.657	44.000	159.000	115.000	-.600	.019

Note. $N = 94$. Standard of error for Skewness was .249 and standard of error for Kurtosis was .493 for all variables listed.

The mean scores were assigned to the variables DUB, DA, and SESUD, which had previously summative scores as a first step to the continued mitigation of skewness in the dataset, as this type of data transformation could be used for normalizing data distributions. Moreover, this kind of data transformation could be advantageous when working with summative data susceptible to deviation due to the number of contributing items or components. Furthermore, mean scores were computed by dividing the sum of each variable's scores by the number of items, which reduced the impact of variations in item counts among scales or participants (Coakes, 2005). Such a data transformation method could contribute to the standardization of the data, resulting in a more balanced expression of the variables, and it could have the potential to reduce positive or negative skewness (Coakes, 2005). In turn, implementing this type of transposition of the data could align the distribution of each variable more closely with the properties of a normal distribution, thereby enhancing the validity of subsequent statistical analyses through the hierarchical regression model.

Post-transformation, the means were meanDUB = 3.656, meanDA = 1.711, and meanSESUD = 3.605. Medians closely matched the means, indicating a symmetric distribution around the center, and the standard deviations were relatively modest, with values of .375, .166, and .770, suggesting a moderate spread of data points around the mean, which improved from the previous permutations. Skewness was slightly negative for all variables -.423, -.619, -.600 and the Kurtosis values suggested a variety of distributions amongst the variables (see Table 6).

Table 6

Descriptive Statistics for Mean Transformed Variables

	Mean	*Median*	*SD*	Min	Max	Range	Skewness	Kutosis
Mean of drug use bias (meanDUB)	3.656	3.650	.375	2.400	4.460	2.060	-.423	.832
Mean death anxiety (meanDA)	1.711	1.745	.166	1.294	2.000	.705	-.619	-.411
Mean of self-efficacy working with substance use clients (meanSESUD)	3.605	3.656	.770	1.375	4.968	3.593	-.600	.019

Note. $N = 94$. Standard of error for Skewness was .249 and standard of error for Kurtosis was .493 for all variables listed.

The Kolmogorov-Smirnov and Shapiro-Wilk tests demonstrated that meanDA deviated significantly from a normal distribution as before where $p < .001$. The meanSESUD variable's normality was slightly increased, with *p*-values of .059 and .025, respectively, across the two tests. MeanDUB appeared to be more normally distributed, with non-significant deviations ($p = .200$ for Kolmogorov-Smirnov and $p = .128$ for Shapiro-Wilk), indicating the least skewness among the variables. While there were still concerns for normality, the above measures suggested movement toward a more normal distribution following the conversion to mean scores; however, there was still concern about meeting the hierarchical multiple regression assumption of normality.

As with the mean transposition, Log10 and Reflection log transformations were later employed as strategic measures to continue addressing the dataset's non-normal distribution. Log10 transformation could prove effective for positively skewed data, such as AGE and EXP, as it compressed the scale of the larger values more than the smaller values, decreasing the tail and reducing overall skewness (Coakes, 2005; West, 2022). On the other hand, the reflection log transformation could be helpful for the left-skewed data, such as the three variables of meanDUB, meanDA, and meanSESUD, as the process reflected the data so that the negative skew converted to positive. This action was followed by applying the log skewness transformation noted above, bringing the distribution closer to normality (Coakes, 2005; West, 2022). Both of these data transformations could be beneficial, not only in normalizing the distribution but also in reducing the impact of any remaining outliers, thereby making the data more suitable for parametric statistical analyses that assume the normality of the data, such as a hierarchical regression model (Coakes, 2005; West, 2022).

The descriptive statistics and tests of normality for the log-transformed variables indicated improved but varying degrees of alignment with a normal distribution. The statistic values for all variables transmuted displayed increased centralization, indicating the second transformation efforts were successful. Notably, meanSESUD_Log demonstrated the least skewness and, according to the Shapiro-Wilk test, aligned most closely with a normal distribution (p = .742; see Table 7).

Conversely, both previously positively skewed variables of AGE and EXP still exhibited significant deviations from normality post-transformation, as indicated by their Kolmogorov-Smirnov and Shapiro-Wilk test results, with p-values of less than .001. Nonetheless, the literature supported these findings as both age and experience had some explanatory overlap with efficacy. For this reason, the hierarchical regression nested structure would help control for this relationship. This correlation between the variables is discussed in the assumption of linearity above. Regarding the other variables, meanDUB_Log's normality statistics showed non-significant deviations from normality (p = .200 for Kolmogorov-Smirnov and p = .205 for Shapiro-Wilk), suggested it was well-aligned with a normal distribution. Finally, meanDA_Log showed improvement but still deviated from normality (p = .005 for Kolmogorov-Smirnov and p = .015 for Shapiro-Wilk). Despite these indicators that the assumption for normality was not met, the scatterplots and residuals showed a near-normal curve (see Table 8). Therefore, the inquiry proceeded onward, but it was noted that non-normative variables were an overall limitation of the analysis.

Table 7

Tests of Normality for Log10 and Reflective Log10 Transformed Variables

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	*df*	Sig.	Statistic	*df*	Sig.
Logarithmic transformation of participants' age (AGE_Log)	.179	94	<.001	.910	94	<.001
Logarithmic transformation of human services work experience (EXP_Log)	.170	94	<.001	.892	94	<.001
Mean logarithmic transformation of drug use bias (meanDUB_Log)	.070	94	.200*	.981	94	.205
Mean logarithmic transformation of death anxiety (meanDA_Log)	.112	94	.005	.966	94	.015
Mean Logarithmic Transformation of Self-Efficacy with Substance Use Clients (meanSESUD_Log)	.063	94	.200	.990	94	.742

Note. $N = 94$.

* This is a lower bound for the true significance.

Table 8

Descriptive Statistics for Log10 and Reflective Log10 Transformed Variables

	M	Median	*SD*	Min	Max	Range	Skewness	Kurtosis	Kurtosis *SD*
Logarithmic transformation of participants age (AGE_Log)	1.491	1.439	.128	1.301	1.792	.491	.578	-.921	.493
Gender identity (GEN)	1.925	2.000	.421	1.000	3.000	2.000	-.483	2.553	.493
Logarithmic transformation of human services work experience (EXP_Log)	1.254	1.397	.647	.000	2.257	2.257	-.786	-.236	.493
Mean logarithmic transformation of drug use bias (meanDUB_Log)	.246	.257	.092	.000	.485	.485	-.319	.464	.493
Mean logarithmic transformation of death anxiety (meanDA_Log)	.107	.098	.054	.000	.232	.232	.387	-.411	.493
Mean Logarithmic Transformation of Self-Efficacy with Substance Use Clients (meanSESUD_Log)	.351	.364	.143	.000	.662	.662	-.157	-.379	.009

Note. $N = 94$. Standard error of skewness is .249 for all variables listed.

Reliability of Instruments

In addition to the demographic questionnaire, participants filled out three self-report surveys to assess variables for the model. The 5-point Likert surveys assessed drug stigma (Stigma of Drug Users Scale; Palamar et al., 2011) and addiction counseling self-efficacy (Murdock et al., 2005). Additionally, a true/false scale assessed death anxiety (Death Anxiety Scale-Extended; Templer et al., 2006). Cronbach's alpha was used to measure the reliability of the instruments, and results varied from .892 to .962, with variances among subscales (see Table 9). These alpha coefficients, well above the acceptable threshold, indicated that the instruments used in the study were highly reliable for measuring the constructs.

Table 9

Scale Reliability Information

Instrument	*N* of Items	Cronbach's α
Stigma of Drug Use Scale	50	.892
Death Anxiety Scale-Extended	51	.900
Addiction Counseling Self-Efficacy Scale Overall	32	.962
Addiction Counseling Self-Efficacy Scale - Factor 1: Specific Addiction Counseling Skills	8	.929
Addiction Counseling Self-Efficacy Scale - Factor 2: Assessment, Treatment Planning, and Referral Skills	9	.921
Addiction Counseling Self-Efficacy Scale - Factor 3: Co-Occurring Disorders Skills	6	.949
Addiction Counseling Self-Efficacy Scale - Factor 4: Group Counseling Skills	5	.923
Addiction Counseling Self-Efficacy Scale - Factor 5: Basic Counseling Skills	4	.828

Research Question 1

Q1 To what extent do death anxiety and substance use bias explain graduate students' perceptions of self-efficacy, and which, if any, of these variables contributes distinctively to the explanation after controlling for age, gender, and the combined effect of years of work experience in human services status and gender?

H1a A small but significant predictive or explanatory power will exist between drug use bias and perception of self-efficacy.

H1b A significant predictive or explanatory power will exist between death anxiety and perceptions of self-efficacy.

It was hypothesized that a significant predictive relationship would exist between the pair of constructs, meanDUB_Log and meanDA_Log, and the dependent variable of meanSESUD_Log when controlling for the other independent variable. A hierarchical multiple regression analysis was performed with the predictor of meanSESUD_Log to test this hypothesis. The variable controls entered into the model on the first block of the regression were (a) AGE_Log and (b) GEN (coded as 0 = male, 1 = female, 2 = gender non-conforming). Moving up in the nested model, the EXP_Log data were entered into the model on the second block, and the meanDUB_Log data were entered on the third block, where meanDA_Log was entered on the final step of the model.

The model summary for the hierarchical regression analysis, with meanSESUD_log as the dependent variable, revealed continuing changes with the addition of independent variables across the four models. In Model 1, with AGE_log and GEN as predictors, the R^2 was .017, indicating that these variables explained approximately 1.7% of the variance in meanSESUD_log. However, the Adjusted R^2 was negative (-.004), suggesting that the model did not account for much variability beyond what would be expected by chance. The $F(2, 91) = .795$, change was not significant where $p = .455$. Table 10 presents the findings of the first model,

which controlled for AGE_Log and GEN in the regression model in which no significant predictive relationships were found.

Table 10

Hierarchal Multiple Regression Results Logarithmic Transformed Data--Model 1

	Unstandardized Coefficients		Standard Coefficients		
Model 1	*B*	SE	*β*	*t*	*p*
(constant)	.560	.175	----	3.206	0.002
Gender identity (GEN)	-.018	.036	-.052	-.500	.618
Logarithmic transformation of participants age (AGE_Log)	-129.000	.117	-.116	-1.109	.270

Note. $N = 94$. Dependent Variable: Mean Logarithmic Transformation of Self-Efficacy with Substance Use Clients (meanSESUD_log).

The inclusion of EXP_log into model 2 significantly improved the model, increasing the R^2 to .094, subsequently explaining 9.4% of the variance in meanSESUD_log. After accounting for the number of predictors, the adjusted R^2 also improved to .064, noting a better expression of the model's predictive power. The $F(1, 90) = 7.665$ was statistically significant at a p-value = .007, affirming the substantial role of EXP_log in the model. This advancement in the model's performance was also mirrored by better information criteria metrics, suggesting a more precise model fit (see Table 11).

Table 11

Hierarchal Multiple Regression Results Logarithmic Transformed Data--Model 2

	Unstandardized Coefficients		Standard Coefficients		
Model 2	*B*	SE	*β*	*t*	*p*
(constant)	.568	.169	----	3.367	0.001
Gender identity (GEN)	-.018	.034	-.056	-.568	.592
Logarithmic transformation of participants age (AGE_Log)	-.082	.114	-.073	-.717	.475
Logarithmic transformation of human services work experience (EXP_Log)	-.062	.022	-.281	-2.768	.007

Note. $N = 94$. Dependent Variable: Mean Logarithmic Transformation of Self-Efficacy with Substance Use Clients (meanSESUD_log).

Model 3 incorporated meanDUB_log, leading to a marginal increase in the model's fitness, where $R^2 = .117$. With this added increment from the inclusion of meanDUB_log, the model now accounted for 11.7% of the variability in the dependent variable of meanSESUD_log. Overall, this was a negligible increase in the model's explanatory power from the previous model. Besides the other statistics, the adjusted R^2 rose to .078, representing that the inclusion of meanDUB_log improved the model's fit. Despite this increase in the R^2 and adjusted R^2 values, the *F* change statistic for the addition of meanDUB_log did not reach statistical significance where $F(1, 89) = 2.337$, $p = .130$ (see Table 12). The non-significance of the *F* statistic indicated that, while meanDUB_log may have had some degree of association with meanSESUD_log, its contribution to the model did not significantly enhance the prediction of the dependent variable when considering the influence of the variables already present in the model. The lack of

significant explanatory change in this third model highlighted that not all additions would necessarily lead to statistically meaningful enhancements; therefore, the decision to retain meanDUB_log in the model relied on theoretical justification and the hypothesis.

Table 12

Hierarchal Multiple Regression Results Logarithmic Transformed Data--Model 3

	Unstandardized Coefficients		Standard Coefficients		
Model 3	*B*	SE	*β*	*t*	*p*
(constant)	.612	.170	----	3.603	< .001
Gender identity (GEN)	-.009	*.035*	-.028	-.275	.784
Logarithmic transformation of participants age (AGE_Log)	-.078	*.113*	-.070	-.689	.493
Logarithmic transformation of human services work experience (EXP_Log)	-.061	*.022*	-.277	-2.749	.007
Mean logarithmic transformation of drug use bias (meanDUB_Log)	-.241	*.158*	-.155	-1.529	.130

Note. $N = 94$. Dependent Variable: Mean Logarithmic Transformation of Self-Efficacy with Substance Use Clients (meanSESUD_log).

Model 4 introduced meanDA_Log resulted in a non-significant increase in R^2 ($R^2 = .123$) and a slight decrease in adjusted R^2 to .073. The F change statistic at $F(1, 88) = .565$ was not significant as the p-value was reported as .454, implying that meanDA_Log and the initial two hypotheses were rejected for the null hypothesis that there was no significant predictive effect for drug use bias, and death anxiety regarding addiction, counseling self-efficacy of masters level CITs (see Table 13).

Table 13

Hierarchal Multiple Regression Results Logarithmic Transformed Data--Model 4

	Unstandardized Coefficients		Standard Coefficients		
Model 4	*B*	SE	*β*	*t*	*p*
(constant)	.540	.196	----	2.760	.007
Gender identity (GEN)	-.008	*.035*	-.023	-.224	.824
Logarithmic transformation of participants age (AGE_Log)	-.047	*.120*	-.042	-.393	.695
Logarithmic transformation of Human services work experience (EXP_Log)	-.062	*.022*	-.282	-2.785	.007
Mean logarithmic transformation of drug use bias (meanDA_Log)	-.225	.159	-.144	-1.411	.162
Mean logarithmic transformation of death anxiety (meanDUB_Log)	.212	*.282*	.081	.752	.454

Note. $N = 94$. Dependent Variable: Mean Logarithmic Transformation of Self-Efficacy with Substance Use Clients (meanSESUD_log).

Research Question 2

Q2 Do years of work experience in human services impact students' perception of self-efficacy when working with substance use disorder populations?

H2a A significant predictive or explanatory power will exist between related work experience and perceptions of self-efficacy when controlling for age and gender identity.

The second research question investigated the extent to which, while controlling for gender and age, the overall fitness of a prediction model that, utilizing work experience as measured by EXP_Log, could predict addiction, counseling, and self-efficacy as measured by the

meanSESUD. The null hypothesis, for hypothesis 2 was, after controlling for gender and age, there was no predictive utility between student work experience as measured by the EXP_Log and addiction, counseling, and self-efficacy, as measured by meanSESUD_Log scores. As noted above, and after controlling for gender and age, the alternative hypothesis was that there was predictive utility between students' work experience as measured by the EXP_Log and self-efficacy in addiction counseling via meanSESUD_Log scores.

As before, a hierarchical multiple regression analysis utilized the dependent meanSESUD_Log results and the independent predictor EXP_Log. The following variable controls were incorporated into the model during the initial step of the regression analysis: (a) gender identity, denoted by the codes 0 = male, 1 = female, and 2 = gender non-conforming and (b) the transformed data of participants' age. The second phase was the input of the EXP_ data into the model. The R^2 value of 0.017 was relatively small, suggesting that the predictors accounted for only 1.7% of the variance in meanSESUD_log. The model exhibited an R^2 Change of 0.017 and $F(2, 91) = 0.795$. Nevertheless, the model failed to achieve statistical significance (p =.455), indicating that the combined influence of these two predictors may not adequately account for the variability observed in meanSESUD_Log. The results of a hierarchical regression analysis utilizing meanSESUD_Log as the dependent variable were outlined in Research Question 1 (see Table 10).

Conversely, Model 2, with the introduction of EXP_Log as an additional predictor variable, significantly improved the explanatory capability of the model, as evidenced by the R^2 value rising to 0.094. This change in R^2 indicated the model now accounted for 9.4% of the overall variance in meanSESUD_Log; a substantial increase in fitness compared to Model 1. Model 2's increased fitness as a model was also shown through an $F = 7.665$, where $F(1, 90)$.

The model overall demonstrated statistical significance (p =.007), emphasizing the considerable effect that EXP_log had on the model's predictive ability (see Table 11). Therefore, based on the significance, the no hypothesis was rejected, and intuitively and statistically, work experience had significant explanatory power over addiction counseling self-efficacy in master's level CITs. These findings were consistent with previous research and literature regarding counselors and training.

Research Question 3

Q3 To what extent do CITs' gender and death anxiety explain their perceptions or biases toward a substance use population?

H3a A significant predictive or explanatory power will exist between death anxiety and bias towards a substance use population.

H3b A non-significant, predictive, or explanatory power will exist between gender and bias towards a substance population.

The third research question examined the overall fitness of a prediction model for drug use bias as measured by meanDUB_Log, and the anxiety was measured by meanDA_Log when controlling for gender identity (GEN). The null hypothesis for this third question was that there was no predictive value between drug use bias (meanDUB_Log) and death anxiety (meanDA_Log) controlling for gender. As stated previously, the alternative hypothesis was that there was predictive utility between drug use bias (meanDUB_Log) and death anxiety (meanDA_Log) after controlling for gender.

The first model of the hierarchical regression analysis was completed to see if and to what extent gender identity (GEN) could predict the measure of drug use bias (meanDUB_Log). An unstandardized estimate of.038 for gender identity in the model's results pointed to a slight rise in meanDUB_Log for every unit change in gender identity (GEN). In Model 1, gender identity (GEN) was the sole independent predictor, yielding an *R*-value of .172, indicating a

correlation between GEN and meanDUB_Log. The R^2 value of .030 suggested that this model explained 3% of the variance in meanDUB_Log with $F(1, 92)$ with the p-value at a significance level of.097, showing that Gender Identity had a noticeable but not statistically significant prediction value for the model.

Model 2 introduced meanDA_Log along with GEN as independent predictors in the model. Model 2's R-value increased to .216, reflecting a stronger correlation with meanDUB_log than Model 1. The R^2 also improved to .047, as the two predictor variables now explained 4.7% of the variance in meanDUB_log. The adjusted R^2 was .026, indicating a marginally better fit of the model to the data. The inclusion of meanDA_Log led to an R^2 change of .017 and an $F(1, 91) = 1.619$. However, with a significance level of $p = .207$, the addition of meanDA_Log did not significantly enhance the model's predictive capability beyond what was provided by the gender identity variable alone.

As a result of the above outcome data, the first alternative hypothesis was rejected in favor of the null as the independent predictor of death anxiety, measured by meanDA_Log, failed to prove statistical significance in the model when predicting the level of drug use bias (meanDUB_Log). However, the second alternative hypothesis, which assumed a non-statistically significant predictive or explanatory relationship between gender identity (GEN) and drug use bias (meanDUB_Log), was accepted (see Table 14).

Table 14

Hierarchal Multiple Regression Results for Death Anxiety as a Predictor of Drug Use Bias Controlling for Gender Identity

	Unstandardized Coefficients		Standard Coefficients		
	B	SE	*β*	*t*	*p*
Model 1					
(constant)	.212	.023	----	9.293	< .001
Gender identity (GEN)	.038	*.022*	.172	1.675	.097
Model 2					
(constant)	.238	*.031*	----	7.727	< .001
Gender identity (GEN)	.034	*.023*	.157	1.525	.131
Mean logarithmic transformation of death anxiety (meanDA_Log)	-.221	.173	-.131	-1.272	.207

Note. Dependent Variable: Mean logarithmic transformation of drug use bias.

Summary

This chapter presented the study findings, including preliminary analysis of demographic data, descriptive statistics, and tests of pertinent statistical assumptions. All hypotheses were rejected for Research Question 1. Hypothesis 2a was accepted for Research Question 2, and all hypotheses for Research Question 3 were rejected. In general, the findings suggested that death anxiety and drug use bias did not serve as predictors of self-efficacy. Additionally, death anxiety was not found to be a predictor of drug use bias.

Nevertheless, there was a notable correlation between work experience and addiction counseling self-efficacy, as work experience accounted for a statistically significant percentage of the dependent variable of self-efficacy. This outcome supported previous research and

literature exploring the correlation between experience and self-efficacy in a given task. The subsequent chapter presents a comprehensive analysis and understanding of the current study findings. It will also include an evaluation of the impact on clinical practice, the study's constraints, and suggestions for future research.

CHAPTER V

DISCUSSION

This chapter presents a comprehensive recapitulation and discussion of the data analyses presented in Chapter IV along with a discussion of the study's implications and limitations. First and foremost, this chapter discusses the quantitative analysis and findings of this research and nest them within the constructs of Terror Management Theory and counselor education. Following this discussion, the second aspect of this chapter explores prospective clinical and educational research topics for terror management and counselor training outside of this study, as the findings did not support the central hypothesis. Finally, this section explores the study's limitations and considers directions for future research.

Summary of the Study

This study postulated awareness of the influence of death anxiety across developmental levels of CITs with substance use populations. Specifically, this study was designed to explore the hypothesized relationship of effects of death anxiety on CITs' overall efficacy in treating clients presenting with substance use disorders. This research permutation stemmed from a robust body of literature regarding death anxiety and exploring how intellectualized and cultural fortifications may provide CITs and counselor educators essential insights regarding foundational aspects of cultural meaning-making, fears of non-being and loss, and countertransference. The hope was to shed light on the direct impact of death anxiety on counselor trainee's personal counselor efficacy when working with high mortality salient and

high-risk populations. The primary constructs in this research included previously normed scales concerning the stigma of drug use bias, addiction counseling self-efficacy, and death anxiety. These instruments included the Death Anxiety Scale-Extended (DAS-E; Templer et al., 2006), the Stigma of Drug Users Scale (Palamar et al., 2011), and the Addiction Counseling Self-Efficacy Scale (ACSES; Murdock et al., 2005). Utilizing the scales mentioned above, along with self-identified demographics, this study investigated the extent to which death anxiety and substance use bias uniquely contributed to CITs' self-efficacy perceptions after accounting for demographic variables of age, gender, and professional experience. Therefore, it was surmised that nesting the study in a Terror Management Theory framework, which expressly hypothesizes the impact of death anxiety's bearing on personal narratives of symbolic immortality and other assuagements of death anxiety such as self-efficacy and self-esteem, would serve as an appropriate and effective theoretical foundation for the hypothesis noted above.

The study's initial sample was comprised of 118 master's level CITs from non-profit and private postsecondary institutions across the United States. After accounting for duplicates and incomplete responses, the final sample consisted of 95 participants. Moreover, one respondent was later removed as a statistical outlier, as determined by the Mahalanobis Distance analysis. The remaining 94 participants represented, via the self-reported demographic questions, a diversity that, although predominantly female, reflected the broader gender distribution trends within the field of counseling trainee programs as reported by national surveys (CACREP, 2022). The demographic inquiry extended to the participants' educational background, noting, for an $N = 94$, the limitation posed by the inclusion of 5 respondents from non-CACREP-accredited programs, whereas the other 89 CITs reported their master's program was CACREP-accredited. Geographic representation spanned 25 states, providing a robust and representative

dataset for the subsequent analyses. Finally, the researcher-developed demographic questionnaire did not account for racial, cultural, or ethnic identity, marking a focused but somewhat limited scope of demographic inquiry and resultant population for analysis.

In addition to the research-developed demographic questionnaire, three previously normed scales were completed by the 94 participants. The reliability of the instruments utilized was confirmed through sufficient Cronbach's α scores, where the range Cronbach's α for the three instruments was .892 to .962, attesting to the robustness of the scales used to measure drug use stigma, addiction counseling self-efficacy, and death anxiety. The study's methodological approach was a hierarchical regression and, therefore, before analysis, all assumptions for a hierarchical regression analysis were tested, including assessments of linearity, homoskedasticity, error independence, independence of independent variables, and multivariate normality. The data presented violated the assumption of multivariate normality, and these challenges in achieving a normal distribution were addressed through various data transformations, including mean scores, Log10, and reflection log transformations, albeit with noted limitations. The results of the hierarchical regression analysis are discussed in detail below.

Death Anxiety and Counselor Efficacy

As the study was constructed around the central hypothesis, exploring the first research question represented a significant portion of the study. This first question examined the psychological dynamics of non-being and the potential impact on the self-perceptions of CITs. Central to this inquiry was the hypothesis that death anxiety and substance use bias held predictive power over CITs' self-efficacy, particularly in the context of working with clients who presented with substance use disorders. The theoretical foundation of this research was Terror

Management Theory, which posited that the fear of death could influence professional and personal attitudes, beliefs, and behaviors.

The following five variables were utilized as independent factors in the hierarchical multiple regression analysis: (a) respondents' age, (b) gender identity, (c) experience in human services, and (d) total score on the Drug Use Bias scale (Palamar et al., 2011), (e) and total score on the Death Anxiety Scale-Extended (DAS-E; Templer et al., 2006). The dependent variable in the hierarchical regression analysis was the cumulative score on the Addiction Counseling Self-Efficacy Scale (SESUD). The first research question and hypothesis examined the predictive ability of the independent factors of death anxiety and substance use bias on the dependent variable. Additionally, variables of age, gender, and job experience in human services were controlled for in the model. The subsequent introduction of death anxiety and substance use bias into the regression equation was expected to reveal additional explanatory power and support the research hypothesis.

Contrary to the study's expectations, the findings of the regression model for the first research question showed death anxiety and substance use bias accounted for an insubstantial increment in the explained variance of self-efficacy among CITs. The outcome confirming the null hypothesis was noted by a non-statistically significant change in the R^2 upon the inclusion of the independent variables in question. The negligible change in variance explained by the construct of drug use bias and death anxiety pointed to a lack of statistical significance in their predictive relationship with self-efficacy. The same conclusion supporting the null hypothesis was reached after an exhaustive examination of potential interactions, checking for multicollinearity, and ensuring that the assumptions underpinning the regression analysis were better met. Nevertheless, even with the transformation of the data, the regression model

consistently indicated a statistically minimal impact of death anxiety and substance use bias on the self-efficacy of CITs.

The lack of significance in the independent variables' experiential condition posed both concern and confusion regarding the research and its fitness into the foundational theoretical underpinnings. The lack of a significant predictive relationship challenged the anticipated influence of existential concerns, as proposed by Terror Management Theory, on professional self-perceptions in addiction counseling (Becker, 1973; Greenberg et al., 2011; Routledge & Juhl, 2010; Servaty-Seib & Tedrick Parikh, 2013). Contrastingly, the theoretical model proposed by Terror Management Theory suggested that, by grappling with existential concerns and managing the terror of death, counselors could attain more profound insights into themselves, their motivations, and their practice, all of which would encourage a more nuanced understanding of the human condition.

Similarly, the findings invited a reevaluation of the assumed impact of substance use bias on counselors' confidence in their professional abilities. Regarding drug use bias, Terror Management Theory detailed that individuals were taught abstract concepts of meaning and worth from an early age through familial and cultural socialization. These concepts were not merely intellectual or moral guidelines but psychological tools that helped individuals cope with deeply ingrained fears of mortality through the creation of a perceived in-group and out-group (Arndt et al., 2004). According to Terror Management Theory, substance use could challenge codified morals of the perceived in-group, which was methodically shown to cause retraction in empathy and increase bias or judgment (Lacocque & Loeb, 1988; Solomon et al., 2015). Nonetheless, the findings of this study were antithetical to the robust literature preceding it regarding moral rectitude and mortality salience, as both of these noted outcomes for death

anxiety and substance use bias were contradictory to the theoretical philosophy and findings. Therefore, this research segment stood as a pivotal juncture in the study, marking a departure from hypothesized predictions and contributing to the scholarly discourse on the factors that shaped self-efficacy in emerging mental health professionals. However, the statistical exploration, while culminating in the rejection of the study's initial hypotheses, opened avenues for a more nuanced understanding of the complexities that underlined the development of self-efficacy in the realm of addiction counseling.

Experience and Self-Efficacy

In contrast to the findings of the first research question, the second inquiry of this study, which asked if there was an explanatory relationship between experience and self-efficacy, did reveal a significant relationship between the independent variable of work experience in human services and the dependent variable of self-efficacy perceptions when working with substance use populations. This finding and the support of the research hypothesis were statistically robust and aligned with existing literature, which acknowledged the pivotal role of experiential learning in shaping professional confidence. In the context of CITs, this relationship of efficacy to hands-on experience was invaluable, as it provided a tangible context in which theoretical knowledge from academic training could be applied, tested, and reflected upon.

Likewise, Bandura's (1977) Social Cognitive Theory suggested that self-efficacy was enhanced through mastery and vicarious experiences, verbal persuasion, and emotional arousal. Of these self-efficacy-boosting practices, mastery experiences were paramount, particularly in counselor education, where counseling skills were operationalized and reinforced through hands-on engagement with clinical skills during practicum and internships (Bandura, 1997; Barnes, 2004). Moreover, empirical evidence from Mullen et al. (2015) corroborated the progressive

development of self-efficacy in CITs through experiential learning and mastery experiences, as evidenced by a significant increase in efficacy metrics from the commencement of their master's program to the culmination of the final internship. Additionally, self-efficacy not only constituted a metric of professional growth within counseling but also positively influenced task execution and completion, thereby, functioning as both a result and a developmental construct in counselor training (Larson & Daniels, 1998; Mullen et al., 2015). As counselor trainees accumulated work experience and other experiential learning in their chosen field, they engaged in a myriad of client interactions, problem-solving scenarios, and personal *ecological momentary assessment*s regarding ethical decision-making, all of which contributed enormously to their professional identity development.

Beyond concrete learning objectives, trainees could learn to adapt their communication styles, intervention strategies, and therapeutic approaches to meet the needs of diverse clients, thus, providing an ever-expanding understanding of self as a burgeoning professional (Klassen, 2004). Such efficacy experiences with respect to diversity are integral to building a professional repertoire and a nuanced understanding of the counseling process and the role of intersecting identities (Klassen, 2004).

The statistically significant relationship identified in the study between work experience and self-efficacy also aligned with the practical and professional standards set forth by accrediting bodies. These standards mandated supervised clinical hours for counselor preparation and defined the notion of competence in education, clinical modalities, and populations in which a counselor practiced (ACA, 2014). The ethical foundation of competence was reflective of the core ethical guideline of beneficence, and the training and ethical requirement of supervision allowed CITs to integrate and synthesize knowledge and skills in a supportive environment,

thereby, enhancing their self-efficacy and safeguarding clients. Nevertheless, it was essential to recognize that, while mastery experiences and experiential learning were crucial to increased confidence, self-efficacy was not a product of a single event but rather a continuous developmental process that was reflective of and bolstered by a composite construct of an individual's self-belief in specific tasks and overall self-esteem (Becker, 1973; Mullen et al., 2015; Solomon et al., 2015).

In order to contextualize personal growth into Terror Management Theory, self-efficacy was intrinsically linked with introspection, meaning-making, the mitigation of death anxiety, as well as the foundational components of counseling skills, which included fostering hope, empathy, resilience, existential fulfillment, and the concept of symbolic immortality (Becker, 1973; Mullen et al., 2015; Sawyer, 2013; Yalom, 2008). As such, both self-efficacy and self-esteem did not emerge fully realized from an essentialist core, but rather, these constructs of esteem were shaped through the interpretive processes assigned to oneself, which reflected the roles, norms, and values imparted by one's cultural frameworks across the various ecological strata of society. In the framework of terror management, such a conception of personal worth posited that one's sense of morality, societal contribution, and intrinsic worth was inextricably linked to the individual's worldview, which, in turn, was itself a mosaic of the cultural milieu that had nurtured it (Becker, 1973; Solomon et al., 2015). Consequently, self-esteem could be understood as the profound recognition and belief in one's meaningful and enduring place within the world, a sentiment that was both shaped by and reflective of the broader cultural narratives and social structures that defined our existence (Becker, 1973; Solomon et al., 2015).

Conclusively, the second research question found a statistically significant and scholastically corroborated link between work experience in human services and the self-efficacy

of CITs. This relationship underscored the importance of direct, practical experience as a contributor to the development of a CIT's professional confidence and stood as a testament to the value of experiential learning in counseling education.

Gender and Death Anxiety Predicting Substance Use Bias

The third and final research question of the study examined the interwoven effects of gender identity and death anxiety and their potential to increase biases toward substance use disorder populations. In this case, the null hypothesis surmised there was no predictive effect between gender or death anxiety and the presence of substance use bias. In contrast, the opposite would be valid for the confirmation of the research hypothesis. As with the other research questions, this question utilized a hierarchical regression model which controlled for gender identity. The statistical model found neither gender identity nor death anxiety emerged as significant predictors of such bias. The lack of statistical significance in these findings required a reevaluation of the initial hypothesis that death anxiety would play a predictive role in biases toward individuals with substance use. However, such results contradicted other literature.

However, despite the statistical insignificance of both gender identity and death anxiety as predictors of substance use bias, the observed movement towards statistical significance and, therefore, the increased explanatory power of gender identity on substance used bias hints at a more complex interaction than revealed through the regression model. The observation that gender identity exhibited a discernible trend despite not reaching statistical significance raised questions regarding the more subtle influences of socialization, norms, morality, and expectations that may shape professional behavior and the development of biases.

Furthermore, the absence of a significant relationship between death anxiety and bias did not diminish the conceptual richness of the inquiry. On the contrary, it raised thought-provoking

questions about how existential concerns, such as death anxiety, integrated into the professional psyche of CITs and how this integration may or may not influence the judgment and perceptions of clients grappling with substance use disorder.

Once more, nesting this final research question into a terror management context, the criteria for attaining a form of symbolic immortality were deeply embedded within the cultural constructs of morality, specifically, the clash of good and evil as culturally prescribed, and this subjective truth presented across all aspects of personal identity (Becker, 1973; Solomon et al., 2015). These moral distinctions were inextricably bound to the dynamics of human relationships, and the social and collective process of moral internalization or oppression unfolded within the accepted cultural definitions of "good" behavior (Becker, 1973; Zebrowitz et al., 2008). The motivation to engage in moral behavior was fundamentally an endeavor to assert one's significance and, in doing so, stood in contrast to the natural order of impermanence (Becker, 1973). Therefore, allegiance to societal standards facilitated a sense of inclusion within the collective and provided an avenue to transcend one's smallness and finitude for alignment and connection, albeit at the exclusion and castigation of others (Becker, 1973). Finally, Terror Management Theory would note that when subjective, moral views were challenged, be that through individuals or groups, there was a tendency to retract and double down on one's own beliefs rather than experience the world as pluralistic and subjective; thus, bias, while harmful in action, was theorized to have ego boosting powers to assert one's place outside of nature (Greenberg et al., 2011; Solomon et al., 2015). The complexity of the findings from this final research question then lied in the ability to challenge and expand existing narratives regarding stigma and labels placed on a population within the counseling profession.

Implications

This study was crafted as an existential and introspective endeavor to enhance the preparation of CITs in relation to therapeutic substance use settings and populations. By utilizing multiple research-backed scales of death anxiety, addiction counseling bias, and self-efficacy with substance use populations, the study worked to offer a predictive exploration of CITs' awareness of how personal fears of non-being, socialized, and semiotic norms of morality and meaning-making, could impact work with clients through the avoidance and lack of understanding of deep seeded and internalized beliefs and fears of death. This awareness of these foundational means of symbolic immortality would equip clinicians with valuable insights into their biases early in their counselor education. As such, this research aimed to challenge the distorted or avoidant view of death presented in counseling training programs in which grief and loss were the focus rather than the phenomenological experience of personal death anxiety. Therefore, such a change in focus, from solely grief and loss to a more holistic view of death, would allow for a more nuanced approach to counselor education regarding the subject of death. Nevertheless, the lack of statistical significance across multiple hypotheses of this study stunted the discussion of implications despite the support of the second research hypothesis.

The lack of statistical significance and the confirmation of multiple research hypotheses notwithstanding, the comprehensive theoretical implications posed in the study extended across several domains of counselor education, practice, and research. The foundational theories that support the original hypotheses of the research invited educators, practitioners, and trainees to reflect deeply on the constructs of self-efficacy, death anxiety, and bias within the context of counseling, particularly as they related to working with substance use disorder populations. Moreover, the theoretical nesting of the study in Terror Management Theory may prompt a

reevaluation of current training models, encouraging educational efforts toward united approaches that considered a more comprehensive array of psychological and sociocultural factors of counselor development, such as death anxiety. This bolstering of social-ecological factors in counselor training could include an increased curriculum emphasis on exploring CITs' personal beliefs and biases surrounding meaning-making and cultural semiotics, particularly those related to death and substance use.

Furthermore, the theoretical underpinnings of the study underscored the importance of considering cultural narratives and how they informed counselor education and practice. The nuanced understanding of how societal constructs of meaning and worth influence professional self-perception and behavior with clients was vital, and the profession as a whole must continue to widen the allowance of a pluralistic worldview and broaden cultural competencies incorporated into training programs. In doing so, counselor education could enhance counselor trainees' ability to traverse personal biases and anxiety in a way that supported both the trainees and effective client-centered care.

Additionally, despite the research supporting the null hypothesis from most research questions, the statistical analysis found a significant explanatory relationship and support of the second research hypothesis, which explored the relationship between work experience in human services and self-efficacy. The known but further supported relationship between experiential learning and efficacy may have educational implications, such as suggesting that counseling programs may need to emphasize experiential learning opportunities above and beyond practicum and internship, especially across a varied and diverse population. Such an emphasis could ensure that CITs were academically prepared and confident in their practical skills and

judgment, as well as an increased understanding of self. The nature and quality of these practical experiences and the supervision provided may be critical factors in developing self-efficacy.

Limitations

As outlined in this chapter, the limitations of this study arose from many factors that may impact the interpretation and applicability of the findings. Every limitation indicated specific areas where one must exercise caution when interpreting the results. Additionally, these limitations provided the potential to enhance the methodology and broaden the comprehension of the elements that influence self-efficacy and biases in CITs.

Sample Characteristics

Firstly, the participants represented a convenience sample of CITs who opted to join the study, thereby, limiting the generalizability of the research and its findings. Likewise, the self-reported gender identity composition of the sample, with a predominance of female participants, was reflective of current trends within the field of counseling, where females were typically overrepresented. This overrepresentation may influence the study's results as it could potentially skew perceptions of self-efficacy and attitudes towards substance use disorders, given that gender could intersect with professional identity and experience in complex ways. Consequently, the insights, or lack thereof, gleaned from this research may be more applicable to self-identified female CITs and less so to their male or gender non-conforming counterparts, who were underrepresented in the sample. The gender dynamic limitations within the sample were especially pertinent when considering the potential intersectionality of gender with the other co-occurring independent variables in the study, as well as thinking about the socialized and cultural roles of gender as it related to the counseling profession. The discussion of the study's gender population as a limitation was critical since gender identity may shape the educational,

supervisory, and clinical experiences of CITs beyond the variables in question, all of which could influence their development of self-efficacy. The underrepresentation of male and gender non-conforming individuals within the study restricted the capacity to fully explore and understand the variables' interplay and dynamics across a more balanced gender spectrum.

In addition to gender distribution, the sample included participants from both CACREP-accredited and non-CACREP-accredited programs. The inclusion of CACREP and non-CACREP-accredited participants presented a weakness to the study's generalizability since CACREP-accreditation was commonly seen as an indicator of uniformity in educational experiences across counseling institutions. The variance in accreditation status introduced an element of educational variety that may decrease the validity of the findings. Furthermore, participants from non-accredited programs may have been exposed to different curricular content, fieldwork experiences, and levels of academic support, which may have influenced the development of self-efficacy for addiction populations. Likewise, students from accredited programs may also have had different educational experiences, potentially influencing their perceived self-efficacy and attitudes toward clients with substance use disorders. In either case, the variability introduced by the bimodal accreditation standard added a layer of complexity to interpreting the study's findings.

Geographical Representation

The geographical representation within the study, while encompassing a range of 25 states, was not uniformly distributed, potentially limiting the breadth of the conclusions of the analysis. Additionally, some states, like Colorado, produced an overrepresentation of participants. This fact raised questions about the regional specificity of the findings and whether they could be accurately extrapolated to the national counselor-in-training population. Perhaps

regional educational practices and cultural norms carried significant variance across the United States, and these differences may influence the training, attitudes, and self-perception of CITs. Conversely, the underrepresentation or absence of responses from other states left a gap in understanding how trainees in other states might differ in their experiences and perspectives.

Finally, the differing legal, social, and political climates from state-to-state could affect the context in which substance use disorders were seen and addressed, both in society and within the counseling profession. States with more stringent policies on substance use may cultivate varying attitudes and approaches in their counseling training programs, which could influence CITs' self-efficacy and biases toward drug populations. Also, substance use per capita varied by regional, state, local, and rural or urban settings, and this would impact trainees' exposure to substance use disorders, thereby, shaping the practical experiences that they encounter during their training.

Survey Response Rate

In addition to the limitation posed by the respondents and their lack of geographical diversity and gender identity diversity, the survey response rate of 11.2% posed a considerable limitation to the study's findings due to potential response bias, a common concern in survey-based investigations. Response bias arose when the attributes or viewpoints of the individuals who opted to provide feedback differed systematically from those who did not complete the survey. The missing data may skew the analysis and weaken the generalizability of the findings to the population. The low response rate of this study suggested that just a tiny portion of the whole population of CITs submitted the data used to conclude the findings. Additionally, it was also possible that the group of counselor trainees that responded to the survey did not accurately reflect the broader community, notably if the respondents showed a more substantial interest in

the subject matter. In this way, individuals who had a specific interest in death anxiety or substance use problems may have been more likely to participate in the survey which could have introduced a selection bias. Ultimately, as with all convenience sampling, the response rate issue was further compounded by the potential for volunteer bias.

Non-collection of Racial, Cultural, or Ethnic Data

The exclusion of data regarding racial, cultural, or ethnic identity in the study was a noteworthy constraint, given that these dimensions of identity were recognized to influence individuals' experiences and perspectives profoundly. The influence of one's identity and cultural background on self-perception and interaction with others was well-documented in the literature, and this was particularly relevant in the context of counseling, where cultural competency was a fundamental and essential skill.

Furthermore, biases have been frequently interconnected with an individual's cultural schema and past experiences. As a tenet of the study, personal biases have had the potential to impact the therapeutic process, and by ignoring the aspects of ethnicity and race on identity, the study may have failed to capture the biases or experiences of CITs. The omission of cultural background in the demographics for this research could result in overlooking crucial components that could contribute to systemic prejudice and oppression and their contribution or distraction from self-efficacy.

Finally, cultural humility, awareness, and responsiveness to social context have been crucial components of counselor training, as they contributed significantly to the development of self-efficacy and effectiveness. In addition, a counselor must understand and address their personal biases and the positive consequences cultural humility has on the therapeutic alliance. Neglecting to incorporate racial, cultural, and ethnic information may result in overlooking

substantial discrepancies in the formation and expression of self-efficacy across a diverse clinical population.

Statistical Assumptions Violations

The violation of statistical assumptions necessary for hierarchical regression analysis limited the study's conclusions. Furthermore, the work experience variable did not satisfy the linearity assumption for regression models due to multiple entries that indicated no months of experience. The data collection process pertaining to the assumption of linearity suggested that participants' self-efficacy and work experience might not exhibit a linear relationship. Consequently, the lack of adherence to the assumption of linearity may influence the model's ability to predict self-efficacy accurately. Moreover, the normality assumption was also in question, as evidenced by the skewness, kurtosis values, and outcomes of normality tests. When combined, these markers of non-normality in the data may result in biased estimates, impact the validity of the *p*-values obtained from the analysis, and raise issues regarding the reliability of the study's statistical findings.

Data Transformation

To address the non-normal presentation of the data, the study employed data transformations. The data transformation was essential for the assumptions underlying hierarchical multiple regression analysis as the raw data exhibited issues with normality. Nevertheless, the analysis still encountered difficulties in fulfilling the normality assumption. The ongoing problems with the assumption of normality indicated that the regression analysis may not accurately capture the data, which could affect the reliability of the study's conclusions. Since the data transformations were insufficient in resolving distribution concerns, the ensuing

analyses may produce skewed estimates, which might impact the study's results and the generalizability of its findings.

Exclusion of Outliers

While only one outlier was removed from the data, and the exclusion of outliers using Mahalanobis Distance was a standard statistical strategy to enhance the dataset's integrity, this method had the drawback of perhaps discounting valid data points that depicted authentic outliers within the population. The outlier in this study may have provided valuable insights into the behaviors and features of CITs who fell outside the normal range of the sample distribution, and their inclusion in the analysis could have led to a more comprehensive knowledge of the elements that influence self-efficacy and biases.

Multicollinearity of Independent Variables

While the multicollinearity of death anxiety and age was expected due to the theoretical underpinnings and previous literature, breaking this assumption for a hierarchical regression constrained the findings. Despite the regression model being designed to account for the interaction between the independent variables, the multicollinearity might muddy the understanding of their individual contributions. The presence of multicollinearity as a factor in the model might increase the variability of the coefficient estimates and reduce the model's reliability, perhaps resulting in overestimations or underestimations of the effect sizes. While the measures implemented to mitigate the effects of multicollinearity, such as organizing the model to incorporate correlated variables at separate stages, were methodically valid, nevertheless, the fundamental constraint persisted that the distinct impact of the interrelated variables on the result could not be definitively determined. Hence, although the model offered significant insights, one must exercise caution when interpreting the impact of age and death anxiety on self-efficacy.

Future Research

Future research should utilize the limitations of this study to expand upon and refine its structural and outcome measures through numerous permutations. The first of which would be to increase and diversify the sample population recruitment. Not only would this allow for a more robust and generalizable sample of CITs, but it would also increase geographical diversity and bring gender identity percentages of the sample population within the range of the national counseling trainee averages. Additionally, the purposeful inclusion of participants from a broader range of educational institutions, including non-CACREP-accredited programs, would help to provide additional insight into the effect of educational practices on counselor development, specifically around addressing death anxiety, drug use bias, and CITs' self-efficacy.

Furthermore, incorporating additional demographic characteristics into the study would expand the number of questions that could be answered by future research in this vein, as well as the richness and complexity of the found inferences. Similarly, enhanced demographic characteristics would aid in the examination of biases through a cross-cultural lens, emphasizing the importance of cultural stigma or acceptance regarding substance use. Further expansion of a cross-cultural demographic in future studies may also investigate how different counseling training programs approach the intersectionality of culture, death anxiety, and counseling practice. By asking and testing such research questions, future research could evaluate the effectiveness of intercultural training modules and counselors' ability to engage effectively with clients from diverse backgrounds, all while exploring strategies for addressing death anxiety and bolstering self-efficacy across cultural landscapes.

Other topics for future research could include concentrating on assumption breaches in statistical analysis and investigating alternative methodologies that are resistant to violations of

normality. By strengthening the analyses used, the rigor and dependability of this quantitative analysis and its associated research questions would be improved; this, in turn, would increase the quality of data guiding counseling education policies and practices. Similarly, qualitative research would offer another avenue to capture rich and detailed data exploring the complexities of the existential constructs beyond those captured by quantitative analyses. In particular, qualitative research on death anxiety, self-efficacy, and bias in counseling could investigate subjective experiences, personal narratives, and contextual elements that affect these phenomena. Furthermore, qualitative and longitudinal research would have the ability to consider the impact of mentoring, peer interactions, and institutional culture on CITs' viewpoints, biases and the development of clinical confidence across populations and time. Finally, case studies could also be commissioned to offer detailed analyses of specific instances where death anxiety and biases might impact clinical practice.

Another way to probe the impact of death anxiety and drug use bias on CITs' self-efficacy would be to implement a quasi-experimental design and interventional study. In this way, explorations of death anxiety and its impact on counselor efficacy might be seen more clearly through alleviation or transmutation of the symptoms through education and/or intervention. In addition to implementing training or education and scrutinizing the effects, future studies could also implement the historical terror management technique of death prompts in an experimental group.

The identified areas for future research above provide a comprehensive road aimed at enriching our understanding of the many factors impacting the development of effective, impactful, and unbiased counselors. By delving into the complexities of varied sample recruitment, regional representation, and longitudinal analysis, future researchers could uncover

the intricate ways in which demographics, place, and time influence counseling efficacy and viewpoints. Furthermore, investigating qualitative approaches, cross-cultural studies, and examining multicollinearity and statistical assumptions could encourage a more comprehensive and reliable understanding of the existential phenomenon. Whereas qualitative research focused on personal narratives and analysis of individual experiences could provide contextualized understandings of the elements that influence counselors' death anxiety, self-efficacy, and bias. All such investigations could have the potential to give deeper insights into the professional growth trajectories of CITs, emphasizing the dynamic interplay between personal experiences, educational settings, and professional development.

Conclusion

This study provided an evaluation of the association between death anxiety, drug use bias, and CITs' self-efficacy with addiction populations, with theoretical support from Terror Management Theory. Despite the fact that the statistical results did not support the assumptions, the study provided a foundation for future discussion on the multifaceted issues and their impact on counselor education. Nonetheless, the significant link between human service experience and self-efficacy emphasized the importance of practical experience in building confident and effective counselors.

Furthermore, the study's limits and unexpected findings encouraged future research to take a more inclusive approach to sample diversity and employ approaches that could overcome the obstacles of assumption violations articulated by this research. Future research is urged to investigate the cultural, educational, and experiential elements of death anxiety that influence self-efficacy and biases, perhaps through the use of qualitative or longitudinal methodologies. By doing so, counselor educators would have more knowledge of how counselors' personal

experience of death anxiety and prejudices influence their professional practice and, ultimately, the quality of care delivered to clients with drug use disorders.

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APPENDIX A

RESEARCHER-DEVELOPED DEMOGRAPHICS QUESTIONNAIRE

RESEARCHER-DEVELOPED DEMOGRAPHICS QUESTIONNAIRE

Please specify your current age (rounding to the nearest year): {Write-in answer}

Please specify your gender identity.

- o Female
- o Gender
- o Gender Non-Conforming {Write-in response}

Please specify, the number in number of years and months, your work and/or volunteer experience in human services, including practicum and internship, if applicable:
(Examples of human services work experience - case management, addiction counseling/treatment, social worker, behavioral technician, probation or parole office, child welfare specialist, occupational therapist etc.).
{Write-in answer}

Is your master's program CACREP accredited?

- o Yes
- o No
- o CACREP aligned and/or currently seeking accreditation

Please write in the full name of the state in which your master's program is located.
{Write-in answer}

Have you completed your practicum experience?

- o Yes
- o No

APPENDIX B

DEATH ANXIETY SCALE-EXTENDED

DEATH ANXIETY SCALE-EXTENDED

Items	Key	Statement
1	T	I am very much afraid to die.
2	F	The thought of death seldom enters my mind.
3	F	It doesn't make me nervous when people talk about death.
4	T	I dread to think about having to have an operation.
5	F	I am not at all afraid to die.
6	F	I am not particularly afraid of getting cancer.
7	F	The thought of death never bothers me.
8	T	I am often distressed by the way time flies so very rapidly.
9	T	I fear of dying a painful death.
10	T	The subject of life after death troubles me greatly.
11	T	I am really scared of having a heart attack.
12	T	I often think about how short life really is.
13	T	I shudder when I hear people talking about World War III.
14	T	The sight of a dead body is horrifying to me.
15	F	I feel the future holds nothing for me to fear.
16	T	I am afraid of dying on a hijacked plane.
17	T	I am afraid of being embalmed.
18	T	I'm scared the doctor will tell me I'm dying.
19	T	I'm anxious that I might die soon.
20	T	Movies involving people dying trouble me.
21	T	I'm afraid of dying in an accident.
22	T	I worry about what will happen to me when I die.

Items	Key	Statement
23	T	I fear drowning.
24	T	I am very much afraid of perpetual torture after death.
25	T	Death is a dark, scary, and lonely thing.
26	T	I am afraid of dying from a life-threatening disease.
27	T	I do not smoke since I am afraid of dying from cancer.
28	T	I am afraid that I do not know when death is going to come.
29	T	I very much fear burning in hell.
30	T	I very much fear being tortured to death.
31	T	Dreams that bother me involve death.
32	T	I would be afraid of flying in a plane because an accident could kill me.
33	T	I am afraid of sleeping alone.
34	T	I am very much afraid of a terrorist attack.
35	T	I often dream about death.
36	T	I avoid stories involving death.
37	T	I'm afraid of being killed in my sleep.
38	T	When I'm in small places I worry about being trapped and dying.
39	T	I won't let doctors treat me because sometimes they accidentally kill people.
40	T	I worry about overdosing on medication.
41	T	I am afraid of being burned or cremated while I am still alive.
42	T	I have nightmares about dying. Dreams about dying often wake me up.
43	T	It makes me nervous when I see an ambulance.
44	T	I am afraid of dying in a natural disaster.
45	T	I fear being killed in a war.

Items	Key	Statement
46	T	The idea of reincarnation frightens me.
47	T	When I think about death I can't go to sleep.
48	T	I don't like being around people who are very old.
49	T	I am troubled about the purpose of life.
50	T	The thought of no longer existing bothers me.
51	T	I worry that I might die today.

First 15 items = Death Anxiety Scale; last 36 items = Death Anxiety Scale--New; all 51 items = Death Anxiety Scale---Extended. Items are rated true/false.

APPENDIX C

THE STIGMA OF DRUG USERS SCALE

THE STIGMA OF DRUG USERS SCALE

The following 10 statements assess your level of agreement with how you think most people feel about illegal drug use. Please check off one answer for each drug. (Please remember that for opiates and amphetamine we are only assessing use outside of prescription or use to get "high").

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
Most people believe _____ users cannot be trusted.					
Marijuana					
Power Cocaine					
Ecstasy					
Amphetamine (Illegally)					
Opiates (illegally)					

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
Most people believe _____ users are dangerous.					
Marijuana					
Power Cocaine					
Ecstasy					
Amphetamine (Illegally)					
Opiates (illegally)					

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
Most people think less of a person that uses _____.					
Marijuana					
Power Cocaine					
Ecstasy					
Amphetamine (Illegally)					
Opiates (illegally)					

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
Most employers will not hire a person that uses _____. Marijuana Power Cocaine Ecstasy Amphetamine (Illegally) Opiates (illegally)					

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
Most people would not accept a _____ uses as a close friend. Marijuana Power Cocaine Ecstasy Amphetamine (Illegally) Opiates (illegally)					

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
Most people would not accept a _____ user as a teacher of young children in a public school. Marijuana Power Cocaine Ecstasy Amphetamine (Illegally) Opiates (illegally)					

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
Most people feel that _____ use is a sign of personal failure. Marijuana Power Cocaine Ecstasy Amphetamine (Illegally) Opiates (illegally)					

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
Most people would treat a _____ user just as they would treat anyone else.					
Marijuana					
Power Cocaine					
Ecstasy					
Amphetamine (Illegally)					
Opiates (illegally)					

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
Most Young women would not date someone who uses _____.					
Marijuana					
Power Cocaine					
Ecstasy					
Amphetamine (Illegally)					
Opiates (illegally)					

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
Most people will take a known _____ user's opinions less seriously.					
Marijuana					
Power Cocaine					
Ecstasy					
Amphetamine (Illegally)					
Opiates (illegally)					

APPENDIX D

ADDICTION COUNSELING SELF-EFFICACY SCALE (ACSES)

ADDICTION COUNSELING SELF-EFFICACY SCALE (ACSES)

Factor 1: Specific Addiction Counseling Skills

1. Assess a client's previous experience with self-help groups such as AA, NA, CA, and so forth.
2. Help a client determine who is available to support her/his recovery.
3. Help a client figure out what behaviors will support her/his recovery.
4. Teach a client about self-help support networks and related self-help literature.
5. Help a client develop realistic expectations about recovery.
6. Asses a client's readiness to change substance use.
7. Help a client recognize what triggers her/his substance use.
8. Challenge behaviors that interfere with a client's recovery.

Factor 2: Assessment, Treatment Planning and Referral Skills

9. Refer a client when I cannot treat her/his co-occurring mental illness.
10. Gather information about a client's employment history.
11. Assess a client's financial concerns.
12. Select high quality referral sources for a client if needed.
13. Gather information about a client's prior experience with substance abuse treatment.
14. Include a client in the referral and decision-making process.
15. Write accurate and concise assessment reports.
16. Use assessment data to develop a treatment plan.
17. Summarize a client's treatment and recovery information for other professionals.

Factor 3: Co-Occurring Disorders Skills	
18.	Work effectively with a client who has both a substance use and anxiety disorder.
19.	Work effectively with a client who has both a substance use and psychotic disorder.
20.	Work effectively with a client who has both a substance use and a mood disorder.
21.	Work effectively with a client who has both a substance use and a personality disorder.
22.	Screen clients for co-occurring disorders.
23.	Work effectively with a client who has both substance use and trauma-related issues.

Factor 4: Co-Occurring Disorders Skills	
24.	Help members of a counseling group support each other.
25.	Help members of a counseling group challenge each other responsibly.
26.	Develop trust and cohesion among members of a counseling group.
27.	Form a counseling group, including determining the type of group and selecting members.
28.	React spontaneously and responsively in a group counseling situation.

Factor 5: Basic Counseling Skills	
29.	Show empathy toward a client.
30.	Convey an attitude of care and concern for all group members.
31.	Create a therapeutic environment where a client will feel that I understand her/him.
32.	Establish a warm, respectful relationship with a client.

Items are rated on a 5-point Likert-type scale (1 = *Not Confident*, 5 = *Highly Confident*).

APPENDIX E

INSTITUTIONAL REVIEW BOARD APPROVAL

UNIVERSITY OF
NORTHERN COLORADO

Institutional Review Board

Date:	11/07/2023
Principal Investigator:	Jason Rose
Committee Action:	**IRB EXEMPT DETERMINATION – New Protocol**
Action Date:	11/07/2023
Protocol Number:	2308051503
Protocol Title:	THE IMPACT OF DEATH ANXIETY ON COUNSELOR-IN-TRAININGS' EFFICACY WITH SUBSTANCE USE POPULATIONS
Expiration Date:	

The University of Northern Colorado Institutional Review Board has reviewed your protocol and determined your project to be exempt under 45 CFR 46.104(d)(701) (702) (703) for research involving

Category 1 (2018): RESEARCH CONDUCTED IN EDUCATIONAL SETTINGS. Research, conducted in established or commonly accepted educational settings, that specifically involves normal educational practices that are not likely to adversely impact students' opportunity to learn required educational content or the assessment of educators who provide instruction. This includes most research on regular and special education instructional strategies, and research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.

Category 2 (2018): EDUCATIONAL TESTS, SURVEYS, INTERVIEWS, OR OBSERVATIONS OF PUBLIC BEHAVIOR. Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met: (i) The information obtained 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; (ii) Any disclosure of the human subjects' responses outside the research would not reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, educational advancement, or reputation; or (iii) The information obtained is recorded by the investigator in such a manner that the identity of the human subjects can readily be ascertained, directly or through identifiers linked to the subjects, and an IRB conducts a limited IRB review to make the determination required by 45 CFR 46.111(a)(7).

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Category 3 (2018): BENIGN BEHAVIORAL INTERVENTIONS IN CONJUNCTION WITH THE COLLECTION OF INFORMATION FROM ADULT SUBJECTS through verbal or written responses (including data entry) or audiovisual recording if the subject prospectively agrees to the intervention and information collection and at least one of the following criteria is met: (A) The information obtained 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; (B) Any disclosure of the human subjects' responses outside the research would not reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, educational advancement, or reputation; or (C) The information obtained is recorded by the investigator in such a manner that the identity of the human subjects can readily be ascertained, directly or through identifiers linked to the subjects, and an IRB conducts a limited IRB review to make the determination required by 45 CFR 46.111(a)(7). For the purpose of this provision, benign behavioral interventions are brief in duration, harmless, painless, not physically invasive, not likely to have a significant adverse lasting impact on the subjects, and the investigator has no reason to think the subjects will find the interventions offensive or embarrassing. Provided all such criteria are met, examples of such benign behavioral interventions would include having the subjects play an online game, having them solve puzzles under various noise conditions, or having them decide how to allocate a nominal amount of received cash between themselves and someone else. If the research involves deceiving the subjects regarding the nature or purposes of the research, this exemption is not applicable unless the subject authorizes the deception through a prospective agreement to participate in such research.

You may begin conducting your research as outlined in your protocol. Your study does not require further review from the IRB, unless changes need to be made to your approved protocol.

As the Principal Investigator (PI), you are still responsible for contacting the UNC IRB office if and when:

- You wish to deviate from the described protocol and would like to formally submit a modification request. Prior IRB approval must be obtained before any changes can be implemented (except to eliminate an immediate hazard to research participants).
- You make changes to the research personnel working on this study (add or drop research staff on this protocol).
- At the end of the study or before you leave The University of Northern Colorado and are no longer a student or employee, to request your protocol be closed. *You cannot continue to reference UNC on any documents (including the informed consent form) or conduct the study under the auspices of UNC if you are no longer a student/employee of this university.
- You have received or have been made aware of any complaints, problems, or adverse events that are related or possibly related to participation in the research.

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If you have any questions, please contact the Interim IRB Administrator, Chris Saxton, at 970-702-5427 or via e-mail at chris.saxton@unco.edu. Additional information concerning the requirements for the protection of human subjects may be found at the Office of Human Research Protection website - http://hhs.gov/ohrp/ and https://www.unco.edu/research/research-integrity-and-compliance/institutional-review-board/.

Sincerely,
Michael Aldridge
Interim IRB Administrator

University of Northern Colorado: FWA00000784

APPENDIX F

FORMAL ANNOUNCEMENT OF RESEARCH OPPORTUNITY TO COUNSELORS-IN-TRAINING

Hello Counselors-In-Training,

You are invited to participate in a brief research survey regarding counselors'-in-training Efficacy, which involves answering 93 questions and takes about 10-15 minutes to complete. All responses are confidential. Participation is entirely voluntary, though you must be at least 18 years old or older to contribute. Upon completion of the survey, participants may voluntarily elect to enter a drawing to win one of three $50.00 Amazon.com gift cards. If you are interested and over the age of 18, please click the link below:

Please note this the study is approved by the University of Northern Colorado's (UNC) Institutional Review Board (IRB), and should you have any questions or concerns regarding your selection or treatment as a research participant, please contact the University of Northern Colorado IRB at irb@unco.edu or 970-351-1910.

[SPACE TO INSERT QUALTRICS LINK]

Thank you greatly,

Jason Rose, M.A. LPC, LAC, NCC
Doctoral Candidate
Counselor Education and Supervision
University of Northern Colorado

APPENDIX: G

RECRUITMENT LETTER

Title of the Project: The Impact of Death Anxiety on Counselors'-In-Training Efficacy with Substance Use Populations

Student Researcher: Jason Rose, M.A.
Counselor Education & Supervision
rose4225@bears.unco.edu

Research Advisor: Heather Helm, Ph.D.
Counselor Education & Supervision
heather.helm@unco.edu

Dear Esteemed Counseling Faculty,

I am writing to inform you about an opportunity for your students to participate in a research study about counselors'-in-training efficacy. This study is being conducted as a part of my doctoral dissertation at the University of Northern Colorado. Here are some key details about the research study:

- **Title:** Counselors-In-Training Efficacy Survey
- **Objective**: To explore substance use bias and death anxiety impact on counselors'-in-training overall efficacy.
- **Duration:** This study comprises three questionnaires and should take between 10 and 15 minutes to complete.
- **Format:** This is an online survey accessible from any internet-connected device.
- **Benefits**: There are no known dangers linked with this study; however, focusing on mortality may cause cognitive and emotional distress. Though participation has no immediate advantages, survey questions may help students reflect and gain self-awareness.

Student participation is crucial to the success of this study, and by participating, your students will not only contribute to the academic community but also gain a deeper understanding of themselves as burgeoning counselors.

Participation is entirely optional, and participants may withdraw at any time. Participant confidentiality will be rigorously maintained in accordance with ethical standards. Likewise, personal information will remain strictly confidential and will only be used for research purposes.

If you are interested in allowing your students to participate, an email to forward to your students with a link to the survey will follow this one. If you are interested in learning more about the study, please feel free to reply to this email or contact me at rose4225@bears.unco.edu, and I would be happy to provide you with more detailed information and address any questions or concerns you may have.

Please note this the study is approved by the University of Northern Colorado's (UNC) Institutional Review Board (IRB), and should you have any questions or concerns regarding your selection or treatment as a research participant, please contact the University of Northern Colorado IRB at irb@unco.edu or 970-351-1910.

Thank you for considering being a part of this research endeavor. Your student's involvement is invaluable, and I look forward to the possibility of collaborating with them on this research.

Warm Regards,

Jason Rose, M.A. LPC, LAC, NCC
Doctoral Candidate
Counselor Education and Supervision
University of Northern Colorado

APPENDIX H

CONSENT FORM FOR HUMAN PARTICIPATION IN RESEARCH

CONSENT FORM FOR HUMAN PARTICIPATION IN RESEARCH

University of Northern Colorado

Title of the Project: The Impact of Death Anxiety on Counselors'-In-Training Efficacy with Substance Use Populations

Student Researcher: Jason Rose, M.A., LPC, LAC, NCC
Counselor Education & Supervision
email address: rose4225@bears.unco.edu

Research Advisor: Heather Helm, Ph.D.,
Counselor Education & Supervision
email address: heather.helm@unco.edu

You are invited to participate in the "Counselors-In-Training Efficacy Survey," a research initiative designed to evaluate factors of bias and anxiety and clinical efficacy. Jason Rose, a doctoral student in the Counselor Education and Supervision Department at the University of Northern Colorado, is conducting this research under the supervision of Dr. Heather Helm.

This study comprises three questionnaires about your typical thoughts, feelings, and responses across various situations and actions. It should take between 10 and 15 minutes to finish, and all recorded responses will be kept anonymous. You must be at least 18 years or older to participate in this study, and you may withdraw from the study at any time. While there are no known hazards associated with participation in this study and, therefore, there are no anticipated risks, there may be cognitive and emotional discomfort in reflecting upon death. Though participation has no immediate benefits, you may acquire some introspection and self-awareness considering the survey questions. Upon consent and completion of the survey, participants may choose to enter themselves into a random drawing to receive one of three $50 Amazon.com gift cards at the end of data collection by providing their name and email. The self-selected recipients will be chosen using a random number generator and contacted via email to claim their prize.

The data obtained and analyzed will be stored on a password-protected computer in a secure office. Only the primary researcher and the Faculty Research Advisor will know a name associated with a subject number, and your name will only be used for drawing for a gift card and not attached to any data. Moreover, names are not used in any report or permutation of the data or research as a whole. All identifiable information collected for this study will be deleted by the primary researcher three years after the conclusion of data collection.

Participation is entirely optional, and prospective participants may elect not to engage in this study. Should a participant decide to contribute to the research, please know they may withdraw at any time, and any decision will be honored. Moreover, withdrawal from the study will not result in any lost benefits to which you are otherwise entitled.

After reading the information above and having the opportunity to ask any questions, please select “Start” below if you are 18 years or older, currently enrolled in a masters-level counseling program, and wish to participate in this study. All participants will receive a copy of this form for future reference. If you have any concerns about your selection or treatment as a research participant, please contact the University of Northern Colorado IRB at irb@unco.edu or 970-351-1910.