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Abstract

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Age Bias in Clinical Judgment: Moderating Effects of Ageism and Multiculturalism

A Dissertation

Presented to

the Faculty of the Morgridge College of Education

University of Denver

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of the Requirements for the Degree

Doctor of Philosophy

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Kristin Pyne

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Chapter 1: Introduction

Baby Boomers will fully transition into older adulthood by 2030, a change that will dramatically shift the proportion of older adults in the United States. While older adults made up 13.7% of the US population in 2012, adults over 65 years old are expected to jump to 20.3% of the population by 2030 (U.S. Census Bureau, 2014). The older population is expected to reach 83.7 million individuals by 2020 (U.S. Census Bureau, 2014). Presently, older adults are seen more frequently and by a wider array of mental health professionals compared to a decade ago. Ageism remains to be a powerful force of oppression for older adults in the United States and mental health professionals can be influenced by ageist attitudes in multiple ways (Kessler & Bowen, 2015; Kessler & Schneider, 2016; Mejia, Hyman, Behbahani, & Farrell-Turner, 2018). Given the increasing number of older adults and the broader array of psychologists who are and will be treating them, it is paramount for researchers to examine the prevalence and effect of ageism among professional psychologists. The present study examined the prevalence and effect of ageism on practitioners' clinical attitudes toward an older versus younger client.

Demand for Mental Health Services Among Older Adults

More than one in five adults over the age of 60 live with a mental or neurological disorder. Depression is the most common disorder and impacts 7% of older adults

globally whereas dementia impacts 5%, anxiety impacts 3.8%, and substance use impacts around 1% (World Health Organization, 2017a). Depression is experienced by older adults at a much higher prevalence rate (>7.5% for older women and >5.5% for older men) compared to the global population on average (around 4.4% in 2015; World Health Organization, 2017b). Anxiety, on the other hand, appears to impact older adults and younger adults with similar prevalence (World Health Organization, 2017a).

The sheer number of older adults diagnosed with mental illness is projected to increase as the proportion of older adults globally increases. Rates of depression, for example, are expected to increase dramatically by the year 2050 with the strongest increases among women and men older than 65 years (Heo, Murphy, Fontaine, Bruce, & Alexopoulos, 2008). To adapt to the increase of older adults with mental illness, current healthcare systems need to expand to include more early detection, adequate mental healthcare for older adults (Heo et al., 2008), and an increased focus on prevention. Increasing efforts to prevent and treat depression, for example, are especially relevant given the high disease burden of depression in older adults in terms of cost, mortality, and utilization of healthcare services (Cuijpers, Smit, Patel, Dias, Li, & Reynolds, 2015).

Baby Boomers and mental health. Beyond the increase in mental illness solely due to increasing numbers of older adults globally, several unique factors are projected to increase the prevalence of mental illness in the upcoming cohort of older adults. Factors such as living through a global financial crisis (Sargent-Cox, Butterworth, & Anstey, 2011), global changes in lifestyle such as malnourishment, obesity, sedentary lifestyle, sleep deprivation, greater inequality (Hidaka, 2012), and specific characteristics of the

baby boomer cohort such as increased actual and projected prevalence of substance use and substance related disorders (Cleary, Sayers, Bramble, Jackson, & Lopez, 2017) as well as increased incidence of depression (Gallup, 2015) are expected to increase the need for mental health treatment in the coming years. Compared to other generations, Baby Boomers report the highest level of treatment for depression (14% currently treated) and the highest incidence of lifetime diagnosis of depression (21%)(Gallup, 2015). Given that only 9% of the prior generation (born before 1945) reported treatment for depression compared to 14% of Baby Boomers (Gallup, 2015), it can be expected that the number of older adults seeking mental healthcare for depression will increase by both number and percentage.

Treating Older Adults

As the population of older adults increases and as Baby Boomers age, psychologists can expect caseloads that include increasing numbers of older adults. In the 2008 APA Survey of Psychology Health Service Providers, practicing psychologists reported dedicating only 9% of their practice time, on average, to working with older adults (American Psychological Association, 2010). Seven years later in the 2015 APA Survey of Psychology Health Service Providers, approximately 37 percent of psychologists reported working “frequently” or “very frequently” with older adults. Older adults were treated by psychologists with more frequency than were adolescents (34.2 percent) and children (23 percent) (American Psychological Association, 2016). These statistics demonstrate an increase in the amount of time that psychologists dedicated to working with older adults from 2008 to 2015. As the baby boomer generation expands

the proportion of US older adults by 2030, the growth in older adults on psychologists' caseloads will likely become even more dramatic.

Specialization in geropsychology. Despite the growing older population, specialization in geropsychology remains rare. As stated above, the 2015 APA Survey of Psychology Health Service Providers found that older adults aged 65 to 80 were treated “frequently” or “very frequently” by over 37 percent of psychologists surveyed (American Psychological Association, 2016). Furthermore, over half of psychologists surveyed had worked with oldest-old adults (80 years or older) at one time or another, albeit infrequently, and 9.2 percent of psychologists worked with oldest-old adults “frequently” or “very frequently.” Yet, only 1% of psychologists providing direct care reported a primary specialty and 2% reported a secondary specialty in professional geropsychology (American Psychological Association, 2016). These data are similar to results of the 2008 APA Survey of Psychology Health Service Providers which found less than 5 percent of psychologists specialized in geropsychology (American Psychological Association, 2010). These data demonstrate an important discrepancy between the number of psychologists treating older adults and the number of psychologists who specialize in geropsychology. Specialization in geropsychology among practicing psychologists does not appear to match the increasing demand for services.

Competence with older adults. There are several factors that make geropsychology an area of practice that requires skills, knowledge, and awareness above and beyond training in general professional psychotherapy (Knight, Karel, Hinrichsen,

Qualls, & Duffy, 2009). These factors include a focus on developmental and lifespan psychology, a focus on how pathologies present differently in later life, a focus on the relationship between physical and psychological symptoms in the face of chronic medical conditions, and a focus on the age-related contextual and systems factors that older adults face (Knight et al., 2009). Yet, there may be little opportunity to gain such knowledge for psychologists who do not specialize in geropsychology. A 2010 survey of psychology graduate programs in the United States found that only 32.6% of programs had a gerontology department and only 11% of programs had a formal concentration in geropsychology (Pachana, Emery, Konnert, Woodhead, & Edelstein, 2010). Worse still, the majority (67.4%) of graduate programs in the United States did not have *any* geropsychology coursework and none of the programs required students to take a geropsychology specific course (Pachana et al., 2010). This data shows that despite the importance of geriatric-specific training in psychology, there is little opportunity for students to engage with these specific competencies.

Beyond clinical competencies with older adults, it is essential for psychologists to also examine and recognize their own attitudes, biases and beliefs about aging (American Psychological Association, 2014) and how these beliefs impact their conceptualization and treatment of older adults (Kessler & Bowen, 2015). Ageism continues to be underrepresented in multicultural courses despite a call to widen the lens to include broader populations such as age (Pieterse, Evans, Risner-Butner, Collins, & Mason, 2009). As a consequence, practitioners may lack the opportunity to “recognize how their attitudes and beliefs about aging and about older individuals may be relevant to their

assessment and treatment of older adults” (American Psychological Association, 2014), and may consciously or unconsciously exhibit ageism in their practice.

Ageism

Ageism is defined as, “a systematic stereotyping of and discrimination against people because they are old, just as racism and sexism accomplish this with skin color and gender” (Butler, 1989, p. 139). Butler’s definition offered the first concrete description of the unequal treatment of older adults based solely on their age. Expanding on this initial concept, Iverson, Larsen & Solem (2009) offered a more comprehensive definition of ageism as “... negative or positive stereotypes, prejudice, and/or discrimination against (or to the advantage of) elderly people on the basis of their chronological age or on the basis of a perception of them as being ‘old’ or ‘elderly.’” (p. 15). This expanded definition allows for more precise research on ageism through a thorough and nuanced operationalization of the concept.

Prevalence of Ageism

Ageism is a pervasive and global form of discrimination that negatively impacts older adults at both individual and systemic levels. Research suggests that at least one in three older adults experiences age discrimination (Rippon, Kneale, de Oliveira, Demakakos, & Steptoe, 2014). While understudied compared to the global population in the past decade, smaller-scale studies on ageism incidence in the United States have found that 84 percent of community-dwelling respondents over 60 reported at least one experience of ageism (McGuire, Klein, & Chen, 2008) and that 81 percent of workers over 50 years old experienced discrimination in the workplace (Chou & Choi, 2011).

Ageism has strong negative impacts on both mental and physical health. Age discrimination is strongly correlated with depression and other negative mental health outcomes in older adults (Han & Richardson, 2014; Lyons, Alba, Heywood, Fileborn, Minichiello, Barrett, Hinchliff, Malta, & Dow, 2017; Marchiondo, Gonzales, & Williams, 2017). Age discrimination also appears to reduce the likelihood of positive mental health outcomes in older adults (e.g. flourishing; Lyons et al., 2017). For adults 51 years and older in the work place, age discrimination has been shown to increase over time and to increase depressive symptoms while decreasing job satisfaction and overall health (Marchiondo, Gonzales, & Williams, 2017).

Holding negative stereotypes about aging impacts physical aspects of aging. In one study, older adults' score on a measure of negative age stereotypes predicted increasingly shorter telomere lengths (which is a marker of accelerated cellular aging; Pietrzak, Zhu, Slade, Qi, Krystal, Southwick, & Levy, 2016). Longitudinal studies have shown that simply holding negative age stereotypes earlier in life significantly increased older adults' likelihood of experiencing a cardiovascular event in their lifetime (Levy, Zonderman, Slade, & Ferrucci, 2009) and significantly predicted greater brain changes associated with Alzheimer's disease (including decrease in hippocampal volume and increase in plaques and tangles; Levy, Ferrucci, Zonderman, Slade, Troncoso, Resnick, & Mayr, 2016).

Behaviorally, age priming (both implicit and explicit) has been shown to impair older adults' performance on tasks of memory (e.g. delayed recall), psychomotor functioning (e.g. walking time), physiological functioning (e.g. blood pressure), and/or

social functioning (e.g. self-perceptions of aging; Meisner, 2012). This research shows the power of simply thinking about age/aging on the behaviors and physical functioning of older adults. Overall, this literature demonstrates the power of ageism on older adults' health and has led researchers to conclude that reducing ageism could significantly benefit older adults' mental and physical health (e.g. Levy et al., 2009; Swift, Abrams, Lamont & Drury, 2017).

Ageism and Psychotherapy

Broadly, therapist characteristics (including attitudes) have been shown to impact the treatment of clients in psychotherapy. For example, psychotherapists' expectations of client improvement are correlated with positive client outcomes (Connor, Callahan, & Hilsenroth, 2015). On the other hand, negative therapist attitudes toward clients have been shown to contribute to negative outcomes such as social distance and refusal to write letters of support (Drake, Codd, & Terry, 2018). Implicit race bias has been shown to negatively impact therapists' expectations of client-therapist bond with Black clients (Katz, Hoyt, & Tracey, 2014). In practice, therapists' reported comfort with racial/ethnic minorities has been shown to be an important predictor in the relationship between client race/ethnicity and non-retention on therapists' caseloads (Owen, Drinane, Tao, Adelson, Hook, Davis, & Fookune, 2017). Overall, these selected studies demonstrate the power of therapist attitude on expected and actual outcomes of psychotherapy.

Ageist attitudes, specifically, may also influence psychotherapy. Research shows that aging stereotypes can cause therapists to rely on their own understanding of aging as a basis for client evaluations; can move therapists to speak and interact differently with

older clients; influence clients to perform more poorly on diagnostic tests; and can change the method of therapy that therapists select when working with older adults (Kessler & Bowen, 2015). Importantly, trainees have been shown to recommend shorter-term (vs. long term) therapy and to avoid clarifying techniques with older adults based solely on age (a hypothetical client 79 vs. 47 years; Kessler & Schneider, 2017). In a recent study, masters and doctoral trainees who exhibited greater ageism on a measure of behaviors toward older adults were less likely to be willing to work with older adults or to desire working with older adults in their career (Mejia et al., 2018). Furthermore, a study of oncology social workers found that clinical and treatment judgments were significantly impacted by the age of a hypothetical client, such that providers prioritized different aspects of care and diagnosis based solely on client age (Conlon & Choi, 2014). While recent studies have demonstrated a significant impact of a clients' age on differential treatment in therapy, research in this area is limited to a handful of studies that generally neglect to address moderating factors. Yet, without better understanding the factors that strengthen or weaken the relationship between client age and differential treatment in therapy, little can be done in the way of intervention and education to address these disparities. The present study aimed to fill this gap by considering explicit ageism and multicultural competence as hypothesized moderating factors.

Ageism and Multicultural Competence

Doctoral programs in clinical and counseling psychology increasingly emphasize multicultural competence as a core component of training. A large majority of training and research in the area has utilized Sue et al.'s tripartite MCC's model of knowledge,

awareness, and skills as the basis (as a whole or in part) for understanding, teaching, and measuring multicultural competence. In a content analysis of multicultural course syllabi in counseling programs, 96% of syllabi indicated an incorporation of the tripartite model into the goal statement for the course (Pieterse et al., 2009) demonstrating the continued importance of this model. In research, four major scales stem from the tripartite model of MCC's including the MCKAS, which is utilized frequently in counseling psychology (Lu, 2017). Several measures have been developed according to the tripartite model to measure multicultural competence with specific marginalized groups such as LGB clients (Bidell & Whitman, 2013). Overall, the MCC model remains dominant in the study and education of multicultural competence (Tao, Owen, Pace, Imel, & Tracey, 2015).

Studies that utilize Sue et al.'s tripartite model to conceptualize MCC's have demonstrated strong links between self-reported multicultural competence and counselor attitudes toward poverty (Clark, Moe, & Hays, 2017), counselors' bias toward Black clients (Katz, Hoyt, & Tracey, 2014), counselor's gender-role attitudes (in the case of multicultural knowledge; Chao, 2012), counselor's color-blind racial attitudes (in conjunction with training and race/ethnicity; Chao, 2013; in conjunction with training for multicultural knowledge; Chao, Wei, Good, Flores, & Mallinckrodt, 2011), and counselors' positive attitudes toward people who are transgender (Kanamori & Cornelius-White, 2017). Given that the tripartite MCC model has been used to link multicultural competence to counselor attitudes in many studies (as described above) and given the high likelihood that the current cohort of professional psychology students has

been exposed to education on this model (as evidenced by course syllabi; Pieterse et al., 2009), the current study utilized this conceptualization of multicultural competence.

Ageism has also been correlated with multicultural competence despite limited research on the topic. Research has found a significant negative correlation between self-reported ageism and multicultural competence in counseling students and practitioners (McBride & Hays, 2012). Multicultural competence was measured according to the tripartite model as a composite score combining knowledge and awareness subscales. Participants who endorsed lower ageist beliefs also endorsed higher levels of multicultural competence (McBride & Hays, 2012). A second study examined associations of various predictors, including multicultural competence, on psychologists' clinical judgments toward older adults. Results of this study showed that higher self-reported multicultural competence on the MCKAS predicted less professional bias toward a 70-year-old vignette client (Tomko & Munley, 2013). Given the proposed link between multicultural competence and explicit ageism, it may be that multicultural education and other activities that increase multicultural competence could improve explicit ageism in trainees (McBride & Hays, 2012). Broad multicultural competence is proposed to be an important component for geriatric training even beyond the knowledge and skills required to practice with a geriatric population (Tomko & Munley, 2013).

While these two studies establish an important connection between multicultural competence and ageism, the first study (McBride & Hays, 2012) only focused on the correlation between MCC and explicit ageism and did not examine actual clinical judgment toward clients. The second study only used one vignette condition (70-year-old;

Tomko & Munley, 2013). Thus, although the study found correlations between MCC and clinical judgment, researchers were unable to detect differential treatment based on age differences. Thus, it is possible that those who scored lower in MCCs would have treated any client with worse clinical judgment, regardless of age. The present study aimed to fill this gap by examining MCCs as moderators in the relationship between clients' reported age and therapists' clinical biases and judgments. Research on multicultural competencies and their effect on therapeutic services and counselor education is called for by the AARC Standards for Multicultural Research (O'Hara, Clark, Hays, McDonald, Chang, Crockett, Filmore, Portman, Spurgeon, & Wester, 2016) and the current study contributes to a growing body of literature on psychology trainees' preparedness to work with diverse populations.

The Present Study

The proportion of older adults in the United States is growing and older adults have been shown to benefit from psychotherapy. However, the majority of mental health practitioners who treat older adults do not specialize in geropsychology and may lack the knowledge, skills and awareness necessary to treat older adults. Lack of awareness and knowledge of older adults can manifest in explicit ageism and in age discrimination, which have been shown to impact mental health providers' treatment of older adults. Yet, further research is needed on the exact impacts of age biases on the treatment of older adults (Kessler & Bowen, 2015). While practitioners rarely specialize in geropsychology, there is a large focus on training practitioners to develop multicultural competence. Recent research has demonstrated a link between multicultural competence and ageism

(McBride & Hays, 2012; Tomko & Munley, 2013), which may suggest that broader training in multicultural competence may make up for the lack of specialized training in geropsychology. However more research is needed to understand the exact relationship between multicultural competence, explicit ageism, and differential treatment of older clients.

Thus, the present study aimed to examine the impact of ageism and multicultural competence on the differential treatment of older adults. Specifically, this study examined the effect of client age on clinical bias toward a hypothetical client presented in a vignette. The present study expanded on prior studies by including multicultural competence and explicit ageism as moderating variables in the relationship between client age and clinical discrimination. The establishment of these moderating variables aimed to give concrete direction on plausible interventions to reduce clinical discrimination toward older clients.

Hypotheses

H₀: There would be no differences in measures of clinical bias between participants responding to a clinical vignette featuring a 70-year-old versus a 35-year-old.

H₁: Participants in the 70-year-old vignette condition would exhibit more clinical bias compared to participants in the 35-year-old vignette condition.

H_{1A}: Multicultural competence would moderate the relationship between vignette condition and clinical bias such that higher reported levels of multicultural competence would buffer the impact of vignette condition on clinical bias.

H_{1B}: Explicit ageism would moderate the relationship between vignette condition and clinical bias such that lower levels of self-reported ageism would buffer the impact of vignette condition on clinical bias.

Chapter 2: Literature Review

The United States population is aging rapidly as Baby Boomers transition into older adulthood. By the year 2035, experts project that the number of people over 65 will exceed the number of people under 18 in the United States for the first time in history (U.S. Census Bureau, 2018). The entire Boomer population will have crossed into older adulthood by the year 2030 and with this change, one in every five residents in the United States will be over 65 years old (U.S. Census Bureau, 2014; 2018). This number represents a dramatic increase from the 13.7% of the United States population that older adults occupied in 2012 (U.S. Census Bureau, 2014) and the 15.2% occupied by older adults in 2016 (U.S. Census Bureau, 2017).

Aging and Mental Health

Approximately 15% of older adults over 60 years old are reported to have a mental disorder. Specifically, it is estimated that the global prevalence of depression in older adults stands at 7% while dementia (5%), anxiety (3.8%), and substance use (1%) follow behind (World Health Organization, 2017a). Older women (>7.5%) and men (>5.5%) experience the highest prevalence of depression compared to any other age group (World Health Organization, 2017b). Older adults also experience elder abuse at a rate of approximately one in six (World Health Organization, 2017a). Taking into account the projected population of 83.7 million older individuals by 2020 (U.S. Census

Bureau, 2014), the number of older adults with depression in the United States in 2020 could be estimated to be over 5.8 million (at 7%) and the number of older adults with anxiety could be estimated to be over 3.1 million (at 3.8%). While these numbers are high, they may even be an underestimation since older adults and healthcare professionals often under-identify mental health problems in this population (World Health Organization, 2017a). By 2050, the most dramatic increase in depression incidence is expected in women and men older than 65 (Heo et al., 2008), which will have large consequences terms of cost, mortality and utilization of healthcare services (Cuijpers et al., 2015).

Baby boomers, specifically, are projected to have unique and increasing mental health treatment needs over the coming years (Choi, DiNitto & Marti, 2015). Baby Boomers have exhibited and are projected to exhibit greater substance use compared to previous generations (Blow & Barry, 2012; Cleary et al., 2017) as well as greater prevalence of mental health disorders in general (Choi, DiNitto & Marti, 2015; Gallup, 2015). Given their higher rates of lifetime illicit drug use (U.S. Department of Health and Human Services, 2010) and their generally accepting attitude toward drug use compared to prior generations (Babatunde, Outlaw, Forbes, & Gay, 2014; Cleary et al., 2017), Baby Boomers are expected to utilize marijuana, alcohol, psychotherapeutic drugs, and illicit-drugs, among others, as they age (Cleary et al., 2017). From 2002 to 2009, there was an increase from 2.7 to 6.2 percent of adults aged 50 to 59 who endorsed past month illicit drug use (U.S. Department of Health and Human Services, 2010) which is consistent with

other research supporting increased treatment for illicit drugs misuse as the Boomers age (Duncan, Nicholson, White, Bradley & Bonaguro, 2010).

The number of older adults with substance use disorders is expected to continue increasing over the coming years (Babatunde et al., 2014) and experts are concerned with comorbid mental health and substance use disorders in the Baby Boomer generation (Cleary et al., 2017). Older adults with substance use disorders often have comorbid psychological distress and are often under-diagnosed (Searby, Maude & Mcgrath, 2015). As the Boomers age, there will be an urgent increase in demand for mental health services that tailor care toward older adults with co-occurring mental health and substance-use disorders (Searby, Maude & Mcgrath, 2015), with alcohol dependence and/or abuse (Babatunde, et al., 2014), and with substance related issues in general (Cleary et al., 2017).

Aside from substance use disorders specifically, Boomers also report mental illness at higher rates in general than their predecessors (14.7% vs. 8.6%) and are more likely than the generation before them to have received mental health treatment within the past year (2.17 greater odds; Choi, DiNitto & Marti, 2015). For depression, specifically, Boomers receive treatment at higher rates compared to other generations (14% are treated currently vs. 9% in generation before them) and one in five Boomers reports a lifetime diagnosis of depression, which is higher than any other prior cohort studied (Gallup, 2015). In middle age, the first wave of the Boomer cohort demonstrated higher rates of depression and anxiety compared to those immediately older than them (Karel, Gatz & Smyer, 2012). As a cohort, Baby Boomers may be more comfortable with

reporting mental disorders and may be especially burdened with corresponding medical, functional and financial stressors (Karel, Gatz & Smyer, 2012) which may lead Boomers to experience mental disorders in older age at higher rates than their predecessors.

Additional factors may further contribute to increased mental health problems in Baby Boomers. At their current age, Boomers already report more incidence of chronic disease, disability, and report their health to be worse off compared to the prior generation at the same age (King, Matheson, Chirina, Shankar, & Broman-Fulks, 2013). Older adults with worse physical health have higher incidence of depression and visa versa (World Health Organization, 2017a). Lifestyle changes may also predispose Boomers to poor mental health. An Australian study found that older adults who were impacted by the 2008 global financial crisis also reported increased symptoms of depression and anxiety (Sargent-Cox, Butterworth & Anstey, 2011), which likely has implications for Baby Boomers who were in middle age during that time. Lastly, Boomers may be more susceptible to increasing rates of depression relative to changing global lifestyles that expose individuals to malnourishment, obesity, lack of sunlight, sedentary life styles, sleep deprivation, and greater inequality (Hidaka, 2012).

Overall, psychotherapy is considered to be an effective treatment for older adults. Older adults have been shown to benefit from various forms of psychotherapy including psychodynamic psychotherapy (Roseborough, Luptak, McLeod, & Bradshaw, 2013), problem-solving therapy (Areán, Raue, Mackin, Kanellopoulos, McCulloch & Alexopoulos, 2010; Kirkham, Choi & Seitz, 2016), and cognitive behavioral therapy (Gould, Coulson & Howard, 2012a; Gould, Coulson & Howard, 2012b; Hendriks,

Kampman, Keijsers, Hoogduin, & Voshaar, 2014; Wuthrich, Rapee, Kangas & Perini, 2016), among others. While much of the current research focuses on the treatment of depression in older adults (e.g. Gould, Coulson, & Howard, 2012a; Karlin, Walser, Yesavage, Zhang, Trockel, & Taylor, 2013; Lee, Franchetti, Imanbayev, Gallo, Spira, & Lee, 2012), an increasing number of studies support the efficacy of psychotherapy in the treatment of various other disorders in older adults including anxiety (Gould, Coulson & Howard, 2012b; Gonçalves & Byrne, 2011; Wuthrich et al., 2016) and post-traumatic stress disorder (Dinnen, Simiola, & Cook, 2014). Furthermore, older adults appear to benefit from psychotherapy as much as younger adults do (e.g. Hendriks et al., 2014; Karlin et al., 2013). Meta-regression analyses by Cuijpers and colleagues (2009) demonstrated no significant difference in the effectiveness of psychotherapy for depression between older and middle-aged adults (Cuijpers, Van Straten, Smit & Andersson, 2009; Cuijpers, Karyotaki, Eckshtain, Ng, Corteselli, Noma, Quero & Weisz, 2020).

Despite the encouraging evidence above, studies that support the efficacy of psychotherapy for older adults are dwarfed by studies of younger populations. For example, a meta-analysis of studies on the efficacy of psychotherapy for the treatment of depression included 242 studies of middle-aged adults but only 50 studies on older adults (55-75) and 10 studies on older old adults (75+) (Cuijpers et al., 2020). Even more striking, a 2017 review of articles in the *Journal of Counseling Psychology*, *The Counseling Psychologist*, and *Counseling Psychology Quarterly* demonstrated that less than 1% of total articles were devoted to older adults from the years 2001-2015 (Keum,

2017). This was down from less than 2% from 1991 to 2000 (Keum, 2017). Some researchers suggest ageism may prevent providers from recommending or pursuing appropriate psychotherapeutic treatment due to beliefs that older adults benefit more from medication than from psychotherapy and/or do not want to engage in therapy (Bodner, Palgi & Wyman, 2018) which may impact the number of researchers who pursue studies that focus specifically on older adults. As stated above, too, much of the historical research has focused specifically on the treatment of depression in older adults. Overall, while there is promising support in studies published on the efficacy of psychotherapy for older adults, there are major gaps in this literature too.

Despite these gaps in literature, aging Boomers have led practicing psychologists to already see increasing numbers of older adults on their caseloads. Psychologists reported dedicating about 9% of their practice time, on average, to working with older adults in the 2008 APA Survey of Psychology Health Service Providers (American Psychological Association, 2010). By the 2015 survey, 37 percent of psychologists reported working “frequently” or “very frequently” with older adults and over half had worked with adults over 80 at one time or another (American Psychological Association, 2016). By 2015, more psychologists reported working with older adults frequently compared to adolescents (34.2 percent) and children (23 percent; American Psychological Association, 2016). This increase in proportion of older adults on the caseloads of practicing psychologists will likely become even more dramatic as the Boomers continue to enter older adulthood.

Current projections suggest that the mental healthcare system as it stands is unprepared to deal with the wave of Baby Boomers who are entering old age (Duncan et al., 2010; Karel, Gatz & Smyer, 2012; Searby, Maude & Mcgrath, 2015). Professional psychologists frequently lack even basic competence in geropsychology (Karel, Gatz & Smyer, 2012). This lack of training in geropsychology is apparent in existing academic programs as well as in current practicing psychologists. For graduate programs, less than one third of programs have a gerontology department, only 11% have formal concentrations in geropsychology, less than one third offered *any* geropsychology coursework, and none of the programs required students to take even a single geropsychology course (Pachana et al., 2010). The topic of ageism also continues to be underrepresented in multicultural courses (Pieterse et al., 2009).

In professional practice, specialization in geropsychology remains remarkably rare. The 2015 APA Survey of Psychology Health Service Providers revealed that less than 2% of psychologists actively caring for older adults specialized in geropsychology (American Psychological Association, 2016). This proportion is similar to those surveyed in the 2008 APA Survey of Psychology Health Service Providers (5%; American Psychological Association, 2010) and demonstrates both a lack of specialization as well as a lack of growth over time in the number of specialized psychologists.

While some psychologists who see older adults may be competent enough, the need for geropsychology training increases as presenting problems become more complex and specialized (e.g. dementia, comorbid physical and mental health concerns; Knight et al., 2009). Given the higher incidence of chronic disease (King et al., 2013) and

substance use (Cleary et al., 2017) in Boomers, specialized training in geropsychology will likely become especially relevant. Furthermore, a lack of knowledge about aging has been linked to negative ageist behaviors (Cherry, Brigman, Lyon, Blanchard, Walker & Smitherman, 2016). Trainees and psychologists who have not been exposed to geropsychology may lack the opportunity to explore and recognize their own attitudes, biases, and beliefs about aging (a central competency as highlighted in APA's Guidelines for Psychological Practice with Older Adults, 2014) and how these beliefs can shape their conceptualization and treatment of older clients (Kessler & Bowen, 2015) leading to conscious and unconscious ageism in their practice. Overall, more research needs to be done to examine whether current trainees and psychologists are adequately competent to treat the influx of Boomers despite a lack of specialization.

History, Prevalence, and Impact of Ageism

While studies of societal attitudes toward older adults were published as early as 1944 (Palmore, 1982), the term “ageism” was first introduced as a concept by Dr. Robert Butler in the year 1969 to describe the “deep seated uneasiness on the part of the young and middle-aged – a personal revulsion to and distaste for growing old, disease, disability; and fear of powerlessness, ‘uselessness,’ and death” (p. 243). Dr. Butler positioned ageism as parallel to other forms of discrimination (such as racism and classism) and highlighted the importance of ageism in the youth-centric culture of the United States (Butler, 1969). In 1975, Dr. Butler offered a more formal definition of ageism as “a process of systematic stereotyping of and discrimination against people

because they are old, just as racism and sexism accomplish this for color and gender” (Butler, 1975). This definition has since been the most common definition of ageism.

Since the original conceptualization of ageism by Butler, the term has expanded and grown as other researchers continued to work in the area. One prominent figure in the ageism literature is Dr. Erdman Palmore who started to study “stereotypes about elders and the inequalities between older and younger people” at around the same time as Dr. Butler defined the term (Palmore, Branch & Harris, 2016, preface). Dr. Palmore developed several measures and texts on ageism over his career (Palmore, 2015) that expanded the definition of ageism to include such aspects as positive ageism toward older adults as well as different levels of ageism in society (micro- and macro-level; Iverson, Larsen & Solem, 2009). Also missing in Butler’s original conceptualization of ageism was a study of implicit ageism as well as a thorough attention to the tripartite model of attitudes that includes affective, behavioral and cognitive components (Iverson, Larsen & Solem, 2009).

In light of these various components that emerged in the course of research on ageism, Iverson and colleagues developed a more comprehensive definition of ageism to speak to each component and to allow for future researchers to work from a similar definition of the concept. The authors found a large gap in the literature in terms of operationalizing the concept of ageism and therefore worked to develop a comprehensive definition of ageism that included four key dimensions and ten total components (Iverson, Larsen & Solem, 2009). The definition of ageism they proposed is: “... negative or positive stereotypes, prejudice, and/or discrimination against (or to the advantage of)

elderly people on the basis of their chronological age or on the basis of a perception of them as being ‘old’ or ‘elderly.’ Ageism can be implicit or explicit and can be expressed on a micro-, meso- or macro-level” (p. 15). This definition takes into account the tripartite model of attitudes, the conscious and unconscious aspects of ageism, as well as the different levels at which ageism presents in society (Iversen, Larsen & Solem, 2009).

While there has been an increase in academic attention on the topic, ageism remains socially acceptable in society (e.g. jokes and greeting cards) and most people continue to be unaware of their ageist behaviors and assumptions (Palmore, 2015). Despite lack of awareness, ageism is highly prevalent and manifests not only at the individual level (internalized negative views toward self or others) but also at the societal level (e.g. in healthcare; Ayalon & Tesch-Romer, 2017). In a study of adults over the age of 50, 84% of US respondents reported experiencing one or more incidents of ageism, such as being denied employment because of age or being ignored because of age, in their lifetime with over half having occurred multiple times (Palmore, 2004). A smaller scale study in the United States revealed that four of every five community-dwelling participants over 60 experienced at least one form of ageism (McGuire, Klein & Chen, 2008). The same proportion of workers over 50 reported experiencing discrimination in the workplace in the United States (Chou & Choi, 2011). In the 2008 - 2012 cohort of the Health and Retirement Study (HRS) in the United States, one in five participants over 50 (n = 6,017) reported healthcare discrimination (Rogers, Thrasher, Miao, Boscardin, & Smith, 2015).

Ageism is also prevalent in other Western cultures and larger scale studies have demonstrated a strong prevalence of ageism in Europe. Researchers using the English Longitudinal Study of Ageing found that 33% of over 7,500 older adults (50+) reported experiencing age discrimination, which increased to 36.8% for adults 65 and older (Rippon et al., 2014). In 2017, a subsequent study with the English Longitudinal Study of Ageing found that 39.3% of community-dwelling older adults (n = 4,886) reported experiencing discrimination (Shankar & Hinds, 2017). Further research in the United Kingdom revealed that older adults (54+) were the least likely to be hired in an experimental study with hypothetical job applicants of various ages (Richardson, Webb, Webber, & Smith, 2013), that older workers are perceived as warm but incompetent in the workplace compared to younger workers (Krings, Sczesny, & Kluge, 2011), and that a hypothetical 50-year old candidate is more likely to be perceived as less healthy and less fit for the job, resulting in less job offers compared to a 30-year old candidate (Kaufmann, Krings & Sczesny, 2016).

While ageism is prevalent for older adults in general, there is evidence to suggest that older adults with multiple minority statuses may be especially impacted. In a 2011 study of lifetime and everyday discrimination across three racial and ethnic groups, researchers found that Black older adults reported much higher rates of lifetime as well as everyday discrimination compared to Latino and White older adults (Ayalon & Gum, 2011). For older women, there is research to suggest that age discrimination is different and more pervasive over time for women in the workplace (McGann, Ong, Bowman, Duncan, Kimberley, & Biggs, 2016). In healthcare, older women are treated more poorly

than older men in such areas as receiving less thorough care, less preventative care, and less cardiac disease care compared to older men despite the high prevalence of cardiac disease in both older women and older men (Chrisler, Barney, & Palatino, 2016).

Minority stress is likely to be especially high for older women of color and older sexual minority women who have already experienced lifetime discrimination related to multiple minority identities (Chrisler, Barney & Palatino, 2016). Overall, compounding minority statuses can increase the prevalence of discrimination especially in older women and older adults of color.

The statistics presented above on the prevalence of ageism in older adults are especially troubling given that ageism has been shown to significantly and negatively impact older adults' physical and mental health (e.g. Levy et al., 2009; Swift et al., 2017). In terms of physical health, ageism has been shown to contribute to negative outcomes such as disease and disability. For example, shorter telomere length is a marker of accelerated cellular aging and has been tied to older adults' negative age stereotypes such that endorsing negative ageism was predictive of shorter telomere length (Pietrzak et al., 2016). In longitudinal studies, simply endorsing ageism earlier in life was significantly predictive of later life decreases in hippocampal volume and increases in plaques and tangles associated with Alzheimer's disease (Levy et al., 2016). Younger endorsement of ageism also made older adults significantly more likely to experience a cardiovascular event in their lifetime (Levy et al. 2009). Even the simple act of priming older adults on age (implicitly and explicitly) in the moment has been shown to alter their physical state. Specifically, older adults who were primed on age demonstrated poorer memory on tasks

such as delayed recall, showed impaired psychomotor functioning in tasks such as walking time, exhibited worsened physiological functioning such as higher blood pressure, and/or endorsed poorer social functioning (Meisner, 2012).

Beyond age stereotypes, healthcare discrimination (most frequently related to age) was associated with new or worsened disability over time such that older adult respondents to the 2008 Health and Retirement Study (HRS) who reported multiple experiences of healthcare discrimination were more likely to experience disability years later compared to those who did not report incidences of healthcare discrimination (Rogers et al., 2015). Perceived age discrimination has also been linked to worse physical and cognitive functioning in older adults from the English Longitudinal Study of Ageing (Shankar & Hinds, 2017). For the nearly 5,000 respondents, almost two fifths reported experiences of age discrimination such as receiving poorer service or being treated with less respect. These reports of age discrimination were associated with worsened recall and gait speed both immediately and at follow up four years later (Shankar & Hinds, 2017).

Ageism as also been shown to impact older adults' mental health. Research supports a strong association between older adults reports of everyday age discrimination and future depressive symptoms even when adjusting for baseline levels of discrimination and depression (Han & Richardson, 2014). Older adults who reported higher levels of age discrimination also reported more negative self-perceptions of aging (Han & Richardson, 2014), highlighting the impact of internalized ageism on older adults' likelihood of experiencing depression. In the workplace, age discrimination was

shown to be predictive of depressive symptoms and low job satisfaction in older adults from the Health and Retirement Study (Marchiondo, Gonzales & Williams, 2017). Research also shows that when older adults experience ageism, they are likely to have worsened mental health problems such as anxiety and depression (Lyons et al., 2017). Ageism has also been shown to reduce positive mental health outcomes such as flourishing in older adults (Lyons et al., 2017). These studies highlight the strong negative association between ageism and older adults' mental health.

Overall, ample research has demonstrated the prevalence of ageism globally as well as in the United States. Research also supports the negative association between ageism and older adults' well-being across many domains of their physical and mental health. Given the established prevalence and impact of ageism, as well as the recognized gap in training of professional psychologists in geropsychology despite growing caseloads of older adults, research that focuses on the presentation and impact of ageism in mental health care is crucial.

Ageism in Mental Healthcare

Therapist characteristics (such as attitudes) can have important effects on client treatment and outcomes in psychotherapy. If psychotherapists hold expectations of client improvement, their clients are more likely to have positive outcomes (Connor, Callahan, & Hilsenroth, 2015). On the other hand, negative attitudes and biases toward clients can negatively impact various aspects of the therapeutic relationship such as bond (Katz, Hoyt, & Tracey, 2014) as well as social distancing and withholding of support (Drake, Codd & Terry, 2018). Furthermore, therapists who feel more comfortable with

racial/ethnic minority clients are less likely to have lost such clients from their caseloads (Owen et al., 2017). These select studies highlight a larger body of literature that establishes the power of therapist characteristics on psychotherapy in general.

Yet research on the effects of therapist attitudes about age and aging on psychotherapy, specifically, are often under researched (Fullen, 2018). Even so, there are several studies that highlight the presence and impact of ageism in the mental health treatment of older adults. For example, one study of age bias in psychotherapy asked 418 clinical psychologists to rate hypothetical clients (varied on age, sex and class) on questions of clinical judgment in areas such as attitudes, social likeability, diagnostic impressions, etc. (Settin, 1982). Results revealed that the older adult clients received significantly more negative perceptions in areas such as usefulness of intervention, prognosis, desire to provide intervention, comfort, disorientation, and diagnosis of a thought disorder (Settin, 1982). A subsequent 1993 study of licensed clinical psychologists (N = 209) also utilized age-manipulated vignettes to measure age bias in the treatment of a hypothetical depressed client (Wrobel, 1993). Results revealed significant differences in responses based on age in the areas of treatment setting, treatment type, and prognosis (Wrobel, 1993). Psychologists in the study were more likely to recommend day treatment or semi-structured living environment for older adults, younger adults were recommended to receive cognitive behavior therapy and older adults supportive treatment, and the client's rated prognosis worsened with age (Wrobel, 1993).

Another vignette study demonstrated similar results (James & Haley, 1995). Practicing psychologists (N = 371) were assigned to age- and health-manipulated clinical vignettes about a depressed woman and were asked to respond to questions of professional bias including items about diagnosis, ability to form a therapeutic relationship, appropriateness for therapy, treatment recommendations, attribution of presenting problem to an organic disorder, probably prognosis, and likelihood of committing suicide (James & Haley, 1995). Participants were also asked to rate their confidence and comfort working with the client, as well as their perceptions of her openness to treatment and how much the client is responsible for her problems (James & Haley, 1995). Results revealed that psychologists perceived the older clients to be less appropriate for therapy and rated the older clients' prognosis as poorer compared to the younger clients (James & Haley, 1995).

A 2003 study in Australia examined mental health professionals' clinical attitudes toward older vs. younger clients. Psychologists and counselors (N = 707) were assigned to the same age-manipulated vignettes used in James & Haley's (1995) study and were given a modified version of the professional bias measure from the same study (Helmes & Gee, 2003). Results revealed less favorable attitudes toward working with the older vs. the younger client in the areas of ability to form a therapeutic relationship, prognosis, appropriateness for therapy, as well as in therapist competence and willingness to treat the older client (Helmes & Gee, 2003). These results demonstrate a similar pattern of age bias in psychologists as the prior three studies (James & Haley, 1995; Settin, 1982; Wrobel, 1993).

Recent literature has also supported the existence of age bias in mental healthcare. A 2014 study of oncology social workers found that participants prioritized different aspects of care and gave different diagnoses for older hypothetical clients compared to younger ones (Conlon & Choi, 2014). In 2017, psychology trainees in Germany (N = 97) were asked to respond to measures of treatment attitudes toward an older (79) or a younger (47) client vignette. Results showed that while there were no significant differences in treatment attitude (as measured by the questions from James & Haley, 1995), trainees recommended more short-term therapy and were more likely to avoid clarifying techniques with the older client vs. the younger client (Kessler & Schneider, 2017). Ageism has also been shown to reduce the likelihood of trainees electing to work with or seek training with older adults (Mejia et al., 2018). Beyond negative age bias, one study demonstrated that social work students and providers endorsed low levels of negative ageist behaviors and high levels of positive ageism which, while an improvement on negative ageism, still represents ageism toward older clients (Allen, Cherry & Palmore, 2009).

A literature review by Kessler & Bowen (2015) offered several insights into the relationship between age biases and psychotherapy. The authors suggested that upon seeing an older client, therapists automatically activate stereotypes and utilize these as a basis for client evaluations and goal setting. Too, they suggest that age stereotypes can influence therapists to interact differently with older clients and to change the method of therapy utilized because the therapist is working from their own images or understanding of aging as their basis of understanding (Kessler & Bowen, 2015). This can, for example,

look like over-accommodation (being paternalistic, speaking louder, using baby talk) or avoidance of challenge (focusing only on warmth and empathy rather than challenging problematic behaviors) with older clients (Kessler & Bowen, 2015).

While limited, the research on ageism in mental healthcare overall supports the idea that mental healthcare providers (including trainees, social workers, counselors and psychologists) often treat older adult clients differently based solely on their age. There is a great need for more research on how providers' age biases do and will impact psychotherapy (Kessler & Bowen, 2015) especially with Baby Boomers as they continue to age. This is especially relevant in light of the limitations in psychotherapy effectiveness research described above and highlights a gap in the field's understanding of exactly how beneficial therapy is for older adults and how beneficial it may be if bias were addressed.

Multicultural Competence

The field of professional psychology has a stated commitment to multicultural competence. Much training, research, and practice has been dedicated over the past few decades to understanding what it means to be culturally competent and how to put cultural competence into practice. The field shifted its attention to multiculturalism starting in the 1980s and trainees in professional psychology programs have been required to take multicultural coursework since the nineties (American Counseling Association, 2013). Derald Wing Sue and colleagues have been at the forefront of this movement as they developed the foundational tripartite definition of multicultural counseling competencies to include knowledge, awareness, and skills (Sue, Arredondo &

McDavis 1992). In the 2016 edition of *Counseling the Culturally Diverse*, Sue describes these core areas of competency in depth: *awareness* as an understanding of one's own worldview including biases, framework, assumptions, and so on; *knowledge* that other worldviews exist and of sociopolitical factors; and *skills* in terms of effective psychotherapy interventions and techniques that are tailored and adapted to various cultural backgrounds (Sue & Sue, 2016).

Sue et al.'s tripartite MCC model continues to be the basis for understanding, teaching, and measuring multicultural competence (American Counseling Association, 2013; Tao et al., 2015). A content analysis of multicultural course syllabi from accredited counseling psychology programs (N = 54) revealed that the vast majority of syllabi (96%) incorporated the tripartite model of knowledge, skills, and awareness into the goal statement for the course (Pieterse et al., 2009). Multicultural knowledge and awareness were the strongest components in the multicultural course content and grade assessment (Pieterse et al., 2009). Researchers have also used the tripartite model to develop four scales, such as the MCKAS, which counseling psychology researchers employ frequently to assess multicultural competence (Lu, 2017). Group-specific measures have also utilized the tripartite model as a basis for measuring multicultural competence (with LGB clients; Bidell & Whitman, 2013).

There is evidence to suggest that multicultural competence is strongly related to attitudes and biases amongst therapists. In a study of mental health professionals and students (N = 173) on how multicultural competence impacts the way that counselors think about the therapeutic relationship, researchers found that self-reported multicultural

competence explained a unique proportion of variance in bond expectations (e.g. feeling that client will appreciate the therapist) such that more culturally competent participants expected better therapeutic bonds with Black clients (Katz, Hoyt, & Tracey, 2014).

Beyond bond expectations, many studies have drawn a strong connection between color-blind racial attitudes and self-reported multicultural competence such that lower racial color-blindness is associated with higher levels of multicultural knowledge (Chao et al., 2011) and multicultural competence (Johnson & Jackson Williams, 2015; Neville, Spanierman, Doan, & Nagayama Hall, 2006).

Race bias more broadly is also related to multicultural competence. However, studies report differing relationships between these two variables. One study found that levels of race bias in school counselor trainees (N = 99) were predictive of lower scores of multicultural competence (Constantine, 2002). A related study of racial attitudes in White marriage and family therapists (N = 113) further demonstrated negative racial bias to be predictive of lower scores of multicultural competence (Constantine, Juby & Liang, 2001). Research has also shown that multicultural competence is associated with more biased ratings of racial/ethnic minority clients. White family counselors rated a Latino family in overly positive ways compared to a White family and multicultural competence moderated this overcompensation effect (Gushue, Constantine, & Sciarra, 2008). Overall, multicultural competence and racial bias appear to be strongly related.

Outside of racial attitudes, multicultural competence is closely related to other types of bias. For example, higher self-report of multicultural competence was positively correlated with more positive attitudes toward transgender individuals in a study of 95

counselors, counseling students, and counseling interns (Kanamori & Cornelius-White, 2017). Counselors and counseling trainees' higher levels of multicultural competence were also predictive of decreased negative attitudes toward poverty (e.g. believing that personal deficits cause poverty; Clark, Moe & Hays, 2017). Finally, counselors (N = 460) who had more positive gender-role attitudes as well as higher multicultural training also had higher levels of multicultural knowledge (Chao, 2012).

Multicultural competence has also been related to ageism, specifically, despite extremely limited research on the topic. In a study of 361 graduate students, master's- and doctoral-level counselors, researchers established a significant negative correlation between self-reported ageism and multicultural competence (McBride & Hays, 2012). More specifically, participants' who endorsed higher levels of explicit age bias (agreeing with myths about aging) also reported lower levels of multicultural competence on a composite score of multicultural knowledge and multicultural awareness (McBride & Hays, 2012). A subsequent study in this area also demonstrated similar results. In a study about clinical judgments toward older adults, researchers examined how various predictors (including multicultural competence) impacted counseling psychologists' age bias toward a hypothetical 70-year-old client vignette (Tomko & Munley, 2013). Results showed that counseling psychologists' higher multicultural competence was predictive of less professional bias (e.g. appropriateness for therapy) toward the older client vignette (Tomko & Munley, 2013) indicating that broad multicultural competence translated into hypothetical work with older adults.

These two studies, in addition to the studies on multicultural competence and other types of bias reviewed above indicate the importance of the relation between multicultural competence and attitudes/biases toward minority groups. It may be that some of the broad knowledge, skills and awareness acquired in multicultural education or from other multicultural opportunities could improve levels of ageism in trainees and other mental health professionals (McBride & Hays, 2012). Despite the lack of geriatric specific training in professional psychology, it is proposed that broad multicultural competence may be an important component in geropsychology competence and training (Tomko & Munley, 2013). Yet, very little is still known about the exact implications of multicultural competence on ageism. Research in this area is highly relevant (O'Hara et al., 2016) and will have important implications for psychologists and trainees who lack specialized training in geropsychology.

As reviewed in this chapter, the proportion of older adults in the United States is growing rapidly (U.S. Census Bureau, 2014), bringing with them a projected growth in mental health concerns (Choi, DiNitto & Marti, 2015). Psychotherapy is an effective treatment for these concerns (Cuijpers et al., 2009). Even though psychologists are seeing increasing caseloads of older adults, there remains little training and specialization in geropsychology (American Psychological Association, 2016). As such, it may be that practitioners have not had the opportunity to address their personal ageism and may take ageism into their practice. In fact, older adults have been shown to receive differential treatment in psychotherapy (Kessler & Bowen, 2015, Kessler & Schneider, 2016, Mejia et al., 2018). Outside of specialization in geropsychology, it may be that broader

multicultural competence allows psychologists to encounter and address ageism. Higher levels of multicultural competence have been associated with lower levels of age bias (McBride & Hays, 2012; Tomko & Munely, 2013), indicating a potentially relevant impact point for targeting ageism in psychotherapy.

Chapter 3: Method

In light of the increased emphasis on multicultural competence alongside the continued prevalence of ageism, the present study examined bias toward older adults in psychotherapy and whether multicultural competence or ageism acted as moderators for the differential treatment of an older versus a younger client. A randomized experimental design was utilized wherein participants were randomly assigned to age-manipulated vignette conditions. Vignettes have been shown to be a valid and suitable methodology for studying various topics such as health service disparities (Lapatin, Goncalves, Nillni, Chavez, Quinn, Green & Alegria, 2012) as well as clinicians' decision-making (Evans, Roberts, Keeley, Blossom, Amaro, Garcia, Stough, Canter, Robles & Reed, 2014). A 2014 literature review revealed that well-designed vignettes allow for precision in addressing causal research questions that would be unfeasible or unethical in real-world experimental situations. Vignette studies have demonstrated both external validity and internal validity due to the combination of the survey and experimental methodology (Evans et al., 2014). Furthermore, much research has supported the generalizability of vignette responses to real world clinical behavior (Evans et al., 2014).

Participants and Procedure

Participants were masters-level and doctoral-level trainees in clinical psychology, counseling psychology, and counseling. This population was selected due to the modern

emphasis on multicultural competence in APA-accredited doctoral programs and ACA-accredited masters programs in the United States. Utilizing trainees also allowed for training-specific recommendations based on the results and provided an accurate picture of the professionals who will be providing services to the quickly expanding population of older adults.

Data was collected remotely using Qualtrics online survey software. A recruitment email was sent via the Association of Counseling Center Training Agencies (ACCTA) Listserv as well as directly to all programs listed in the APA list of accredited doctoral programs as well as the list of CACREP accredited masters programs in Clinical Mental Health Counseling (with contact information readily available online). The recruitment email informed potential participants that the purpose of the study was to examine “clinical assessment of various clients” to obscure age as the focal point of the study (adapted from the procedure in Mohr, Weiner, Chopp & Wong, 2009). Recruitment materials and survey title were intentionally vague in the study description to ensure that participants did not respond in overly positive or deferential ways to the older client in order to appear more socially desirable.

Upon following the survey link in the recruitment email, participants viewed the informed consent form followed by an initial practice vignette designed to strengthen participant belief that the study was about the clinical assessment of various clients rather than about age specifically. This method was based on the procedure used in Mohr et al. (2009) in which a warm-up vignette was utilized to prevent socially desirable responding to vignettes of varying sexual orientations. Participants rated the practice vignette using

the Global Assessment of Functioning (GAF; Mohr et al., 2009) and answered a single question about presenting problem.

Next, participants were randomly assigned to one of two vignette conditions in which a woman (35 or 70 years old) presented with symptoms of depression (James & Haley, 1995; see Appendix A). As a validity check, participants were asked to rate the client's age on a 7-point scale (*extremely young to extremely old*) to ensure that participants were sufficiently aware of the vignette client's age (Kessler & Schnieder, 2017). Participants were also asked to respond to a validity check question about the presenting problem (Appendix H). Following the validity checks, participants responded to the client attractiveness scale (TPRQ; Davis, Cook, Jennings & Heck, 1977; Tryon, 1989) and the scale of professional bias (James & Haley, 1995). The order of these two scales was randomized. Finally, participants completed the scales of social desirability, explicit ageism, and multicultural competence. These scales were also randomized and were presented at the end of the study to further ensure that participants were unaware that the survey was aimed at age-related bias when responding to the clinical vignette (consistent with Mohr et al., 2009). At the end of the study, participants responded to remaining demographic questions that pertained explicitly to experiences and coursework with age/aging.

Of note, a measure of socially desirable responding was included in this study as a covariate due to similar precedence being set in other vignette studies of clinical bias (e.g. Mohr et al., 2009) and due to the previously established effect of socially desirable responding on measures of ageism and multicultural competence. Although self-reported

ageism has been shown to be unaffected (Lassonde, Surla, Buchanan, & O'Brien, 2012) or minimally affected (Cherry, Allan, Denver & Holland, 2015) by socially desirable responding, research has found a significant correlation between self-reports of positive ageism and social desirability (Cherry et al., 2015). While the effect size was small, researchers found that participants who were most concerned with socially desirable responding also reported the highest levels of positive ageist behaviors (i.e. holding the door for an older person) (Cherry et al., 2015). For multicultural competence, a literature review that included ten scales of cultural competence and four social desirability scales found that cultural competence was significantly associated with social desirability (Larson & Bradshaw, 2017).

Measures

Demographic Questionnaire. A brief demographic questionnaire (Appendix B) was given to participants with questions about age, gender, race, training level, program type, multicultural coursework, coursework on geropsychology and/or aging, semesters of clinical experience, and frequency of clinical experiences with diverse clients and with older adults. As described above, this questionnaire was split between the beginning and end of the study depending on how much the questions would indicate the focus of the study.

Survey of Professional Bias. The survey of professional bias was designed to measure clinical judgment of practicing psychologists toward vignettes that varied based on age and health (James & Haley, 1995). Participants are asked rate their responses on a 7-point Likert scale to questions such as “How do you view Ms. James’s ability to

develop an adequate therapeutic relationship with you?” and “How comfortable would you feel in treating Ms. James’s presenting complaint?” (James & Haley, 1995). Recent studies have utilized only a selection (5 to 6) of the original eleven items to address various research questions about therapists’ clinical judgments (e.g. Helmes & Gee, 2003; Kessler & Schneider, 2017; Tomko & Munley, 2012). Kessler & Schneider found good internal consistency for six of the survey items ($\alpha = .82$; 2017). The present study used eight of the eleven original items (removing questions not scored on the 7-point Likert scale; Appendix C) and researchers planned to conduct a confirmatory factor analysis to confirm that the eight items could be used as a composite scale in accord with prior research.

Therapist Personal Reaction Questionnaire. The Therapist personal reaction questionnaire (TPRQ) was originally designed as a 70-item measure of clinicians’ positive and negative attitudes toward their clients on a 5-point Likert scale (Ashby, Ford, Guerney, Guerney, & Snyder, 1957). The present study utilized the modified 15-item Therapist Personal Reaction Questionnaire (Davis et al., 1977; Tryon, 1989; Appendix D). The modified TPRQ contains 15 statements about client attractiveness (e.g. “I like this client more than most” and “I felt pretty ineffective with this client”) that are rated on a 5-point Likert scale (1 is “strongly disagree” and 5 is “strongly agree”; Tryon, 1989). Results of a cluster analysis showed the TPRQ measures both counselor feelings toward the client and counselor feelings about working with the client. Strong internal consistency was demonstrated for Cluster 1 ($\alpha = .89$) and for Cluster 2 ($\alpha = .82$; Tryon, 1989). The full scale has demonstrated adequate internal consistencies over time ranging

from .75 to .87 (Mohr, Israel, Sedlacek & Hansen, 2001; Mohr et al., 2009; Tryon, 1989). Higher TPRQ scores have been correlated with lower rates of premature termination (Tryon, 1989) and clients' positive likelihood of returning to therapy after the intake session (Tryon, 1992). Researchers in the present study modified the TPRQ slightly to indicate working with a hypothetical rather than actual client (e.g. "I'd like this client more than most"; Mohr, 2009).

Fraboni Scale of Ageism. The Fraboni Scale of Ageism (FSA; Fraboni, Saltstone & Hughes, 1990; Appendix E) is a 29-item self-report measure of explicit ageism in which participants are asked to respond to various statements on a 4-point Likert scale from "strongly disagree" to "strongly agree." There are three factors represented on the FSA including antilocution (e.g. "teen suicide is more tragic than suicide among the old"), discrimination (e.g. "most old people should not be trusted to take care of infants"), and avoidance (e.g. "I personally would not want to spend much time with an old person"). The FSA has been shown to have adequate internal consistency ($\alpha = .86$) and has been significantly correlated with measures of acceptance of others and knowledge about elderly people (Fraboni, Saltstone & Hughes, 1990) as well as various other cognitive and affective measures of ageism (Rupp, Vodanovich & Crede, 2005).

Multicultural Counseling Awareness Scale. The Multicultural Counseling Awareness Scale (MCKAS; Ponterotto, Gretchen, Utsey, Rieger & Austin, 2002; Appendix F) is a revised version of the original scale (MCAS), which was designed to measure multicultural knowledge, awareness, and skills (Ponterotto, Rieger, Barrett, Harris, Sparks, Sanchez & Magids, 1996). The revised MCKAS consists of 32 items with

20 items representing knowledge and 12 items representing awareness. Participants are asked to respond to various statements (e.g. “I think that clients who do not discuss intimate aspects of their lives are being resistant and defensive”) on a 7-point Likert scale from “not at all true” to “totally true.” The MCKAS has demonstrated good internal consistency for the full scale ($\alpha = .90$; Lu, 2017) as well as for the two subscales of knowledge and awareness (each with $\alpha = .85$; Ponterotto et al., 2002). A 2017 review of literature revealed evidence of construct validity for the MCKAS, which has been significantly negatively correlated with scales of racism, white racial identity, and colorblind racial attitudes (Larson & Bradshaw, 2017).

The Balanced Inventory of Desirable Responding. The Balanced Inventory of Desirable Responding (BIDR-IM; Paulhus, 1988; Appendix G) is a 40-item survey that measures two underlying constructs of socially desirable responding including self-deceptive positivity and impression management. This study utilized only the impression management subscale (BIDR-IM) as this subscale is one of the most commonly employed and recommended measures of socially desirable responding in contexts where individuals seek affiliation, approval, and belonging (versus dominance, power, independence; Steenkamp, De Jong & Baumgartner, 2010). Participants are asked to respond to various statements (e.g. “I sometimes tell lies if I have to”) on a 7-point Likert scale ranging from “Not true at all” to “Very true”. Half of the items are reverse-scored. A dichotomous scoring procedure was utilized as recommended by the original author (Paulhus, 1991; Lambert, Arbuckle, & Holden, 2016). Prior studies have established

adequate reliability and validity for this measure (Paulhus, 1991; Miller & Ruggs, 2014; Vispoel & Tao, 2013).

Power Analysis

Effect sizes for select individual items on the Professional Bias questionnaire (James & Haley, 1995) have ranged from $d = .28$ to $d = .49$ (James & Haley, 1995; Helmes & Gee, 2003). Regarding the Therapist Personal Reaction Questionnaire (TPRQ), a recent dissertation demonstrated a significant difference in TPRQ scores for heterosexual fathers versus gay fathers such that gay fathers were rated more positively (Miller, 2015). The calculated effect size for this result was $d = 3.2$ indicating an exceptionally large effect size.

Assuming a small to medium effect size (averaged $f = .175$) for the study, an a-priori power analysis was conducted to determine the number of participants needed to achieve an acceptable power of 0.80. G*Power software was utilized with an alpha of 0.05 for the two groups at a power level of 0.80. Results revealed a necessary participant count of $N = 260$.

Data Analysis

Missing data was analyzed and handled utilizing mean substitution, which has been shown to be a valid methodology for handling missing data especially in cases with low levels of missing data overall (Parent, 2013). Outliers were examined and cases with z-scores greater than 3 were removed from the data. The data was examined for assumptions of skewness, kurtosis, and homogeneity of variance. The two vignette conditions were then tested for the assumption that the distribution of responses would be

the same across vignette condition for demographic variables and the pass/fail rate of the validity check.

In the main analysis, the present study utilized a one-way ANCOVA analysis (with social desirability as the covariate) to address the first hypothesis. Prior to this analysis, assumptions were tested for and verified using Shapiro-Wilk's test and Levene's test, among others. To test the moderation hypotheses, moderation analyses were conducted using the SPSS PROCESS macro (Hayes, 2013) for both multicultural competence and for ageism, while controlling for socially desirable responding as a covariate. Assumptions for the regression were also tested and verified prior to these analyses.

Chapter 4: Results

The present study aimed to examine student clinical bias toward age-manipulated clinical vignettes (middle-age, old). The study also aimed to explore moderating effects of multicultural competence and ageism on the association between experimental manipulation and clinical bias. Overall, the present study was designed to expand on prior research on clinical judgment by exploring age, ageism, and multicultural competence in relation to bias. Overall, it was hypothesized that participants in the older vignette condition would exhibit more clinical bias compared to participants randomly assigned to the middle-age condition. In terms of moderation, it was hypothesized that higher multicultural competence and ageist attitudes would buffer and enhance the relationship between vignette condition and clinical bias, respectively. This chapter will outline the details of statistical analyses conducted including data preparation, exploration of assumptions, preliminary analyses, and primary analyses.

Data Preparation

Data was collected through an online survey platform (Qualtrics) and was analyzed using the IBM Statistical Package for the Social Sciences (SPSS 24.0). A total of 371 responses were downloaded from Qualtrics at the initial point of survey closure. Cases with 100% missing data on one or more of the six main scales were deleted from the analysis ($n = 76$). Furthermore, cases in which participants failed one or both of the

validity checks were removed from analysis. For the age validity check, participants were removed from the study if their response on the age estimate question differed from the actual condition to which they were randomly assigned ($n = 32$). Participants who inaccurately described the client’s presenting concern by selecting either too few responses or inaccurate responses were removed ($n = 5$). One additional participant was removed for failing to complete the age validity question. Finally, participants who listed degrees or programs outside of masters or doctoral degrees in counseling psychology, clinical psychology, and clinical mental health counseling ($n = 12$) were removed.

After removing these cases, only four single instances of missing data occurred on single items in the data set. Missing data was handled using mean substitution due to the low levels of missing data overall (Parent, 2013). Case outliers were identified as having z-scores greater than +/-3 and were also removed from the study ($n = 4$). The final sample consisted of 242 participants.

Participants

Table 1 presents demographic characteristics for the final sample and Table 2 presents academic and clinical experiences reported by participants.

Table 1.
Demographic Characteristics of the Sample (N = 242)

<i>Variables</i>		<i>n</i>	<i>%</i>
Gender	Female	193	79.8
	Transgender Male	1	0.4
	Male	42	17.4
	Transgender Female	1	0.4
	Non-Binary	3	1.2
	Gender Queer	2	0.8
Age	Unreported	1	0.4
	21 – 25 years old	83	34.3
	26 – 30 years old	111	45.9

	31 – 35 years old	35	14.5
	36 – 40 years old	6	2.5
	41 – 50 years old	3	1.2
	51+ years old	3	1.2
Race/Ethnicity	Asian/Asian American	14	5.8
	Black/African American	10	4.1
	Hispanic/Latino	8	3.3
	White/Caucasian, European, not Hispanic	166	68.6
	Native American or American Indian	1	0.4
	Multiracial/Multiethnic	33	13.6
	Jewish/Jewish American	5	2.1
	Caribbean	2	0.8
	Middle Eastern/Persian	3	1.2
	Degree Upon Completion	Ph.D.	93
Psy.D.		80	33.1
Unspecified Doctorate		5	2.1
MA		21	8.7
MS		12	5.0
Unspecified Master's		26	10.7
Unreported		5	2.1
Year in Program	1	44	18.2
	2	55	22.7
	3	46	19.0
	4	37	15.3
	5	36	14.9
	6	16	6.6
	7	2	0.8
	Other Unreported	5 1	2.1 0.4
Program Type	Clinical	137	56.6
	Counseling	45	18.6
	Clin MH Counseling	60	24.8
Semesters of Clinical Experience	0	47	19.4
	1 – 2	45	18.6
	3 – 5	60	24.8
	6 – 8	55	22.7
	9 – 11	24	9.9
	12+	9	3.7
	Other Unreported	1 1	0.4 0.4

Table 2.
Academic and Clinical Experiences of the Sample (N = 242)

<i>Variables</i>		<i>n</i>	<i>%</i>
Courses with Primary Multicultural Focus	0	35	14.5
	1	114	47.1
	2	48	19.8
	3	21	8.7
	4 – 5	14	5.8
	6 – 7	3	1.2
	8+	3	1.2
	Unreported	4	1.7
Courses with Secondary Multicultural focus	0	19	7.9
	1 – 2	75	31.0
	3 – 5	81	33.5
	6 – 8	25	10.3
	9 – 11	14	5.8
	12+	17	7.0
	Unreported	11	4.5
Courses with Primary Aging Focus	0	148	61.2
	1	73	30.2
	2	10	4.1
	3+	5	2.1
	Unreported	6	2.5
Courses with Secondary Aging Focus	0	103	42.6
	1	80	33.1
	2	26	10.7
	3	13	5.4
	4	5	2.1
	5+	8	3.3
Unreported	7	2.9	
Clinical Experience with Oldest Adults (75+)	Never	142	58.7
	Infrequently	53	21.9
	Occasionally	30	12.4
	Frequently	8	3.3
	Very Frequently	4	1.7
	Missing	5	2.1
Clinical Experience with Older Adults (55 – 75)	Never	88	36.4
	Infrequently	49	20.2
	Occasionally	53	21.9
	Frequently	32	13.2
	Very Frequently	15	6.2
	Missing	5	2.1

Preliminary Analyses

This following instruments were administered: the Survey of Professional Bias (James & Haley, 1995), the Therapist Personal Reaction Questionnaire (Ashby et al., 1957), the Fraboni Scale of Ageism (Fraboni, Saltstone & Hughes, 1990), the Multicultural Counseling Awareness Scale (Ponterotto et al., 2002), and the Balanced Inventory of Desirable Responding (Impression Management Scale; Paulhus, 1991). A summary of descriptive statistics and Cronbach's alphas for the instruments can be found in Table 3.

Table 3.
Descriptive Statistics and Cronbach's Alphas for Study Variables

	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>	<i>Range</i>	<i>α</i>
SPB Total	21.20	4.02	12	35	23	0.566
TPRQ Total	49.50	4.78	34	62	28	0.622
MCKAS Total	184.90	18.60	125	224	99	0.886
FSA Total	50.53	8.64	32	89	57	0.859
BIDR-IM Total	6.20	3.57	0	15	15	0.756

Test Reliability & Factor Analysis

Cronbach's alpha is an essential measure of test reliability in research and is typically accepted at values ranging from 0.70 to 0.92 (Tavakol & Dennick, 2011). As displayed in Table 2, Cronbach's alphas were calculated for each of the survey measures and ranged from 0.566 on the SPB to 0.886 on the MCKAS. While three of the measures produced alphas greater than .8, the two dependent variables in the study demonstrated low alphas (.566 on the SPB and .622 on the TPRQ).

When exploring the reliability for the TQRQ, removal of one or several items did not appear to significantly improve the Cronbach's alpha. Furthermore, dividing the

TPRQ into clusters as described by Tyron (1989) also did not improve Cronbach's alpha, with Cluster 1 yielding a coefficient alpha of 0.523 and Cluster 2 a coefficient alpha of 0.655. As such, full-scale scores on the TPRQ were used for the main data analyses and results should be interpreted with caution given that .622 is close to the lowest historical suggested cut-off for alpha of 0.6 (Cho & Kim, 2015) and below the current lowest suggested cut-off of 0.7 (Tavakol & Dennick, 2011).

A planned factor analysis was initiated for the Survey of Professional Bias (SPB), to explore underlying constructs and to select appropriate items for the scale. However, the Kaiser-Meyer-Olkin Measure of Sampling Adequacy score of 0.568 suggested there was insufficient shared variance among items to warrant a factor analysis. Given the low scale score reliability for these items and the inability to run a factor analysis, SPB was removed from the main analyses.

Testing of assumptions: Normality

Normality was assessed for each scale using the Shapiro-Wilk test (Razali & Wah, 2011; Yap & Sim, 2011; Ghasemi & Zahediasl, 2012). Client attractiveness scores (TPRQ; Davis et al., 1977; Tryon, 1989) were normally distributed for the older vignette condition but not for the younger vignette condition ($p = 0.008$, $p = 0.458$). Multicultural competence scores (MCKAS; Ponterotto et al., 2002) as well as socially desirable responding scores (BIDR-IM; Paulhus, 1991) each violated the assumption of normality for both vignette conditions (middle age; older) as assessed by Shapiro-Wilk's test ($p = 0.006$, $p = 0.005$; $p = 0.002$, $p = 0.030$). Finally, ageism scores (FSA; Fraboni, Saltstone

& Hughes, 1990) were normally distributed for the older vignette condition but not for the younger vignette condition ($p = .401$, $p = .001$).

In order to better understand the violations of normality for the measures, a descriptive and graphical exploration of normality was pursued via critical values of skewness and kurtosis (set at +/- 2.58; Razali & Wah, 2011) as well as via histograms. Client attractiveness scores (TPRQ; Davis et al., 1977; Tryon, 1989) fell into a normal distribution for the older vignette condition (skewness = 0.007, SE = 0.228; kurtosis = -0.078, SE = 0.453) whereas the middle-aged condition was not skewed (skewness = -0.482, SE = 0.212) but exhibited a kurtosis score indicating a slight leptokurtic distribution (kurtosis = 1.232, SE = .422; z-score = 2.92). Visual inspection of the histogram for the middle-aged condition showed a slight leptokurtic distribution in client attractiveness scores. Scores on the measure of socially desirable responding (BIDR-IM; Paulhus, 1991) were normally distributed for the middle-aged vignette condition with a skewness of 0.401 (SE = 0.212) and kurtosis of -0.447 (SE = 0.422) and for the older vignette condition with a skewness of 0.193 (SE = 0.228) and kurtosis of -0.653 (SE = 0.453). Given that the violations of normality appeared slight in the examination of skewness/kurtosis and histograms, no transformations were applied for TPRQ and BIDR-IM variables. ANOVA, ANCOVA, and regression analyses have been shown to be robust to violations of normality, especially with larger sample sizes (Olejnik & Algina, 1984; Schmider, Ziegler, Danay, Beyer & Bühner, 2010; Schmidt & Finan, 2018).

An exploration of skewness and kurtosis for multicultural competence scores (MCKAS; Ponterotto et al., 2002) revealed that kurtosis in both the middle-aged and

older conditions was normal (0.443, SE = 0.422; 0.071, SE = 0.453), but that skewness scores indicated a significantly skewed distribution for both conditions (-0.655, SE = .212, z-score = -3.09; -0.599, SE = .228, z-score = -2.62). A visual inspection of the histograms for multicultural competence scores indicated negatively skewed distributions with a large proportion of responses being located in the high scores on the measure (indicating higher multicultural competence). Ageism scores (FSA; Fraboni, Saltstone & Hughes, 1990) were normally distributed for the older condition (skewness = 0.095, SE = .0.228 ; kurtosis = -0.629, SE = 0.453) but not for the middle-aged condition with a skewness of 0.827 (SE = 0.212; z-score = 3.90) and a kurtosis of 2.169 (SE = .422; z-score = 5.14). Visual inspection of the histograms supported a positively skewed and leptokurtic distribution of scores for the middle-aged vignette condition, but not for the older vignette condition.

Given the more severe violations of normality in the MCKAS scores and the FSA scores, data transformation was used to achieve normality (Aron, Coups & Aron, 2013). Transformation successfully improved normality MCKAS and FSA scores. Multicultural competence scores (MCKAS; Ponterotto et al., 2002) were transformed successfully utilizing a reflected square root transformation (Aron, Coups & Aron, 2013). Results of normality testing indicated normal distributions in both the middle-aged and older vignette conditions as evidenced by skewness (-0.193, SE = 2.21; -0.218, SE = 0.228), kurtosis (0.608, SE = 0.422; 0.557, SE = 0.453), and a non-significant Shapiro-Wilk test ($p = 0.359$; $p = 0.170$). Ageism scores were then transformed successfully utilizing a normal square root transformation (Aron, Coups & Aron, 2013). Results of normality

testing indicated subsequent normal distributions in both the middle-aged and older vignette conditions as evidenced by skewness (0.142, SE = 0.212; -0.248, SE = 0.228), kurtosis (0.331, SE = 0.422; -0.500, SE = 0.453), and a non-significant Shapiro-Wilk test ($p = 0.226$; $p = 0.260$).

Testing of assumptions: ANCOVA

Assumptions for the one-way ANCOVA were met. There was one continuous dependent variable, one categorical independent variable, one continuous covariate, and independence of observations. Standardized residuals for the vignette conditions were normally distributed, as assessed by Shapiro-Wilk's test ($p = 0.174$, $p = 0.362$). The assumption of homoscedasticity was met after a visual inspection of the standardized residuals plotted against the predicted values. Furthermore, Levene's test of homogeneity of variance was non-significant ($p = 0.720$) indicating that there was homogeneity of variances. Finally, there were no outliers in the data, as assessed by no cases with standardized residuals greater than ± 3 standard deviations.

Testing of assumptions: Regression

Predictor and moderator variables for the regression analyses were standardized (Fraizer, Tix & Barron, 2004). There was no indication of multicollinearity as demonstrated by lowest tolerance values of 0.932 for the FSA analysis and 0.843 for the MCKAS (Allison, 1999). Standardized residuals were found to be normally distributed in the FSA regression (Shapiro-Wilk's test $p = .174$) but not the MCKAS regression (Shapiro-Wilk's test $p = .024$). An inspection of the Normal Q-Q plot suggested that the data appeared normal despite the violation of the Shapiro-Wilk's test. In the FSA

regression, no outliers were found to have cross over with high leverage cases, and the data did not have any influential cases. As such, outliers were noted and still included in the data. In the MCKAS regression, only one individual was found to be both an outlier and a high leverage point. The unusual outlier was noted and removed, and the regression was re-run. Results revealed that removing this individual did not significantly change results of the analyses so they were not removed. An examination of studentized residual plots revealed linearity and homoscedasticity. Finally, the assumption that variables are measured reliably/without error (Osborne & Waters, 2002) was violated by the poor Cronbach's alpha on the TPRQ. As such, there may be increased risk for Type II error in the results of the regression analyses (Osborne & Waters, 2002).

Testing of Assumptions: Balance Tests

Demographic variables and validity check pass/fail rates were compared between vignette conditions using Chi-square tests of independence. Results revealed one significant difference between groups. Participants assigned to the older vignette condition more frequently failed the age validity check ($n = 28$) than participants assigned to the younger vignette condition ($n = 1$), $\chi^2 (1, N = 289) = 27.74, p < 0.001$. All other chi-square values were non-significant at the $p > .05$ level, indicating that the distribution of responses did not differ across condition for demographic variables.

Independent Variables

Statistically significant Pearson's correlations between study variables are included in Table 4. Client attractiveness (TPRQ) was significantly correlated with ageism (FSA), socially desirable responding (BIDR-IM), and the demographic variable

“degree upon completion.” Client attractiveness was not significantly correlated with multicultural competence or gender. Multicultural competence (MCKAS) was significantly correlated with ageism and with three demographic variables: gender, “number of courses with a primary focus on multicultural competence” and “number of courses with a secondary focus on multicultural competence.” Beyond client attractiveness and multicultural competence, ageism (FSA) was significantly correlated with socially desirable responding (BIDR-IM), which was significantly correlated with gender and degree upon completion.

Table 4.
Correlations among Study Variables

Variables	1	2	3	4	5	6
1. TPRQ ¹	--	.120	-.149*	.164*	-.156*	-.075
2. MCKAS ²		--	-.338**	0.044	.104	-.142*
3. FSA ³			--	-.144*	.025	.123
4. BIDR-IM ⁴				--	-.180**	-.097
5. Degree ⁵					--	.049
6. Gender ⁶						--

Variables	1	2	3	4	5	6
1. MCKAS ²	--	-.338**	.170**	.270**	.030	.027
2. FSA ³		--	-.063	-.090	-.065	-.035
3. Primary MC Courses			--	.367**	.284**	.307**
4. Secondary MC Courses				--	.109	.394**
5. Primary Aging Courses					--	.304**
6. Secondary Aging Courses						--

¹ Higher TPRQ scores describe more positive feelings; ² Higher MCKAS scores describe higher multicultural competence; ³ Higher FSA scores describe more negative explicit ageism; ⁴ Higher BIDR-IM scores describe more socially desirable responding; ⁵ Master’s degree coded as “1” and

Doctoral degree coded as “2”;⁶ Cis- and Trans-identifying Females coded as “1” and Males coded as “2.”

Note. * $p < .05$, ** $p < .01$.

There were no significant correlations with survey measures for age, year in program, semesters of clinical experience, and number of courses with a secondary focus on Age, Aging, and/or Geropsychology. There was a significant correlation between ageism scores (FSA) and participant responses on the estimates of frequency of working with “Oldest Adults (75+)”, “Older Adults (55-75),” and “Middle-Age Adults (33-55)” but not for “Young Adults” or “Children and Adolescents” (See Table 5).

Table 5.
Correlation for Frequency of Working with Various Age Groups with Ageism

	0-18	18-35	35-55	55-75	75+
Ageism (FSA)	.042	-.039	-.128*	-.279**	-.210**

Note. * $p < .05$, ** $p < .01$.

Primary Analyses

ANCOVA

A one-way analysis of covariance (ANCOVA) was conducted to determine whether there were significant differences in means on TPRQ scores across age conditions after controlling for socially desirable responding scores (BIDR-IM). After adjustment for socially desirable responding, the difference in client attractiveness (TPRQ) scores differed significantly between the vignette conditions, $F(1, 239) = 4.24$, $p = 0.041$, partial $\eta^2 = 0.017$. See table 6 for results.

Table 6. With the Bonferroni adjustment, TPRQ scores were significantly lower for the older vignette condition ($M = 48.83$, $SE = .412$) compared to the younger vignette condition ($M = 50.08$, $SE = .444$) with a mean difference of 1.25 ($p = .041$).

Table 6.
Client Attractiveness by Age Vignette, ANCOVA Table

Source	Sum of Squares	df	Mean Square	F	p	Partial Eta Squared
Corrected Model	241.96	2	120.978	5.49	.005**	.044
Intercept	137355.11	1	137355.11	6228.56	.000***	.963
BIDR-IM	160.51	1	160.51	7.28	.007**	.030
Age Condition	93.53	1	93.53	4.24	.041*	.017
Error	5270.54	239	22.05			
Total	598473.00	242				
Corrected Total	5512.50	241				

* $p < .05$, ** $p < .01$, *** $p < .001$

Hierarchical Regression Analysis¹

Two hierarchical regressions were run in order to assess the moderating effects of multicultural competence (MCKAS scores) and ageism (FSA scores) on the relationship between vignette condition and client attractiveness. In both regression analyses, only social desirability was included as a covariate despite preliminary analyses establishing a significant correlation between TPRQ scores and degree upon graduation. Degree upon graduation was not included as a covariate because it was also significantly correlated with social desirability, which could lead to multicollinearity (Yu, Jiang & Land, 2015; Mela & Kopalle, 2002). Social desirability was selected as the correlated variable that would remain in the model due to the theoretical relevance and the premeditation of including that specific variable as a covariate in analyses (Yu, Jiang & Land, 2015).

¹ Moderation analyses run with the standardized non-transformed variables (MCKAS, FSA) did not substantially affect the findings of the two analyses.

Multicultural competence. For the multicultural competence moderator, socially desirable responding (BIDR-IM) was included as a covariate. Age condition (dummy coded 1 or 0 for middle-age or older) was entered as the X-variable, standardized TPRQ as the Y-variable, and standardized MCKAS as the moderator variable. The model accounted for approximately 5.3 % of variance in scores of client attractiveness ($F(4, 237) = 3.30, p = .012$). The addition of an interaction term did not change the model ($r^2 = 0.001$) and was not statistically significant ($F(1, 237) = .359, p = .550$). Results are presented in Table 7.

Ageism. For the analysis of ageism as a moderator, socially desirable responding (BIDR-IM) was also included as a covariate. Age condition (dummy coded 1 or 0 for middle-age or older) was entered as the X-variable, standardized TPRQ as the Y-variable, and standardized FSA as the moderator variable. The model accounted for approximately 7.6% of variance in scores of client attractiveness ($F(4, 237) = 4.88, p < .001$). The addition of an interaction term accounted for approximately 1.6% of additional variance ($r^2 = 0.016$) and was statistically significant ($F(1, 237) = 4.03, p = .046$). Results of this analysis are presented in Table 8.

Table 7.
Summary of Hierarchal Regression Analysis for the Variables Predicting TPRQ Total

Variable	B	SE B	t	ΔR^2
Model Summary				.053*
Constant	-.138	.093	-1.48	
Age Condition	.253	.127	1.99*	
MCKAS	-.047	.092	-.510	
Interaction	-.076	.127	-.599	.001
BIDR-IM	.168	.063	2.65**	

Note. Interaction= Age Condition* MCKAS; * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 8.

Summary of Hierarchical Regression Analysis for the Variables Predicting TPRQ Total

Variable	TPRQ Total (Middle-Age)			
	B	SE B	t	ΔR^2
Model Summary				.076***
Constant	-.123	.092	-1.34	
Age Condition	.242	.125	1.93	
Ageism	-.270	.094	-2.87**	
Interaction	.253	.126	2.01*	.016*
BIDR-IM	.157	.063	2.47*	

Note. Interaction= Age Condition* FSA

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

Simple slopes were calculated using the SPSS PROCESS Macro. Results indicated that the association between vignette condition and client attractiveness was significant at higher levels of ageism ($b = .49$, $SE = .18$, $p = .006$) but not at lower levels of ageism ($b = -.01$, $SE = .18$, $p = .948$) (see Figure 1). That is, the 70-year old client was rated significantly less attractive when ageism scores were high.

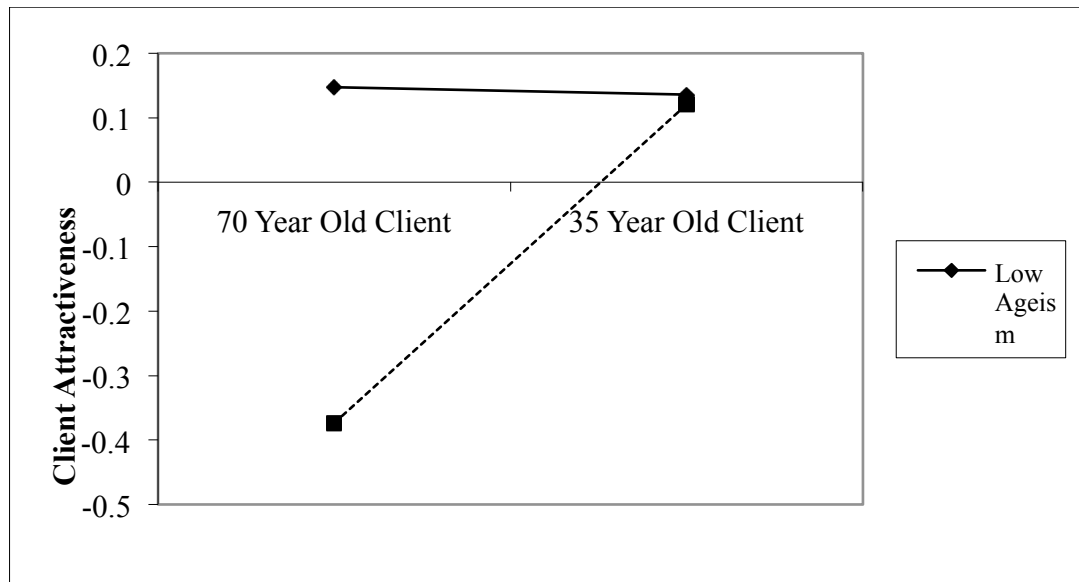


Figure 1. Moderation effect of ageism on client attractiveness.

Chapter 5: Discussion of Research Findings and Conclusion

Bias Toward an Older Client

Results supported the study's first hypothesis that there would be a significant difference in bias between participants who were exposed to a 70-year-old client compared to a 35-year-old client. Of note, the only change between the vignettes was the age (35 or 70) and participants included in the final analysis were sufficiently primed for age by this slight variation as evidenced by a manipulation check. When controlling for socially desirable responding, participants in this study who were randomly assigned to the older vignette condition showed significantly less favorable views toward the hypothetical client compared to those who were assigned to the younger vignette condition. Specifically, this study demonstrated a difference in perceived client attractiveness as measured by the Therapist Personal Reaction Questionnaire (TPRQ). This scale was designed to capture client attractiveness (e.g. "I like this client more than most" and "I felt pretty ineffective with this client") and was developed to assess both counselor feelings toward the client and counselor feelings about working with the client (Tryon, 1989).

The difference in client attractiveness ratings between a younger and older client by participants in the present study adds to a growing body of literature that highlights negative attitudes and discriminatory behavior of mental health professionals toward

older clients (Settin, 1982; Wrobel, 1993; James & Haley, 1995; Helmes & Gee, 2003; Conlon & Choi, 2014; Kessler & Schneider, 2017; Mejia et al., 2018). The present study established less favorable ratings of an older client in a final sample of 242 mental health trainees recruited from across the country, from various degree programs, at various stages of training, with varying amounts of clinical experience, and primed solely on a single age descriptor in an identical clinical vignette.

Moderation of Multicultural Competence

In light of prior research highlighting the relationship between ageism and multicultural competence (McBride & Hays, 2012; Tomko & Munley, 2013), it was hypothesized that multicultural competence would moderate the relationship between age condition and bias such that participants who reported high levels of multicultural competence would respond similarly to each vignette condition whereas those with lower levels would exhibit more differential bias toward the older versus the younger client. This hypothesis was not supported in the present study. Multicultural competence was not a significant moderator in the relationship between age condition and bias, as measured by client attractiveness.

Interestingly, multicultural competence was found to correlate significantly with the measure of explicit ageism. The correlation between multicultural competence and age bias is supported by prior research that has established a relationship between multicultural competence and race bias (Constantine, 2002; Constantine, Juby & Liang, 2001; Gushue, Constantine & Sciarra, 2008), bias toward transgender individuals (Kanoamori & Cornelius-White, 2017), bias toward poverty (Clark, Moe & Hays, 2017),

and age bias specifically (McBride & Hays, 2012; Tomko & Munley, 2013). In this study, higher levels of multicultural competence were correlated with lower levels of explicit ageism. Multicultural competence was also correlated with number of courses with primary and secondary focus on multiculturalism as well as with number of courses with a primary focus on age/aging.

Overall, while multicultural competence correlated with ageism and with higher levels of coursework in both multiculturalism and age/aging, there was no correlation nor was there a moderating effect for multicultural competence and bias as measured by client attractiveness. Across levels of multicultural competence, the older vignette client was seen as significantly less attractive. As such, multicultural competence alone does not appear to buffer the impact of age presentation on bias. The results of this study contrast those of Tomko & Munely (2013) who found that higher MCKAS scores predicted less clinical bias toward an older client on the Survey of Professional Bias (SPB, James & Haley, 1995). Of note, Cronbach's alpha was not reported for the SPB in Tomko & Munley's study despite being reported for their other measures (2013). In light of the poor alpha found for the SPB in the present study, it may be that authors selected items for their scale (6 of the original 11) that did not have good internal consistency and may have produced a Type 1 error.

Conversely, it may be that the SPB items utilized in Tomko & Munley's study and the measure of bias used in this study (TPRQ) capture distinct aspects of clinical bias that are impacted differently by MCKAS scores due to their differing underlying constructs. It could be that multicultural competence was predictive of overt bias (SPB

items such as diagnosis and prognosis) but did not predict or correlate with implicit biases associated with client attractiveness in this study (TPRQ items such as client likeability, warmth toward client, imagined reactions to client). Indeed, MCKAS was correlated with explicit ageism in the present study and in past studies (McBride & Hays, 2012) so it could be that the SPB taps into a construct more related to explicit bias and discrimination (prognosis, diagnosis, etc.) whereas the TPRQ represents a more implicit bias (imagined personal reactions toward client).

Regardless of the differential results from prior research, the results of the moderation analysis for multicultural competence have important implications for addressing a central underlying question of this study: whether focusing on general multicultural competence is sufficient to reduce age bias within mental health professionals. This study suggests it is not. It may be that participants who identified as having more multicultural competence were able to respond in explicitly appropriate ways on the FSA (e.g. by not agreeing with overtly ageist statements), thus explaining the correlation between the two, but that multicultural competence was not related to implicit or more subtle biases as enacted toward an older vignette client.

This is an interesting finding in light of another recent study showing that higher levels of self-reported multicultural competence wasn't sufficient enough to predict even *cultural* bias within mental health professionals. A recent article demonstrated a grave discrepancy between self-reported multicultural competence and culturally appropriate responding toward a vignette client (Wilcox, Franks, Taylor, Monceaux & Harris, 2020). Participants in that study rated themselves at the midpoint of the MCKAS, at a minimum,

but a large percentage (38-99% depending on the study) failed to address *any* cultural components on the vignette. The authors suggested that trainees and professionals might self-report as high in multicultural competence while simultaneously behaving in ways that are inconsistent with this self-report (Wilcox et al., 2020). The current study suggests that this phenomenon might also be occurring with ageism, wherein self-reported multicultural competence (while correlated with ageism and with coursework with primary/secondary focus on multiculturalism) did not significantly buffer actual negative ageist bias toward older adults.

Moderation of Ageism

Ageism was also hypothesized to be a moderator for the relationship between vignette condition and clinical bias. This hypothesis was grounded in the idea that age biases are automatically activated with older clients and subsequently utilized as a basis for client evaluation, goal setting, and interactions with these clients (Kessler & Bowen, 2015). Indeed, results from the present study revealed that ageism was found to be a significant moderator in the model. For moderate to high levels of ageism, client attractiveness scores were significantly worse when participants responded to the 70-year-old client compared to the 35-year-old client. This difference did not persist for participants who reported lower levels of explicit ageism. When entered into a regression model, age condition became less significant in explaining variance among bias scores, while ageism and the interaction between ageism and age conditions stood out as accounting for significant variance in bias scores. Overall, results of this study suggest

that moderate to high levels of ageist attitudes were predictive of bias toward an older client.

Beyond moderation, the present study also found several correlations between ageism (FSA) and other study variables and demographic characteristics. First, explicit ageism correlated with three other variables in the study: client attractiveness (TPRQ), multicultural competence (MCKAS), and social desirability (BIDR-IM). In terms of direction of correlation, higher levels of explicit ageism were correlated with lower levels of rated client attractiveness, multicultural competence, and social desirability. Beyond these variables, ageism significantly correlated with frequency of clinical experience with oldest old adults (75+) and older adults (55-74+) such that more experience with older and oldest adults was correlated with lower explicit ageism. Interestingly, primary/secondary coursework in age/aging/geropsychology was not correlated with ageism.

Taken together, the predictive, moderator, and correlational relationships established between explicit ageism and ratings of client attractiveness is a significant contribution to the literature. These findings may aid in determining which trainees will require targeted interventions to reduce clinical bias toward older adults—specifically trainees with higher levels of explicit ageism and trainees with less clinical experience with older adults—and provides context to the overall difference in client attractiveness ratings found by the initial univariate analysis.

Research Limitations

The strongest limitation of this study is the poor internal consistency on the two proposed dependent variables. Despite demonstrating adequate to high internal consistency in prior studies, both the Survey of Professional Bias (SPB) and the Therapist Personal Reaction Questionnaire (TPRQ) yielded low Cronbach's alphas and only the TPRQ was retained as a dependent variable. The TPRQ's alpha fell just above the lowest historical cutoff for adequate internal consistency and below current recommendations. It may have been that the vignette did not provide sufficient information to allow clients to fully imagine working with the client, which may have led to inconsistent ratings on the TPRQ. The measure was initially designed to assess therapists who had already met in-person with the client being rated (Tryon, 1989). While the TPRQ has been adapted to a vignette scenario successfully in a study about bias toward sexual minority clients (Mohr, 2009), it may have been that the current vignette did not give enough detail to fully activate an imaginary experience of what it would be like to work with the client. Furthermore, the vignette from the current study was field-tested with graduate students and feedback was integrated on word-choice and content. However, believability of the vignette was not assessed as it had been in prior studies (Mohr et al., 2001; Mohr et al., 2009). Given that the TPRQ did fall within a once-accepted range, it was not discarded in order to avoid the potentially damaging effect of losing important information due to extreme cutoffs for alpha in exploratory research (Cho & Kim, 2015). Cho & Kim (2015) state, "the nature of the decision being made on the basis of the test should be the guide for the acceptable level of reliability" (2015; p. 218). As such, results of this study must

be taken with caution due to the issue of internal consistency for items on the main outcome measure.

Beyond poor internal consistency, this study may have been limited by the significant difference in the pass/fail rate on the age validity check across the vignette conditions. More participants in the older condition failed the age validity check (28 vs. 1; by wrongly guessing that the client they saw was “middle aged” or younger) and were removed from the study, which may have impacted the group composition in an important way. For example, those who paid little attention to the vignette in the younger condition may have passed the validity check due to chance (by guessing “middle-age”) and may have continued the study without being aware of participant age. Still, it can be argued that removing participants who weren’t sufficiently primed on old age is more relevant to the study of age bias and that participants in the younger condition who stayed in the study by chance (if any) were responding based on a belief that the vignette client was *not* old and therefore did not negatively impact the results. Beyond this, a second validity check supported the fact that those who remained in the study paid enough attention to the vignette apart from age.

Another limitation of this study is generalizability. Of the several hundred programs that were contacted with the recruitment email, the majority of training directors did not respond, or responded that their program was unable or unwilling to forward the research request to their students. As such, there might be something unique about the training directors and/or programs that forwarded the recruitment email to their students. Relatedly, there might also be something unique about the students who decided

to participate in the research study. Social desirability was correlated with several of the variables in the study so it may have been that students who were willing to respond to a dissertation research request were also more likely to behave in socially desirable ways. Even with these potential limitations in generalizability, however, recruitment did aim to access a wide range of trainees. By recruiting students from every APA-accredited doctoral program and every CACREP-accredited masters program in the United States, participants likely represented a diversity of geographical locations, program cultures, specialties, and interests.

A third limitation of the current study is the lack of dimensionality in the study of clinical bias toward older adults. While explicit ageism was measured across condition and some aspect of implicit clinical bias was captured within the TPRQ, other damaging aspects of ageism (such as changes in speech/tone/inflection, behaving in an overly deferential way, avoidance, differential diagnosis, etc.) were not explored in the current study. The narrow focus of the current study on one type of ageist behavior (implicit bias on a client attractiveness measure) likely does not best capture the range of ageist behaviors that therapists in training may (or may not) bring with them into the field. Even still, the inclusion of both explicit and implicit bias allowed this study to speak to the unique moderation effect of explicit ageism on bias toward older clients.

Training Implications

In light of the limitations described above, results of the present study suggest that ageism is a strong moderating factor in the relationship between client age and bias toward a client. As such, training that focuses on reducing ageism is paramount

especially for trainees who have inherently moderate to high levels of negative explicit ageism when entering training programs. Historically wherein such students may have avoided contact with older clients (Mejia et al., 2018) and potentially minimized the harm of negative bias, the changing age demographics in the United States will likely make avoidance of older clients more challenging. Thus, training programs will need to place more focus on reducing ageism among trainees in order to minimize potential significant levels of clinical bias towards older adults.

One way to reduce explicit ageism is to increase student contact with older adults. In the current study, explicit ageism was negatively correlated with frequency of clinical experience with older (50-74) and oldest (75+) adults. While a causal direction cannot be determined from this correlational data, it appears as though clinical experience with older clients may be a crucial recommendation for training programs in preparing students to treat older adults in a competent way in their future careers. Recent research has established the same correlation between contact with older adults and explicit ageism (Barnett & Adams, 2018; Helphrey, Adams, Smith, Sawyer, Fierro, Edzards, Coldiron, & Barnett, 2019). One study was able to demonstrate directionality and concluded that that positive contact reduced negative ageist attitudes (Lytle & Levy, 2017). Researchers suggest that the relationship between contact and ageism is reflective of intergroup contact theory (Helphrey et al., 2019; Lytle & Levy, 2017). The strong moderation of ageism on the relationship between vignette condition and client attractiveness in the current study suggests that interventions targeted toward reducing ageism will likely also decrease the likelihood of differential treatment of older clients.

Again, this needs to be considered in light of the serious limitations of the dependent variable. However, in combination with prior research, this study contributes to a growing knowledge that positive contact with older adults can reduce negative ageist attitudes and in the case of this study, negative clinical bias.

A second way to reduce explicit ageism is through increased knowledge. Coursework in age, aging, or geropsychology was not found to be significantly correlated with explicit ageism, however it may still be that increased coursework in these areas could contribute to decreasing ageism alongside, as a result of, or contributing to increased experience with older adults – though the relationship is unknown. Indeed, experience working with oldest and older adults was positively correlated with number of primary courses in the area for participants in this study. The null result in the correlation between explicit ageism and coursework may be reflective of a lack of relationship between coursework and ageism, or could be more reflective of a floor effect in number of courses because 62% of participants reported zero and 93% reported 0-1 primary courses in age/aging/geropsychology. Furthermore, 43% of participants reported zero and 77% reported 0-1 secondary courses in the same. In light of previous literature supporting the correlational and causal relationship between knowledge and ageism (Barnett & Adams, 2018; Helphrey et al., 2019; Lytle & Levy, 2017), it seems more likely that the low number of courses contributed to the non-significant correlation. These results also imply that more than half of participants reported never having a course with primary focus on age, aging, or geropsychology which highlights a previously established training gap (Pachana et al., 2010). It is suggested that programs look critically at course offerings

in order to increase the training opportunities in age, aging, and geropsychology as well as to facilitate clinical experiences with older and oldest adults.

Recommendations for Future Research

Consistent with similar prior studies that have included both masters and doctoral level students together (Mejia et al., 2018; McBride & Hays, 2012), results of this study showed a correlation between type of degree (with 1 = masters and 2 = doctoral) and both ratings of client attractiveness (significant at $p < .05$) and of socially desirable responding (significant at the $p < .01$ level). For both client attractiveness and socially desirable responding, master's students responded in a more socially desirable manner and also reported more favorable views of the vignette clients they were exposed to. Type of degree was also significantly correlated with year in program, semesters of clinical experience, and experience working with four of five surveyed age groups. Future research should consider the differences that may exist between degree types even after factors like social desirability, years in the program, and type/amount of clinical experience are accounted for. Though beyond the scope of this study, a planned analysis using these variables could further explore the group differences between masters and doctoral students on bias toward older adult clients.

A second recommendation for future research would be to develop and use stronger measures of clinical bias. Dependent variables in the present study were found to have low internal consistency. Despite establishing adequate to high Cronbach's alphas in prior studies, even similar studies, both measures did not hold up in this study. In the future, selecting alternative measures of clinical bias with stronger psychometric

properties will be essential. I was unable to locate other measures of clinical bias toward clients, so it might be that future researchers need to develop and validate a new scale toward the goal of measuring various aspects of clinical bias. The preliminary results of this exploratory study support the efforts of future researchers in establishing superior measures of clinical bias and replicating this study.

Finally, future research on clinical bias toward older adults would likely benefit from a design that allows researchers to examine the effect of an intervention on reducing ageism in trainees. While the present study suggests the presence of clinical bias toward older clients and highlights the moderating impact of ageism, future studies could offer and assess the impact of training or contact interventions for trainees at varying levels of explicit ageism. Taking this next step would allow for more concrete recommendations with the goal of prompting national change in both masters and doctoral programs in the United States in order to meet the demands of the growing older adult population.

Conclusion

This study aimed to examine the prevalence of clinical bias toward older adults in masters and doctoral students in clinical psychology, counseling psychology, and clinical mental health counseling. Results of this study suggest the presence of clinical bias when working with older adults among mental health trainees. Furthermore, ageist attitudes, rather than general self-reported multicultural counseling competence mitigate this effect. Overall, results of this study contribute to the growing body of research that has demonstrated negative attitudes and discriminatory behavior of mental health professionals toward older clients (Settin, 1982; Wrobel, 1993; James & Haley, 1995;

Helmes & Gee, 2003; Conlon & Choi, 2014; Kessler & Schneider, 2017; Mejia et al., 2018) and suggest that explicit ageism plays an important role in differential treatment of older clients.

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Appendix A

Age-Manipulated Vignettes

Carolyn is a 35 year-old white female who arrives at your office on time for her first individual counseling appointment. Psychotherapy is covered under her insurance. You learn from her that she and her husband have been experiencing financial stress and are struggling to make ends meet. Carolyn is dressed casually and presents with slightly flattened affect. She appears to respond to your questions openly, without hesitation. She indicates that she has lost all interest in activities that formerly gave her pleasure, that she frequently awakens at 2:00 a.m. and is unable to return to sleep, and that she has recently lost 5 pounds. Carolyn also states that she has begun to wonder if life is worth living anymore.

Carolyn is a 70 year-old white female who arrives at your office on time for her first individual counseling appointment. Psychotherapy is covered under her insurance. You learn from her that she and her husband have been experiencing financial stress and are struggling to make ends meet. Carolyn is dressed casually and presents with slightly flattened affect. She appears to respond to your questions openly, without hesitation. She indicates that she has lost all interest in activities that formerly gave her pleasure, that she frequently awakens at 2:00 a.m. and is unable to return to sleep, and that she has recently lost 5 pounds. Carolyn also states that she has begun to wonder if life is worth living anymore.

Appendix B

Demographic Questionnaire

Please fill out the following demographic questions:

1. Age
2. Gender
3. Race and Ethnicity
4. Program Type (e.g. clinical psychology)
5. Degree upon Graduation
6. Year in Program
7. How many semesters of clinical experience have you completed?

Please answer the following questions about coursework you have completed including courses you are currently enrolled in:

1. Number of courses with a primary focus on Multicultural Competence
2. Number of courses with a secondary focus on Multicultural Competence
3. Number of courses with a primary focus on Age, Aging, and/or Geropsychology
4. Number of courses with a secondary focus on Age, Aging, and/or Geropsychology

Please estimate how frequently you've worked with the following clients during *your entire clinical experience*:

Oldest Adults (75+)

1	2	3	4	5
Never	Infrequently	Occasionally	Frequently	Very Frequently

Older Adults (55-75)

1	2	3	4	5
Never	Infrequently	Occasionally	Frequently	Very Frequently

Middle-Age Adults (35-55)

1	2	3	4	5
Never	Infrequently	Occasionally	Frequently	Very Frequently

Young-Adults (18-35)

1	2	3	4	5
Never	Infrequently	Occasionally	Frequently	Very Frequently

Children and Adolescents (0-18)

1
Never

2
Infrequently

3
Occasionally

4
Frequently

5
Very
Frequently

Appendix C

Modified Survey of Professional Bias

1. How do you view Ms. James's ability to develop an adequate therapeutic relationship with you? (*very good (1) to very poor (7)*)
2. How appropriate a candidate for psychotherapy do you see Ms. James as being? (*very appropriate (1) to very inappropriate (7)*)
3. With regard to her presenting complaint, how would you rate Ms. James's prognosis? (*very good (1) to very poor (7)*).
4. How likely do you rate the probability of Ms. James attempting suicide in the near future? (*very likely (1) to very unlikely (7)*).
5. How would you rate your subjective level of competence in treating Ms. James's presenting complaint? (*very competent (1) to no competence (7)*)
6. How comfortable would you feel in treating Ms. James's presenting complaint? (*very comfortable (1) to very uncomfortable (7)*)
7. How open to your treatment recommendations do you see Ms. James as being? (*completely open (1) to completely closed (7)*)
8. How much do you think Ms. James is to blame for her problems? (*completely to blame (1) to completely blameless (7)*)

Appendix D

(Revised) Therapist Personal Reaction Questionnaire

1. I'd like this client more than most.
2. I'd have a warmer, friendlier reaction to this client than to others I have seen.
3. I would seldom be in doubt of what the client was trying to say.
4. In general, I couldn't ask for a better client.
5. I would usually find significant things to respond to in what the client said.
6. I'd feel pretty ineffective with this client.
7. I'd think I did a pretty competent job with this client.
8. I'd disagree with this client about some basic matters.
9. I'd think this client was trying harder to solve his or her problems than most I've seen.
10. It would be hard to know how to respond to this client in a helpful way.
11. It would be easier for me to see exactly how this client would feel in the situations she describes than it would be with other clients.
12. I am more confident that this client would work out her problems than I've been with others.
13. In comparison with other clients, I'd find it hard to get involved with this client's problems.
14. I would like to be able to feel more warmth toward this client than I imagine I would.
15. Sometimes I'd resent the client's attitude.

Cluster 1 (1, 2, 4, 8, 9, 11, 12); Cluster 2 (3, 5, 6, 7, 13, 14, 15)

Appendix E

Fraboni Scale of Ageism

1. Teenage suicide is more tragic than suicide among the old.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

2. There should be special clubs set aside within sports facilities so that old people can compete at their own level.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

3. Many old people are stingy and hoard their money and possessions.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

4. Many old people are not interested in making new friends preferring instead the circle of friends they have had for years.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

5. Many old people just live in the past.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

6. I sometimes avoid eye contact with old people when I see them.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

7. I don't like it when old people try to make conversation with me.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

8. Old people deserve the same rights and freedoms as do other members of our society.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

9. Complex and interesting conversation cannot be expected from most old people.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

10. Feeling depressed when around old people is probably a common feeling.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

11. Old people should find friends their own age.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

12. Old people should feel welcome at the social gatherings of young people.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

13. I would prefer not to go to an open house at a seniors club, if invited.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

14. Old people can be very creative.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

15. I personally would not want to spend time with an old person.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

16. Most old people should not be allowed to renew their drivers licenses.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

17. Old people don't really need to use our community sports facilities.

1 2 3 4
Strongly Disagree Disagree Agree Strongly Agree

18. Most old people should not take care of infants.

1 2 3 4
Strongly Disagree Disagree Agree Strongly Agree

19. Many old people are happiest with people of their own age.

1 2 3 4
Strongly Disagree Disagree Agree Strongly Agree

20. It is best that old people live where they wont bother anyone.

1 2 3 4
Strongly Disagree Disagree Agree Strongly Agree

21. The company of most old people is quite enjoyable.

1 2 3 4
Strongly Disagree Disagree Agree Strongly Agree

22. It is sad to hear about the plight of the old in our society these days.

1 2 3 4
Strongly Disagree Disagree Agree Strongly Agree

23. Old people should be encouraged to speak out politically.

1 2 3 4
Strongly Disagree Disagree Agree Strongly Agree

24. Most old people are interesting, individualistic people.

1 2 3 4
Strongly Disagree Disagree Agree Strongly Agree

25. Most old people would be considered to have poor personal hygiene.

1 2 3 4
Strongly Disagree Disagree Agree Strongly Agree

26. I would prefer not to live with an old person.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

27. Most old people can be irritating because they tell the same stories over and over again.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

28. Old people complain more than other people do.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

29. Old people do not need much money to meet their needs.

1	2	3	4
Strongly Disagree	Disagree	Agree	Strongly Agree

Appendix F

Multicultural Counseling Knowledge and Awareness Scale

Using the following scale, rate the truth of each item as it applies to you.

1	2	3	4	5	6	7
Not at All True			Somewhat True			Totally True

1. I believe all clients should maintain direct eye contact during counseling.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

2. I check up on my minority/cultural counseling skills by monitoring my functioning – via consultation, supervision, and continuing education.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

3. I am aware some research indicates that minority clients receive “less preferred” forms of counseling treatment than majority clients.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

4. I think that clients who do not discuss intimate aspects of their lives are being resistant and defensive.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

5. I am aware of certain counseling skills, techniques, or approaches that are more likely to transcend culture and be effective with any clients.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

6. I am familiar with the “culturally deficient” and “culturally deprived” depictions of minority mental health and understand how these labels serve to foster and perpetuate discrimination.

1 2 3 4 5 6 7

Using the following scale, rate the truth of each item as it applies to you.

1 2 3 4 5 6 7
Not at Somewhat Totally
All True True True

7. I feel all the recent attention directed toward multicultural issues in counseling is overdone and not really warranted.

1 2 3 4 5 6 7

8. I am aware of individual differences that exist among members within a particular ethnic group based on values, beliefs, and level of acculturation.

1 2 3 4 5 6 7

9. I am aware some research indicates that minority clients are more likely to be diagnosed with mental illnesses than are majority clients.

1 2 3 4 5 6 7

10. I think that clients should perceive the nuclear family as the ideal social unit.

1 2 3 4 5 6 7

11. I think that being highly competitive and achievement oriented are traits that all clients should work towards.

1 2 3 4 5 6 7

12. I am aware of the differential interpretations of nonverbal communication (e.g., personal space, eye contact, handshakes) within various racial/ethnic groups.

1 2 3 4 5 6 7

13. I understand the impact and operations of oppression and the racist concepts that have permeated the mental health professions.

1 2 3 4 5 6 7

14. I realize that counselor-client incongruities in problem conceptualization and counseling goals may reduce counselor credibility.

1 2 3 4 5 6 7

Using the following scale, rate the truth of each item as it applies to you.

1 2 3 4 5 6 7
Not at Somewhat Totally
All True True True

15. I am aware that some racial/ethnic minorities see the profession of psychology functioning to maintain and promote the status and power of the White Establishment.

1 2 3 4 5 6 7

16. I am knowledgeable of acculturation models for various ethnic minority groups.

1 2 3 4 5 6 7

17. I have an understanding of the role culture and racism play in the development of identity and worldviews among minority groups.

1 2 3 4 5 6 7

18. I believe that it is important to emphasize objective and rational thinking in minority clients.

1 2 3 4 5 6 7

19. I am aware of culture-specific, that is culturally indigenous, models of counseling for various racial/ethnic groups.

1 2 3 4 5 6 7

20. I believe that my clients should view a patriarchal structure as the ideal.

1 2 3 4 5 6 7

21. I am aware of both the initial barriers and benefits related to the cross-cultural counseling relationship.

1 2 3 4 5 6 7

___ 38. I have never damaged a library book or store merchandise without reporting it.

___ 39. I have some pretty awful habits.

___ 40. I don't gossip about other people's business.

Appendix H

Validity Check

Approximately how old is Carolyn?

1 2 3 4 5 6 7
Extremely
Young
Extremely
Old

Which clinical issues did Carolyn endorse? (Check all that apply)

- Financial Stress**
- Loss of Interest in pleasurable activities**
- Excessive energy
- Trouble sleeping**
- Panic Attacks
- Substance Abuse