8-2022

Attachment and Older Adults in Psychotherapy: A Latent Profile Analysis of Psychological Distress across Treatment

Brian Michael Stran
Western Michigan University

ATTACHMENT AND OLDER ADULTS IN PSYCHOTHERAPY: A LATENT PROFILE ANALYSIS OF PSYCHOLOGICAL DISTRESS ACROSS TREATMENT

Brian M. Stran, Ph.D.

Western Michigan University, 2022

Older adults have been largely underrepresented within the psychotherapy literature. Given the unique social and emotional changes associated with older age (Carstensen et al., 1999) and the perceived gap in training that trainees report in working with older adults (Woodhead et al., 2015), there is a pressing need for research that can aid mental health practitioners in the conceptualization, treatment planning, and treatment of their older adult clients.

In the first part of this manuscript, an integrated theoretical model, consisting of socioemotional selectivity theory (SEST; Carstensen et al., 1999) and attachment theory (Bowlby 1969), was developed to provide psychotherapists with a more complete conceptualization of older adult clients. This integrated model combined the normative emotional and social network patterns in older adults predicted by SEST with attachment theory's prototypical attachment styles of secure, anxious, avoidant, and disorganized attachment. SEST's perspective of normative social aging was used to help inform and adjust if certain social behaviors should be viewed as pathological or not. Stemming from the consolidation of these theories, specific recommendations to clinicians, supervisors, and training programs regarding client conceptualization, treatment planning, and progress tracking were provided.

In the second part of this manuscript, an archival study was conducted that sought to aid researchers and clinicians in the conceptualization and treatment of older adult clients through the development of clinical profiles. To establish the number of valid profiles, their characteristics, and how they differ in treatment outcomes across the first six sessions of psychotherapy, a latent profile analysis (LPA) and subsequent analysis of covariates (ANCOVA) were conducted. Because attachment theory's potential application to the unique social experiences of older adults and the transdiagnostic nature of psychological distress, the subscales of the Experiences of Close Relationship scale and Outcome Questionnaire 45.2 were used as the LPA's indicator variables. With a sample of 172 clients who are 55 years or older, a three-profile model was identified, and each participant was assigned to a profile. Each profile was characterized based on mean scores of each indicator variable: Profile 1 was identified as "Secure Attachment and Low Psychological Distress"; Profile 2 was identified as "High Attachment Anxiety and Psychological Distress"; and Profile 3 was identified as "High Attachment Avoidance and Moderate Attachment Anxiety and Psychological Distress." Next, ANCOVAs were conducted to evaluate differences in change in psychological distress across the first six sessions of therapy. Results suggested that while Profile 2 experienced the greatest change in psychological distress across the first six session of therapy, they were also the only profile to remain within the clinically significant range of distress. Further clinical and research applications were explored. Overall, the development of the three-profile model and examination of profile differences in treatment outcomes provides a novel and potentially useful tool in the psychological treatment of the largely under-studied population of older adults.

ATTACHMENT AND OLDER ADULTS IN PSYCHOTHERAPY: A LATENT PROFILE ANALYSIS OF PSYCHOLOGICAL DISTRESS ACROSS TREATMENT

by

Brian M. Stran

A dissertation to the Graduate College
in partial fulfillment of the requirements
for the degree of Doctor of Philosophy
Counseling Psychology and Counseling Education
Western Michigan University
August 2022

Doctoral Committee:

Eric Sauer, Ph.D., Chair
Kelly McDonnell, Ph.D.
Janet Hahn, Ph.D.

ACKNOWLEDGMENTS

The completion of this dissertation would not have been possible without the support and mentorship of my advisor, Dr. Eric Sauer. I want to express my gratitude for his patience, advocacy, and expertise in the development and creation of my dissertation. His guidance as my advisor, clinical supervisor, and mentor has prepared me to actively contribute to the field of counseling psychology.

I would also like to thank the other members of my dissertation committee, Dr. Kelly McDonnell and Dr. Janet Hahn, for dedicating their time and efforts throughout the dissertation process. They both compassionately pushed me to continue improving my skills as a researcher and how I express the findings of my dissertation. Dr. McDonnell's years of work as my clinical supervisor have left a positive lasting impact on how I view myself and work with my clients.

I grateful to my cohort, friends, and family for their support throughout my many years of graduate training. Without the assistance of Kara Annecharico and her frequent trips to the clinic to record data, this project would not have been completed. I particularly want to thank Jon Hook and his family for their support and opening their home to me so I would not have to drive home during the bad Michigan winters. Finally, I want to thank Eileen Joy for her contributions to my growth as a psychologist and her immeasurable contributions to my happiness and fulfillment as a person.

Brian M. Stran

TABLE OF CONTENTS

Table of Contents – continued

Table of Contents – continued

APPENDICES

LIST OF TABLES

LIST OF FIGURES

CHAPTER I

INTRODUCTION

Attachment theory and it's unique developmental perspective has been a crucial tool used by clinicians in psychotherapy, aiding them in the identification of harmful interpersonal patterns and conceptualizing their clients' history. While concepts of attachment theory, like attachment style, have been applied across the lifespan, attachment theory alone does not account for the unique developmental social changes of older age. The integration of complementary developmentally focused theories with attachment theory may serve to provide a more complete understanding of the interpersonal realities of older adults. Socioemotional selectivity theory (SEST; Carstensen et al., 1999) offers insight into the age-related social changes of older adults that most developmental theories do not offer. The integration of SEST and attachment theory may aid clinicians, supervisors, training programs, and researchers in conceptualizing older adults in psychotherapy and provide a more complete understanding of the social environment and needs of older clients.

Attachment Theory in Psychotherapy

Developed by John Bowlby (1969), attachment theory provides conceptualizations of interpersonal relationship patterns and emotion regulation across the lifespan. Research has highlighted the significant role that one's attachment patterns have on mental health. Specifically, maladaptive attachment patterns within and outside of psychotherapy have been identified as a predictor of negative psychotherapy outcomes, including substance use, lower self-esteem, anxiety, depressive symptoms, and disordered eating (Fairbairn et al., 2018; Lee &

Hankin, 2009; Levy et al., 2018). From its identified relationship with psychotherapy outcomes and its potential application to client psychopathology, clinicians have used attachment theory to inform their practice (Wei, 2008). Although the current research on attachment-informed psychotherapy focuses on the therapeutic process and outcomes, attachment theory may also provide insight when conceptualizing clients' presentations.

Attachment Theory Overview

Bowlby (1988) proposed that all people are born with the evolutionarily developed need to obtain feelings of comfort and safety from their primary attachment figure (e.g., caregivers and parents) in the form of close relationships. This instinct to connect with caregivers is deeply rooted in the evolution of humans and the need for caregivers to ensure survival, especially in infancy. As young children, people seek proximity and care from their primary attachment figures though the employment of proximity-seeking behaviors. These behaviors in infancy and early childhood often display themselves as expressions of distress that communicate the need for the caregiver to provide safety and comfort (Bowlby, 1988). By obtaining the attention of the caregivers, children are seeking assurance of safety and resulting comfort. The way primary attachment figures respond to this attention-seeking behavior is proposed to have significant implications to the development of personalities, psychopathology, and relationships with others in adulthood (Bowlby, 1969). As people enter childhood and adolescence, they expand their seeking of attachment needs to family members, close friends, and eventually romantic relationships.

From repeated interactions with primary caregivers, children start to develop internal working models that make up their expectations of themselves and the behaviors of others (Bowlby, 1988). Central to how these early experiences have lifelong implications, internal

working models unconsciously "influence what information individuals attend to, how they interpret events in their world, and what they remember" (Pietromonaco & Barrett, 2000; p.156) . In situations where a child's attachment system is activated and the caregiver does not consistently offer the child feelings of safety and comfort, the child may start to engage in reactive or dismissive behaviors in an attempt to obtain feelings of comfort and security. Additionally, the child's internal working models start to develop beliefs about their worthiness of care and expectations for how others will treat them (Bowlby, 1989). Both the internal working models and attachment-related behaviors are theorized to continue into adulthood and display themselves in maladaptive relationship patterns (Hunter & Maunder, 2015). Researchers have expanded on this understanding of attachment-related behaviors and developed frameworks in which to understand them.

Central to attachment theory is the concept of attachment styles. Attachment styles are relatively stable behavioral patterns that individuals develop to obtain comfort and security from their relationships (Bowlby, 1988). However, the behaviors that people use to obtain comfort and security can be rooted in destructive or maladaptive means. Ainsworth (1970) first provided empirical evidence of attachment styles in her series of seminal studies using the "Strange Situation." In her study, she would place an infant in a room with their mother and a stranger. The experimenter then would instruct the parent and stranger to leave, creating situations where the child was left alone, alone with the stranger, and alone with the mother. Based on the attachment-related behaviors the infant showed when reunited with the parent (e.g., proximity-seeking behavior, maintained contact, avoidance of proximity, and resistance to contact), three distinct patterns were identified: secure attachment, ambivalent-insecure attachment, and avoidant-insecure attachment. Ainsworth (1970) identified secure attachment based on the

child's observed mild distress when the mother left and positive reactions when reunited. Ambivalent-insecure attachment was identified by extreme distress when the mother left and ambivalent to the attention of the mother when reunited. Lastly, the avoidant-insecure attachment style was identified by minimal distress when the mother left and ambivalence to the mother's return. Although there are also biological factors associated with the development of attachment style (Rees, 2007), a primary caregivers' inability or refusal to provide consistent comfort and safety to their child has been largely identified as a primary reason behind the development of insecure attachment styles (Lee & Hankin, 2009). Building off Ainsworth's work, attachment researchers provided additional empirical evidence of attachment styles. Researchers, Main and Soloman (1986) introduced a fourth attachment style, disorganized, that describes children with both anxious and avoidant features stemming from inconsistent or unpredictable caregiving. With attachment theory conceptualized as relevant across the lifespan, attachment researchers expanded their conceptualizations of attachment style into adulthood.

In one of the first applications to adult attachment, Hazan and Shaver (1987) proposed a four-attachment style model in regard to romantic relationships: secure attachment, anxious-preoccupied attachment, dismissive-avoidant attachment, and fearful-avoidant attachment. Considered most associated with healthy behaviors, secure attachment is demonstrated through the ability to maintain mutually satisfying relationships and effective management of emotions (Hazan & Shaver, 1987). Anxious-preoccupied attachment is identified through persistent worry about abandonment by others and high emotional reactivity to stressors (Hazan & Shaver, 1987). The dismissive-avoidant attachment style is identified by the emotional and physical avoidance of close relationships in order to avoid being rejected by others (Hazan & Shaver, 1987). Lastly, Hazan and Saver identified fearful-avoidant attachment through the presence of both anxious and

dismissive behaviors; these behaviors include both wanting emotional closeness, while also fearing the associated vulnerability. Generally speaking, these insecure attachment styles develop when instinctual secure attachment behaviors fail to satisfy the needs of the individual (Hazan & Shaver, 1987). Although attachment researchers have moved away from the categorical approach to attachment styles, the emphasis on anxiety and avoidant attachment-related behavior persists.

Modern psychotherapy researchers have adopted a two-dimensional model, where an individual's attachment style is reflected in the degree in which they demonstrate anxious and avoidant attachment behaviors (Fraley & Spieker, 2003; Mikulincer et al., 2003). The first dimension of anxious attachment refers to a person's tendency to worry about the quality of their relationships, sometimes resulting in the need to engage in behaviors that they believe will make others care for them (Gillath et al., 2017; Mikulincer et al., 2003); additionally, individuals with high anxious attachment tend to experience greater emotional reactivity to stress. The second dimension of avoidant attachment refers to the degree in which a person attempts to avoid emotional vulnerability in their relationships out of fear they may be rejected; this avoidance of vulnerability may result in the lack of close emotional relationships and the over-regulation of emotional states (Gillath et al., 2017). Lower avoidant and anxious attachment scores are associated with secure attachment, while elevated scores on either dimension are associated with greater insecure attachment. Relevant across both childhood and adulthood, this two-dimensional approach to attachment style have been frequently used within clinical research and are applicable to the conceptualization of adult psychopathology.

Especially in the case of older adults, higher avoidant or anxious attachment have been associated with several psychological concepts that may be relevant to conceptualizations of clients in psychotherapy. Insecure attachment in older adults has been identified to predict

negative psychological outcomes, including loneliness (Ong et al., 2015; Spence et al., 2018), severity of depressive symptoms (Bradley & Cafferty, 2001; Spence et al., 2018), severity of post-traumatic stress disorder symptoms (Ogle et al., 2015), low ability to cope with pain (Monin et al., 2014), and general wellbeing (Kafetsios & Sideridis, 2006). Consistent with attachment theory's understanding of maladaptive behavior patterns associated with insecure attachment, older adults' difficulties maintaining supportive and emotionally close relationships were consistently identified as mediating factors within these studies. With existing evidence to suggest that an attachment theory lens is an effective tool in understanding psychological outcomes, attachment theory may also serve to inform clinicians' conceptualizations of client clinical presentation and treatment planning.

Attachment Theory and Client Conceptualization

Building on the principles of attachment theory, Bowlby (1977) argued that attachment can meaningfully contribute to the field of psychotherapy. Although much of the present attachment-related psychotherapy literature is related to the psychotherapy process (Sauer et al., 2003; Sauer et al., 2010) and psychotherapy outcomes (see Levy et al., 2018), attachment theory's perspective on development and presentation of maladaptive behaviors can be used by clinicians to complement other theoretical approaches to therapy. Wei (2008) offered the idea that attachment theory may be effectively used to conceptualize client behavior through its application to client history and current behavioral or cognitive patterns. Regarding client history, attachment theory may offer complementary information that highlights the importance of early childhood relationships and how current behaviors may be connected (Wei, 2008; Wei et al., 2003). Specifically, the identification of early childhood relationships may help provide context to the behavioral patterns that were needed for the client to survive their early

environment (Wei et al., 2003). Additionally, attachment theory's insight on concepts like internal working models and attachment style may offer a complementary perspective by which to explain client behavioral or cognitive patterns (Lopez et al., 2001; Wei, 2008). The identification of internal working models, developed from an early age, may serve to highlight cognitive patterns and beliefs that underlie the way clients interact with the world and self. By identifying interpersonally focused thinking patterns that have persisted across a client's life, client's internal working models may become more clear. Through the anxious and avoidant attachment dimensions of attachment style and their direct impact on relationships, clinicians may use attachment style as an alternative perspective on pathological behavior (Wei, 2008). While not an approach to psychotherapy, attachment theory has the potential to inform clinician conceptualizations of client difficulties and behaviors.

Limitations of Attachment Theory in Clinical Settings

Much of the clinical attachment literature is focused on attachment's application to childhood and young adulthood, leaving a dearth of clinically focused research with older adults. While I was unable to identify any attachment-related studies that specifically utilized an older adult clinical sample, researchers have identified the potentially negative psychological consequences of insecure attachment patterns in non-clinical older adult samples, like lower psychological wellbeing, increased complicated bereavement, and increased depressive and anxiety symptoms (Bodner & Cohen-Fridel, 2010; Kafetsios & Sideridis, 2006; Monin et al., 2014). This lack of clinical research into older adults may stem from the lack of formalized training students and trainees get in their graduate training in issues of aging (Pachana et al., 2010; Woodhead et al., 2013; Woodhead et al., 2015) and the potential focus on attachment as it relates to children within these programs. The incorporation of a developmentally focused

theory, that explains the social and emotional experiences of older adults, with attachment theory may provide an opportunity for researchers and clinicians to highlight the unique interpersonal presentations of older clients. By providing a more complete understanding of the experiences of older adult clients, this integrated framework may provide a meaningful foundation for older adult-focused future attachment research.

Socioemotional Selectivity Theory

Socioemotional selectivity theory (SEST; Carstensen et al. 1999) is a sociopsychological developmental theory that attempts to explain the relation between older adults' interpersonal patterns, time horizons, personal goals, and emotions. Stemming from its core concept of shortened time horizons, SEST addresses the temporal change in goal setting, the trimming of social relationships, and preference for positive stimuli. A large body of research supports the concepts of SEST and the generalizability of its results across a diverse range of older populations (see Reed et al., 2014). Because of the comprehensiveness of the theory and the strong supporting evidence, SEST may benefit psychological practice with older adults.

Shortened Time Horizons and Goal Realignment

Central to SEST is the idea that as adults chronologically age, they tend to believe that they have less time remaining of life, also known as a shortened time horizon (Carstensen et al., 1999; Carstensen et al, 2000). This process is typically observed starting in middle adulthood and gradually increases into late adulthood (English & Carstensen, 2014). From this shortened time horizon, older adults tend to develop personal goals and motivations that are focused on present needs and emotional satisfaction (Carstensen & Mikels, 2005). The connection between older age, shorten time horizons, and goal realignment has been strongly supported within the literature across international populations (see Fung et al., 2008; Fung & Isaacowitz, 2016).

However, this phenomenon is not exclusively connected to age and has been observed in populations of younger adults who experience real or perceived shortened time horizons, like those with terminal breast cancer (Sullivan-Singn et al., 2015) and those asked to imagine a dramatically reduced lifespan (Barber et al., 2016; Fung & Carstensen, 2006). Inversely, researchers have found that older adults can be made to develop personal goals that are similar to younger adults under controlled experimental conditions, when prompted to imagine a much longer time horizon (Fung et al., 2000). While chronological age is strongly associated with this goal alignment, SEST suggests that shortened time horizons are the mechanism in which goals realign.

Carstensen and colleagues (1999) suggest that there are two functional categories of goals: those related to the gaining of knowledge and those related to regulation of emotional states. While goals related to emotional regulation often do not require large quantities of social contact, goals related to knowledge acquisition often require large diverse social networks to maximize information input (Carstensen et al., 1999). From the collected data of knowledge acquisition goals, people can determine their preferences, worldviews, social rules, and appropriate behavioral patterns (Carstensen et al., 1999). In contrast, goals of emotional regulation generally involve individuals attempting to minimize negative experiences, while maximizing positive experiences. Across the lifespan, humans attempt to balance these two goals based on what is advantageous for their stage of development (Carstensen et al, 2000; Carstensen & Mikels, 2005). SEST suggests that while younger adults may be willing to sacrifice their emotional goals for the prospect of a better future through knowledge acquisition (e.g., college or starting a low paying job with the potential for advancement), older adults perceive their remaining time as limited, and focus on their current needs and happiness.

Social Selectivity

Connected to the shifting of goals, is the observed downsizing of social networks (Carstensen et al. 1999). SEST posits that the observed social selectivity of older adults is a direct result of shifting goals and motivation (Carstensen et al, 2000). This social pruning typically consists of cutting periphery social relationships, like associates and work friends (Carstensen et al. 1999; Carstensen & Mikels, 2005). In a meta-analysis of 277 studies, containing 177,635 participants, researchers found strong support for the finding that social network size peaks in adolescence and early adulthood and begins to decline as adults grow older (Wrzus et al., 2013); they also found that while friendship and associate networks continued to decline throughout older adulthood, family networks remained stable across the lifespan. Carstensen and colleagues (2003) suggested that the removal of these periphery relationships is a function of a stronger focus on the people who provide the most amount of relational satisfaction, like spouses, children, and siblings. The burdens of maintaining larger social networks are likely advantageous for younger adults in their pursuit of long-term knowledge gathering goals; however, the social selectivity of older adults maximizes their exposure to rewarding emotional experiences with loved ones, while minimizing the risk of negative experiences with periphery relationships.

Positivity Effect

Stemming from the shortened time horizons and realignment of goals in older adults, SEST postulates that there is a resulting preference for positive stimuli as compared to younger adults, called the *positivity effect* (Carstensen & Mikels, 2005). Specifically, the *positive effect* directly relates to the observed preference older adults demonstrate in their attention and memory of positive information and away from negative information (Carstensen & Mikels, 2005). A

meta-analysis of 100 empirical studies of the *positivity effect* identified a consistent attentive and memory preference for positive information by older adults and an opposite preference in younger adults (Reed, et al., 2014). That is, younger adults have the exact reverse relationship, where attention and memory is directed towards negative information and away from positive information. Carstensen and colleagues (2018) suggest that the contrasting preferences of older and younger adults relate to their information gathering and emotional regulating goals. Since younger adults tend to set goals related to gathering information that discerns things like potential threats, it makes sense that their attentional and memory preferences would be drawn towards stimuli that is potentially threatening (Carstensen & DeLiema, 2018). Notably, the *positivity effect* is not an inherently conscious process, evidenced by the consistent finding that the *positivity effect* is observed strongest when researchers only ask older participants to observe rather than memorize or explicitly process stimuli (Reed et al., 2014; Reed & Castensen, 2012).

Limits of SEST Research

While there is substantial evidence supporting the components of SEST across age and diverse populations, some areas of research are missing. Since SEST was developed, it has been largely supported within the fields of developmental and cognitive psychology; however, there is a dearth of research in its application to psychotherapy. From my review of the literature, I did not find any cases of research using explicitly SEST-related variables with clinical populations. SEST has been used to explain the results of qualitative analyses in a sample of older women in Alcoholics Anonymous (Ermann et al., 2016) and to provide additional context for preexisting psychotherapy theories, like Cognitive Behavioral Therapy (Charles, 2010; Knight & Poon, 2008; Laidlaw & McAlpine, 2008). Another significant limitation of SEST research is the primary focus on normative development. Within my review of the literature, no research has

sought to explore deviations from the model or factors associated with this deviation. Despite these limitations, SEST still has the potential to inform existing psychological practice and research.

Integration of Attachment and SEST: A Lifespan Development Attachment Model

Attachment theory alone does not provide a complete understanding of older adult's psychosocial developmental patterns. Because social structures change in older adulthood, clinicians who incorporate attachment theory into their practice may inaccurately conceptualize older adult behavior. The insight regarding the psychosocial development of adults provided by SEST has the potential to aid clinicians in their understandings of normative social development in older age. Beyond illuminating normative development, SEST may also improve the identification of maladaptive attachment behavioral patterns and may be reflected in the recovery patterns of psychotherapy. Although the emotional develop aspects of SEST and attachment theory are likely theoretically connected, the current integration focuses on the behavioral and interpersonal aspects of the two theories.

Attachment and Normative Changes in Social Network

In conceptualizing normative social relationships for older adults, SEST provides the understanding that as people age, their social networks tend to become smaller and consist mainly of close relationships (Carstensen et al. 1999). Although there is cultural variation in the size of the social networks, the phenomenon of social selectivity has been identified in African, Asian, European, and North American samples (Cheng et al., 2009; Harling et al., 2020; Litwin, 2010; Schwartz & Litwin, 2018). Central to this social selectivity is the retention of close relationships like immediate family members and long-term friends (Carstensen et al. 1999). Integrating with attachment theory, normative social selectivity and decreasing social networks

over time are behaviors consistent with those demonstrating secure attachment patterns through the maintenance of close interpersonal relationships. While attachment theory alone does not account for aging related reductions in social networks, the ability to maintain meaningful and trusted relationships connects the normative aspects of these two frameworks.

For clinicians, it is important to understand the normative changes in social networks for older adults, because healthy behaviors may be misidentified as indicators of psychopathology and maladaptive attachment styles. Clinicians working from an attachment framework often look for certain behaviors and interactions as indications of overall attachment style (e.g., emotionally cutting yourself off from someone is a behavior associated with avoidance attachment; Wei, 2008). Clinicians can easily misidentify the normative reduction in social networks predicted by SEST as an indication of avoidant or anxious attachment patterns. If a clinician sees an older client's social network change by pushing away previously held relationships, they may interpret the client's behavior as an indicator of pathological avoidance of relationships and label them with an avoidant attachment style. Inversely, if a clinician sees an older client's significantly increased reliance on close friendships or family members as a means of fulfilling social needs, they may interpret the client's behavior as an indication of abandonment anxiety and label the client with an anxious attachment style.

Importantly, clinicians need to understand the degree to which the client is being impacted by this change in social networks. If the older client is not indicating any hindrance in getting their social needs met and wellbeing is still maintained, the client's social network change is likely normative and non-pathological. However, if this social change does result in distress to self or others, it is possible that maladaptive attachment patterns are contributing to these social network changes.

Case Example. A 64-year-old African American man is seeking psychotherapy on the behest of his wife of 40-years. He reported that he retired approximately a year ago, due to a back injury that made doing his job impossible. Although the client is still able to move around, he is unable to pick up anything over 50 lbs. The client's wife expressed concern about the client's recent lack of communication with old work friends and lack of community involvement. Prior to retirement, the client invested long-hours into his work and would spend most weekends socializing with his work friends. In addition, he was heavily involved with a local community organization, serving in leadership roles over the past several decades. In response to his wife's concerns, the client has said that his old friends had not made an effort to talk to him and he does not really see the point in reaching out. He added that he feels like spending time with his wife and adult children is a much better use of his time than attending community events. When asked, the client stated that his wife and children have been his primary source of social interaction for the past year.

From a solely attachment perspective, there appears to be some indication that the client is demonstrating avoidant attachment behavior through his lack of communication with work friends and lack of involvement with the community organization. The client's avoidant behavior may potentially be a product of him emotionally cutting himself off from the potential abandonment, paralleling the abandonment he experienced from his job when he was forced to retire. However, through an integrated framework, the client's behavior may not be pathological. Within the context of the client's age and recent retirement, the reduction of the client's social network is likely normative; he no longer is forced to interact with coworkers through his job and has shifted his priorities to spending time with his family. While maladaptive attachment

behaviors are still possible for older adults to experience, clinicians must consider the unique developmental factors of aging.

Identification of Pathology in Attachment

In addition to the identification of normative development, the integration of SEST with attachment theory may also aid in the identification of pathological attachment patterns. Similar to the way that change in social networks can be indicative of normative attachment-related behavior, the change or lack of change in social networks can also indicate maladaptive attachment behaviors. While contemporary attachment research has moved away from categorical descriptions of attachment patterns (Fraley & Spieker, 2003; Mikulincer & Shaver, 2007; Del Giudice, 2019), the historical names of secure, anxious, avoidant, and disorganized styles are still used to describe the degree in which an individual endorses anxiety and avoidant attachment behaviors (Shi et al., 2014). Based on the three prototypes of pathological insecure attachment patterns, we can integrate SEST to illustrate three social network patterns as indicators of psychopathology.

Avoidant Attachment

The first prototype of avoidant attachment is characterized by endorsement of greater avoidant attachment and lower anxious attachment behaviors; that is, a person who shows avoidant attachment likely emotionally withdraws themselves from social relationships out of the fear of abandonment or rejection (Shi et al., 2014). Existing literature has identified that adults across the lifespan with higher avoidant attachment scores often experience smaller and fewer close friend and family relationships (Gillath et al., 2017; Magai et al., 2001). As demonstrated in Figure 1, older adults with higher avoidant attachment scores have smaller network sizes as compared to those in other attachment styles (Mikulincer & Shaver, 2007). The smaller and less

quality social network patterns of older adults with greater avoidant attachment behaviors stand in contrast to the normative patterns described by SEST. As clinicians are looking to conceptualize the attachment patterns of their older adult clients, the observation of small and superficial social networks may provide evidence of the client's potential avoidant attachment style.

Anxious Attachment

The second prototype of anxious attachment is characterized by high endorsement of attachment-related anxiety and lower avoidant attachment behaviors. Individuals in this cluster are characterized by significant worry and distress about the stability of their relationships and the potential that they will be abandoned or rejected (Bowlby, 1988; Shi et al., 2014). Due to the attachment pattern of constantly trying to reaffirm relationships, those who are anxiously attached are likely to keep larger than necessary social networks or retain social networks that lack closeness (Bowlby, 1988; Gillath et al., 2017). In contrast to the findings of older adults with avoidant attachment styles, older adults with anxious attachment styles have similar family and friendship social network sizes as compared to those with secure attachments (see Figure 1; Magai et al., 2001); however, the quality and stability of these relationships in older adults has been largely unstudied. Research of younger adults suggests that while the social network size of those with anxious attachment are comparable to those with secure attachment, these relationships tend to lack closeness and have high turnover (Gillath et al., 2017). With this information in mind, clinicians may benefit their identification of anxious attachment styles in older adult clients, by looking beyond just social network size and including investigations of the quality of their clients' relationships.

Disorganized Attachment

The third prototype of disorganized attachment is characterized by a high endorsement of both anxious and avoidant attachment patterns. People who demonstrate this prototype are characterized by a high degree of unstable relationships and high emotional reactivity (Ainsworth & Bell, 1970; Bowlby, 1988). Disorganized attachment has been theorized to stem from an inability to develop coherent strategies to obtain needs from attachment figures when under distress (Main & Soloman, 1990). In adulthood this often demonstrates itself in erratic or extreme behaviors when under times of distress that are associated with significant psychopathology (e.g., personality disorders, post-traumatic distress disorder; Beeney et al., 2017). Although there is an absence of literature on the social network composition of individuals demonstrating disorganized attachment, theory suggests that relationship size and quality are likely unstable and subject to frequent changes across friend and family relationships (see Figure 1). By using the marker of unstable social networks, clinicians may include this evidence as part of their conceptualization of disorganized attachment patterns.

Social Network Change in Treatment Recovery

In addition to how the integration of SEST and attachment theory can improve clinicians' conceptualizations of their client's attachment-related behavior prior to treatment, this integrative model can also help clinicians track client progress during and post-treatment. Through the lens of attachment-informed psychotherapy, therapy progress includes the clinician's attempts to create a therapeutic environment that encourages the client to develop a greater sense of security within the therapeutic relationship (Davila & Levy 2006). Per this model, if a client demonstrates a significant positive change in attachment patterns in treatment, the quality and quantity of social networks should reflect normative development over the lifespan (see Figure 1). By using

social network size and quality, clinicians may be able to tap into both symptomology of maladaptive attachment styles and degree of impairment experienced. Because the time investment of developing and maintaining close relationships, it is possible that observations of social network changes over treatment will not be possible within short-term psychotherapy contexts. Rather, observations in social change may also be reflected in how clients continue their change after treatment is complete.

An older adult who demonstrates movement towards more secure attachment patterns in psychotherapy will likely display a social network change that differs from the change a younger adult may experience. Clients who demonstrate attachment-related improvements in therapy may generally experience a greater quality of close social relationships (Mikulincer et al., 2013); however, older adult clients may differ from younger adults in the number of periphery relationships gained or kept. For individuals who demonstrate greater avoidant attachment patterns, treatment recovery would likely involve an increase in periphery relationships; but due to age-related social network differences of old adults, the number of relationships outside of family and close friends would likely be dramatically smaller than that of a younger adult. As previously explored, clients who demonstrate either greater anxious attachment or a high combination of anxiety and avoidance will likely also show improvement in the stability of relationships. Additionally, there is some evidence that the quantity of social networks of those with higher attachment anxiety is similar to those with more secure patterns, but with significantly fewer close relationships and greater turnover (Gillath et al., 2017). Translating this to the context of psychotherapy, individuals with high anxious attachment who show benefit in therapy are likely to demonstrate greater stability in relationships rather than a change in network size. In the context of older adult clients, it is important to recognize that social networks of

clients with high anxious attachment should be considered based on their quality and stability, rather than just size. Due to strong theoretical connection between social network size and quality and attachment-related behavioral patterns, clinicians may benefit from using measures of social network to aid in their understanding of the progress or outcome of treatment.

Cultural Considerations

While the integration of SEST and attachment theory has the potential to be an effective tool in aiding therapists in their conceptualization and treatment of older adults, clinicians need to consider social networks in the context of client culture and identities. Regarding factors associated with race and ethnicity, there is evidence to suggest that the self-reported attachment patterns and social networks of racial minority groups in the United States can differ from White Americans. Magai and colleagues (2001) found in sample of 800 older Americans, that African American participants reported higher anxious attachment scores and smaller, but more emotionally interconnected, social networks as compared to European Americans. Additionally, evidence suggests that attachment patterns differ cross-culturally; Agishtein and Brumbaugh (2013) highlighted those individuals who are from collectivistic Middle and East Asian cultures reported significantly higher attachment anxiety scores than any other cultural group. This cultural difference does not suggest that certain cultural groups are more pathological, rather, it suggests that normative levels of preoccupation in social relationships differ between collectivist and individualistic cultures.. While there has been substantial cross-cultural research supporting the observation that aging is associated with the retention of close relationships and fewer periphery relationships (Moss & Wilson, 2017), cultures that more commonly live in intergenerational households report that number of close relationships increase with age (Fung et al., 2008). Without the consideration of a client's culture and identities in the implementation of

this model, therapists are vulnerable to providing inaccurate and potentially harmful conceptualizations and treatments to their clients.

Recommendations and Future Research

Clinical Recommendations

Clinician recommendations. Based on the previously reviewed integration of SEST and attachment theory across chapter one, the following points are recommended for clinicians to consider when practicing with older adult clients.

1. When developing conceptualizations of older adult clients, clinicians working with an attachment framework should consider the normative aging development of older adult social development (e.g., social selectivity).
2. In treatment planning, clinicians should consider creating developmentally informed goals for treatment that reflect the normative social needs of their older clients.
3. Clinicians may benefit from considering how their interpretations of maladaptive attachment behavior could misidentify normative social development of older adults.
4. Clinicians may benefit from considering the social networks of older adults with relationships that are often more unstable and lack closeness, but with relatively normative size as an indicator of higher attachment anxiety
5. Clinicians working with older adult clients may benefit from considering social networks that are lower in quantity and quality relationships as evidence of higher avoidant attachment.

6. Clinicians may benefit from considering a pattern of unstable social networks coupled with higher emotional reactivity as evidence of more disorganized attachment in older adult client.
7. Due to the diversity of aging experience across cultures, clinicians should always consider the impact of their older adult client's culture on their attachment and social network presentation.

Training program and supervisor recommendations. Beyond the work of clinicians, there is a need for training programs and supervisors to provide comprehensive training on working with older adults. Despite older adults accounting for an increasingly large portion of the total United States population, a lack of training and readiness to deal with the age specific needs of older adults persists in mental healthcare (Institute of Medicine, 2012; Karel et al., 2012). The model presented in this paper may aid training programs and supervisors in preparing trainees to work towards clinical competence with older adult clients.

1. Training programs should consider incorporating theories of lifespan development, case examples of older adults, and evidence-based practices for older adults into their curriculum, particularly for psychodiagnostic and theories of clinical practice courses.
2. Supervisors should consider incorporating lifespan development models like SEST into their supervision with trainees.
3. Training programs and supervisors should consider attempting to expand what many trainees consider a "prototypical" client to include older adults of diverse backgrounds.

4. Training programs should provide education on how social network size and quality changes over the lifespan.
5. Supervisors should consider encouraging supervisees to assess the quality and quantity of clients' social networks and incorporate this data in their case conceptualizations.
6. Supervisors may benefit from increasing their awareness of the ways social selectivity in older age can impact the presentation of client attachment-related behavior.

Recommendations for Future Research

While the presented model is theoretically sound and has support for its potential application, three areas of needed future research were identified. First, there is a need for more research on the relationship between social network and attachment patterns in older clinical populations. The literature on social network and attachment style primarily consists of younger college student samples (e.g., Gillath et al., 2017) or non-clinical community-members (Magai et al., 2001). Ideally, new research in this area would track the social networks of adults across the lifespan, while also measuring attachment style. Second, research is needed to see if social network size and quality are effective tools in the tracking of treatment outcomes for older adult clients. While the tracking of social satisfaction has been used in common outcomes measures like the OQ-45.2 (Lambert et al., 1996), there has been no support for its use with attachment-based therapies with older adults. Lastly, there is a need for research to examine if the social networks of older adults are something that can change as a result of psychotherapy and movement towards more secure attachment. While theoretically, movement towards a more

secure attachment style would be reflected in at least the quality of social networks, research is required to support this claim for older adult clients.

CHAPTER II

REVIEW OF THE LITERATURE

Statement of Problem

The United States Census has predicted that by 2050, the number of older adults in the United States will double to 83.7 million from the 2012 census estimate (Ortman et al., 2014). The Institute of Medicine Committee on the Mental Health (2012) has estimated that by 2030, there will be 10 to 14 million older adults in the United States with a mental health disorder. With the dramatic increase in the number of older adults in the United States experiencing mental illness as a function of the increasing overall population, more research is needed to better understand the unique considerations clinicians would need to make when working with older adult clients.

While there is support that psychotherapy can be as effective for older adults as younger adults (Hill & Brettle, 2005), many psychology trainees feel that they are not adequately trained and do not feel competent in addressing the issues specific to older adult clients (Pachana et al., 2010; Woodhead et al., 2013; Woodhead et al., 2015). Specifically, trainees have identified the lack of aging-related course work, practicum-training opportunities, and specialized faculty as reasons for the perceived lack of competence (Woodhead et al., 2013; Woodhead et al., 2015). Contributing to this perceived lack of training and competency may be the lack of psychotherapy research focusing on older populations through a lens that incorporates the unique social and emotional realities of aging. Current research suggests the stark social and emotional differences between older and younger adults are rooted in a shift in preference towards close relationships and positive experiences (Carstensen et al., 1999). Because of the unique social and emotional differences that differentiate older adults from younger age cohorts, integrating complementary

developmental theories that highlight relational and emotional development with psychotherapeutic approaches may provide additional insight for clinicians. Using the framework of attachment theory (Bowlby, 1969), in this study, I conducted a latent profile analysis to develop profiles that cluster older adult clients based on self-reported attachment behaviors and psychological distress. These client profiles could serve to significantly improve clinician and researchers' understanding of older adult clinical presentations and their expected change in psychotherapy.

Theoretical Background

Attachment Theory

Attachment theory is a framework developed by Bowlby (1969) to explain the natural inclination for humans to seek social relationships and to understand the impact of early social development on adulthood. Attachment refers to the long-term social connection that one person has toward another person with the potential to provide the feelings of safety and comfort (Bowlby, 1969). The attachment relationships that are developed across the lifespan often have larger implications for future relationships and mental health.

Attachment theory, and its associated concepts, provide a comprehensive perspective on the social and emotional development of people across the lifespan. Bowlby (1969; 1988) explained that the foundation of attachment theory is that all humans have the evolutionarily advantageous natural inclination to seek safety and comfort from others. This process starts in infancy when infants develop their first attachment to their primary caregiver, called the *primary attachment figure* (Bowlby, 1988). Over the course of infancy and early childhood, children attempt to achieve care their primary attachment figure in order to fulfil their primary needs (e.g., comfort and safety). The main method in which children achieve this care is through the use of

proximity seeking behaviors, like crying and verbalizations (Bowlby, 1988). From the desired proximity to their primary attachment figure, children are hoping to find comfort and safety. Over the course of childhood, children will use proximity seeking behaviors when feeling unsafe and demonstrated exploratory behaviors that seek out people who will fulfill their social needs when feeling safe (Freeney & Thrush, 2010). This exploratory behavior in childhood is a function of the child's ability to use their primary attachment figure as a *secure base*, from which they can explore unknown and risky experiences with the ability to return to their primary attachment figure for comfort and safety. For example, a child who fell down while playing in a playground with other children may look over their parent for comfort. If for some reason the parent was no longer there, the child would likely start to cry, with the hope that it would draw the parent to them. By having the parent in view, the child feels comfortable and safe enough to engage in play with others; however, once the secure base of the parent is gone, the child will engage in proximity-seeking behaviors to bring them back.

Bowlby (1969) states that the way the primary attachment figure responds to the child's desire for comfort and safety and the child's responding reactions strongly influences interpersonal relationships and emotional regulation into adulthood. Cognitively, the impressions made by the caregiver and child's responses to the establishment or lack of a secure base, create schemas of worthiness of love and expected responses of others, called internal working models. Behaviorally and emotionally, these proximity-seeking behaviors over time start to become consistent patterns of behavior called attachment styles, which Ainsworth (1970) and Bowlby (1988) proposes may be carried on through the lifespan. There have been mixed findings regarding the stability of attachment styles, especially from childhood to adolescence (Fraley, 2002; Opie et al., 2020; Vice, 2005; Waters et al., 2000). However, Waters and

colleagues (2000) noted that the degree of change in attachment style from childhood to adolescence is likely a function of negative life experiences predicted within attachment theory, like a loss of a parent, parental divorce, sexual abuse, or severe mental or physical illness. Longitudinal research across multiple years has found moderate degrees of stability across adulthood (Zhang & Labouvie-Vief, 2004) and high degrees of stability in older adulthood (Consedine & Magai, 2006). Consedine and Magai (2006) found that in a sample of 415 older adults, that nearly 81.4% scored within the same attachment style over the course of seven years. Older adult attachment research has suggested that this stability might be connected to a realignment of focus towards intimate relationships and away from more distant attachment relationships (Consedine & Magai, 2006; McConnell & Moss, 2011).

Using the foundational conceptualization of social and emotional development, as well as concepts like attachment style, internal working models, and relationship patterns, attachment theory has been used to inform psychotherapy practice (Wei, 2008). While still relatively early in its development as a tool for psychotherapy, attachment-informed adult psychotherapy researchers have focused on understanding the psychotherapy process between clinician and client (Sauer et al., 2003; Sauer et al, 2010) and attachment behaviors' influence on psychotherapy outcomes (Levy et al., 2018). Generally applied to younger adult clients (Levy et al., 2018), the use of attachment theory in psychotherapy research has largely overlooked older adult clients. Although not well researched for older adults, an attachment perspective on client behavior, like attachment style, may provide clinicians a helpful tool in understanding client presentation and outcomes of treatment.

Adult attachment style. A key tenet of attachment theory is that individual's experiences of attachment throughout early life create relatively stable behavior patterns called

attachment styles based on the degree of security (Bowlby, 1988). As previously mentioned, attachment styles may vary over time, especially in adolescent and young adult populations; however, it appears that attachment style stays mostly stable across time and relationship in adulthood. Early attachment research conceptualized styles as categories, stemming from Ainsworth's (1970) Strange Situation study. Widely understood as one of the first empirical validations of Bowlby's attachment theory, Ainsworth's research had a significant impact on the continued development of attachment theory by allowing other researchers to connect early-life attachment style to childhood and adulthood outcomes. In this study, infants, between nine and eighteen months old, were placed in a room with their mother and a stranger. Next, the experimenter would create situations in which the infant was left completely alone, alone with the stranger, and alone with their mother by instructing the adults to leave the room in certain orders. Based on the observed behaviors (e.g., proximity-seeking behavior, maintained contact, avoidance of proximity, and resistance to contact) Ainsworth identified patterns of behavior during the reunion between the mother and child that she believed were reflective of the infant's attachment.

Ainsworth identified three distinct attachment styles (secure, ambivalent-insecure, and avoidant-insecure). Understood as the most common and emotionally balanced form of attachment, Ainsworth (1970) wrote that secure attachment was identified by distress when the mother left, avoidance of stranger when mother was not present, and a happy reaction to the reunion with their mother as perceived by researchers. Ambivalent-insecure attachment was identified by elevated distress when mother was not present, fear of the stranger, and resistance to the mother during reunion. Lastly, the avoidant-insecure attachment was identified by no overt displays of distress when the mother left, comfort playing with the stranger, and minimal interest

when reintroduced to their mother. Later research built on the model of attachment style by Ainsworth (1970) by conceptualizing other styles in which to categorize attachment behaviors. Regarding adult attachment, Main and Solomon (1986) introduced a fourth style of preoccupied attachment to describe individuals who demonstrated both dismissive and fearful attachment behaviors. While the number and names of the categories differed based on the researcher, many conceptualizations of adult attachment included a secure, fearful/anxious, dismissive/avoidant, and preoccupied style (Batholomew, 1990; Hazan & Shaver, 1987; Mikulincer & Shaver, 2007).

Generally speaking, secure attachment is most associated with healthy relationships, while the insecure styles are associated with maladaptive attachment behaviors and unhealthy relationship patterns (Hazan & Shaver, 1987). Secure attachment is theoretically connected to the childhood ability to establish trusting and attentive bonds with their early caregivers; these secure bonds were developed by using proximity-seeking behaviors (e.g., crying, clinging, etc.) that elicited and maintain both attention and proximity from caregivers and the development of the caregiver as a secure base (Meyer & Pilkonis, 2001). Conversely, fearful/anxious, dismissive/avoidant, and preoccupied attachment styles are theorized to stem from early childhood experiences where the child sought attention, comfort, and security, which was not consistently provided by their caregivers (Lee & Hankin, 2009). Subsequent research suggests that the development of attachment styles may derive from a mixture of biological and environmental factors (Kagan, 1984; Rees, 2007). For example, in addition to environmental factors like maternal sensitivity to the needs of their child (Wolff et al., 1997), researchers have identified innate calmer temperaments as a predictor of childhood secure attachment (Fox, 1989; Kagan 1984). The maladaptive patterns associated with insecure attachment typically take the form of either hyper-emotional arousal, which is associated with anxious attachment, or hypo-

emotional arousal, which is associated with avoidant attachment (Hazan & Shaver, 1987; Rees, 2007). In adulthood, these emotional and relationship difficulties continue. Insecure attachment in adulthood is often associated with difficulties maintaining fulfilling relationships and regulating emotions in response to stress (Batholomew, 1990).

From traditional categorical conceptualizations of adult attachment, attachment researchers shifted to the measurement of attachment styles across two primary dimensions: anxiety and avoidance (Fraley & Spieker, 2003; Mikulincer et al., 2003). The first dimension of attachment-related anxiety refers to an individual's tendency to worry about the availability and care of other people. Individuals who are high on this dimension often worry about the quality of their relationships with others and fear that they will be rejected, abandoned, or disliked (Brennan et al., 1998). From this worry and fear of abandonment, individuals often seek reassurance of the quality of their relationships by asking other's opinions of them and acting in ways they think will make others like them more (Mikulincer et al., 2003). The function of this anxious behavior comes from a desire to regain emotional homeostasis that has been dysregulated by attachment-related fears (Sandford, 1997). The second dimension of attachment-related avoidance refers to an individual's tendency to avoid vulnerability and reliance on others; individuals who are high on this dimension often have difficulties trusting and displaying vulnerability with people (Brennan et al., 1998). From this lack of trust, people with higher avoidant attachment tend to have smaller friend groups and fewer close relationships (Gillath et al., 2017). The function of this avoidant behavior is to prevent close relationships or social interactions where they may be hurt by others in the form of rejection (Gillath et al., 2017). By emotionally cutting themselves off from others and their own feelings, individuals with higher avoidant attachment seek to maladaptively achieve emotional homeostasis (Brennan et al., 1998).

Similar to the categorical models of attachment style, higher avoidant and anxious attachment are theorized to stem from early childhood caregivers that were inconsistent, negligent, or abusive (Fraley & Spieker, 2003). In addition, other events like parental death, divorce, or significant illness can also negatively impact the development of attachment towards caregivers (Waters et al, 2000). Across the measure of both avoidant and anxious attachment dimensions, lower scores are indicative of more secure attachment while higher scores are associated with more insecure attachment. To reflect the transition away from the categorical understanding of attachment styles and supporting evidence of its use (Fraley & Spieker, 2003; Mikulincer et al., 2003), I used the two-dimension model of anxious and avoidant attachment for this study.

Cultural Differences in Attachment

The presentation and prevalence of attachment and caregiver behaviors differ across cultures and individuals (Stern et al., 2021). Notably, differences in attachment style have been found based on age (Chopik et al., 2013; Segal et al., 2009), race/ethnicity (Agishtein & Brumbaugh, 2013; Magai et. Al., 2001), and gender (Consedine & Fiori, 2009). Although prevalence and presentation of attachment styles may differ across cultural groups, the function of attachment behaviors – to establish safety and trust with secure individuals – appears to be culturally universal (Stern et al., 2021). Evolutionarily developed to achieve feelings of safety and comfort, culture shapes the way in which an individual expresses attachment-related behavior.

Similar to other areas of developmental research on age differences, younger adults report significantly higher attachment anxiety compared to middle-aged and older adults (Chopik et al., 2013; Segal et al., 2009). However, age differences in avoidant attachment have been found to be minimal (Chopik et al., 2013). These age differences in anxious attachment may

stem from the observed phenomenon that younger adults are more invested in the acceptance of their peers as compared to older adults (Segal et al., 2009). Consistent with this finding, socioemotional selectivity theory research (see Carstensen et al., 1999) suggests that while younger adults have an adaptive desire to maintain larger social networks, older adults tend to be more focused on retaining a smaller, but close social network.

Although research has generally found that the proportion of insecure and securely attached adults are the same across gender (Consedine & Fiori, 2009; Del Giudice, 2019), differences in the type of insecurity have been identified. Generally speaking, men are more likely to report avoidant attachment styles, while women are more likely to report anxious attachment (Bakerman-Kranenburg & van IJzendoorn, 2009; Del Giudice, 2019). This difference may be related to evolutionary-based differences in need for certain social patterns to best achieve access to resources and safety (Del Giudice, 2019). Although largely understudied, preliminary research has suggested that transgender adults are more likely to report higher insecure attachment as compared to cisgender people, which may be connected to their experiences of parental and familial rejection due to their gender identity (Amodeo et al., 2016).

Patterns of attachment behaviors also appear to differ based on race and ethnicity. Although attachment research with underrepresented cultural groups is limited (Stern et al., 2021), White and European adults appear to report higher levels of secure attachment and lower attachment-related anxiety as compared to African American adults (Magai et al, 2001). Research suggests that these differences may be explained by extraneous variables like economic hardships and systemic racism (Magai et al, 2001; Stern et al., 2021) and possibly parenting techniques, such as the use of corporal punishment (Agishtein & Brumbaugh, 2013). Racial and ethnic groups may also differ in which people provide the role of being a child's secure base. For

example, research suggests for African American families, mothers, fathers, grandmothers, spiritual community leaders, and fictive kin may each be potential attachment figures and sources of secure base support (Stern et al., 2021). Additionally, cultural values associated with race and ethnicity, like collectivism, may influence the presentation of attachment behaviors through expectations of how one is supposed to interact with others (Agishtein & Brumbaugh, 2013). Because attachment behaviors and prevalence appear to differ across race and ethnicity, it is important to contextualize attachment research in terms of how group differences in values, family structure, and experiences of racism may shape individual's experiences of attachment.

Older adults and attachment. While the focus of much of the attachment literature has been on the experiences of those in childhood and early adulthood, attachment theory is applicable to people across the lifespan. Specifically, the age-related social differences of older adults and its connection to mental health make attachment conceptualizations particularly poignant. Bowlby (1980) noted that while in early life people's attachments tend to be connected to those older than themselves, older adults tend to develop attachments with those in the same generation or younger. Related to this shift in the age of attachment figures is the likelihood of older attachment figures passing away as chronological age increases (Bradley & Cafferty, 2001). Notably different from those of children and young adults, the literature has identified caregivers, children, and romantic partners as common attachment figures for older adults (Antonucci, 1994; Bradley & Cafferty, 2001; Browne & Shloberg, 2003). Throughout childhood and young adulthood, attachment figures often are stronger and wiser; that is, children and younger adults have someone they can rely on to provide some form of protection or guidance. However, the presence of a stronger and wiser attachment figure is much less likely for older adults. Despite these shifts in power dynamics of attachment figures, researchers have

highlighted that close attachment relationships are likely more important in older age than any other part of adulthood (Bradley & Cafferty, 2001; Kafetsios & Sideridis, 2006). Overall, insecure attachment in older adults is associated with lower psychological and physical wellbeing (Assche et al., 2012; Bodner & Cohen-Fridel, 2010; Kafetsios & Sideridis, 2006). Specifically, older adults with insecure attachment are vulnerable to a decreased likelihood of receiving caregiving from adult children, greater vulnerability to maladaptive grief after the loss of a spouse, and greater chance of developing depressive and anxiety symptoms (Bradley & Cafferty, 2001; Kafetsios & Sideridis, 2006; Monin et al., 2014).

Notably different than younger age cohorts, older adults are globally observed to have smaller social network (Akiyama et al., 2003; Carstensen, 1992; Carstensen et al., 1999). These smaller social networks typically are the result of the social pruning of acquaintances and community relationships (Carstensen et al., 1999). As a result of these cutting of social relationships, close attachment figures become a central part of many older adults' lives (Shaver & Mikulincer, 2004). Comparatively, older and younger adults have similar sized networks of close attachment figures (Gillath et al., 2017); however, the quality of these close relationships is largely unstudied. While there are proposed models (see Carstensen et al, 1999) explaining normative social network changes in older adults, attachment theory can provide the unique insight of attachment behaviors and their impact on the quality of social relationships. Specifically, the use of attachment styles within the context of aging-related social changes, can aid in the understanding of normative and abnormal relationships. For example, while the trimming of social relationships is seen as a relatively normal aspect of aging, knowledge of avoidant attachment can help distinguish the difference between a shift in relationship focus and emotionally cutting oneself off from others out of fear of rejection. With the uniqueness of social

relationships and attachment in older adult cohorts, the application of attachment theory in older adults may serve to improve related health services, like psychotherapy.

Adult Attachment, Psychotherapy, and Psychopathology

The framework provided by attachment theory may be helpful to interpret different aspects of psychotherapy, including change in psychological distress (Levy et al., 2018). The type of attachment styles clients demonstrate in therapy appears to predict therapeutic outcomes, including psychological distress and symptoms (Levy et al., 2018; Shi et al., 2014). However, there is a scarcity of research examining the relationship between attachment behavior and psychological distress for older adults in therapy. In this study, I sought to provide more understanding of the relationship between attachment behavior of older adult clients and psychological distress, through the development of clinical profiles and tracking of treatment trajectory.

The use of attachment-related behaviors and patterns has been supported in its application to therapy outcome research (Levy et al., 2018; Shi et al., 2014). A meta-analysis of 36 studies, which included 3,158 participants 65 years or older (Levy et al., 2018), found that pretreatment attachment style was a "small-to-moderate" predictor of posttreatment outcomes. Specifically, secure attachment at pretreatment significantly predicted greater psychological distress improvement when compared to clients with insecure attachment (Levy et al., 2018). However, I was unable to identify any therapy-outcome study that has sought to explore the relationship between attachment style and therapy outcome exclusively in samples of adults over 55 years old. Due to older adults increasingly accounting for larger parts of the United States population and a lack of research guiding clinicians understanding of psychotherapy for older

adults, more research is needed to better understand treatment outcomes and associated variables like attachment style (Ortman et al., 2014).

Psychopathology. Using the principles and framework provided by attachment theory, Bowlby (1977) extended his work into the field of psychotherapy and psychopathology. Bowlby (1988) advocated strongly for the incorporation of attachment theory in psychotherapy, stating that he believed therapy was a way of reforming insecure attachment and challenging internal working models of self and others. In regard to psychopathology, hundreds of studies of clinical and non-clinical samples have supported the connection between insecure attachment and common psychopathologies, like depression, anxiety, post-traumatic stress, and personality disorders (Agrawal et al., 2004; Bosqute & Egeland, 2006; Bowlby, 1980; Hazan & Shaver, 1987; Mikulincer & Shaver, 2007). Specifically, the relationship between attachment insecurity and psychopathology has been evidenced to be mediated by self-representations, emotional regulation, and interpersonal difficulties (Mikulincer & Shaver, 2012). In regard to self-representation, individuals with insecure attachment tend to have unstable self-esteem, and use maladaptive strategies, like perfectionism and avoidance, in attempts to combat feelings of worthlessness; the maladaptive beliefs of adults with insecure attachment ultimately leave them more vulnerable to mental illness (Mikulincer & Shaver, 2012). In regard to emotion regulation, insecurely attached adults have been less successful in their ability to express emotions in adaptive and productive ways that leads them to be more vulnerable to mental illness; however, these ineffective ways of expressions differ based on the degree of attachment anxiety or avoidance (Hazan & Shaver, 1987). While anxiously attached adults tend to experience amplified emotional states in response to difficulties, those with greater attachment avoidance tend to unhealthily repress their emotional reactions to negative situations (Sandford, 1997).

Interpersonal difficulties are conceptualized in attachment theory as the inability to gain support from attachment figures due to the overreliance on maladaptive attachment behaviors (e.g., overly cold or reliant on others). As a result of these interpersonal difficulties, adults are likely to experience low social satisfaction, social isolation, and loneliness, and in turn are at a greater risk of experiencing psychological disorders (Mikulincer & Shaver, 2012). Because of the theoretical and empirical evidence of the relationship between insecure attachment and psychopathology, attachment theory is likely a helpful tool in aiding clinicians conceptualize client concerns.

Psychopathology and attachment in older adult clients. While there is limited research examining attachment in therapy-seeking older adults, the current attachment literature on older adults suggests that attachment styles remain relevant to psychological functioning for older adults. In a 30-year longitudinal study, Sroufe (2005) supported that notion that early attachment experiences, before five years old, were associated with the development of emotional regulation, self-reliance, and social competence in older age. Kafesios and Sideridis (2006) reported presenting differences in attachment style, perceived social support, and wellbeing in younger adults as compared to adults over 65 years within a non-clinical Greek sample. Specifically, they found that younger adults tended to have higher degrees of anxious attachment and a stronger inverse relationship between anxious attachment and wellbeing; they also found social support in older adults mediated the effects of avoidant attachment and feelings of loneliness and mental illness. Attachment styles of older adults may also influence the positive and negative effects of emotional and instrumental support (Merz & Consedine, 2009). Merz and Consedine found in a sample of 1,118 older adults that perceived emotional support from others was positively associated with wellbeing and caregiving support of daily living activities was negatively associated with wellbeing; however, older adults who report more secure attachment

experienced significantly greater positive effects on wellbeing from emotional support and were less negatively impacted by caregiving support.

The limited literature that does exist on older adult attachment styles is consistent with evidence that social relationships significantly influence older adult psychological functioning (Cornwell & Waite, 2009; Fiori et al., 2006). As noted earlier, older adults tend to cut periphery relationships and invest more time in meaningful close relationships, which contribute to an increase in positive emotions (Carstensen et al., 1999). Subsequently, older adults' mental health is connected to their ability to hold and maintain close relationships (Carstensen et al., 1999). Connecting this literature with attachment theory, older adults who demonstrate insecure attachment and have lower quality relationships are theoretically more likely to experience mental health problems. While there is sufficient research to suggest that attachment style has an impact on mental health (e.g., Bosmans et al., 2010; Catanzaro & Wei, 2010), more research is needed examining how the attachment styles and presentations of older adults influence psychological treatment and trajectory of therapeutic changes in treatment. Using a person-centered statistical model to apply clinically relevant variables to individual participants, Latent Profile Analysis (LPA) offers a unique and potentially clinically-beneficial perspective into understanding attachment characteristics in psychotherapy.

Utility of Attachment-Based Profiles

One way researchers have been able to group individuals based on attachment style and psychological outcomes is through the development of profiles. Profiles are statistically grouped individuals who were placed within a "profile" based on their similarity to each other centered on common characteristics (Lanza et al., 2003). The development of individual-based profiles has been used to aid researchers and clinicians in understanding and conceptualizing

psychological symptomology and attachment. In a sample of 1,577 Danish trauma victims, Armour and colleagues (2011) utilized LPA to develop classes based on their attachment and psychological symptomology. The development of these profiles enables researchers and clinicians to conceptualize within and between groups differences based on attachment style and symptomology. Since symptomology (Fiske et al., 2010; Flint et al., 2012) and attachment styles (Chopik et al., 2013) can significantly differ across age, especially in the context of developmental social changes, it is important that older adult-specific profiles are developed. Given the previously discussed lack of attachment research with older adult samples, there is a need for research that develops profiles of older adults based on psychological symptoms and attachment style. The development of profiles enables clinicians to approach psychotherapy with an understanding of the expected path of psychological symptoms across treatment. By having an expected track of treatment, clinicians can use observations of deviations from the predicted path as an indicator of something that may need to be addressed. Additionally, the path of psychological symptoms over treatment can also help clinicians set realistic expectations for how beneficial treatment may be for their clients. However, due to the current lack of research in the development of profiles for older adult clients, clinicians are left to practice with no guidance or expectation in psychotherapy.

Purpose of Study

Because of the established connection between attachment behaviors and psychopathology and the lack of research exploring the implications of attachment style on psychological treatment, there is a need for research to aid clinicians in understanding treatment with older adults through an attachment lens. The absence of literature tracking treatment outcomes for older adult clients through an attachment lens potentially leaves mental health

providers practicing without guidance that accounts for an integrated developmental view of treatment trajectory. In this study, I present the results of an LPA conceptualizing different profiles of older adults seeking psychotherapy based on presenting attachment style and symptoms of psychological distress. Additionally, these profiles will be used to examine outcomes of treatment. Consistent with the World Health Organization's (Mendive, 2009) call for the use of psychological distress as a means of taking a transdiagnostic perspective to mental illness, I used a measure of general psychological distress to track the trajectory of treatment and presenting distress.

Research Questions

Three research questions guided the hypotheses, design, and analyses of the present study. First, can viable profiles of older-adult clients be identified based on the relation between attachment style and overall psychological distress? Second, will change in psychological distress over time be the same across profiles? Third, will clinical profiles be theoretically consistent with prototypical attachment styles?

Hypotheses. The present study has two hypotheses. First, based on the findings of a four-profile structure in previous attachment research (Armour et al., 2011; Bucci et al., 2017; Shevlin et al., 2014), it is expected that four distinct client profiles will be found based on differences in attachment and psychological distress scores using LPA (Morin et al., 2016). It is expected that the four profiles will differ in initial psychological distress and will be distinguished by the following: low anxious and avoidant attachment; high anxious attachment; high avoidant attachment; high anxious and avoidant attachment. Second, based on the literature supporting the relation between insecure attachment and psychopathology, it is expected that the therapy outcomes across treatment will differ between each profile.

CHAPTER III

METHODS

Participants

The original sample size of this study was 240 therapy clients over the age of 55 years; however, 68 participants were removed due to missing intake OQ-45.2 or attachment-related measure at time of the intake. The final sample of this study consisted of 172 participants age of 55 years or older. Participants were individual therapy clients from a university training clinic, located in a medium-sized city in the Midwestern United States. The training clinic provided outpatient services on a sliding scale basis to community members who are not in need of crisis or intensive services. Average age of the sample was 60.33 years (*SD* = 5.34), ranging from 55 years to 79 years. In regard to gender, 61% (*n* = 105) self-identified as women and 39% (*n* = 67) as men; no additional gender identifications were indicated by participants. Within this sample, 82.6% (*n* = 142) of participants identified as White/Caucasian, 8.1% (*n* = 14) Black/African American, 2.9% (*n* = 5) Asian/Pacific Islander, 3.5% (*n* = 6) Hispanic/Latino, 2.3% (*n* = 4) Multiracial, and 0.6% (*n* = 1) "Other". The sample was mostly low-income, with 55.2% (*n* = 95) of participants reported earning between $0 and $24,000 year, 16.9% (*n* = 29) between $24,001 and $30,000, 12.8% (*n* = 22) between $31,000 and $40,000, and 13.4% (*n* = 23) over $41,000 a year. In regard to highest obtained education, 11% (*n* = 19) did not complete high school, 48% (*n* = 84) completed high school, 15% (*n* = 26) had an associate degree, 15% (*n* = 26) had an undergraduate degree, and 8% (*n* = 14) had a graduate degree. The archival data from this study was compiled between 2011 to 2021, with 2011 containing the earliest recorded administration of both a OQ45.2 and ECR at intake.

Trainee Therapists

Therapy was provided on a weekly basis by trainees enrolled in master's or doctoral psychology or counselor education programs under the supervision of a doctoral level licensed clinician. Each individual therapy session was approximately 50 minutes in length. The case loads of master's students were generally two clients, while the caseload of doctoral students was two to five clients. Trainees were provided intensive weekly individual (one hour) and group supervision (one to two hours). As part of their program of study, master's level trainees received generalist training regarding theoretical orientation and counseling techniques, with an emphasis on the development of basic counseling skills. Master's level trainees typically begin their work in the training clinic after two to three years of study. Doctoral level trainees' plan of study similarly emphasizes a generalist approach, but with a greater emphasis placed on the development of theoretical orientation and advanced counseling skills. Depending on if a clinically relevant master's degree was obtained prior to admission, doctoral level trainees could have one to three years of study prior to a practicum within the clinic.

Measures

Experiences in Close Relationships Scale (ECR; Brennan et al., 1998)

The ECR (Brennan et al., 1998) is a 36-item self-report measure of interpersonal connection with close or romantic relationships and consists of two subscales, Avoidance and Anxiety (Appendix B). The Avoidance subscale measures the degree to which an individual avoids intimate relationships with others, whereas the Anxiety subscale measures the degree to which an individual worries about relationships or worry about social rejections (Brennan et al., 1998). The scores are measured on a 7-point scale, ranging from 1 (*strongly disagree*) to 7 (*strongly agree*; Brennan et al., 1998). With 18 items each, the Avoidance and Anxiety subscales

scores range from 18 to 126. Higher scores on each of the subscales represent greater attachment insecurity within each respective dimension. ECR is commonly utilized in attachment literature due to its application of the contemporary, two-dimensional conceptualizations of attachment presentations (Mikulincer et al., 2003).

I found no studies that have has sought to establish reliability or validity of ECR scores in older adult populations. In community adult samples, the ECR subscale scores appear to have high internal consistency: Avoidance subscale, Cronbach α = .93-.95; Anxiety subscale, Cronbach α = .91-.94 (Brennan et al., 1998; Wei et al., 2007). Regarding test-retest reliability, the Anxiety and Avoidance subscale scores are highly correlated over time (r = .82 and .86 after three weeks; Wei et al., 2007; r = .68 and .71 after six months; Lopez et al., 2002). Appropriate divergent validity was evidenced by negative correlations between the Anxiety and Avoidance subscale scores with emotional awareness (r = -.45 and -.45), psychological distress (r = -.53 and -.48), and social support (r = -.35 and -.44; Mallinckrodt & Wei, 2005). Higher scores on the Anxiety subscale were associated with greater loneliness (r = .39), excessive reassurance seeking (r = .47), and depression (r = .46); higher scores on the Avoidance subscale were associated with greater loneliness (r = .44) and emotional cutoff (r = .31), evidencing convergent validity of the subscale scores (Wei et al., 2007). Confirmatory factor analyses indicated that the two-factor model of separate Anxiety and Avoidance subscores provided the better fit then other models, CFI = .94, RMSEA = .11, in contrast to traditional models of attachment that conceptualized attachment along four factors, CFI = .95, RMSEA = .07 (Wei et al., 2007). The Anxiety and Avoidance subscale scores are correlated at .30, indicating that the subscales seem to assess distinct aspects of attachment (Wei et al., 2007). Within my study, while Avoidance (Cronbach α

= .75) was within acceptable range for internal consistency, Anxiety (Cronbach α = .69) was slightly below the recommended minimum of .70 (Tavakol & Dennick, 2011).

Outcome Questionnaire-45.2 (OQ-45.2)

OQ-45.2 (Lambert et al., 1996) is a 45-item self-report measure of general psychological distress (Appendix A). The OQ-45.2 is designed for repeated administrations and use as a clinical tool for therapists to assess client progress over the course of therapy (Lambert et al., 1996). This measure contains three subscales: Symptom Distress, Interpersonal Problems, and Social Role. The total score across all three subscales is used as a measure of global distress (Lambert et al., 1996). Each of the OQ-45.2 items are rated on a 5-point scale, ranging from 0 (*Never*) to 4 (*Always*). OQ-45.2 total scores range from 0 to 180, Symptom Distress ranges from 0 to 100, Interpersonal Problems ranges from 0 to 44, and Social Role ranges from 0 to 36. Higher scores imply greater dysfunction. Total scores above 63 indicate clinically significant levels of psychological distress (Lambert et al., 1996).

Lambert et al. (1996) found high three-week test-retest reliability of scores in an adult clinical sample (α = .84). Lambert et al. (1996) also found from moderate to strong evidence of internal consistency for each subscale and total score in a clinical sample: Symptom Distress (Cronbach α = .91), Interpersonal Problems (Cronbach α = .74), Social Roles (Cronbach α = .71), and total score (Cronbach α = .93). In regard to factor structure, Rice, Suh, and Ege (2014) found that the OQ-45.2 comparative fit index (CFI) score to be .84, which is under the acceptable cutoff of .90; however, Rice et al. (2014) noted that scales with large number of items, like the OQ-45.2, tend to have lower CFI scores. Rice et al. (2014) also reported an adequate RMSEA score for the three-factor structure of .086 (90% CI = .085, .087). Regarding the convergent validity of scores, Hanson and Merker (2005) found that OQ-45.2 scores

correlated with the clinician-scored Global Assessment of Functioning (GAF; American Psychiatric Association, 2000) and Structure Interviews for DSM-IV Disorders (First et al., 1996) at .78 and .87, respectively. In regards to sensitivity to change, Lambert et al. (1996) showed that the OQ-45.2 could be used to detect changes in therapy based on a significant change in OQ-45.2 total scores after seven sessions of psychotherapy in a pre (M = 84.65) and post (M = 67.18) design using a series of paired t-tests, $t(39) = 4.78$, $p < .001$. Lambert et al. (1996) also found significant differences in each subscale after seven weeks of therapy using paired t-tests: Symptom Distress, pre (M =67.18) and post (M = 46.20), $t(39) = 4.26$, $p < .001$; Interpersonal Relations, pre (M = 18.35) and post (M = 15.67) , $t(39) = 3.30$, $p < .001$; Social Role, pre (M = 15.83) and post (M = 11.98), $t(39) = 4.30$, $p < .001$. In addition, Lambert et al. (1996) evidenced discriminant validity of the OQ 45.2 by sufficiently distinguishing between non-clinical university (M = 42.33, SD = 16.60) and community samples with university outpatient clinic (M = 78.01, SD = 25.71) and community mental health samples (M = 86.07, SD = 19.33) with total scores, $F = 145.09$, $p = .001$. Lambert et al. (1996) reported modest sensitivity, .85, and specificity, .74, indexes in identifying clinically significant levels of psychological distress; meaning there was 85% chance of a true positive and 74% of a true negative identification of clinically-significant distress. In this study, total OQ45.2 (Cronbach $\alpha = .95$) and subscale Symptom Distress (Cronbach $\alpha = .93$) had high internal consistency; both Interpersonal Relations (Cronbach $\alpha = .78$), and Social Role (Cronbach $\alpha = .78$) were within acceptable range. Although the psychometric statistics reported were gathered from adult clinical samples, the extent to which older adults were represented in these samples is unreported.

Demographic Information

As part of standard practice for all clients seeking services in the training clinic, the following information was collected from the participants at intake: age, gender, race, income, history of previous psychological services, education level, subjective report of severity of presenting concern and type of employment. All information gathered was self-reported prior to the intake session using a standardized form (Appendix C).

Procedures

The present study included archival data of older adult clients seeking psychotherapy in a departmental training clinic over the past eleven years**.** Consistent with standard practice for all clients seeking services, the following description is a review of the data collection process within the training clinic. Upon agreeing to seek psychotherapy services with the university-based counseling training clinic, participants completed the informed consent to both therapy and research, the demographic information form, the ECR, then the OQ-45.2, prior to the intake session with an intake therapist. Completion of all forms took approximately 20 minutes. Participants had the option of completing the forms using a computer tablet or in pen-and-paper format; in a meta-analysis conducted by Gwaltney, Shields, and Shiffman (2008), electronic and paper-and-pencil administration of patient-reported outcomes measures are nearly identical and were not accounted for in this study. After the intake session, participants were assigned a master's or doctoral level student clinician for individual therapy by the clinic director and staff, based on the participant's psychological needs. Specifically, clients with more severe presenting concerns (e.g., elevated suicidal ideation, extensive trauma history, significant interpersonal difficulties) were more likely to be assigned to a doctoral-level trainee due to their more

intensive training and previous counseling experience. At the beginning of each weekly session, participants completed an OQ-45.2.

CHAPTER IV

RESULTS

Data Screening

Missing Data

Due to sampling criteria of this study, there were no missing OQ45.2 or ECR subscale scores in the final sample of 172 participants. However, post-LPA analyses that measured OQ45.2 total scores across six sessions contained 83 total participants, with 89 missing participants. To evaluate if there was any identifiable pattern to missingness with the data, I conducted an independent *t-test* between intake OQ45.2 total score and a dummy variable representing individuals who did and did not complete six sessions. Results suggested that there is no difference in mean between those who completed six sessions (M = 66.35, SD = 24.47) and those who did not (M = 66.35, SD = 24.32), $t = .081$, $p = .935$. The results suggest that there was no discernable pattern to the missing OQ45.2 total scores. Due to the amount of missing data from the sixth session and the implausibility to imputing data, participants who did not complete six sessions was removed from the analyses conducted after the LPA.

Outliers

To identify and determine the potential impact of outliers within the sample, I created boxplots for each OQ45.2 and ECR subscale (Figures 2-6). Measuring outlying scores three standard deviations from the mean, the Avoidance subscale contained six, Social Role subscale contained one, and Interpersonal Relations subscale contained four. To determine if outliers impacted the results of the study, linear regressions were conducted between each indicator variable and total intake OQ45.2 score, with and without removed outliers. Results suggested that there was relatively no difference in significance between indicator variables with and

without outliers included ($p < .001$). Due to the lack of impact from outliers on total OQ45.2 scores, I determined that the removal of outliers was unnecessary.

Normality of Distributions

To measure the degree of normality of the ECR and OQ45.2 subscale scores, I evaluated the frequency of each indicator variable through the measurements of skewness and kurtosis, and visual examination of the data. In regard to skewness, no variables appear to significantly skew (Table 2), with no score above 1.00 or below -1.00 (George & Mallery, 2010). In regard to kurtosis, all variables appeared to be normally distributed (Table 2), with no score above 3.00 or below -3.00 (Kline, 2005). Additionally, I created histograms for the frequency of each indicator variables (Figures7-11); qualitatively, each appears to be normally distributed. Despite the robust nature of the bootstrapping procedures within LPA that does not require normally distributed data, this sample appears to be adequately distributed for post-LPA analyses.

Preliminary Analyses

Demographic Differences Across Indicator Variables

Concerning demographic differences, I analyzed gender, racial, and income-based differences across each indicator variable. In regard to gender differences, only Symptom Distress was significantly different between men (M = 34.54) and women (M = 39.97), $t = 2.23$, $p = .027$. Results suggest that women reported significantly higher Symptom Distress scores than men. To assess racial differences, I conducted ANOVAs. Only the ECR subscale, Avoidance, was statistically significant, $F(5,166) = 5.195$, $p < .001$;post-hoc analysis indicated that White participants ($M = 71.15$) reported significantly higher scores than Asian participants ($M = 55.00$). Lastly, when examining income-based differences, no significant differences were identified

across indicator variables. Due to statistically significant gender and racial differences found within the sample, I included both demographic variables as covariates in post-LPA analyses.

Latent Profile Analysis

To explore the latent profile, I conducted a latent profile analysis (LPA). Specifically, I used LPA to examine clustering of participant scores on the Avoidance and Anxiety ECR subscales as well as Social Role, Interpersonal Relation, and Symptom Distress OQ-45.2 subscale scores at intake. OQ45.2 subscale scores were used to provide a more detailed conceptualization of client presentation within each profile, despite the orthogonal nature of the subscales. While each subscale strongly correlated with each other (Lambert et al., 1996), the use of each subscale as an indicator variable allows each component of psychological distress to be equally recognized within the LPA model. I followed Dziak and colleagues' (2016) recommendations and procedures for conducting an LPA. Consistent with these recommendations, I ran multiple LPA models, with increasing numbers of profiles to compare measures of fit. Addressing the first hypothesis, that four profiles will be identified, the model was used to determine the most appropriate number of profiles using Lo-Mendell Ruben (LMR) and Bootstrap likelihood ration tests (BLRT), as well as the estimate of entropy. As part of the LPA, each participant was given an entropy score, that provided the level of categorical uncertainty each individual fits within the determined profile. The profile with the greatest entropy score within each participant determined which profile the participant was assigned. Each profile was interpreted and named based on the average attachment scores and OQ-45.2 subscale scores. To provide context to each profile, demographic information was also used to highlight differences between each profile. To address the second hypothesis that the OQ-45.2 Total scores will differ between profiles, I ran repeated measures analysis of covariance

(ANCOVA) measure differences between profile membership and OQ-45.2 total scores from the second, third, fourth, fifth, and sixth administrations, while controlling for gender, race, and intake total OQ-45.2 scores. I used Total OQ45.2 scores instead of subscale scores due to the orthogonal nature of the three subscales and the applicability of total OQ45.2 scores to common outcome measure-based treatment. All indictor variables were interval in nature because they have equal distance between each potential point score and do not have a real zero.

Examination of Indicator Variables

To measure and evaluate the relationship between the ECR subscales of Anxiety and Avoidance, and OQ45.2 subscales of Interpersonal Relations, Social Role, and Symptom Distress, I created a Pearson correlation matrix (Table 1). This table was created to evaluate if variables were correlated either too closely or not enough. All but the relationship between Avoidance and Interpersonal Relations and Social Roles are significantly correlated. Significant Pearson correlations range from .20 to .69. While most variables are mildly to moderately correlated, they appear to be measuring separate, but related constructs.

Psychological Distress and Attachment Latent Profile Structure

To address the first hypothesis, that four profiles would be identified, I conducted LPA with the ECR Anxiety and Avoidant subscales and OQ-45.2 subscales of Social Role, Interpersonal Relations, and Symptom Distress. In this study, I used the LPA Three-Step approach to model identification, application, and analysis (Dziak et al., 2016); the three steps of this approach are model comparison and identification, characterization of each identified profile, then conducting analyses to provide context to the profiles. Fit statistics for five latent profile models (presented in Table 3) suggest that the three-profile model was most appropriate for the sample. Consistent across both measures of model fit, Lo-Mendell Ruben (LMR) and

Bootstrap likelihood ration tests (BLRT), the three-profile model was identified as best fitting of the data. In addition, the three-profile model's entropy score of .801 is above the acceptable range of .800 (Ferguson et al., 2020).

Next, a Maximum Likelihood Estimation analysis was used to estimate the likelihood a participant would fit in each profile; individualized entropy scores in the assigned profile ranged from .52 to .99. Each entropy score indicates the level of variance explained by the membership to the profile. Assigned participants were then used to characterize each profile based on mean subscale scores of the indicator variables and demographic data. In addition, each profile's z-score across each indicator variable was also used to standardize and highlight differences between profiles (Figure 12).

As illustrated in Table 4, the first profile contained the smallest number of participants (n = 31), accounting for approximately 22% of the total sample. Profile 1 was characterized by relatively low levels of attachment-related avoidance and anxiety (M = 50.09 and M = 62.45), and relatively low levels of psychological distress across the OQ-45.2 subscales of Social Role (M = 6.67), Interpersonal Relations (M = 8.71), and Symptom Distress (M = 17.85). To observe clinical significance of OQ-45.2 scores, all three indicators were combined to create a total score. The average OQ-45.2 total score 33.23 was well below the cut off scores of 63 (Lambert et al., 1996), indicating subclinical psychological distress (Lambert et al., 1996). Profile 1 was 54.8% women, 77.4% White, averaged 62.32 years in age, and 48.4% had a history of previous psychotherapy treatment (Table 5). This profile was called "Secure Attachment and Low Psychological Distress."

The second profile was the second largest profile in the model (n = 34) and comprised about 20% of the sample. Profile 2 was largely characterized by comparatively high attachment-

related anxiety and avoidance (M = 76.89 and M = 73.07), and high Social Role (M = 19.39), Interpersonal Relations (M =22.19), and Symptom Distress (M = 56.59) scores. The average OQ-45.2 total score for Profile 2 was 98.17, which is well above the clinical cut off 63. Profile 2 was 70.4% women, 77.4% White, and 71.4% with history prior psychotherapy (Table 5). Compared to the other profiles, Profile 2 was the youngest (M = 58.74). This profile was identified as "High Attachment Anxiety and High Psychological Distress."

The final profile was the largest profile identified within the model (n = 107, 62%). While Profile 3's attachment-related avoidance score (M = 71.65) is similar to that of Profile 2, the average attachment-related anxiety (M = 65.46) was relatively lower. Additionally, Profile 3's measures of psychological distress (Social Role M = 11.49; Interpersonal Relations M =16.96; Symptom Distress M = 37.59) were moderately high. Profile 3's mean OQ-45.2 total score of 66.04 was just above the clinical cut off score of 63. Profile 3 was 59.8% women, 84.1% White, and 54.7% individuals with prior psychotherapy experience (Table 5). Profile 3 averaged 60.25 years in age. This profile was called "High Attachment Avoidance and Moderate Attachment Anxiety and Moderate Psychological Distress."

Psychotherapy Outcomes and Latent Profiles

To address hypothesis two, that there would be outcome differences between profiles, a repeated measures ANCOVA was conducted to determine group differences between latent profiles and the second, third, fourth fifth, and sixth administration of the OQ-45.2 total scores, while controlling for the first administration of the OQ-45.2, gender, and race. Results suggest that there was no significant interaction between Profile membership and OQ-45.2 total scores, $F(8,308) = 1.37$, $p = .220$. However, due to the non-linear appearance of the data, an alternative ANCOVA was conducted.

An ANCOVA was conducted to measure group differences between profile membership and the difference between intake and sixth OQ45.2 administration, while controlling for gender and race. Of the original sample, only 79 participants were identified as completing six sessions of therapy. Results suggested that there is a significant interaction, $F(2,78) = 9.90$, $p < .001$, $\eta p2 = .20$. A simple contrast analysis was conducted to measure group differences between profile 1 ($M = 7.373$), 2 ($M = 8.200$), and 3 ($M = 7.354$) using a Bonferroni correction (Figure 13.). The contrast analysis results suggest a significant difference between Profile 1 and Profile 2 ($p < .001$) and between Profile 3 and Profile 2 ($p < .001$), however, the difference between Profile 1 and Profile 3 was not significant ($p = .087$). These results suggest that individuals in Profile 2 experienced significantly greater change in psychological distress as compared to participants in Profile 1 and 3.

CHAPTER V

DISCUSSION

The goal of this study was to establish a latent profile model of older adults in psychotherapy based on participant attachment style and psychological distress, that both aids clinicians in their conceptualization of their clients and provides a reasonable expectation of treatment outcomes. With literature highlighting the interconnection of social relationships and mental health in older adults (Rook & Charles, 2017) and the potential benefits of attachment-informed psychotherapy (Berant & Obegi, 2009; Sauer et al, 2010), there is a need for research that combines these areas of study. LPA that combines attachment and psychological distress has never been conducted for an older adult clinical sample and may make meaningful contributions to the psychotherapy field.

Three Profile Model

The model of best fit established by the LPA was the three-profile model, which differed from the hypothesized four-profile model. As compared to a one, two, four, and five profile model, the three-profile model provided the best balance of significant estimates of fit and low levels of uncertainty, entropy. Compared to previous LPA models using attachment indicator variables that identified four profiles (Armour et al., 2011; Bucci et al., 2017; Shevlin et al., 2014), the clinical sample of this study likely contained individuals presenting with more psychological difficulties than the non-clinical samples of the other studies. Due to the increased psychological difficulties of this sample, a large portion of the overall population that are more securely attached or have only slightly elevated insecure attachment presentations may be less likely to appear within this clinical sample. In addition to the clinical nature of this sample, the unique social patterns of older adults may have influenced the finding of three profiles. With

older adults reporting more normative avoidant attachment behaviors (Chopik et al., 2013) and a greater reliance on a smaller social network (Carstensen et al., 2020), differences in the number of identified profiles may make sense when compared to relatively younger samples.

Characterizing each profile, Profile 1 tended to include individuals who are more securely attached with comparatively low psychological distress, Profile 2 tended to include people who were more anxiously attached with high psychological distress, and Profile 3 included individuals slightly more avoidantly attached with moderate levels of psychological distress. Each of the three identified profiles tapped into a unique presentation of low, medium, and elevated levels of psychological distress. However, the attachment presentations of each profile provided a more complex perspective into the psychological presentations of the participants. While Profile 1's mean attachment scores were both relatively low, Profile 2 and 3 most noticeably differed in their degree of attachment-anxiety. Demographically, as compared to Profile 1 and 3, Profile 2 characterized by high distress and high attachment-anxiety, tended to be more women and had more individuals with a prior history of psychotherapy. In regard to age, the most distressed profile (Profile 2) was the youngest group, while the oldest profile (Profile 1) was the oldest; this is consistent with SEST's understanding that the mental health of adults typically improve as they get older

The difference in attachment-anxiety between Profile 2 and 3 may provide insight into the role both dimensions of attachment play in psychological distress. Within attachment-related literature, older adults tend to have more elevated attachment-related avoidance as compared to younger adults (Kafesios & Sideridis, 2006), which may stem from an age-related normative shift in personal and social goals (Carstensen & Mikels, 2005). Although relatively elevated in both Profile 2 and 3, the comparative difference in attachment-anxiety may contribute to the

mechanism by which individuals develop more severe psychological distress. Alternatively, greater social, interpersonal, and psychologically related symptomatic distress may increase an individual's likelihood of experiencing attachment-related anxiety. More research is needed to clarify this relationship in older adult clinical samples.

Latent Profiles and Psychotherapy Outcomes

To examine the utility of the identified three-profile model, two ANCOVAs were conducted. The first analysis of a repeated-measures ANCOVA did not find significant differences across the second, third, fourth, fifth, and sixth OQ-45.2 administration, meaning there was no evidence of differences in mean OQ45.2 total score between profiles across the first six sessions of psychotherapy. In examining the results, the small sample size of Profile 1 (n = 15) and Profile 2 (n = 18) and the potentially non-linear nature of the outcomes, may account for the insufficient evidence of repeated group differences. Change in therapy outcomes has traditionally been viewed as linear and continuous (Hayes et al., 2007); however, outcomes are often more complex, nonlinear, and discontinuous in change (Hayes et al., 2007; Thompson et al., 2010). Given the potentially non-linear nature of the OQ45.2 scores across each session, the need to use a methodology that accounts for any nonlinear directionality of change across the first six sessions of therapy was determined.

To capture the overall change that occurred in psychotherapy across the first six sessions and account for nonlinear data, an ANCOVA was conducted between profile membership and difference in psychological distress between intake and session six. The use of the first six sessions is common among the psychotherapy outcome literature for its adequate balance between length of time to observe measurable change and treatment attrition (Crits-Christopher et al., 2010; Wampold, 2015). The results suggested that both Profile 1 and Profile 3 experienced

significantly lower change in outcome scores after six sessions as compared to Profile 2. Profile 2 experienced a mean difference of 13.28 points between intake and session six, as compared to 3.63 points for Profile 1 and 6.43 points for Profile 3. The results suggest that individuals experiencing greater psychological and attachment-related anxiety distress are most likely to achieve the greatest change in therapy. However, given the mean intake OQ-45.2 total score of 100.03, clients in Profile 2 are still unlikely to drop below a total score of 62 and achieve subclinical levels of psychological distress after six sessions. In contrast, with a mean drop of 6.43 points, Profile 3 is likely to achieve, on average, subclinical levels of psychological distress after six psychotherapy sessions. Overall, the results suggest that the three-profile model is a valid method to compare mean change in psychological distress across therapy. In addition, the results demonstrate that although clients in Profile 2 on average experience the most change in OQ-45.2 total scores, clients from Profile 1 and 3 are more likely to end treatment with subclinical levels of psychological distress. These findings offer both clinicians and researchers a unique and potentially beneficial tool in therapy conceptualization and treatment expectations made specifically for older adult clients.

Clinical Implications

Although much research has been invested in understanding both therapist and client factors on treatment outcomes (see Wampold, 2015), there is a distinct dearth of research seeking to aid therapists throughout the course of treatment with older adult clients. The LPA process of developing clinical profiles based on psychological distress and attachment-related avoidance and anxiety has the potential to provide mental health practitioners with a valuable tool in the conceptualization, treatment-planning, and outcome measurement of clients in psychotherapy. Being in an often marginalized and underrepresented population, older adult clients are

particularly vulnerable to therapist bias in the form of therapeutic prototypes and expectations that were developed based on younger age groups (Bodner et al., 2018; Fullen, 2018). This study's clinical profiles may help therapist develop more complex and age-inclusive understandings of psychotherapy.

This study and the development of clinical profiles may address potentially incomplete therapist conceptualizations of their older adult clients. Although psychological distress is commonly used to understand client presentations, the addition of attachment-related distress would provide a more complete picture of the client and concerns that would contribute to their overall reasons for attending psychotherapy. Looking beyond a client's presentation of low, medium, or high level of psychological distress, attachment behaviors of clients provides a complex understanding of the intersection of interpersonal patterns and mental health. In turn, a more complete understanding of their clients' concerns may open the opportunity to better adjust their therapy approach to the specific needs of the client from the start of treatment. For example, a client presenting to psychotherapy with high psychological distress and low awareness of the ways their relationship difficulties impact mental health may overlook social stressors in the intake process; however, if the therapist intentionally provides objective and subjective measures of attachment-related distress, like the ECR, these relevant interpersonal factors are more likely to be highlighted from the start of therapy. From this additional information, therapists have a more complete picture of their client's difficulties and are in a better position to adjust their therapeutic approach to best match the needs of the client. These therapeutic adjustments could include making interpersonal relationships a more central feature in therapy conversations, increasing client motivation to address their interpersonal difficulties by highlighting their

impact on the client's life, and choosing to work from a more interpersonally-focused theoretical orientation to therapy.

The application of this study's clinical profiles may also serve to improve therapist understanding of the treatment trajectory and expected outcomes when working with older clients. Therapists may be able to compare their clients' presentations to the established three profiles in this study and draw reasonable expectations of how much progress would be expected and how long it may take to reach the desired outcomes. Each profile provides insight into how the intersection of attachment behavior and psychological distress impacts how older adult clients improve in treatment. For example, a therapist working with an older adult client presenting with high psychological distress and attachment-related anxiety may expect significant decreases in symptom distress over the course of treatment but may not expect the client to reach subclinical levels of distress. Instead, both client and therapist should be more realistically expect positive change relative to the client's presenting distress. Similarly, an older client who is presenting to therapy with relatively secure attachment behavior and low psychological distress should not expect dramatic improvements in distress in treatment.

Limitations and Future Research

There were a number of factors that limited the generalizability of this study. First, the sample consisted of older adults living within a mid-sized city receiving psychotherapy services from a university-run training clinic, which may not be representative of older clients in therapy across the United States. In addition, due to low cost and the insurance-free nature of the training clinic's services, this study's sample likely over-represented individuals from lower socioeconomic backgrounds and those without access to affordable insurance. Based on 2020 census data for the United States, this study over-represented White individuals (58.2% vs.

82.6%) and women (51% vs. 61%; U.S. Census Bureau, 2021). Future research could build on the finding of this study by recruiting a wider ranging sample that is more representative of the racial, ethnic, and gender make up of older adults in the United States. A way this could be done is through the use of cluster sampling, in which a certain percentage of the sample is guaranteed to be of a certain demographic. Given the racial and gender differences found within the literature and this study, future research may find benefit from ensuring that marginalized groups are being included.

Next, with data collected over the past 11 years, cultural, economic, and political factors likely shifted the context of the society in which both therapist and client exist within. Factors like economic recessions, United States immigrations policies, and political unrest may directly influence the psychological presentation and resource availability of both client and provider. Although the longevity of data collected in this study provides a more naturalistic perspective on psychotherapy outcomes, there were no set ways to account for the potential influences of significant events. Future research may build on these findings by replicating the results within a much shorter time frame or providing measures that allow researchers to control for the impact of these events. For example, to account for the psychological impact of the COVID19 pandemic, future researchers may use measures like the COVID-19 Stress Scale (Taylor et al., 2020) to have greater control over their psychotherapy outcome measure results.

In addition, due to the small sample size of participants that completed six sessions of psychotherapy, interpretation of outcome differences between profiles were limited. Accounting for a smaller portion of the total sample, Profile 1 and 2 contained less than 20 participants each that completed the needed six sessions of therapy. Future research may benefit from recruiting a

larger sample across each profile to better assess patterns of psychological distress across treatment.

The reliance on singular measures of attachment-behaviors and psychological distress may introduce mono-method bias and an increased likelihood misidentifying important constructs. One way to improve the evidence of construct validity of future research would be to include multiple self-report measures of both attachment and psychological distress, such as the Adult Attachment Questionnaire (Simpson et al., 1996) and Counseling Center Assessment of Psychological Symptoms-62 (Locke et al., 2011). Including multiple measures of the sample or similar constructs would enable researchers to have greater confidence in identifying the desired construct. In addition to self-report measures, observational measures like the Patient Attachment Coding System (Talia et al., 2014) offer a means of evaluating behaviorally evidenced attachment patterns in therapy without the potential impression management that may impact self-report measures. By incorporating a more comprehensive battery of attachment and psychological distress-related measures, future researcher may provide a more complete understanding of the results of this study. Lastly, due to limited sample size, a second LPA was not conducted to provide additional support for the existence of a three-profile model. Additional evidence of a three-profile model would provide more support of the model's utility in accurately conceptualizing older adult clients. Beyond replicating the three-profile model in a similar sample, future research should expand on the findings of this study by comparing models to samples collected outside of university training clinics to better assess the generalizability of these client profiles.

Conclusions

The establishment of a latent profile model that combines relevant constructs within psychotherapy, attachment style and psychological distress provides a novel and useful tool in the conceptualization and treatment of older adults. In an archival sample of psychotherapy clients seeking services in a community-based training clinic, a three-profile model best fit. Each profile contains a portion of clients that reported a unique pattern of attachment-anxiety, attachment-avoidance, and psychological distress. Profile 1 was characterized by relatively secure attachment and psychological distress, Profile 2 consisted of individuals with high anxiety attachment and high psychological distress, and Profile 3 notably contained clients with relatively high avoidant attachment and moderate levels of psychological distress. Post-LPA analyses and demographic interpretation suggest that although Profile 2 experiences the greatest decrease in psychological distress across treatment, only Profile 1 and 3 obtained subclinical levels of psychological distress after six sessions. It is my hope that by establishing a latent profile model using measures of attachment and psychological distress, that clinicians can be both better prepared to conceptualize client presentation at intake and have reasonable expectations of how therapy will progress based on them.

REFERENCES

Ainsworth, M. D., & Bell, S. M. (1970). Attachment, exploration, and separation: Illustrated by the behavior of one-year-olds in a strange situation. *Child Development, 41*(1), 49–67. https://doi.org/10.2307/1127388

Agishtein, P., & Brumbaugh, C. (2013). Cultural variation in adult attachment: The impact of ethnicity, collectivism, and country of origin. *Journal of Social, Evolutionary, and Cultural Psychology, 7*(4), 384-405. http://dx.doi.org/10.1037/h0099181

Agrawal, H. R., Gunderson, J., Holmes, B. M., & Lyons-Ruth, K. (2004). Attachment studies with borderline patients: A review. *Harvard Review of Psychiatry*, *12*(2), 94–104. doi:10.1080/10673220490447218

American Psychiatric Association (2000). *The diagnostic and statistical manual of mental disorders, fourth edition, text revision*. Washington DC: American Psychiatric Association.

Amodeo, A. L., Vitelli, R., Scandurra, C., Picariello, S., & Valerio, P. (2015). Adult Attachment and Transgender Identity in the Italian Context: Clinical Implications and Suggestions for Further Research. *The International Journal of Transgenderism*, *16*(1), 49–61. https://doi.org/10.1080/15532739.2015.1022680

Antonucci, T. C. (1994). *Attachment in adulthood and aging.* In M. B. Sperling & W. H. Berman (Eds.), *Attachment in adults: Clinical and developmental perspectives* (p. 256–272). Guilford Press.

Armour, C., Elklit, A., & Shevlin, M. (2011). Attachment typologies and posttraumatic stress disorder (PTSD), depression and anxiety: a latent profile analysis approach. *European Journal of Psychotraumatology*, *2*, https://doi.org/10.3402/ejpt.v2i0.6018

Bakermans-Kranenburg, M. J., & van IJzendoorn, M. H. (2009). The first 10,000 Adult Attachment Interviews: distributions of adult attachment representations in clinical and non-clinical groups. *Attachment and Human Development, 11*(3), 223–263. https://doi.org/10.1080/14616730902814762

Barber, S. J., Opitz, P. C., Martins, B., Sakaki, M., & Mather, M. (2016). Thinking about a limited future enhances the positivity of younger and older adults' recall: Support for socioemotional selectivity theory. *Memory and Cognition, 44*(6), 869-882.

Bartholomew, K. (1990). Avoidance of intimacy: An attachment perspective. *Journal of Social and Personal Relationships, 7*, 147-178. https://doi.org/10.1177/0265407590072001

Beeney, J. E., Wright, A., Stepp, S. D., Hallquist, M. N., Lazarus, S. A., Beeney, J., Scott, L. N., & Pilkonis, P. A. (2017). Disorganized attachment and personality functioning in adults: A latent class analysis. *Personality Disorders, 8*(3), 206–216. https://doi.org/10.1037/per0000184

Berant, E., & Obegi, J. H. (2009). Attachment-informed psychotherapy research with adults. In J. H. Obegi & E. Berant (Eds.), *Attachment Theory and Research in Clinical Work with Adults* (pp. 461–489). The Guilford Press.

Bodner, E., Palgi, Y., & Wyman, M. F., (2018). Ageism in mental health assessment and treatment of older adults. *Contemporary Perspectives on Ageism, 19*, 241-262. https://doi.org/10.1007/978-3-319-73820-8_15

Bosquet, M., & Egeland, B. (2006). The development and maintenance of anxiety symptoms from infancy through adolescence in a longitudinal sample. *Development and Psychopathology, 18*(2), 517-550. https://doi.org/10.1017/S0954579406060275

Bosmans, G., Braet, C., Van Vlierberghe, L. (2010). Attachment and symptoms of psychopathology: Early maladaptive schemas as a cognitive link?. *Clinical Psychology & Psychotherapy*, *17*(5), 374-385. https://doi.org/10.1002/cpp.667

Bosquet, M., & Egeland, B. (2006). The development and maintenance of anxiety symptoms from infancy through adolescence in a longitudinal sample. *Development and psychopathology*, *18*(2), 517–550. https://doi.org/10.1017/S0954579406060275

Bowlby, J. (1969). *Attachment and loss: Volume I*. London, UK: Hogarth Press.

Bowlby, J. (1977). The making and breaking of affectional bonds: I. Aetiology and psychopathology in the light of attachment theory. *British Journal of Psychiatry*, *130*(3), 201-210. https://doi.org/10.1192/bjp.130.3.201

Bowlby, J. (1980). *Attachment and loss. Vol. 3: Loss, sadness and depression*. Basic Books.

Bowlby, J. (1988). *A secure attachment.* Routledge

Bradley, J. M., & Cafferty, T. P. (2001). Attachment among older adults: Current issues and directions for future research. *Attachment & Human Development*, *3*(2), 200-221. https://doi.org/10.1080/14616730126485

Brennan, K. A., Clark, C. L., & Shaver, P. R. (1998). Self-report measurement of adult attachment: An integrative overview. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 46-76). New York, NY: Guilford Press.

Browne, C. J. & Shloberg, E. (2003). Attachment theory, ageing and dementia: A review of the literature. *Aging & Mental Health*, *10*(2), 134-142. https://doi.org/10.1080/13607860500312118

Bucci, S., Emsley, R., & Berry, K. (2017). Attachment in psychosis: A latent profile analysis of attachment styles and association with symptoms in a large psychosis cohort. *Psychiatry Research, 247,* 243–249. https://doi.org/10.1016/j.psychres.2016.11.036

Carstensen, L. L., & DeLiema, M. (2018). The positivity effect: a negativity bias in youth fades with age. *Current Opinion in Behavioral Sciences, 19,* 7-12. https://doi.org/10.1016/j.cobeha.2017.07.009 PMCID: PMC6186441

Carstensen, L. L., Fung, H. H., & Charles, S. T. (2003). Socioemotional selectivity theory and the regulation of emotion in the second half of life. *Motivation and Emotion, 27*(2), 103-123. http://dx.doi.org/10.1023/A:1024569803230

Carstensen, L. L., Isaacowitz, D. M., & Charles, S. T. (1999). Taking time seriously: A theory of socioemotional selectivity. *The American Psychologist, 54*(3), 165-181. https://doi.org/10.1037/0003-066X.54.3.165

Carstensen, L. L., & Mikels, J. A. (2005). At the intersection of emotion and cognition: Aging and the positivity effect. *Current Directions in Psychological Science, 14,* 117–121. https://doi.org/10.1111/j.0963-7214.2005.00348.x

Carstensen, L. L., Pasupathi, M., Mayr, U., & Nesselroade, J. R. (2000). Emotional experience in everyday life across the adult life span. *Journal of Personality and Social Psychology, 79*(4), 644-655. https://doi.org/10.1037/0022-3514.79.4.644

Catanzaro, A., & Wei, M. (2010). Adult attachment, dependence, self-criticism, and depressive symptoms: A test of a mediation model. *Journal of Personality, 18,* 1135-1162. https://doi.org/10.1111/j.1467-6494.2010.00645.x

Charles, S. T. (2010). Strength and vulnerability integration: A model of emotional well-being across adulthood. *Psychological Bulletin, 136*(6), 1068–1091. https://doi.org/10.1037/a0021232

Cheng, S. T., Lee, C. K., Chan, A. C., Leung, E. M., & Lee, J. J. (2009). Social network types and subjective well-being in Chinese older adults. *The Journals of Gerontology. Series B, Psychological sciences and social sciences, 64*(6), 713–722. https://doi.org/10.1093/geronb/gbp075

Chopik, W. J., Edelstein, R. S., & Fraley, R. C. (2013). From the cradle to the grave: age differences in attachment from early adulthood to old age. *Journal of Personality*, *81*(2), 171–183. https://doi.org/10.1111/j.1467-6494.2012.00793.x

Connolly Gibbons, M. B., Rothbard, A., Farris, K. D., Wiltsey Stirman, S., Thompson, S. M., Scott, K., Heintz, L. E., Gallop, R., & Crits-Christoph, P. (2011). Changes in psychotherapy utilization among consumers of services for major depressive disorder in the community mental health system. A*dministration and Policy in Mental Health, 38*(6), 495–503. https://doi.org/10.1007/s10488-011-0336-1

Consedine, N. S., & Fiori, K. L. (2009). Gender moderates the association between attachment and discrete emotions in late middle age and later life. *Aging and Mental Health, 13*(6), 847-862. https://doi.org/10.1080/13607860903046545

Consedine, N. S., & Magai, C. (2006). *Emotional Development in Adulthood: A Developmental Functionalist Review and Critique.* In C. Hoare (Ed.), *Handbook of adult development and learning* (p. 123–148). Oxford University Press.

Cornwell, E. Y., & Waite, L. J. (2009). Social disconnectedness, perceived isolation, and health among older adults. *Journal of Health and Social Behavior, 50*(1), 31–48. https://doi.org/10.1177/002214650905000103

Crits-Christoph, P., Baranackie, K., Kurcias, J. S., Beck, A. T., Carroll, K., Perry, K., Luborsky, L., McLellan, A., Woody, G., Thompson, L., Gallagher, D., & Zitrin, C. (1991). Meta-analysis of therapist effects in psychotherapy outcome studies. *Psychotherapy Research, 1*(2), 81–91. https://doi.org/10.1080/10503309112331335511

Davila, J., & Levy, K. N. (2006). Introduction to the special section on attachment theory and psychotherapy. *Journal of Consulting and Clinical Psychology, 74*(6), 989–993. https://doi.org/10.1037/0022-006X.74.6.989

Del Giudice M. (2019). Sex differences in attachment styles. *Current Opinion in Psychology, 25*, 1–5. https://doi.org/10.1016/j.copsyc.2018.02.004

Department of Health and Human Services. (2011). Practitioners' guide: For working with older adults with depression. *U.S. Department of Health and Human Services*. Retrieved from https://store.samhsa.gov/sites/default/files/d7/priv/sma11-4631-practioners.pdf

Dozier, M., Stovall-McClough, K. C., & Albus, K. E. (2008). Attachment and psychopathology in adulthood. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (pp. 718-744). New York, New York: The Guilford Press.

Dziak, J. J., Bray, B. C., Zhang, J., Zhang, M., & Lanza, S. T. (2017). Comparing the performance of improved classified-analyze approaches for distal outcomes for latent profile analysis. *Methodology, 12*(4), 107-116. https://doi.org/ 10.1027/1614-2241/a000114

English, T., & Carstensen, L. L. (2014). Emotional experience in the mornings and the evenings: Consideration of age differences in specific emotions by time of day. *Frontiers in Psychology, 5,* Article 185. https://doi.org/10.3389/fpsyg.2014.00185

Ermann, L.S., Lawson, G., & Burge, P. L. (2016). Unexpected social benefits of alcoholics anonymous for older women. *Adultspan Journal, 15*(1), 13-24.

Fairbairn, C. E., Briley, D. A., Kang, D., Fraley, R. C., Hankin, B. L., & Ariss, T. (2018). A meta-analysis of longitudinal associations between substance use and interpersonal attachment security. *Psychological Bulletin, 144*(5), 532–555. https://doi.org/10.1037/bul0000141

Feeney, B. C., & Thrush, R. L. (2010). Relationship influences on exploration in adulthood: the characteristics and function of a secure base. *Journal of Personality and Social Psychology*, *98*(1), 57–76. https://doi.org/10.1037/a0016961

Ferguson, S. L., G. Moore, E. W., & Hull, D. M. (2020). Finding latent groups in observed data: A primer on latent profile analysis in Mplus for applied researchers. *International Journal of Behavioral Development*, *44*(5), 458–468. https://doi.org/10.1177/0165025419881721

Fiori, K. L., Antonucci, T. C., & Cortina, K. S. (2006). Social network typologies and mental health among older adults. *The Journals of Gerontology: Series B, 61*(1), 25-32. doi:10.1093/geronb/61.1.P25

Fiske, A., Wetherell, J. L., & Gatz, M. (2009). Depression in older adults. *Annual review of clinical psychology*, *5*, 363–389. https://doi.org/10.1146/annurev.clinpsy.032408.153621

First, M. B., Spitzer, R., Gibbon, M., & Williams, J. (1996). *Structured clinical interview for axis I disorders-patient edition*. New York, New York: Biometrics Research, New York State Psychiatric Institute.

Flint, A. J., Peasley-Miklus, C., Papademetriou, E., Meyers, B. S., Mulsant, B. H., Rothschild, A. J., & Whyte, E. M.(2010). Effect of age on the frequency of anxiety disorders in major depression with psychotic features. *The American Journal of Geriatric Psychiatry*, *18*(5), 404–412. https://doi.org/10.1097/jgp.0b013e3181c294ac

Fox, N. A. (1989). Infant temperament and security of attachment: a new look. *International Society for Behavioral Development.*.

Fraley, C. R. (2002). Attachment stability from infancy to adulthood: Meta-analysis and dynamic modeling of developmental mechanisms. *Personality and Social Psychology Review*, *6*(2), 123–151. https://doi.org/10.1207/S15327957PSPR0602_03

Fraley, R. C., & Spieker, S. J. (2003). Are infant attachment patterns continuously or categorically distributed? A taxometric analysis of strange situation behavior. Developmental Psychology, 30(3), 387-404. https://doi.org/10.1037/0012-1649.39.3.38

Fung, H. H., & Carstensen, L. L. (2006). Goals change when life's fragility is primed: Lessons learned from older adults, the September 11 attacks and SARS. *Social Cognition*, *24*(3), 248–278. https://doi.org/10.1521/soco.2006.24.3.248

Fung, H. H., Carstensen, L. L., & Lutz, A. M. (1999). Influence of time on social preferences: Implications for life-span development. *Psychology and Aging*, *14*(4), 595–604. https://doi.org/10.1037/0882-7974.14.4.595

Fung, H. H., & Isaacowitz, D. M. (2016). The role of time and time perspective in age-related processes: Introduction to the special issue. *Psychology and Aging, 31*(6), 553-557. http://dx.doi.org/10.1037/pag0000119

George, D. and Mallery, P. (2010) SPSS for Windows Step by Step A Simple Guide and Reference 17.0 Update. (10th Edition), *Pearson*.

Gillath, O., Karantzas, G. C., & Selcuk, E. (2017). A net of friends: Investigating friendship by integrating attachment theory and social network analysis. *Personality & Social Psychology Bulletin*, *43*(11), 1546–1565. https://doi.org/10.1177/0146167217719731

Gwaltney, C. J., Shields, A. L., & Shiffman, S. (2008). Equivance of electronic and paper-and-pencil administration of patient-reported outcome measures: A meta-analytic review. *Value in Health*, *11*(2), 322-333. https://doi.org/10.1111/j.1524-4733.2007.00231.x

Hanson, W. E., & Merker, B. M. (2005). Review of OQ-45.2 (Outcome Questionnaire). In S. R. A. & B. S. Plake (Eds.), *The sixteenth mental measurements yearbook* (pp. 737-739). Lincoln, NE: Buros Institute of Mental Measurements.

Harling, G., Morris, K. A., Manderson, L., Perkins, J. M., & Berkman, L. F. (2020). Age and gender differences in social network composition and social support among older rural South Africans: Findings from the HAALSI study. *The Journals of Gerontology. Series B, Psychological sciences and social sciences, 75*(1), 148–159. https://doi.org/10.1093/geronb/gby013

Hayes, A. M., Laurenceau, J. P., Feldman, G., Strauss, J. L., & Cardaciotto, L. (2007). Change is not always linear: the study of nonlinear and discontinuous patterns of change in psychotherapy. *Clinical psychology review*, *27*(6), 715–723. https://doi.org/10.1016/j.cpr.2007.01.008

Hazan, C., Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology, 52*(3), 511-524. https://doi.org/10.1037/0022-3514.52.3.511

Hill, A., & Brettle, A. (2005). The effectiveness of counseling with older adults: Results of a systematic review. *Counseling and Psychotherapy Research, 5*(4), 1-8. https://doi.org/10.1080/14733140500510374

Hunter, J., & Maunder, R. (2015). *Improving patient treatment with attachment theory*. Springer International Publishing AG.

Institute of Medicine Committee on the Mental Health Workforce for Geriatric Populations. (2012). *The mental health and substance use workforce for older adults: In whose hands?* Washington, DC: The National Academies Press.

Kafetsios, K., & Sideridis, G. D. (2006). Attachment, social support and well-being in young and older adults. *Journal of Health Psychology, 11*(6), 863–875. https://doi.org/10.1177/1359105306069084

Kagan, J., Reznick, J. S., Clarke, C., Snidman, N., & Garcia-Coll, C. (1984). behavioral inhibition to the unfamiliar. *Child development*, 2212-2225.

Karel, M. J., Gatz, M. & Smyer, M. A. (2012). Aging and mental health in the decade ahead: What psychologists need to know. *American Psychologist,* 67, 184-198. https://doi.org/10.1037/a0025393

Kline, R. B. (2005). Principles and practice of structural equation modeling (2nd ed.). *Guildford Press*.

Knight, B. G., & Poon, C. Y. M. (2008). Contextual adult life span theory for adapting psychotherapy with older adults. J*ournal of Rational-Emotive & Cognitive-Behavior Therapy, 26*(4), 232–249. https://doi.org/10.1007/s10942-008-0084-7

Laidlaw, K., & McAlpine, S. (2008). Cognitive behaviour therapy: How is it different with older people? *Journal of Rational-Emotive & Cognitive-Behavior Therapy, 26*(4), 250–262. https://doi.org/10.1007/s10942-008-0085-6

Lambert, M. J., Burlingame, G. M., Umphress, V., Hansen, N. B., Vermeersch, D. A., Clouse, G. C., & Yanchar, S. C. (1996). The reliability and validity of the Outcome Questionnaire. *Clinical Psychology and Psychotherapy, 3*(4), 249-258. https://doi.org/10.1002/(SICI)1099-0879

Lanza, S. T., Flaherty, B. P., & Collins, L. M. (2003). *Latent class and latent transition analysis.* In J. A. Schinka & W. F. Velicer (Eds.), *Handbook of psychology: Research methods in psychology, Vol. 2* (p. 663–685). John Wiley & Sons Inc. https://doi.org/10.1002/0471264385.wei0226

Lee, A., & Hankin, B. L. (2009). Insecure attachment, dysfunctional attitudes, and low self-esteem predicting prospective symptoms of depression and anxiety during adolescence. *Journal of Clinical Child and Adolescent Psychology, 38*(2), 219–231. https://doi.org/10.1080/15374410802698396

Levy, K. N., Kivity, Y., Johnson, B. N., & Gooch, C. V. (2018). Adult attachment as a predictor and moderator of psychotherapy outcomes: A meta-analysis. *Journal of Clinical Psychology, 74*(11), 1996-2013. https://doi.org/10.1002/jclp.22685

Litwin H. (2010). Social networks and well-being: a comparison of older people in Mediterranean and non-Mediterranean countries. *The Journals of Gerontology. Series B,*

Psychological sciences and social sciences, *65*(5), 599–608. https://doi.org/10.1093/geronb/gbp104

Locke, B. D., Buzolitz, J. S., Lei, P. W., Boswell, J. F., McAleavey, A. A., Sevig, T. D., Dowis, J. D., & Hayes, J. A. (2011). Development of the Counseling Center Assessment of Psychological Symptoms-62 (CCAPS-62). *Journal of counseling psychology*, *58*(1), 97–109. https://doi.org/10.1037/a0021282

Lopez, F. G., Mauricio, A. M., Gormley, B., Simko, T., & Berger, E. (2001). Adult attachment orientations and college student distress: The mediating role of problem coping styles. *Journal of Counseling & Development, 79,* 459–464.

Lopez, F. G., Mitchell, P., & Gormley, B. (2002). Adult attachment orientations and college student distress: Test of a mediational model. *Journal of Counseling Psychology, 49*(4), 460-467. https://doi.org/10.1037/0022-0167.49.4.460

Magai, C., Milburn, N., Thorpe, B., McPherson, R., & Peralta, D. (2001). Attachment styles in older European American and African American adults. *Journal of Gerontology*, *56*(1), 28-35. https://doi.org/10.1093/geronb/56.1.S28

Main, M. & Solomon, J. (1986) Discovery of a new, insecure-disorganized/disoriented attachment pattern. In T. B. Brazelton & M. Yogman (Eds), *Affective development in infancy* , pp. 95-124. Norwood, New Jersey: Ablex.

Main, M., & Solomon, J. (1990). *Procedures for identifying infants as disorganized/disoriented during the Ainsworth Strange Situation.* In M. T. Greenberg, D. Cicchetti, & E. M. Cummings (Eds.), *The John D. and Catherine T. MacArthur Foundation series on mental health and development. Attachment in the preschool years: Theory, research, and intervention* (p. 121–160). University of Chicago Press.

Mallinckrodt, B., & Wei, M. (2005). Attachment, social competencies, social support, and psychological distress. *Journal of Counseling Psychology, 52*(3), 358-367. https://doi.org/10.1037/0022-0167.52.3.358

McConnell, M., and Moss, E., (2011). Attachment across the life span: Factors that contribute to stability and change. *Australian Journal of Educational & Developmental Psychology, 11*(1), 60-77.

Meltzoff, J., & Kornreich, M. (1970). *Research in psychotherapy*. New York, NY: Atherton Press.

Mendive J. (2009). Emotional distress: an alternative primary care perspective. *Mental Health in Family Medicine, 6*(3), 125–127.

Merz, E. M., & Consedine, N. S. (2009). The association of family support and wellbeing in later life depends on adult attachment style. *Attachment and Human Development, 11*(2), 203-221. https://doi.org/10.1080/14616730802625185

Meyer, B., & Pilkonis, P. A. (2001). Attachment style. *Psychotherapy: Theory, Research, Practice, Training, 38*(4), 466–472. https://doi.org/10.1037/0033-3204.38.4.466

Mikulincer, M., & Shaver, P. R. (2007). *Attachment in adulthood: Structure, dynamics, and change.* The Guilford Press.

Mikulincer, M., Shaver, P. R., & Berant, E. (2013). An attachment perspective on therapeutic processes and outcomes. *Journal of Personality, 81*(6), 606–616. https://doi.org/10.1111/j.1467-6494.2012.00806.x

Mikulincer, M., Shaver, P. R., & Pereg, D (2003). Attachment theory and affect regulation: The dynamics, development, and cognitive consequences of attachment-related

strategies. *Motivation and Emotion, 27*(2), 77-102. https://doi.org/10.1023/A:1024515519160

Morin, A. J. S., Meyer, J. P., Creursier, J., & Bietry, F. (2016). Multiple-group analysis of similarity in latent profile solutions. *Organizational Research Methods, 19*(2), 231-254. https://doi.org/10.177/10944281.15621148

Moss, S. A., & Wilson, S. G. (2018). Why are older people often so responsible and considerate even when their future seems limited? A Systematic Review. *International Journal of Aging & Human Development, 86*(1), 82–108. https://doi.org/10.1177/0091415017689883

Ogle, C. M., Rubin, D. C., & Siegler, I. C. (2015). The relation between insecure attachment and posttraumatic stress: Early life versus adulthood traumas. *Psychological Trauma: Theory, Research, Practice and Policy, 7*(4), 324–332. https://doi.org/10.1037/tra0000015

Ong, A. D., Uchino, B. N., & Wethington, E. (2016). Loneliness and health in older adults: A mini-review and synthesis. *Gerontology, 62*(4), 443–449. https://doi.org/10.1159/000441651

Opie, J. E., McIntosh, J. E., Esler, T. B., Duschinsky, R., George, C., Schore, A., Kothe, E. J., Tan, E. S., Greenwood, C. J., & Olsson, C. A. (2020). Early childhood attachment stability and change: a meta-analysis. *Attachment & Human Development, 23*(6), 897-930. https://doi.org/10.1080/14616734.2020.1800769

Ortman J. M., Velkoff V. A., Hogan H. (2014). *An aging nation: The older population in the United States*. Retrieved from https://www.census.gov/prod/2014pubs/p25-1140.pdf

Owen, J., Adelson, J., Budge, B. Wampold, Kopta, M., Minami, T., & S. Miller. (2015). Trajectories of change in psychotherapy. *Journal of Clinical Psychology, 71*(9), 817-827. https://doi.org/10.1002/jclp.22191

Pachana, N., Emery, E., Konnert, C. A., Woodhead, E., & Edelstein, B. A. (2010). Geropsychology content in clinical training programs: A comparison of Australia, Canadian, and U.S. data. *International Psychogeriatrics*, *22*(6), 909-918. https://doi.org/10.1017/S1041610210000803

Pietromonaco, P. R., & Barrett, L. F. (2000). The internal working models concept: What do we really know about the self in relation to others? *Review of General Psychology, 4*(2), 155–175. https://doi.org/10.1037/1089-2680.4.2.155

Raue, P. J., McGovern, A. R., Kiosses, D. N., & Sirey, J. A. (2017). Advances in psychotherapy for depressed older adults. *Current Psychiatry Reports, 19*(9), 57. https://doi.org/10.1007/s11920-017-0812-8

Reed, A. E., & Carstensen, L. L. (2012). The theory behind the age-related positivity effect. *Frontiers in Psychology, 3*, 339. https://doi.org/10.3389/fpsyg.2012.00339

Reed, A. E., Chan, L., & Mikels, J. A. (2014). Meta-analysis of the age-related positivity effect: Age differences in preferences for positive over negative information. *Psychology and Aging, 29*(1), 1–15. https://doi.org/10.1037/a0035194

Rees C. (2007). Childhood attachment. *The British Journal of General Practice, 57*(544), 920–922. https://doi.org/10.3399/096016407782317955

Rice, K. G., Suh, H., & Ege, E. (2014). Further evaluation of the Outcome Questionnaire–-45.2. *Measurement and Evaluation in Counseling and Development, 47*(2), 102-117. https://doi.org/10.1177/0748175614522268

Rook, K. S., & Charles, S. T. (2017). Close social ties and health in later life: Strengths and vulnerabilities. *The American Psychologist, 72*(6), 567–577. https://doi.org/10.1037/amp0000104

Sanford, K. (1997). Two dimensions of adult attachment: Further validation. *Journal of Social and Personal Relationships, 14*(1), 133-143. https://doi.org/10.1177%2F0265407597141008

Sauer, E. M., Anderson, M. Z., Gormley, B., Richmond, C. J., & Preacco, L. (2010). Client attachment orientations, working alliances, and responses to treatment: A psychology training clinic study. *Psychotherapy Research, 20,* 702-711.

Sauer, E. M., Lopez, F. G., & Gormley, B. (2003). Respective contributions of therapist and client adult attachment orientations to the development of the early working alliance: A preliminary growth modeling study. *Psychotherapy Research, 13,* 371-382.

Schwarz, G. (1978). Estimating the dimension of a model. *The Annals of Statistics, 6*(2), 461-464. https://doi.org/10.1214/aos/1176344136

Schwartz, E., & Litwin, H. (2018). Social network changes among older Europeans: the role of gender. *European Journal of Ageing, 15*(4), 359–367. https://doi.org/10.1007/s10433-017-0454-z

Segal, D. L., Needham, T. N., & Coolidge, F. L. (2009). Age differences in attachment orientations among younger and older adults: evidence from two self-report measures of attachment. *International Journal of Aging & Human Development, 69*(2), 119–132. https://doi.org/10.2190/AG.69.2.c

Simpson, J. A., Ickes, W., & Grich, J. (1999). When accuracy hurts: Reactions of anxious–ambivalent dating partners to a relationship-threatening situation. *Journal of Personality and Social Psychology, 76*(5), 754–769. https://doi.org/10.1037/0022-3514.76.5.754

Simpson, J. A., Rholes, W. S., & Phillips, D. (1996). Conflict in close relationships: An attachment perspective. *Journal of Personality and Social Psychology, 71*(5), 899–914. https://doi.org/10.1037/0022-3514.71.5.899

Shaver, P. R., & Mikulincer, M. (2004). Attachment in the later years: A commentary. *Attachment & Human Development, 6*(4), 451–464. https://doi.org/10.1080/1461673042000303082

Shevlin, M., Boyda, D., Elklit, A., & Murphy, S. (2014). Adult attachment styles and the psychological response to infant bereavement. *European Journal of Psychotraumatology, 5*(SUPPL). https://doi.org/10.3402/ejpt.v5.23295

Shi, L., Wampler, R., & Wampler, K. (2014). Categorical or dimensional: How do attachment measures inform clinicians in couple therapy? *Journal of Family Psychotherapy, 25*(1), 12-25. d https://doi.org/10.1080/08975353.2014.881686

Spence R., Jacobs C., Bifulco A. (2018). Attachment style, loneliness and depression in older age women. *Aging Mental Health 31*, 1–3. https://doi.org/10.1080/13607863.2018.1553141

Sroufe, L. A. (2005). Attachment and development: A prospective, longitudinal study from birth to adulthood. *Attachment and Human Development, 7*(4), 349-367. https://doi.org/10.1080/14616730500365928

Stern, Barbarin, O., & Cassidy, J. (2021). Working toward anti-racist perspectives in attachment theory, research, and practice. *Attachment & Human Development, ahead-of-print*(ahead-of-print), 1–31. https://doi.org/10.1080/14616734.2021.1976933

Sullivan-Singh, S. J., Stanton, A. L., & Low, C. A. (2015). Living with limited time: Socioemotional selectivity theory in the context of health adversity. *Journal of Personality and Social Psychology, 108*(6), 900–916. https://doi.org/10.1037/a0039047

Tavakol, M., & Dennick, R., (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, *2*, 53-55. https://doi.org/10.5116/ijme.4dfb.8dfd

Taylor, S., Landry, C. A., Paluszek, M. M., Fergus, T. A., McKay, D., & Asmundson, G. (2020). Development and initial validation of the COVID Stress Scales. *Journal of anxiety disorders*, *72*, 102232. https://doi.org/10.1016/j.janxdis.2020.102232

Thompson, M. G., Thompson, L., & Gallagher-Thompson, D. (1995). Linear and nonlinear changes in mood between psychotherapy sessions: Implications for treatment outcome and relapse risk. *Psychotherapy Research, 5*(4), 327–336. https://doi.org/10.1080/10503309512331331436

United States Census Bureau (2021). *Quick Facts: Grand Rapids city, Michigan*. Retrieved from https://www.census.gov/quickfacts/grandrapidscitymichigan

Vice, G. C. (2005). A meta-analysis of the stability of attachment styles from birth to adulthood. *Dissertation Abstracts International: Section B: The Sciences and Engineering*, *65*(7-B), 3753.

Wampold B. E. (2015). How important are the common factors in psychotherapy? An update. *World Psychiatry*, *14*(3), 270–277. https://doi.org/10.1002/wps.20238

Waters, E., Merrick, S., Treboux, D., Crowell, J., & Albersheim, L. (2000). Attachment security in infancy and early adulthood: A twenty-year longitudinal study. *Child Development, 71*(3), 684–689. https://doi.org/10.1111/1467-8624.00176

Wei, M. (2008, October). The implications of attachment theory in counseling and psychotherapy. [Web article]. Retrieved from https://societyforpsychotherapy.org/the-implications-of-attachment-theory-in-counseling-and-psychotherapy

Wei, M., Heppner, P. P., & Mallinckrodt, B. (2003). Perceived coping as a mediator between attachment and psychological distress: A structural equation modeling approach. *Journal of Counseling Psychology, 50*, 438-447.

Wei, M., Mallinckrodt, B., Larson, L. A., & Zakalik, R. A. (2005). Attachment, depressive symptoms, and validation from self versus others. *Journal of Counseling Psychology, 52*, 368-377.

Wei, M., Russell, D. W., Mallinckrodt, B., & Vogel, D. L (2007). The Experiences in Close Relationship scale (ECR)- short form: Reliability, validity, and factor structure. *Journal of Personality Assessment, 88*(2), 187-204. https://doi.org/10.1080/00223890701268041

Woodhead, E. L., Emery, E. E., Pachana, N. A., Scott, T. L., Konnert, C. A., & Edelstein, B. A. (2013). Graduate students' geropsychology training opportunities and perceived competence in working with older adults. *Professional Psychology: Research and Practice*, *44*(5), 355-362. https://doi.org/10.1037/a0034632

Woodhead, E. L., Emery-Tiburcio, E. E., Pachana, N. A., Scott, T. L., Konnert, C. A., & Edelstein, B. A. (2015). Clinical and counseling psychology graduate students' expectations for future work with older adults. *Clinical Gerontologist*, *38*(5), 357-374. http://doi.org/10.1080/07317115.2015.1067271

Wrzus, C., Hänel, M., Wagner, J., & Neyer, F. J. (2013). Social network changes and life events across the life span: A meta-analysis. *Psychological Bulletin, 139*(1), 53–80. https://doi.org/10.1037/a0028601

Zeiss, A. M. (2003). Depression in older adults: Evidence-based treatment and current gaps in the evidence base. *The Gerontologist*, *43*(2), 279-283. https://doi.org/10.1093/geront/43.2.279

Zhang, F., & Labouvie-Vief, G. (2004). Stability and fluctuation in adult attachment style over a 6-year period. *Attachment & Human Development*, *6*(4), 419–437. https://doi.org/10.1080/1461673042000303127

Appendix A

Outcome Questionnaire (OQ®-45.2)

Instructions: Looking back over the last week, including today, help us understand how you have been feeling. Read each item carefully and mark the box under the category which best describes your current situation. For this questionnaire, work is defined as employment, school, housework, volunteer work, and so forth. Please do not make any marks in the shaded areas.

Name:_____ Age:____yrs.

Sex

ID#_____ M ☐ F ☐

Session #_____ Date____/____/____

	Never	Rarely	Sometimes	Frequently	Almost Always	SD IR SR DO NOT MARK BELOW
1. I get along well with others	☐ 4	☐ 3	☐ 2	☐ 1	☐ 0	
2. I tire quickly	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	
3. I feel no interest in things	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	
4. I feel stressed at work/school	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	
5. I blame myself for things	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	
6. I feel irritated	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	
7. I feel unhappy in my marriage/significant relationship	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	
8. I have thoughts of ending my life	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	
9. I feel weak	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	
10. I feel fearful	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	
11. After heavy drinking, I need a drink the next morning to get going. (If you do not drink, mark "never")	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	
12. I find my work/school satisfying	☐ 4	☐ 3	☐ 2	☐ 1	☐ 0	
13. I am a happy person	☐ 4	☐ 3	☐ 2	☐ 1	☐ 0	
14. I work/study too much	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	
15. I feel worthless	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	
16. I am concerned about family troubles	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	
17. I have an unfulfilling sex life	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	
18. I feel lonely	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	
19. I have frequent arguments	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	
20. I feel loved and wanted	☐ 4	☐ 3	☐ 2	☐ 1	☐ 0	
21. I enjoy my spare time	☐ 4	☐ 3	☐ 2	☐ 1	☐ 0	
22. I have difficulty concentrating	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	
23. I feel hopeless about the future	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	
24. I like myself	☐ 4	☐ 3	☐ 2	☐ 1	☐ 0	
25. Disturbing thoughts come into my mind that I cannot get rid of	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	
26. I feel annoyed by people who criticize my drinking (or drug use). (If not applicable, mark "never")	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	
27. I have an upset stomach	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	
28. I am not working/studying as well as I used to	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	
29. My heart pounds too much	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	
30. I have trouble getting along with friends and close acquaintances	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	
31. I am satisfied with my life	☐ 4	☐ 3	☐ 2	☐ 1	☐ 0	
32. I have trouble at work/school because of drinking or drug use. (If not applicable, mark "never")	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	
33. I feel that something bad is going to happen	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	
34. I have sore muscles	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	
35. I feel afraid of open spaces, of driving, or being on buses, subways, and so forth.	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	
36. I feel nervous	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	
37. I feel my love relationships are full and complete	☐ 4	☐ 3	☐ 2	☐ 1	☐ 0	
38. I feel that I am not doing well at work/school	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	
39. I have too many disagreements at work/school	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	
40. I feel something is wrong with my mind	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	
41. I have trouble falling asleep or staying asleep	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	
42. I feel blue	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	
43. I am satisfied with my relationships with others	☐ 4	☐ 3	☐ 2	☐ 1	☐ 0	
44. I feel angry enough at work/school to do something I might regret	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	
45. I have headaches	☐ 0	☐ 1	☐ 2	☐ 3	☐ 4	
						+ +
						Total=

For More Information Contact:
OQ MEASURES LLC
E-MAIL: INFO@OQMEASURES.COM
WEB: WWW.OQMEASURES.COM
TOLL-FREE: 1-888-NIH SCORE (1-888-647-2673)
FAX: 801-990-4236

Appendix B

Experience of Close Relationship Scale

Item #	Item	Dimension
1	I prefer not to show others how I feel deep down.	Avoidance
2	I worry about being abandoned.	Anxiety
3	I am very comfortable being close to others. ®	Avoidance
4	I worry a lot about my relationships.	Anxiety
5	Just when other people start to get close to me I find myself pulling away.	Avoidance
6	I worry that other people won't care about me as much as I care about them.	Anxiety
7	I get uncomfortable when others want to be very close.	Avoidance
8	I worry a fair amount about losing my connections with others.	Anxiety
9	I don't feel comfortable opening up to other people.	Avoidance
10	I often wish that others' feelings for me were as strong as my feelings for them.	Anxiety
11	I want to get close to others, but I keep pulling back.	Avoidance
12	I often want to merge completely with other people, and this sometimes scares them away.	Anxiety
13	I am nervous when other people get too close to me.	Avoidance
14	I worry about being alone.	Anxiety
15	I feel comfortable sharing my private thoughts and feelings with others. ®	Avoidance
16	My desire to be very close sometimes scares people away.	Anxiety
17	I try to avoid getting too close to others.	Avoidance
18	I need a lot of reassurance that I am liked and appreciated by other people.	Anxiety
19	I find it relatively easy to get close to other people. ®	Avoidance
20	Sometimes I feel that I force others to show more feeling, more commitment.	Anxiety
21	I find it difficult to allow myself to depend on others.	Avoidance
22	I do not often worry about being abandoned. ®	Anxiety
23	I prefer not to be too close to other people.	Avoidance
24	If I can't get others to show interest in me, I get upset or angry.	Anxiety
25	I tell others just about everything. ®	Avoidance
26	I find that other people don't want to get as close as I would like.	Anxiety
27	I usually discuss my problems and concerns with other people. ®	Avoidance
28	When I'm not connected to people, I feel somewhat anxious and insecure.	Anxiety
29	I feel comfortable depending on others. ®	Avoidance
30	I get frustrated when others are not around as much as I would like.	Anxiety
31	I don't mind asking other people for comfort, advice, or help. ®	Avoidance
32	I get frustrated if others are not available when I need them.	Anxiety
33	It helps to turn to others in times of need. ®	Avoidance
34	When other people disapprove of me, I feel really bad about myself.	Anxiety
35	I turn to other people for many things, including comfort and reassurance. ®	Avoidance
36	I resent it when others spend time away from me.	Anxiety

® = reverse coded

Appendix C

Intake Paperwork

Client ID: _____

Client Fee: _____

CENTER FOR COUNSELING AND PSYCHOLOGICAL SERVICES-GRAND RAPIDS

CLIENT INFORMATION SHEET

Name: _____ Date: _____
Last First Middle Initial

Permanent Address:_____
Street Apt. No. City Zip Code

Home phone: _____ Work phone: _____ Mobile Phone: _____

1. Gender: _____

2. Age: _____ Birth date: _____

3. Your Racial/Ethnic Group:
   - ☐ Caucasian
   - ☐ Asian/Pacific Islander
   - ☐ African American
   - ☐ American Indian/Alaska Native
   - ☐ Hispanic/Latino(a)
   - ☐ Multiracial
   - ☐ Other

4. Your current relationship status:
   - ☐ Single, never married
   - ☐ Remarried
   - ☐ Separated
   - ☐ Married
   - ☐ Widowed
   - ☐ Divorced
   - ☐ Partnered
   - ☐ Other (please specify): _____

5. Your yearly household income:
   - ☐ 0-$24,000
   - ☐ $24,001-$30,000
   - ☐ $30,001-$40,000
   - ☐ $40,001-$50,000
   - ☐ $50,001-$60,000
   - ☐ $60,001 or more

Number of people supported by above income: _____

Revised 01/2016 by SH

6. Your current living situation:
   - ☐ Living with partner
   - ☐ Living with roommates
   - ☐ Living alone
   - ☐ Living with parents
   - ☐ Living with extended family
   - ☐ Living with children
   - ☐ Other:_____

7. Your highest level of education:
   - ☐ Did not complete high school
   - ☐ High school diploma (or equivalent)
   - ☐ Associate's degree
   - ☐ Undergraduate degree
   - ☐ Master's degree (or equivalent)
   - ☐ Doctorate (or degree equivalent)

8. Your current educational status:
   - ☐ Full-time student
   - ☐ Part-time student
   - ☐ Not a student

9. Your current employment status:
   - ☐ Full-time parent or homemaker
   - ☐ Full-time employed, permanent job
   - ☐ Full-time employed, temporary/summer
   - ☐ Part-time employed, temporary or summer
   - ☐ Part-time employed, permanent job
   - ☐ Unemployed, looking for permanent employment
   - ☐ Unemployed, looking for temp. employment
   - ☐ Unemployed, not looking for a job

10. Please tell us about your family by providing the information below. List mother, father, stepparents, siblings, partner/spouse, and children, if applicable. *Place an X in the X column if the person lives with you.* An example is provided to illustrate how to fill in the chart.

X	Name	Relationship to you	Age	Residence	Occupation
X	e.g., Jane Doe	Stepmother	47	Lansing, MI	Teacher

11. Have you been seen at this Center before?
   - ☐ Yes
   - ☐ No

Revised 01/2016 by SH

12. Are you *currently* receiving professional mental health services elsewhere?

☐ Yes ☐ No

If yes, provider's name: _____ location: _____duration: _____

13. Have you ever received counseling or mental health services before (including hospitalizations or medications)?

☐ Yes ☐ No

If yes, please include provider(s) names, locations, and dates:

_____

_____

14. Do you have any current, recurring, or chronic medical concerns?

☐ Yes ☐ No

If yes, please describe:

_____

_____

15. Are you presently taking any medications?

☐ Yes ☐ No

If yes, please list: _____

_____

16. Do you have a physical disability that limits your activities in any way?

☐ Yes ☐ No

If yes, indicate the nature of the disability: _____

17. In your own words, please describe what you would like to discuss with a counselor:

_____

_____

_____

On the scale below, please estimate the severity of your current concern(s):

Not Upsetting	Mildly Upsetting	Moderately Upsetting		Severe	Very Severe	Extremely Severe	Totally Incapacitating
1	2	3		4	5	6	7

18. Please circle how many sessions you would estimate that you might need to meet with a counselor:

1 2-4 5-8 9-12 12+

Revised 01/2016 by SH

Appendix D

HSIRB Approval Letter

WESTERN MICHIGAN UNIVERSITY

Human Subjects Institutional Review Board

Date: June 21, 2021

To: Eric Sauer, Principal Investigator
Brian Stran, Student Investigator for dissertation

From: Amy Naugle, Ph.D., Chair

Re: IRB Project Number 21-06-04

This letter will serve as confirmation that your research project titled "Attachment, Psychotherapy, and Older Adults" has been **approved** under the **exempt** category of review by the Western Michigan University Institutional Review Board (IRB). The conditions and duration of this approval are specified in the policies of Western Michigan University. You may now begin to implement the research as described in the application.

Please note: This research may **only** be conducted exactly in the form it was approved.
You must seek specific board approval for any changes to this project (e.g., ***add an investigator, increase number of subjects beyond the number stated in your application, etc.***). Failure to obtain approval for changes will result in a protocol deviation.

In addition, if there are any unanticipated adverse reactions or unanticipated events associated with the conduct of this research, you should immediately suspend the project and contact the Chair of the IRB for consultation.

The Board wishes you success in the pursuit of your research goals.

A status report is required on or prior to (no more than 30 days) June 20, 2022 and each year thereafter until closing of the study. The IRB will send a request.

When this study closes, submit the required Final Report found at https://wmich.edu/research/forms.

Note: All research data must be kept in a secure location on the WMU campus for at least three (3) years after the study closes.

251 W. Walwood Hall, Kalamazoo, MI 49008-5456
PHONE: (269) 387-8293, FAX: (269) 387-8276

Table 1

Pearson Correlation Matrix of Indicator Variables

	Anxiety	Avoidance	Interpersonal	Social	Symptom
Anxiety		.357**	.391**	.203**	.276**
Avoidance	.357**		.091	.113	.243**
Interpersonal	.391**	.091		.553**	.621**
Social	.203**	.113	.553**		.689**
Symptom	.276**	.243**	.621**	.689**	

Note: ** = <. *01*

Table 2

Skewness and Kurtosis of Indicator Variables

	Skewness	Kurtosis
Anxiety	-.100	-.451
Avoidance	-.906	2.523
Interpersonal	-.123	.278
Social	.349	.041
Symptom	.018	.368

Table 3

LPA Model Fix Summary

Model	AIC	BIC	SABIC	Entropy	Smallest Profile Percent	LMR p-value	LMR Meaning	BLRT P-Value	BLRT Meaning
1	6515.61	6547.08	6515.42	N/A					
2	6375.79	6426.15	6375.48	.752	43.00%	.008	2 > 1	>.001	2 > 1
3	6319.14	6388.38	6318.72	.801	18.02%	.024	3 > 2	>.001	3 > 2
4	6295.96	6384.09	6295.43	.806	11.81%	.109	3 > 4	>.001	4 > 3
5	6383.72	6390.73	6283.07	.820	2.91%	.531	4 > 5	.004	5 > 4

Note: *n* = 172; AIC = Akaike's Information Criterion, BIC = Bayesian Information Criterion; SABIC = Sample-Adjusted BIC; LMR = Lo-Mendell Ruben; BLRT = bootstrap likelihood ration test.

Table 4

Mean and Standard Deviation of Each Indicator Variable across Profiles

	Profile 1	Profile 2	Profile 3
Anxiety	50.088 (7.01)	76.889 (4.91)	65.461 (2.20)
Avoidance	62.445 (5.53)	73.071 (2.19)	71.650 (1.10)
Interpersonal	8.711 (1.91)	22.189 (1.26)	16.959 (0.90)
Social	6.671 (1.29)	19.393 (1.45)	11.487 (0.79)
Symptom	17.845 (2.21)	56.592 (3.179)	37.592 (3.22)

Note: n = 172; Indicator Mean (Standard Deviation).

Table 5

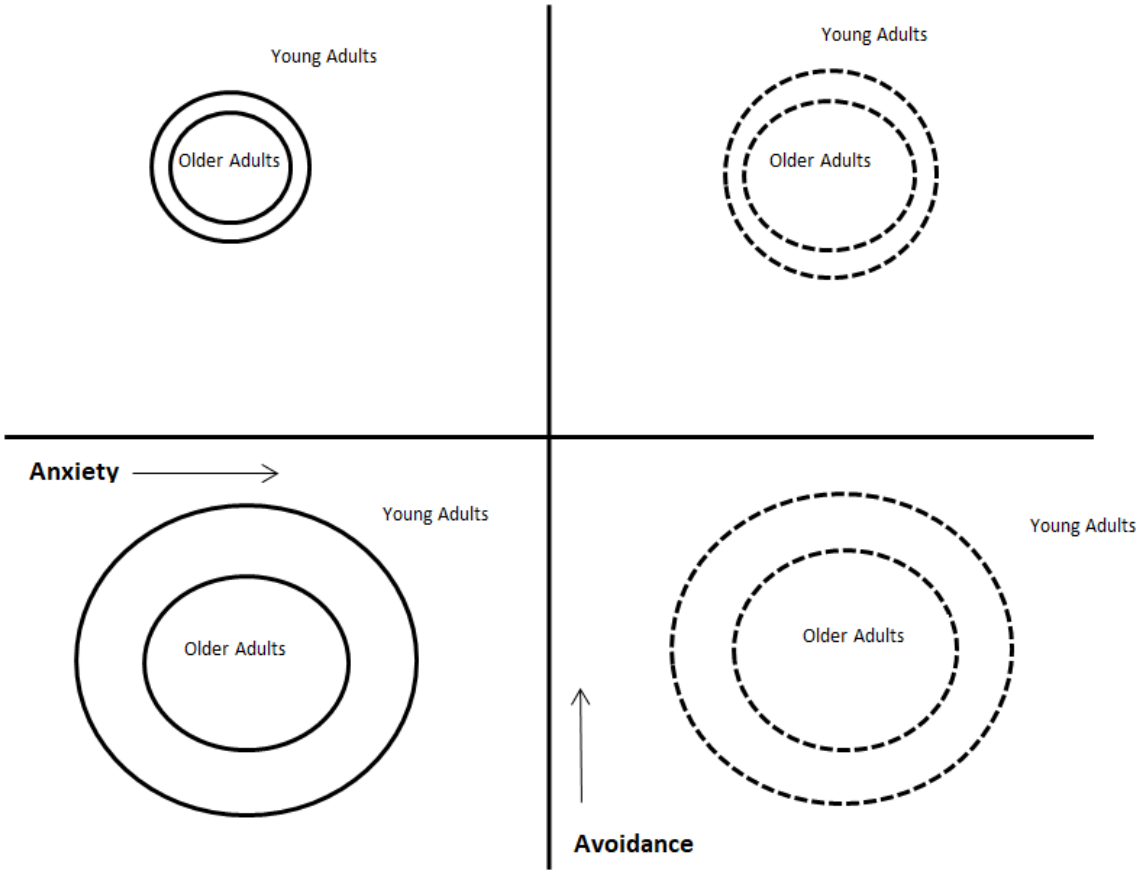
Sample Demographics across Profiles

	Profile 1 "Secure Attachment and Low Psychological Distress"	Profile 2 "High Attachment Anxiety and High Psychological Distress"	Profile 3 "High Attachment Avoidance and mod Attachment Anxiety and mod Psychological Distress"
Gender			
Women	17 (54.8%)	24 (70.6%)	64 (59.8%)
Men	14 (45.16)	10 (23.4%)	43 (40.1%)
Race			
White	24 (77.4%)	28 (82.3%)	90 (84.1%)
Black	3 (9.7%)	2 (5.9%)	14 (13.1%)
Asian	2 (6.5%)	0	5 (5.7%)
Hispanic	0	3 (8.8%)	6 (5.6%)
Multiracial	2 (6.5%)	0	4 (3.7%)
Other	0	1 (2.9%)	1 (0.9%)
Previous Therapy			
No	14 (45.1%)	9 (25.7%)	43 (40.6%)
Yes	15 (48.4%)	25 (71.4%)	58 (54.7%)
Missing	2 (6.5%)	1 (2.9%)	5 (4.7%)
Mean Age (years)	62.32	58.74	60.25

Note: Frequency (Percentage of Profile)

Figure 1

Social Network Across Older and Younger Adults



Note: Circles consisting of dashed lines indicate unstable social networks. The size of each circle is an approximation of social network size across age and attachment style.

Figure 2

Boxplots of ECR subscale, Anxiety

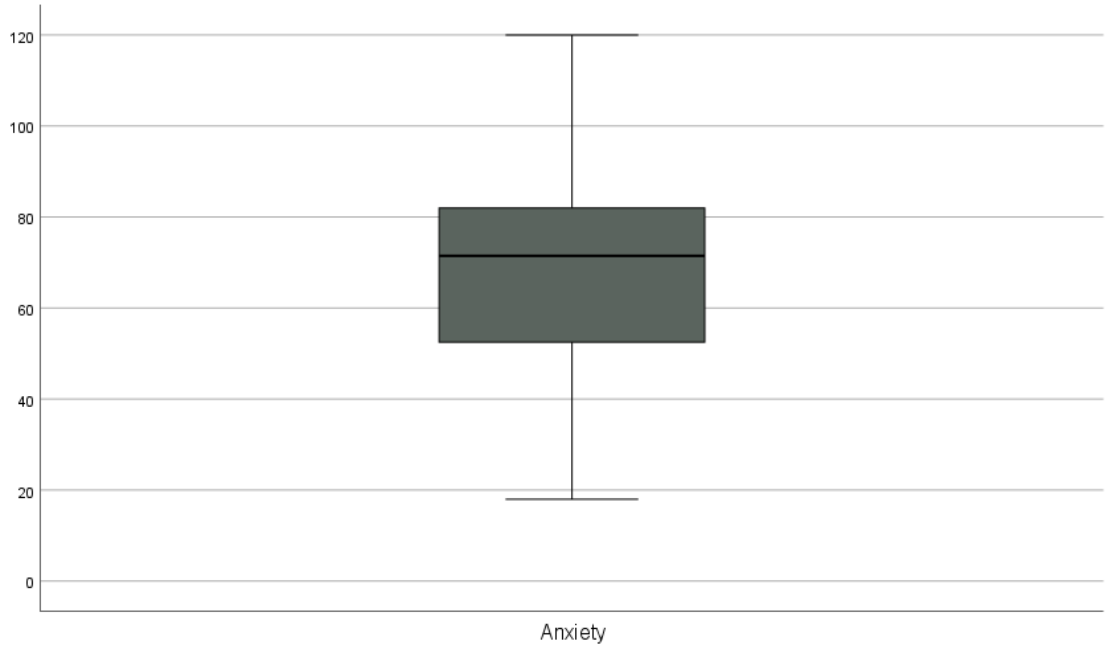


Figure 3

Boxplots of ECR subscale, Avoidance

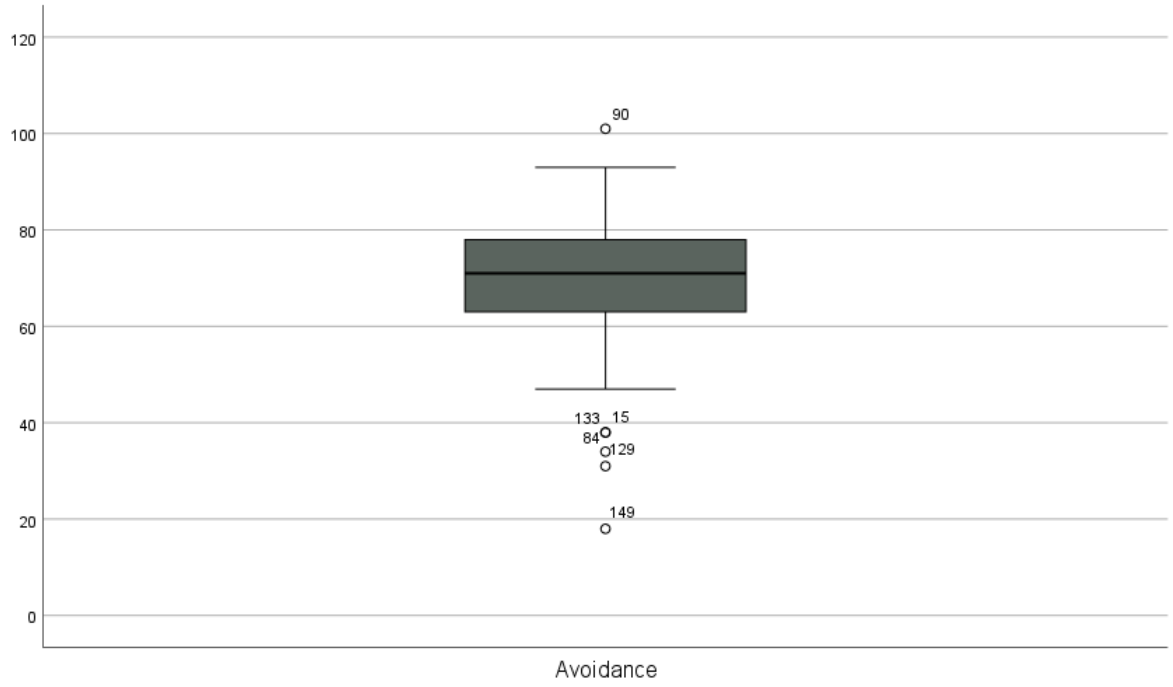


Figure 4

Boxplots of OQ45.2 subscale, Interpersonal Relation

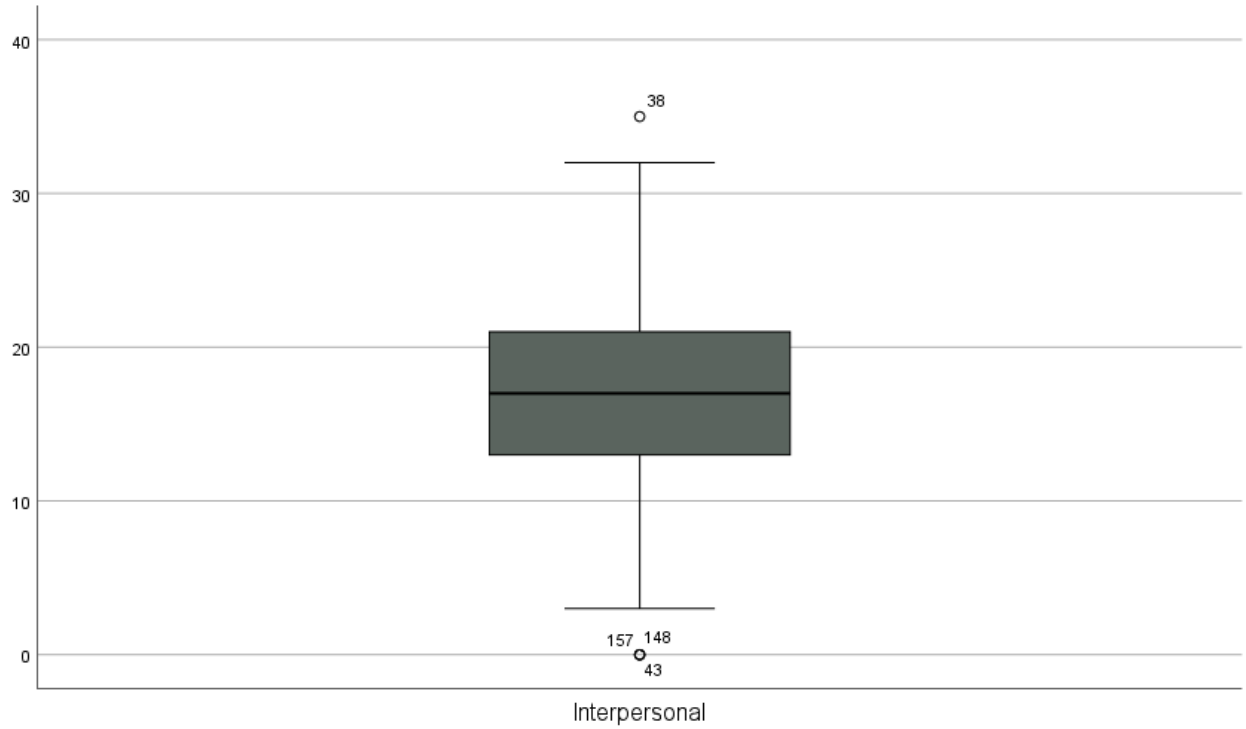


Figure 5

Boxplots of OQ45.2 subscale, Social Role

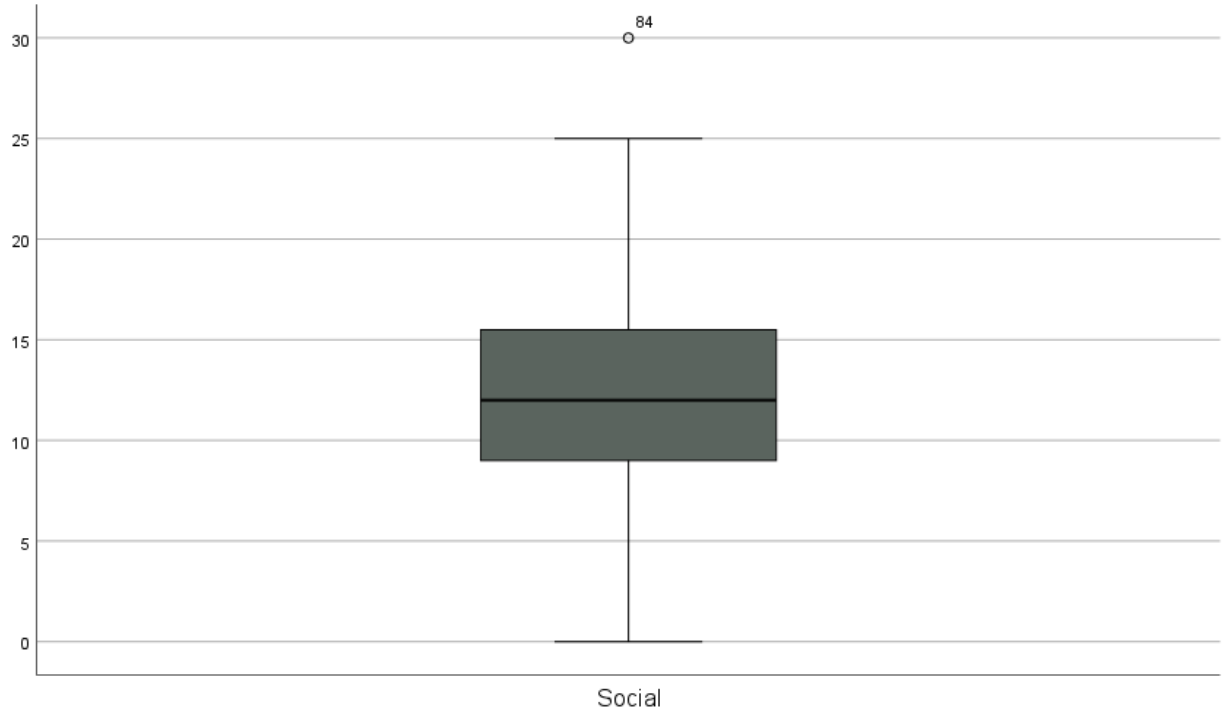


Figure 6

Boxplots of OQ45.2 subscale, Symptom Distress

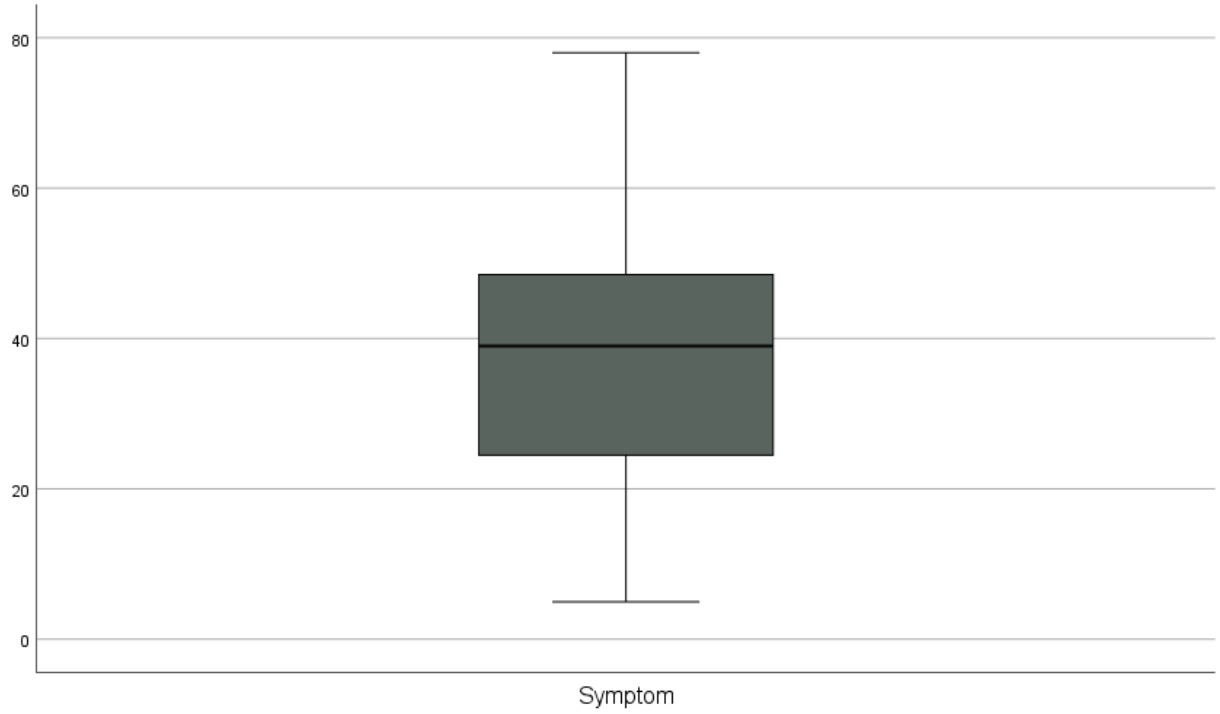


Figure 7

Frequency distribution of ECR subscale, Anxiety

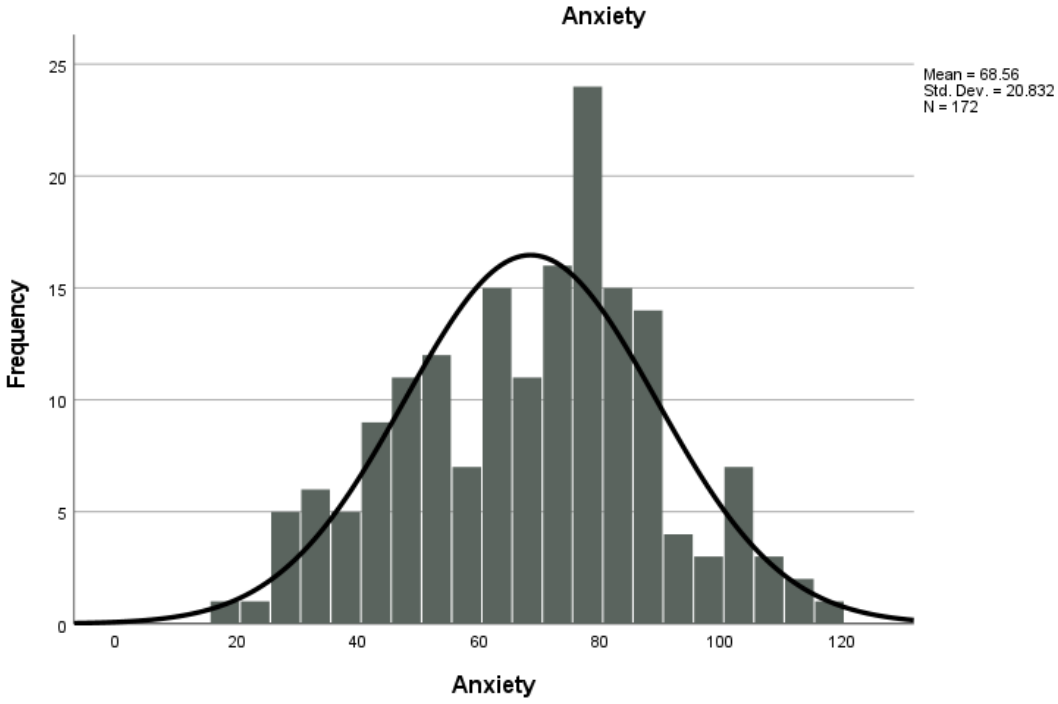


Figure 8

Frequency distribution of ECR subscale, Avoidance

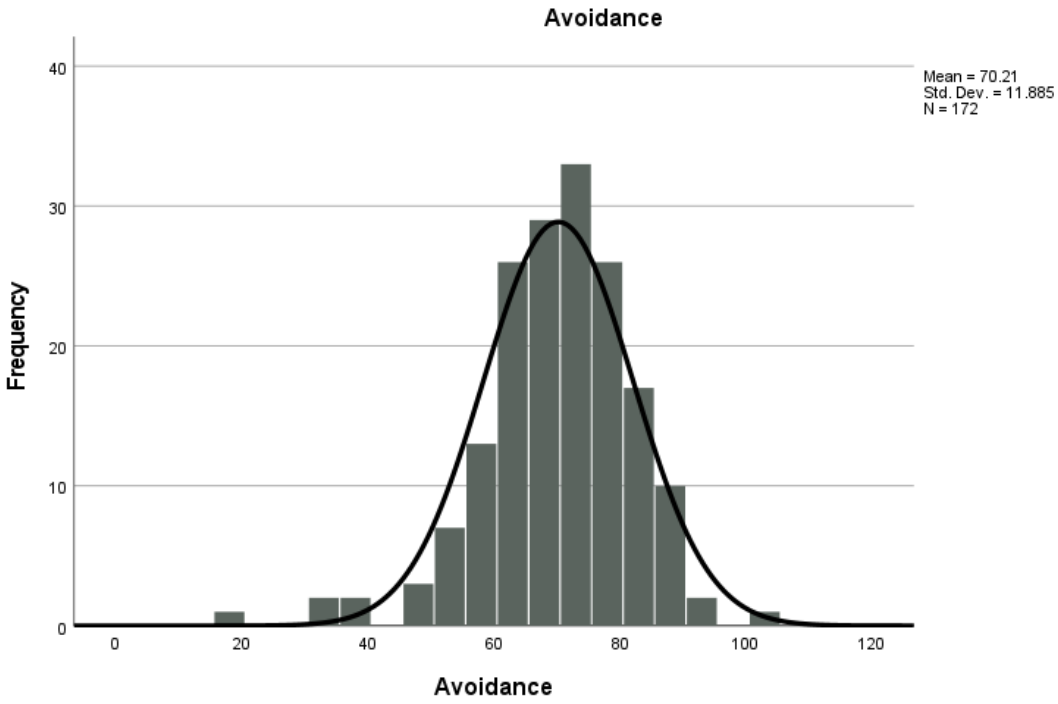


Figure 9

Frequency distribution of OQ45.2 subscale, Interpersonal Relations

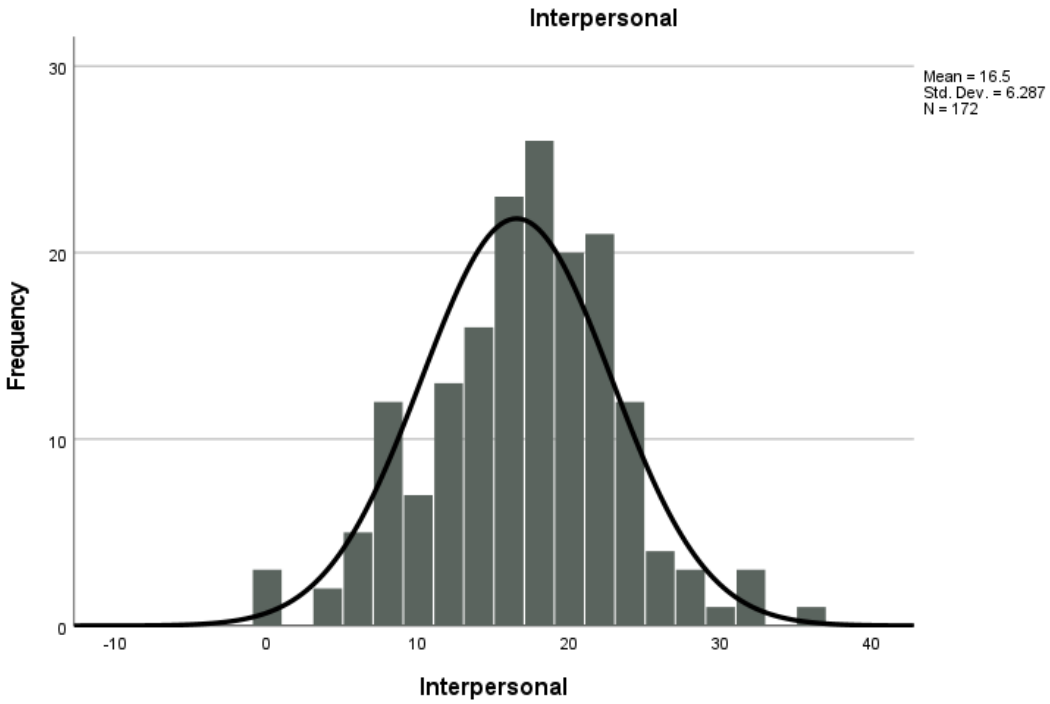


Figure 10

Frequency distribution of OQ45.2 subscale, Social Roles

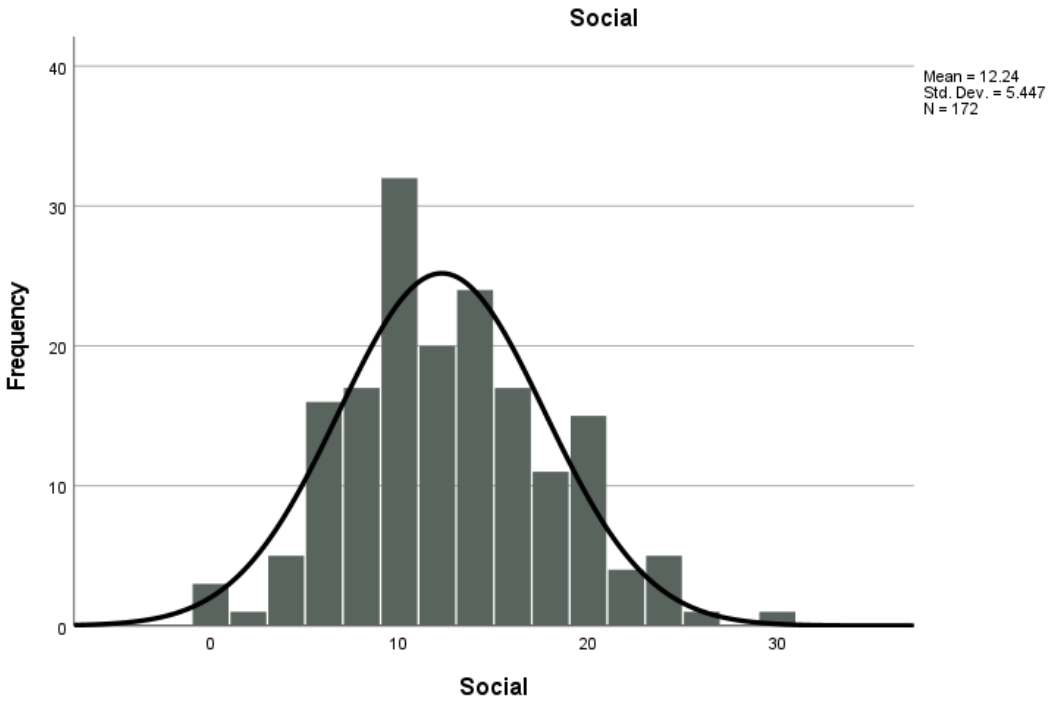


Figure 11

Frequency distribution of OQ45.2 subscale, Symptom Distress

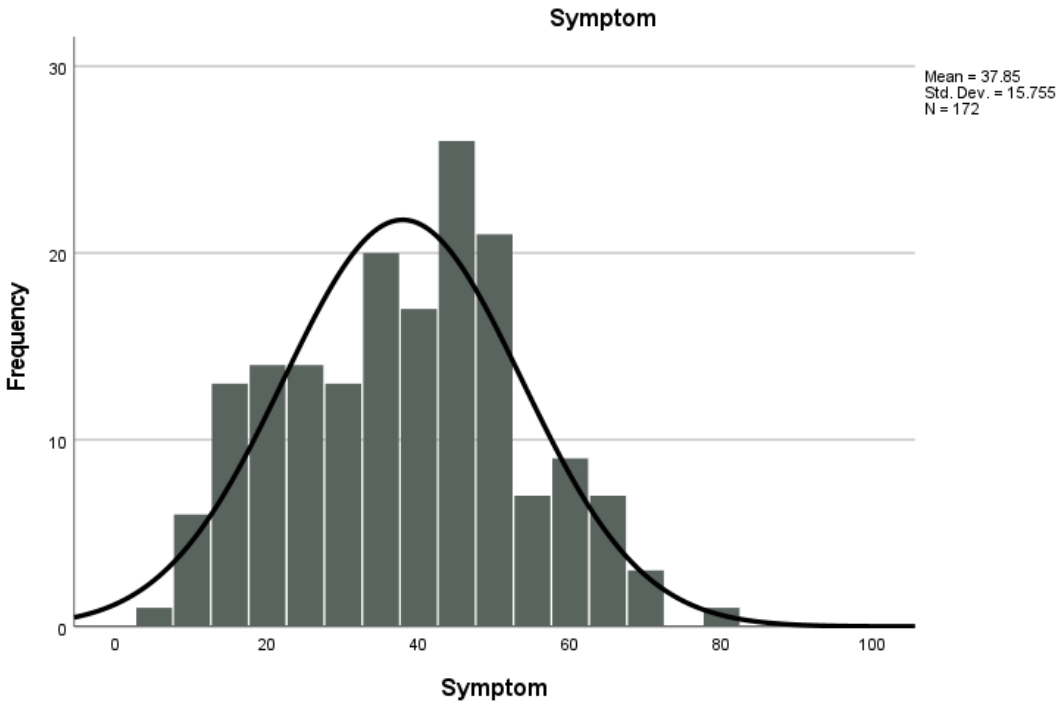
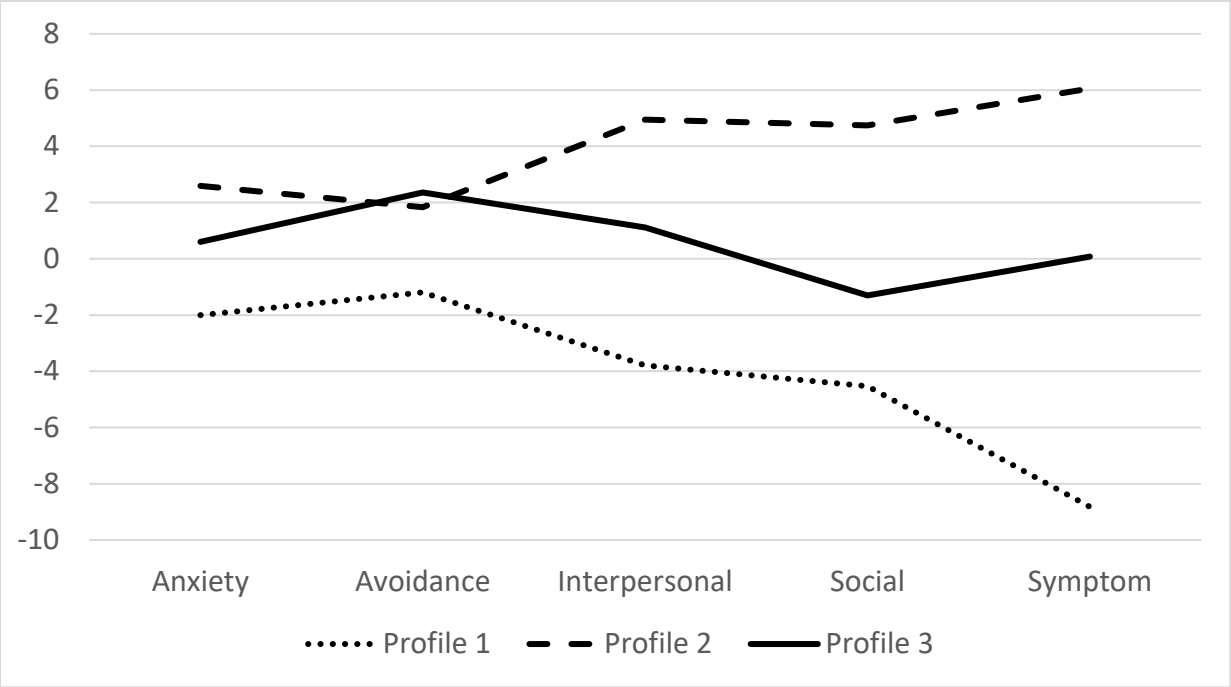


Figure 12

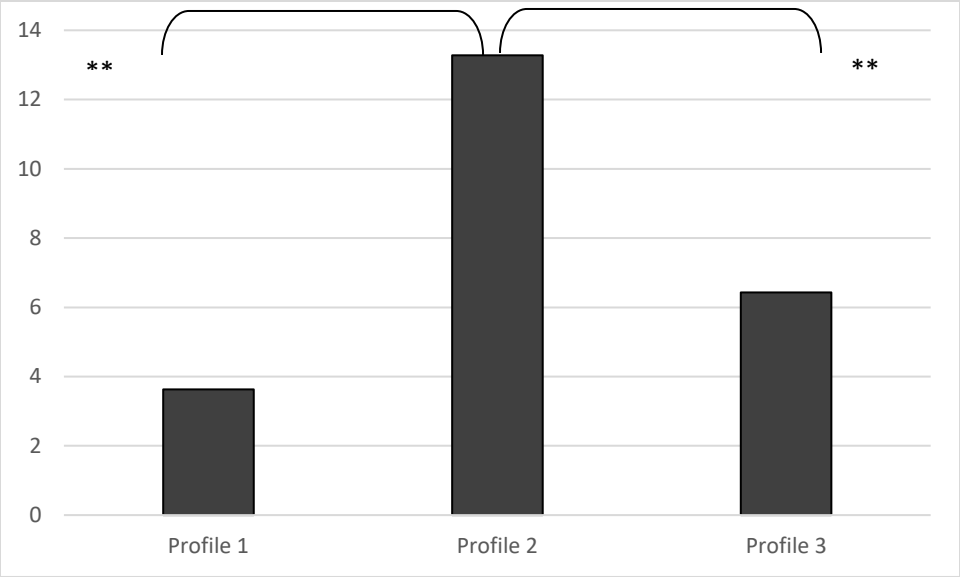
Line Graph Comparing Three Profiles on Their Indicator Variables Based on z-scores



Note: Profile 1, *n* = 31; Profile 2, *n* = 34; Profile 3, *n* = 107.

Figure 13

Mean Difference of OQ-45.2 Total Scores Between Profiles



Notes: $F(2,78) = 9.90$, $p < .001$, $\eta p2 = .20$; Profile 1, $n = 16$; Profile 2, $n = 18$; Profile 3, $n = 49$.
** $p = .001$.