

PRACTITIONER MULTICULTURAL SELF-EFFICACY: AN EXAMINATION OF THE
PRACTITIONER MULTICULTURAL SELF-EFFICACY SCALE'S FACTOR STRUCTURE
AND ASSOCIATED VARIABLES

by

KAHYAH JEHNAY PINKMAN

(Under the Direction of Ashley Johnson Harrison)

ABSTRACT

As the United States continues to grow in diversity, several aims for healthcare clinicians have been discussed in research. A frequently discussed aim pertains to diversifying the workforce by employing more racially/ethnically diverse clinicians within this field. Although this aim can positively impact service provisions, significant consideration must also be given to ensuring those already in the field and entering the field believe they are equipped to engage in culturally responsive, aware, and sensitive practices. As it pertains to cultural sensitivity, awareness, and responsiveness, much of the research has focused on cultural competency, while very little attention has been given to the construct of multicultural self-efficacy. Although cultural competency is a necessary piece to working towards the goal of culturally responsive practices, it is only a piece of the puzzle. Multicultural self-efficacy expands past what is at the core of cultural competency models: awareness, knowledge, etc., and focuses on capability beliefs and direct actions. Specifically, the assessment of multicultural self-efficacy in clinicians evaluates perceptions of their capabilities working with clients who identify as members of groups different from one's own. In order to evaluate such beliefs, a sound measure is needed. In

the current study, we evaluated the factor structure and psychometric properties of an adapted measure of multicultural self-efficacy (PMCSE) aimed for use within broad clinical professions. Although still minimal, much of the research that exists pertaining to multicultural self-efficacy and the measurement of such is specific to counselors. In addition to evaluating the PMCSE, the researcher also examined predictors of multicultural self-efficacy while controlling for social desirability. The results of this study revealed excellent psychometric properties ($\alpha = .92$) and strong factor structure (majority factor loadings above the .4 threshold). Additionally, identification as a member of a racially minoritized group predicted higher perceptions of multicultural self-efficacy ($b = -5.422, p < .001$). Higher endorsements of multicultural desires ($b = -1.282, p < .001$) and experiences ($b = -.478, p = .002$) also corresponded with higher ratings of multicultural self-efficacy as measured by the PMCSE.

INDEX WORDS: Multicultural self-efficacy, self-efficacy, multiculturalism, cultural competency, cultural humility

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DEDICATION

This dissertation is dedicated to my best friend and biggest supporter, my father. You have played an integral role in my academic journey and have always motivated me to do and be my best. You are my greatest source of inspiration and support. What an honor it is to be your daughter and I am so blessed to have you as my father.

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CHAPTER 1

INTRODUCTION

The demographic makeup of the United States (US) is becoming increasingly more diverse every year. According to the most recent US Census (2021), those who identify as White (i.e., do not identify as Hispanic) account for about 60.1% of the population. This indicates an increase in those who identify as a racially minoritized group from the last Census report in 2010, where 75.1% of the population identified as White (US Census, 2021). It is further projected that, by 2044, the US will become “minority White” (Colby, 2014). Although this change in the demographic makeup is evident, this diversity is not reflected when considering the general composition of providers within mental health and healthcare fields.

Recent data shows that 18.9 million Americans serve in healthcare occupations (Artiga et al., 2020). Of this composition, the vast majority (60%) identify as White (Artiga et al., 2020). To further understand the demographic makeup of healthcare clinicians, it is helpful to acknowledge the demographics of specific healthcare fields. According to the American Psychological Association (APA, 2019), only 34% of psychologists identify as a member of a racially minoritized group; however, 62.4% of individuals receiving mental health services identify as members of a racially/ethnically diverse group (Center for Behavioral Health Statistics and Quality, 2021). This demographic discrepancy is also apparent in many other clinical service-providing professions, including occupational and physical therapists, speech-language pathologists, marriage and family therapists, counselors, and social workers (US Census, 2018). Often, research places emphasis on the need to diversify the healthcare field, a

task that is important but not necessarily timely. This growing diversity and increasing mismatch between the cultural backgrounds of providers and the clients they provide services for demonstrates the need not only for racial/ethnic diversity within the workforce but also for service provisions that are culturally responsive. In other words, it is pertinent that providers of all racial and ethnic backgrounds are equipped with the skills, awareness, desires, knowledge, and cultural humility to provide equitable care to racially and ethnically diverse groups. Cultural humility goes beyond the general emphasis of knowledge and awareness that shapes the basis of cultural competence models to also exploring the impact individual biases have on diverse groups and emphasizing the promotion of individual and systemic change by confronting inequities directly (Yeager et al., 2013). Thus, culturally responsive practice requires that clinicians have a sense of their own multicultural self-efficacy. However, in order for this form of self-assessment to be possible, a sound assessment measure is necessary.

Theoretical Framework

Social Cognitive Theory

Before defining multicultural self-efficacy, it is important to understand the general meaning of self-efficacy along with the theoretical framework that supports this construct. Social Cognitive Theory (SCT) is a theory of motivation developed by Albert Bandura that explores human behavior by looking at the reciprocal nature of personal, behavioral, and environmental factors (Bandura, 1982). In this theory, individuals are regarded as self-acting agents. SCT regards people as active agents who are influenced by their environment and influence their environments (Bandura, 2001). According to SCT, an individual's belief in their capabilities predicts their likelihood of engaging in congruent behaviors. With regard to clinical practice,

clinicians are influenced by their diverse environments, and they influence their environment as they engage in work-related tasks such as evaluation, consultation, and intervention.

Self-efficacy is a facet of SCT and is defined as a belief in one's capabilities to engage in a specific behavior (Bandura,1982). According to Bandura (1982), self-efficacy can predict outcomes. For example, students who perceive themselves as having high levels of self-efficacy pertaining to a particular academic task experience a high level of success (Usher, 2015). The same is true for clinicians.

Clinician behaviors are impacted by their beliefs in their capabilities (Shapiro, 2021) and these beliefs are influenced by several factors. Specifically, Bandura (1998) found that there are four sources that influence one's perceptions of their capabilities. The first source and the most salient predictor is mastery experiences. Mastery experiences pertain to the positive influence one's previous success on a task has on one's capability beliefs regarding similar tasks. Further, one's failure on a task weakens one's competence perceptions for similar tasks. A study exploring school psychologists in training consultation self-efficacy found that those students with the highest perceptions of their capabilities were further along in their programs, thus having more chances of mastery experiences (Guiney, et al., 2014). In other words, year in training was a significant predictor of consultation self-efficacy.

A second source of self-efficacy is social persuasion, which pertains to the encouragement or discouragement from others about one's capabilities. Encouragement strengthens our belief in our ability to be successful, while discouragement weakens it. In fact, Daniels et al., (2001) found that those who received positive feedback on their performance increased their self-efficacy ratings at post-test. Seeing people, we regard as being similar to ourselves or influential, achieve success, also strengthens our self-beliefs, and is another source of self-efficacy. This

source of self-efficacy is known as social modeling. Lastly, our physical and emotional state also impacts our self-beliefs. Negative emotions can detrimentally impact our beliefs in our capabilities, while positive emotions can strengthen them. In fact, Tittler et al., (2021) found a negative association between counselors' anxiety about implementing interventions and their counseling self-efficacy. Further, Zhang et al., (2008) found that although therapists believed engaging in multiculturally responsive practices was important, few do so due to their own negative emotions about their abilities. These four sources are an important piece in understanding individual self-efficacy perceptions, which impacts the development of a strong therapeutic alliance between clients and clinicians. Given the importance and complexity of this construct, having a thorough, psychometrically sound measure is essential for understanding varying levels of self-efficacy among individuals in the health service field.

Therapeutic Alliance & Self-Efficacy

A key ingredient of effective therapeutic practices is the development of strong therapeutic alliances. According to Reese et al., (2016) therapeutic alliance refers to the relationship between the patient/client and clinician and the degree to which that relationship is “collaborative and trusting.” Due to the inherent valuable impact on therapeutic outcomes, it is pertinent that clinicians allot focus to developing a strong relationship with their patients/clients (Vasquez, 2007). This is especially important for clinicians working with clients who have cultural backgrounds that are different from their own. One factor that aids in this development are clinicians who display empathic accuracy when working with their clients.

Empathic accuracy refers to clinician perceptivity regarding patient feelings (Reese et al., 2016) and contributes to the degree to which clients feel they are understood by their clinician. One's perception of their clinicians' understanding of their feelings can then beneficially impact

treatment outcomes (Decety et al., 2015; Riess et al., 2012). Further, clinician self-efficacy beliefs can impact their empathic accuracy positively or adversely. Although research illuminates the importance of therapeutic alliance and clinician understanding of their clients, research also indicates disparities in the quality of interactions clients of color experience when seeking and gaining treatment (Alegria et al., 2016; Meyer et al., 2013). These treatment disparities can negatively impact the relationship and interaction between the client and provider, which is why evaluating clinician multicultural self-efficacy is important, as it can impact therapeutic alliance.

Importance of Multicultural Self-Efficacy

Although self-efficacy is a construct that has been explored greatly within clinician research, as it is important for the development of therapeutic alliances, multicultural self-efficacy has not received as much attention. Multicultural self-efficacy can be defined as one's perceived capabilities in engaging in specific behaviors when working with culturally and linguistically diverse groups. Unlike research pertaining to multicultural competence, limited research exists pertaining to multicultural self-efficacy. SCT has sparsely been used as a framework for exploring multicultural self-efficacy among providers such as school psychologists, counselors, and therapists. However, such research has shown that therapists who have had experiences with diverse groups and positive perceptions of their multicultural training perceived their multicultural self-efficacy higher than those who did not (Sheu et al., 2012). Further, research specific to school counselors has found perceptions of self-efficacy regarding multicultural knowledge as a significant predictor of school counselors' involvement with families of color (Harris, et al., 2019). In contrast, Roseberry-McKibbin (1994) found that speech-language pathologists were hesitant to add individuals who identified as English language learners to their caseloads due to their low perceptions of their self-efficacy for working with linguistically

diverse students. Further research with speech-language pathologists continued to repeat similar findings indicating the detrimental impact of a lack of perceived ability (Harris, 2004; Kohnert et al., 2003). However, Parveen and Samthanam (2021) found that speech-language pathologists who received more training working with diverse clients were more likely to have caseloads consisting of more linguistically diverse clients than those who received less training.

Since self-efficacy is a strong predictor of intent, assessment of multicultural self-efficacy within diverse clinical fields is of great importance. As the United States continues to grow more and more diverse, this construct is important to assess because it can provide information on clinician beliefs in their abilities, which will inform further clinical training pertaining to working with diverse populations, to ensure equitable care. A common method for assessing self-efficacy is through self-report methods of measurement.

Measuring Multicultural Self-Efficacy

Measurement Considerations

Self-report instruments are a vital measurement method for scientific research and evaluation (Boateng, 2018). Although self-report instruments have limitations (i.e., the possibility of socially desirable responses; Morgado et al., 2018), such measurement methods can still provide valuable information. In fact, self-report scales are feasible and provide insight into individual perceptions and experiences, which is meaningful data (McDonald, 2008; Zimmerman et al., 2017)

There are several important defining characteristics regarding self-efficacy self-report measures. First, self-efficacy instruments should evaluate individuals' current beliefs about their capability, not their potential beliefs (Bandura, 2006). Further, self-efficacy measures should include a Likert-type scale that assesses the presence or absence of a particular characteristic

(i.e., unipolar) and include beginning instructions that help participants understand the mindset they should be in when providing their ratings. Bandura (2006) also suggests that self-efficacy measures utilize a non-descriptive title, and each item should only evaluate one action. Items within the measure should be pre-tested, so that ambiguous items can be removed or rewritten.

A solid assessment of multicultural self-efficacy should be a self-report measure which uses a Likert-type scale to evaluate individual capability perceptions. Ideally, a multicultural-self efficacy measure will be unipolar, only including piloted and non-double-barreled items. Lastly, it would be important to ensure that the measure includes a title that does not provide much detail about the construct being measured, to ensure that it does not influence self-efficacy judgements. In addition to a solid theoretical orientation and following guidelines for developing self-efficacy scales, a good measure of multicultural self-efficacy would also have strong psychometric support.

Scale Development Psychometric Properties Evaluation

A scale is deemed appropriate for use and conclusions once its psychometric properties, including reliability and validity, are evaluated and considered sound (Morgado et al., 2018). Reliability is concerned with measurement consistency, while validity pertains to the accuracy of the construct representation (Tavakol et al., 2011). Although both psychometric properties go hand in hand, a measure's reliability is pertinent before usage, as a measure is unable to be valid without being reliable (Tavakol et al., 2011). A measure with strong psychometric properties measures the construct intended consistently (Tavakol et al., 2011), allowing one to draw conclusions based on the obtained data (Morgado et al., 2018). Measurements without psychometric support require caution when interpreting because there is no documented evidence indicating the measure is evaluating the intended construct accurately or consistently.

A psychometric test of internal consistency is most common when evaluating the reliability of a measure with multiple items (Tavakol et al., 2011). This is because this psychometric property is the most feasible to obtain because it requires one administration of the measure, unlike other methods (i.e., test-retest) for evaluating reliability (Cohen et al., 2010). Internal consistency evaluates whether a measure is dependable or consistent across conditions (Bandalos, 2018). Internal consistency is measured by the Cronbach's alpha statistic and is often used to determine if the measure is strong or weak. Cronbach alpha values range between 0 and 1, where values closer to 0 indicate poor reliability and values closer to one correspond to greater reliability (Tavakol et al., 2011). A measure's internal consistency value is impacted by the number of items and the correlation between items (Tavakol et al., 2011). Thus, scales with few items and/or items with poor relations tend to have a lower value of internal consistency. A generally acceptable value of alpha ranges between .70 and .95 (Takavol et al., 2011); however, other research states that values of alpha greater than .90 may indicate redundancy in test items, warranting the elimination of some items (Streiner et al., 2003).

Evaluating the factor structure of a scale is of great importance as it provides data pertaining to the measure's construct validity, which helps one to understand if the measure is measuring the intended construct. (Tavakol et al., 2020). Two common methods for evaluating the factor structure of a scale include an exploratory factor analysis (EFA) and a confirmatory factor analysis (CFA; Tavakol et al., 2020). Factor analyses are used to determine if the items within a scale are correlated (Tavakol et al., 2020). This correlation, or lack thereof, provides information as to whether the measure is accurately measuring the overall construct that it is intended to. An EFA is typically the first-factor analysis used when a researcher first develops a scale (Bandalos, 2018; Boateng et al., 2018). This is because an EFA is used to explore the potential relationship

among a set of variables (Bandalos, 2018; Boateng et al., 2018). Further, an EFA is often used when strong theories or adequate research are unavailable to provide information on the variables and their relation to the evaluated construct (Bandalos, 2018). In contrast, a CFA is often used when a strong theory and adequate research exist. This factor analysis method is often utilized to showcase evidence of validity (Bandalos, 2018).

Content Validity

A crucial component of measurement development is establishing content validity (Zamanzadeh et al., 2015). Content validity refers to the extent to which the items within a measure assess the intended construct (Zamanzadeh et al., 2015;) and is considered to be a prerequisite to evaluating other types of validity (e.g., convergent, discriminant, etc.). A measure without acceptable content validity indicates that the items within the measure do not align with others and, therefore, are not measuring what was intended. This area of weakness would make drawing conclusions from the data obtained inappropriate. In measure development, researchers generate potential items for the measure through exhaustive reviews of the literature pertaining to the construct. Initially, researchers begin with a large pool of items and use expert and target population judges to review them for refinement.

Cultural Validity

Cultural validity refers to the extent to which items are sensitive to cultural factors, and this form of validity acknowledges that these factors impact the way items are interpreted (Rosario Bastera et al., 2011). Thus, establishing cultural validity would imply items are culturally inclusive and utilize culturally appropriate language. For the purpose of this study, cultural inclusivity is defined as the items being considerate of a wide range of diverse groups. Culturally appropriate language refers to the item utilizing language that is culturally sensitive (e.g.,

“minoritized” instead of “minority”). By gaining input from expert and target population judges pertaining to the adapted measures of cultural inclusivity and culturally appropriate language, the researcher can work towards ensuring cultural validity. Diverse input about a measure assessing multicultural factors is particularly important because it allows for the voices of those who identify as members of a culturally diverse group to be heard and inform the measure, which aligns with the intent of cultural validity.

Specific Multicultural Self-Efficacy Instruments

School Counseling Multicultural Self-Efficacy Scale (SCMES)

After reviewing the literature, the School Counseling Multicultural Self-Efficacy Scale (SCMES; Holcomb-McCoy, et al., 2008) emerged as an elite measure of multicultural self-efficacy that aligned with all of Bandura’s (2006) recommended scale components. This scale was developed to respond to the need for a scale that measures multicultural self-efficacy within school counselors. The scale first began with eighty-one items, which were developed through reviewing literature pertaining to multicultural competence, self-efficacy, multicultural knowledge, and multicultural school counseling. After developing the first eighty-one items, the researchers utilized inductive methods of item generation by gaining qualitative information from target population judges (i.e., doctoral students in counselor education). Through this process, nine additional items were added to the scale, for a total of 90 items. This combination of deductive and inductive methods of item generation is regarded as a best practice within scale development (Boateng et al., 2018; McCoach et al., 2013). Items were next evaluated for repetition and grammatical errors before being piloted with a small sample of school counselors (n=3). This piloting allowed the researchers to make additional revisions to the items before evaluating the psychometric properties. Scale development was guided by Bandura’s (2005)

guidelines for constructing self-efficacy self-report measures. The theoretical alignment and careful development procedure utilized by the researchers resulted in a valid and psychometrically sound measure of multicultural self-efficacy.

The finalized measure contained 52-items that were loaded into six distinct factors. These factors included i.) Knowledge of Multicultural Concepts, ii.) Using Data and Understanding Systemic Change, iii.) Developing Cross-Cultural Relationships, iv.) Multicultural Counseling Awareness, v.) Multicultural Assessment, and vi.) Application of Racial and Cultural Knowledge to Practice. These factors aimed to evaluate the diverse capabilities of school counselors.

SCMES: Theoretical Support for Domains. The Knowledge of Multicultural Concepts domain was composed of 14 items aimed to evaluate school counselor's knowledge of multicultural notions (i.e., racism, prejudices, societal problems) that impact students and their practice (Holcomb-McCoy et al., 2008). Items for this domain were derived from the Multicultural Knowledge subdomain of Sue et al., (2001) cultural competency model. The Using Data and Understanding Systemic Change subdomain was composed of 9 items aimed at measuring school counselors' perceptions of their abilities using data as an advocacy tool to promote equitable practices (Holcomb-McCoy et al., 2008). This domain was based upon the author's theory of abilities school counselors should have to best meet the needs of the population they provide services to. The third domain, Develop Cross-Cultural Relationships, was composed of 7 items. Each item was aimed at measuring school counselors' ability to develop friendships with people outside of their own cultural background (Holcomb-McCoy, et al., 2008). Again, this domain was not based upon a previous model and instead was developed from the belief in the importance of the development of relationships with people who represent cultures different from one's own (Holcomb McCoy et al., 2008). The Multicultural Counseling

Awareness subdomain was specific to measuring school counselors' capabilities to assess their own understanding of themselves to understand the impact of culture on their practice. This subdomain consisted of 9 items. The Multicultural assessment subdomain comprised 7 items, measuring the ability to engage in culturally responsive assessment selection and interpretation (Holcomb-McCoy et al., 2008). This subdomain was also derived from the understanding of relevant school counselor practices. Lastly, the final subdomain, Application of Racial and Cultural Knowledge to Practice, comprised 6 items. These items were developed to evaluate perceptions of individuals' capabilities in applying their multicultural knowledge within their practice. This subdomain was derived from one of the domains (e.g., multicultural skills) of the cultural competency model by Sue et al., (2001). Overall, the researchers utilized research pertaining to multicultural competence and education, counselor self-efficacy, and social cognitive theory in combination with their general knowledge of the field and practices, as a foundation for developing items and factors that aligned with school counselor practices (Holcomb-McCoy et al., 2008).

SCMES: Exploratory Factor Analysis and Internal Consistency. To examine the novel SCMES, an exploratory factor analysis (EFA) was conducted to determine the measure's factor structure and evaluate the internal consistency (Holcomb-McCoy et al., 2008). An EFA was an appropriate choice as several of the subdomains within the measure were not derived from specific theories, and the remaining subdomains were derived from a validated cultural competency model (Sue et al., 2001) as opposed to a specific multicultural self-efficacy model. Results of the EFA revealed average to high factor loadings, demonstrating that the items measure the proposed six constructs that combine to form a multicultural self-efficacy total. Specifically, item loadings for the specific subscales are as follows: i.) Knowledge of

Multicultural Concepts subdomain ranged between .50 and .71, ii.) Using Data and Understanding Systemic Change ranged between .54 and .68, iii.) Developing Cross-Cultural Relationships subdomain ranged between .52 and .73, iv.) Multicultural Counseling factor loadings ranged between .50 and .68, v.) Multicultural Assessment loadings were between .50 and .64, and lastly, vi.) Application of Knowledge to Practice loadings fell between .50 and .73.

Limitations of the SCMES

Limitation #1: Lack of Applicability to Other Clinical Professions. In spite of the strengths of the SCMES, this measure was developed specifically for use with school counselors and not a wider group of providers (Holcomb-McCoy, et al., 2008). At this time, a multicultural self-efficacy scale that can be used with broad clinical populations (e.g., speech-language pathologists, school psychologists, clinical psychologists, occupational therapists, etc.) has not been developed. These clinical populations are mentioned due to the similarities in profession that exist between them. Specifically, all practitioners within the previously mentioned fields are trained to provide behavioral health services to clients and share similar ethical codes, missions, and competency areas centered around providing equitable services to all (AOTA, 2022; APA, 2022; ASHA, 2022; BACB, 2022; NASP, 2022; NASW, 2022). Due to the growing diversity and the direct positive relationship between self-efficacy judgments and engagement in congruent behaviors, it is important to have a sound measure that would be able to evaluate these clinicians' perceptions of their multiculturally sound capabilities when working with culturally diverse groups. The scarcity of literature on multicultural self-efficacy insinuates that there is a need to understand this construct within a range of clinical practice fields and a clear need for the development of a measure with broader utility. This is evident given the nature of their practice centering around providing direct services to clients involving engaging in assessment,

intervention, and consultation, which further supports their similarities and why one measure that is broad enough to be applicable to all of the aforementioned clinical providers would be of great utility (AOTA, 2022; APA, 2022; ASHA,2022; BACB,2022; NASP,2022; NASW, 2022).

Further understanding of multicultural self-efficacy is important because it is believed to be able to provide a better understanding of general practitioner multicultural competence through the exploration of perceived capabilities instead of perceived competence (Barden et al., 2014), which is applicable within a large range of helping professions. Thus, there is a vast gap in the literature exploring this topic as it relates to many other clinical fields such as school and clinical psychologists, behavior analysts, speech-language pathologists, occupational therapists, social workers and master's level therapists, etc. Further, the existing literature on multicultural self-efficacy mainly focuses on counselors (Barden et al., 2014; Holcomb-McCoy, et al., 2008, Madonna, 2001; Matthews et al., 2018;). It is believed that with a sound measure to assess this construct, data can be obtained on clinical areas for improvement (Holcomb-McCoy et al., 2008). This data can then be used to inform future training curriculums and professional development concentrations (Holcomb-McCoy et al., 2008).

Limitation #2: Lack of Gender and Racial/Ethnic Diversity. In addition to focusing on a narrow type of practitioner, another limitation of the original SCMES measurement is that the original validation study lacked diversity within the sample (Holcomb-McCoy et al., 2008). Specifically, the sample included 181 participants, the vast majority of whom identified as White (70%) and female (86.7%). This, combined with the participants being recruited using a convenience sample, is a limitation because this lack of sample diversity impacts the generalizability of the findings. Additionally, it is difficult to ensure cultural validity without diverse input about the item content and wording. Future research should ensure a diverse

development team reviews scale items (Barden et al., 2015). This will help to ensure items are culturally relevant.

Limitation #3: Length of the Original SCMES. Lengthier measures tend to take more time to complete, which can lead to response burden (Burt et al., 2005). Greater response rates are linked to measures that are shorter, requiring between 15-20 minutes to complete (e.g., Quiera et al., 2021; Saleh et al., 2017). Regarding the ideal number of measure items, Bandalos (2008) states that typically, 10-20 items in length are ideal for self-report measures using Likert-type scales. The length of the original SCMES (e.g., 52 items) greatly exceeds this recommendation. Since this construct would be important to assess among clinicians, it is important to ensure that measure length is not a major deterrent to its use. Overall, self-report measures that are brief, concise, and take no more than 20 minutes to complete would be regarded by clinicians as feasible, which would increase response rates. That said, it is important to note that multidimensional measures likely require more items to ensure sufficient domain coverage (Allen et al., 1990; Robinson, 2017); thus, it is important to strike a meaningful balance between construct coverage and feasibility when developing a measure. As previously mentioned, the internal consistency of the original measure was $\alpha=.93$, indicating acceptable consistency amongst the items; however, since this value is above the .90 cutoff, the shortening of the measure is expected to improve its internal consistency.

Practitioner Multicultural Self-Efficacy Scale

The SCMES was adapted into the practitioner multicultural self-efficacy scale (PMCSE) to accomplish the goal of composing a measure with broader utility (Pinkman et al., 2022). To adapt this measure into a version with more functionality, the researchers first examined the items within the original scale to identify items that were not applicable across broad clinical

settings/professions. This beginning process resulted in the removal of ten items from the measure due to their lack of applicability to settings outside of the school environment or the role of a school counselor. Once these items were removed, the researchers further reviewed the remaining 42 items to broaden the applicability by altering the language used to refer to the target audience. For example, the term “student” was modified to “client.” Other linguistic changes were made throughout the measure for consistency and to align with the study's overall purpose. For example, in alignment with cultural validity, changes were made to ensure the language used within each item was relevant to broad clinical practices instead of school-based practices intended for students. See Table 1 for linguistic changes made in the first adaptation phase.

During phase two of the PMCSE adaptation, the retained and adapted items were rated by target population judges (e.g., those the scale is intended for) and expert judges (e.g., those with extensive knowledge pertaining to the construct being evaluated) for item quality. More specifically, item quality was defined in three different ways: i.) applicability to the individual’s job, ii) cultural inclusivity, and iii.) culturally appropriate language. For the purpose of this study, cultural inclusivity is defined as the item being considerate of a wide range of diverse groups. Culturally appropriate language refers to the item utilizing language that is culturally sensitive (e.g., “minoritized” instead of “minority”).

To balance feasibility (or length) with content validity the researchers wanted to make sure there was a sufficient number of items loading into each of the six factors and were selecting the strongest items. Items were selected for inclusion based on their average Likert ratings (1- strongly agree to 5 - strongly disagree) in the four previously described item quality domains. Lower scores indicated greater perceptions of professional applicability and cultural

inclusiveness. In efforts to refine the measure, the researchers assessed the data for significant outliers regarding the item quality ratings; however, none were found. Although there were no significant outliers within the dataset, the researchers decided upon a cutoff score method to further refine the measure and enhance its feasibility. As stated before, low ratings indicate good item quality, and since the average mean ratings were very high in quality for most items, we set a conservative cutoff of 2.0, corresponding with the Likert response “somewhat agree.” Of the 42 items, 14 received an item quality rating of more than 2.0. After reviewing each item, 13 items were rejected from inclusion within the finalized scale due to item quality and qualitative feedback. This process resulted in a final total of 29 items and is referred to as the Practitioner Multicultural Self-Efficacy Scale (PMCSE).

In addition to item quality ratings, participants also provided qualitative feedback on recommendations for adapting the items to make them more applicable to the respective fields and ensure culturally sensitive language was used. The researchers reviewed this feedback, and items with similar feedback themes were then modified based on participant suggestions. In combination, item quality ratings and qualitative data allowed for the further refinement of items for the adapted measure and resulted in a total of 29 items retained in the PMCSE for further evaluation. The language within the items were also modified for cultural appropriateness and clarity based on feedback.

Variables Related to Multicultural Self-Efficacy

Multicultural Experiences. Research pertaining to the development of cultural competence and engagement in culturally responsive practices has emphasized the benefits of direct exposure to cultural groups different from one's own (Heppner et al., 2014; Isaacson, 2014; Matthews et al., 2021). This direct contact or exposure to cultural groups different from

one's own has been found to positively impact one's overall acceptance of individuals different from themselves (Choi et al., 2015). These experiences foster acceptance by assisting individuals with acknowledging and denouncing their biases or preconceived notions pertaining to different cultural groups and by helping individuals develop an understanding of these different groups (Nuby, 2010).

Multicultural experiences aid individuals in gaining awareness of factors that impact diverse groups, which can aid in the development of cross-cultural relationships (Nieto, 2006). The development of cross-cultural relationships can be vital to the engagement in culturally responsive practices because it can imply a level of acceptance for those different from oneself, which insinuates decreased judgment and increased intergroup respect (Alexander-Ruff et al., 2018). This cultural acceptance, in turn, can then foster a desire to do more and learn more, which can assist one in promoting equity amongst marginalized groups. In fact, it was found that more multicultural experiences are associated with greater help-seeking behaviors (Parkman et al., 2020) and positive attitudes toward diverse groups (Sparkman et al., 2020). Given the aforementioned research detailing the direct relationship between multicultural experiences and culturally sensitive behaviors/actions, it is permissible to expect that multicultural experiences will impact self-efficacy judgments.

Social Desirability. The propensity to engage in socially desirable responses is a common challenge when using self-reported measures (Gittelman et al., 2015). Socially desirable responding, known as social desirability or social desirability bias, occurs when an individual responds to measure items with responses that are regarded as being socially favorable instead of their true response (Latkin et al., 2017). Since self-report measures are a form of self-assessment, potential socially desirable responses are of concern. In addition, some self-report measures are

more likely to produce socially favorable responses when compared to others (Tourangeau et al., 2007). For example, instruments assessing sensitive subjects, such as religion, criminal behavior, and prejudices, are more likely to receive socially desirable responses (Tourangeau et al., 2007). Similarly, the assessment of multicultural self-efficacy may be considered sensitive to some, which may heighten the possibility of responses tainted by social desirability bias. Socially desirable responding on a self-efficacy measure can result in overestimating one's actual abilities, which can impact their likelihood of seeking opportunities to further develop their competencies. Thus, since socially desirable responses on self-report measures can detrimentally impact the data and conclusions drawn from the data obtained, it is important that when developing and administering a self-report measure, precautions are taken to reduce the potential for socially desirable responding (Larson, 2019).

Several suggestions for reducing this form of biased responding and assessing for it, have been proposed and examined within the literature. Dodou et al. (2014) indicated that self-report measures that allowed for anonymity would more likely result in less socially desirable responding than measures requiring individuals to disclose their identity. Larson (2019) also supported this and stated that measures emphasizing that responses are kept confidential, incorporating statements that encourage truthful responses, and measures that disguise the overall construct being measured are likely to have lower amounts of social desirability bias.

In addition to reducing the likelihood respondents engage in this bias, research has also suggested ways for assessing for this bias once a self-report measure is administered. A common method for evaluating this is by requiring respondents to complete both the measure of interest and a psychometrically sound measure of social desirability (Larson, 2019). With data from a social desirability scale, the researcher is able to assess the extent to which the respondent

engages in socially desirable responding and use this as a control variable when evaluating the data. Further, with this information, the researcher will be able to make decisions pertaining to the inclusion or exclusion of data from respondents with high social desirability scores. Given the previously mentioned adverse impacts of socially desirable responding, it is evident that this is an important variable to control for when analyzing participant responses on a self-report, multicultural self-efficacy measure aimed at understanding true capability beliefs to inform future training and education practices. This was also suggested by the original authors of the SCMES and emphasized as an important target of future research (Holcomb-McCoy et al., 2008).

Sociodemographic Variables. The relationship between sociodemographic variables and the construct being explored is a common area of examination within research (Bonsaksen et al., 2019; Satici et al., 2016). In multicultural self-efficacy research among clinicians, common sociodemographic variables of interest include race/ethnicity, gender, age, years of experience/training, and education level (Barden et al., 2014; Holcomb-McCoy et al., 2008; Matthews et al., 2018). Regarding multicultural self-efficacy assessment in clinicians, research has found several correlations between the aforementioned sociodemographic variables and clinician ratings of their multicultural self-efficacy.

Research evaluating multicultural self-efficacy amongst graduate-level students found a positive relationship between degree type and self-reported multicultural self-efficacy (Barden et al., 2015). Specifically, doctoral-level students reported higher levels of multicultural self-efficacy than master's level students (Barden et al., 2015). This could be explained by the increased amount of time doctoral students spend matriculating through their graduate program compared to master's level students, resulting in doctoral students obtaining more years of

experience. In fact, this aligns with research by Owens et al. (2010), which found that multicultural self-efficacy is developed through years of experience. Another variable that was found to be related to higher perceptions of multicultural self-efficacy is race/ethnicity (Holcomb-McCoy et al., 2008; Sheu et al., 2007). This finding was attributed to racially/ethnically diverse individuals inherently having more interactions with culturally diverse groups when compared to their White counterparts (Matthews et al., 2018). Further, higher levels of racial identity were found to be correlated with ratings indicating engagement in culturally appropriate skills (Middleton et al., 2015). Given these findings, it would be beneficial to explore relationships between multicultural self-efficacy and sociodemographic variables.

CHAPTER 2

CURRENT STUDY

The current study evaluated the psychometric properties and overall fit of the PMCSE, an adapted scale for measuring multicultural self-efficacy among broader clinical populations. Additionally, it identified variables associated with higher perceptions of multicultural self-efficacy. The following aims were developed to accomplish these goals.

Aim 1: Examine the Psychometric Properties of the PMCSE

Aim 1a: Internal Consistency

This aim pertains to the overall reliability of the measure. Specifically, the researcher wanted to know: *Is the PMCSE a reliable measure for assessing multicultural self-efficacy amongst broad clinical practitioners as determined by the internal consistency value?* Given the minimal changes made to the adapted measure, which did not alter the overall content of the scale and refinement, the researcher expected to obtain a similar internal consistency value that fell within the acceptable range. The changes made by the researcher broadened the measures' applicability without altering the item content. This resulted in the adapted measure remaining comprehensive in assessing the construct of multicultural self-efficacy.

Aim 1b. Factor Structure

The researcher conducted a confirmatory factor analysis (CFA) to evaluate the factor structure of the items within the adapted scale. It was hypothesized that a confirmatory factor analysis would reveal a similar factor structure as did the original measure, thus indicating the items and factors are accurately measuring the construct. This is believed to be due to the

original measure having acceptable factor loadings, ranging between .5 and .8 (Holcomb-McCoy et al., 2008), indicating a solid factor structure. The researcher also hypothesizes the PMCSE will have high factor loadings due to the original measures' use of cultural competency, multicultural education, and self-efficacy literature to inform the subdomains. The adaptations that the researcher made to the original measure to develop the PMCSE were minimal in nature and did not change the overall content of the scale, which is another reason why consistent findings pertaining to the factor structure were expected.

In addition to the individual factor loadings for each item, the researcher also reviewed the covariance between the various factors to determine if the values were significant at $p < 0.05$. This data provided information pertaining to whether the factors were related to one another.

Aim 2: Examine the relationship between multicultural self-efficacy and multicultural experiences

Further, the researcher assessed the relationship between multicultural self-efficacy and self-reported ratings of multicultural experiences. It was hypothesized that a strong, positive relationship exists between the number of multicultural experiences and multicultural self-efficacy. More specifically, individuals who rate themselves as having more multicultural experiences will endorse higher ratings of multicultural self-efficacy perceptions partly because of research indicating the positive relationship between experiences engaging with culturally diverse individuals and the development of competence within this area (Lopez et al., 2013). Further, Sheu et al., (2007), also highlighted this positive association amongst interactions with culturally diverse individuals and perceptions of multicultural self-efficacy amongst counselors. This was also hypothesized due to social cognitive theory research indicating a reciprocal

relationship between one's perceptions of their own capabilities (e.g., self-efficacy) and their engagement in congruent behaviors (Bandura, 1982).

Aim 3: Examine the relationship between specific sociodemographic variables (i.e., race, years of experience, degree type) and clinician ratings of their multicultural self-efficacy

The researcher hypothesized that participants who identify as members of a culturally diverse group will endorse higher ratings of multicultural self-efficacy than those who do not identify as members of such groups. The rationale for this hypothesis aligns with the research pertaining to the impact of multicultural experiences on culturally responsive behaviors. That is, as a member of a culturally diverse group, one often navigates spaces where they identify as a member of a racially minoritized group, increasing their intercultural multicultural experiences (Matthews et al., 2018). Further, the researcher also hypothesizes that participants who identify as having more years of experience and higher degrees (e.g., PhD, PsyD) will also have greater ratings of multicultural self-efficacy training. Since it is likely that those with more years of experience and higher degrees have also received more training, this is expected given research pertaining to the positive impact of training on general clinician self-efficacy (Shapiro, 2021).

This study will add to the literature pertaining to culturally sensitive clinical practices and respond to the scarce literature pertaining to the measurement of multicultural self-efficacy within clinicians. This is important because there are several benefits of the use of psychometrically sound measures for evaluating several constructs such as knowledge, skills, behaviors, beliefs, symptomatology, etc. A pertinent benefit is that measurement provides data that is able to be quantified (Hosp et al., 2003). Quantifiable information is meaningful because it allows for the determination and understanding of relationships among variables, allows for hypothesis testing, and allows for one to draw conclusions (Verhoef et al., 1997). Further, with

this information, one is able to make generalizations that can further inform future research, training, and practices (Verhoef et al., 1997; Hosp et al., 2003). Given the previously mentioned benefits of measurement and the direct linkage that exists between self-efficacy perceptions and engagement in congruent behaviors, one can conclude that a measure that evaluates this construct (e.g., multicultural self-efficacy) and is reliable and valid for use within broad clinical fields would be of immense value.

CHAPTER 3

METHOD

Measures

Demographic Questionnaire

Participants completed a brief basic demographic questionnaire that gathered information such as their gender, age, and race. Of note, race (e.g., Black, White, Asian, etc.) and ethnicity (e.g., Hispanic, not Hispanic) data will not be separated within the results. The rationale for this is derived from previous research noting limitations for those who identify as Latinx/Hispanic or of Spanish ancestry when being required to select. Specifically, the possibility of having to select a “race” to identify with does not fully encompass who they may identify as (Allen et al., 2011). In interviews after the 2010 census, the vast majority of Latinx families who selected “White” as their race stated that this is not how they identify in their daily life and only did so because they felt as though there were no other options (Demby, 2014). Therefore, by combining both race and ethnicity, participants will be able to make a selection based upon what they find to be most true for themselves (Allen et al., 2011). Thus, to maintain efforts to ensure cultural inclusivity, combining both race and ethnicity options would be most appropriate.

In addition, participants provided information about their educational and professional experiences, including their degree type (e.g., Masters, Ed.D., Ed.S., Psy.D., Ph.D., BCBA, BCBA-D) and specialty areas. Demographic data collected was also used to further analyze the results based upon specific characteristics of the participants.

Practitioner Multicultural Self-Efficacy Scale (PMCSE)

Participants completed the Practitioner Multicultural Self-Efficacy Scale (PMCSE). The PMCSE is an adaptation of the School Counselor Multicultural Self-Efficacy Scale (SCMES; Holcomb-McCoy et al., 2008) aimed at evaluating practitioner perceptions of their own capabilities in working with diverse clients in various domains of their practice (e.g., intervention, consultation, assessment, etc.). The PMCSE was adapted for use with broader clinical populations (i.e., psychologists, speech-language pathologists, social workers, board-certified behavior analysts, marriage and family therapists, and occupational therapists) and consisted of six factors with a total of 29 items. The original measure, SCMES, consisted of 52 items with excellent overall internal consistency ($\alpha = .93$). Further, factor analysis revealed strong factor level reliability across the six factors. Data pertaining to item quality of the PMCSE was obtained from expert and target population judges for the purpose of item revision and refinement.

Preliminary results revealed that overall, the 29 items within the scale are considered to be culturally inclusive, applicable to service provisions within several clinical professions, and utilize culturally appropriate language. This was determined based on item quality data obtained from respondents. When evaluating item quality, respondents read each scale item and responded to four item quality statements (e.g., “this item applies to my specific job,” this item uses culturally appropriate language,” this item relates to something I would do in my job,” this item is culturally inclusive”) using a Likert-type scale ranging between 1 (strongly agree) and 5 (strongly disagree). Lower ratings indicated greater item quality. Overall item quality across all six domains ranged between 1.18 and 1.95, indicating strong item quality overall.

The current version of the PMCSE has 29 items loading into the six factors which compose the six subdomains: i.) knowledge of multicultural concepts (seven items), ii.) using data and

understanding systemic change three items), iii.) multicultural assessment (five items), iv.) multicultural awareness (six items), v.) developing cross-cultural relationships (five items) and, vi.) the application of racial and cultural knowledge to the practice (three items).

The PMCSE required participants to read a variety of “can” statements (e.g., “I can identify when to use data as an advocacy tool,” “I can nonverbally communicate my acceptance of culturally different clients,” “I can identify when my helping style is appropriate for a culturally diverse client”) and respond using a Likert-type scale ranging between 1 (strongly agree) and 5 (strongly disagree) to denote their position regarding the statement. A total score is generated by summing all of the items. Total score on the PMCSE can range between 29-145, where lower scores indicate greater perceptions of multicultural self-efficacy. Six subdomain scores can also be calculated by summing the items in each set. The psychometrics of this measure will be discussed in the results section, given the aims of this study.

Social Desirability Scale-17 (SDS-17)

To control for the possibility of socially desirable responses when examining demographic differences in ratings of multicultural self-efficacy, participants completed the Social Desirability Scale-17 (Stober, 2001). The SDS-17 is a 16-item measure that assesses an individual's propensity to engage in a “socially appropriate” response style when completing self-report measurement scales (Stober, 2001). Participants were asked to read statements (e.g., “I never hesitate to help someone in case of emergency”) and respond with “yes” or “no” depending upon their agreement or disagreement with the statement. Higher scores indicated a greater likelihood for socially desirable responding. The SDS-17 was selected due to its acceptable psychometric properties, internal consistency ($\alpha = .72$), test-retest ($\alpha = .82$), feasibility (e.g., brief), and adequate convergent validity with the Marlowe-Crowne Social Desirability Scale (MCSDS)

which has strong psychometric properties (Marlowe-Crowne, 1960; Stober, 2001). Although the MCSDS is a measure commonly used to assess social desirability, the researcher believed the SDS-17 is a more appropriate measure for use within this study. This is because the SDS-17 is a more recently developed measure than the MCSDS, which consists of statements applicable to current times. Utilizing statements based on 1960s social norms to evaluate participant propensity to engage in socially appropriate responding may not provide a valid estimate of social desirability bias (Stober, 2001). Thus, given the socially relevant items of the SDS-17 and the established convergent validity between the MCSDS and the SDS-17, the researcher selected this measure to control for social desirability within the current study. Internal consistency for this study was ($\alpha = .81$), indicating acceptable reliability.

Multicultural Experiences Questionnaire (Items 1-13) (MEQ)

Participants will also complete the Multicultural Experiences Questionnaire (Narvaez et al., 2017). The MEQ is a 15-item questionnaire developed to evaluate multicultural experiences among college students and adults. This measure consists of two subscales: multicultural experiences and multicultural desires. The multicultural experiences subscale measures the number of multicultural experiences an individual has had, and the multicultural desire subscale measures one's desire and intent to engage in behaviors that will increase their multicultural experiences. When completing the multicultural experiences subscale, participants read statements pertaining to a variety of potential multicultural experiences (e.g., "I have friends from cultural-racial-ethnic backgrounds different than my own") and responded appropriately using the options provided. When completing the multicultural desire subscale, participants read statements pertaining to a variety of potential multicultural desires (e.g., "I push myself to explore my prejudices and biases") and responded appropriately using the options provided,

which vary by item. Higher scores indicate greater multicultural experiences and desires. The MEQ features strong psychometric properties (e.g., documented high internal consistency; $\alpha = .80$), strong feasibility (e.g., brief), and alignment with the construct being measured (Narvaez et al., 2017). Of note, two items from the MEQ were omitted due to an error when importing survey items into Qualtrics for efficient survey distribution. This omission was accounted for and taken into consideration during the statistical analysis. The researcher deemed the error to be miniscule enough to remain in the current study, and the researcher believes participant responses to the measure are valuable for the current study. Internal consistency on the MEQ for this study ($\alpha = .75$) indicated acceptable reliability.

Participants

Recruitment

Various methods were used to recruit participants for this study. Purposive sampling was used to recruit practicing clinicians and graduate students with experience providing direct services to clients (Campbell et al., 2020). Practicing clinicians and graduate students were recruited through national organizational databases (e.g., NASP, APA, etc.), email listservs (e.g., academic universities, professional practices), and word-of-mouth advertisement techniques (e.g., flyers, social media posts, referrals). Participants were informed of the study procedures and requirements. Interested participants recruited via email, database, or social media postings could participate by following an attached link.

Inclusion Criteria

Once interested participants accessed the Qualtrics survey they were first asked a screener question for eligibility purposes. This study aimed to recruit a broad target of behavioral health clinicians and graduate students to evaluate the adapted measure's factor structure and

psychometric properties. To participate in this study, participants must identify as practicing clinicians or graduate-level students within one of the following fields: school/clinical/counseling psychology, speech and language pathology, occupational therapy, social work, marriage and family therapy, or applied behavior analysis. Again, these fields were selected for inclusion due to their similarities in professional competency areas (e.g., data-based decision making) and general professional practices (e.g., assessment, intervention, consultation).

For this study, a practicing professional was defined as an individual within the previously mentioned behavioral health fields who has provided direct services to at least two individuals within the past 5 years. This time range was established due to the changes in science that have occurred, which can impact practices. Because of the researcher's interest in examining the relation between occupation status and MCSE perceptions and for generalizability purposes, the researcher was intentional about including both practicing clinicians and graduate students within the study; however, to ensure some level of clinical experience, all participants must have provided direct clinical services to at least two clients in order to participate. Informed consent was obtained from all participants included in the study. Additionally, all participants who completed the survey and provided contact information were compensated with a gift card for their participation.

Demographics

In total, 198 individuals participated in this study, of which 49.49% were graduate students, 46.46% were practicing clinicians, and 4.04% did not disclose their occupational status. The majority of participants (93.4%) identified as female and as White (53.03%). Participants ranged in age between 18 to over 55. The vast majority of participants (50%) were between ages

25 and 34, 16.7% between the ages of 35 and 44, 15.2% between 18 and 24, 13.6% between 45 and 54 years of age, and 4.5% were over 55 years of age. Regarding area of practice or study, most participants (68.69%) identified as psychology students or practicing psychologists. Roughly 11.62% represented the field of social, 7.07% from marriage and family therapy, 5.56% from speech and language pathology, 5.05% from occupational therapy, and 2.02% identified as board-certified behavior analysts. Of the 198 participants, most (52.53%) did not disclose their degree (e.g., prefer not to say, other); however, 39.9% reported having obtained or currently enrolled in doctoral degree programs (e.g., PhD, PsyD, EdD). Regarding years of experience, most participants (72.2%) reported having between 1 and 10 years of experience. Roughly 18.7% of participants endorsed having 11-20 years of experience, 8.1% reported having 21-30 years of experience, and 1% reported having 31-40 years of experience. See Table 1.

Data Analysis Plan

Descriptive statistical analyses (e.g., frequency) were conducted using the statistical software SPSS (Version 29) to analyze demographic data (IBM Corp., 2023). Initial data analysis examined the normality of the PMCSE, SDS-17, and the MEQ. In addition to descriptive statistical analyses, several other quantitative statistical analyses were conducted to evaluate the psychometric properties and fit of the MCSE. Specifically, using SPSS, Cronbach's alpha was calculated to assess internal consistency. A confirmatory factor analysis was conducted using structural equation modeling (SEM) within Mplus Diagrammer (Version 1.6) to evaluate the overall fit of the PMCSE items with each of the previously identified six factors (Muthen & Muthen 2018). In addition, hierarchical regression analyses were used to examine predictors of PMCSE total scores. The following predictors were examined in this study: sociodemographic variables (i.e., race, degree, and years of experience), as well as multicultural experiences and

multicultural desires. Total scores were obtained for the subscales of multicultural experiences and multicultural desires, and the researcher examined these predictors individually in the regression analyses.

CHAPTER 4

RESULTS

Preliminary Analyses

The researcher conducted preliminary analyses prior to conducting the hierarchical regression analysis. Specifically, the data was reviewed to ensure assumptions of normality were met. Visual inspection of the scatterplot depicting the standardized residuals against the standardized predicted values indicated that the assumption of homoscedasticity was met. Specifically, the analysis revealed that there is no systematic relationship between the predicted and residual values. Visual inspection also revealed the assumption of linearity and normality were also met. Specifically, based on the P-P plot, the residuals were normally distributed.

Additionally, a Pearson correlation statistic was calculated to determine if there was a significant correlation between social desirability (SDS-17) and multicultural self-efficacy perceptions (PMCSE). The Pearson correlation revealed a small negative correlation between the two variables. Specifically, a statistically significant linear relationship ($r = -.291, p < .001$) was found between the PMCSE and SDS-17 endorsements, indicating that as social desirability increased (more socially desirable responses), participants' ratings of their multicultural self-efficacy also increased, given that lower ratings on PMCSE indicate higher perceptions of multicultural self-efficacy. Given this statistically significant finding, social desirability was added to the hierarchical regression analysis as a control variable.

PMCSE Psychometric Examination

Internal Consistency

Cronbach's alpha coefficient was used to examine the overall internal consistency of the PMCSE. This statistic indicated high internal consistency among the items of the measure (Cronbach's alpha = 0.92). Results of the internal consistency analysis indicate that the PMCSE is composed of correlated items, further indicating that the items measure the intended construct, multicultural self-efficacy. Cronbach's alpha coefficient was also used to examine the internal consistency for each of the six subscales of the PMCSE. This statistic indicated internal consistency values within the acceptable range. Specifically, internal consistency for the six factors were, multicultural concepts $\alpha = .76$, using data and understanding systemic change $\alpha = .70$, developing cross-cultural relationships $\alpha = .70$, multicultural counseling awareness $\alpha = .86$, multicultural assessment $\alpha = .80$, and application of racial and cultural knowledge to practice $\alpha = .71$ respectively.

Confirmatory Factor Analysis

Confirmatory factor analysis was used to evaluate the proposed factor structure and determine the fit of the proposed model. The researcher used the same six factors proposed in the original measure to evaluate the overall structure of the model. Data used for this analysis was collected from a sample of behavioral health clinicians and students. To determine model fit, the researcher used the default maximum likelihood model to examine four statistics: the comparative fit index (CFI), the Tucker-Lewis Index (TLI), the root mean square error approximation (RMSEA), and the standardized root mean square residual (SRMR) (Bandalos, 2018). The CFI and TLI statistics provide insight into the variance that exists between the expected and observed variables without being sensitive to sample size. The CFI and TLI range between 0 and 1, where a larger value indicates a greater fit. CFI and TLI values of 0.90 or greater are considered to indicate an acceptable fit.

In this study, the CFI value was 0.856, and the TLI value was 0.839, which were just slightly below the fit threshold (see Table 2). The RMSEA also evaluates the variance between the observed and latent variables while controlling for sample size. RMSEA values range from 0 to 1, where smaller values indicate better model fit. RMSEA values of less than 0.05 are regarded as excellent, while values between 0.05 and 0.08 fall within the good range. The results of this study revealed an RMSEA value of 0.066 (see Table 2). Lastly, the SRMR assesses the observed and expected correlations of the model. Similar to the RMSEA, values range from 0 to 1, where smaller values indicate better model fit. RMSEA values of less than 0.05 are regarded as excellent, while values between 0.05 and 0.08 fall within the good range. For this study, the value of RMSEA was found to be 0.079 (see Table 2). Overall, the CFI and TLI values indicate a fit that is slightly below what is considered to indicate a “good fit.” However, this is a small discrepancy, and the other fit indices that were evaluated (RMSEA, SRMR) revealed promising results, indicating a good fit.

Results of the confirmatory factor analysis using the maximum likelihood estimate (MLR) revealed an excellent fit for the six-factor model of multicultural self-efficacy (see table 3). Standardized factor loadings were all significant ($p < 0.001$). Factor loadings for the model ranged between 0.305 and 0.832 (see Table 3) (see Figure 1). Overall, findings represent a moderate to strong relationship between the observed variables and latent factors when based on a sample size of slightly under 200 participants. In other words, this study found that most of the PMCSE items were highly related to the overall factors being represented in the measure.

Although all factor loadings indicated a moderate to strong relationship between the observed variables and latent factors, it is important to note that the factor loading for one item, item 15 (“I can nonverbally communicate my acceptance of culturally diverse clients”); (0.305),

was above the threshold for acceptable based on some interpretations (Hair et al., 2006) but slightly below the 0.4 threshold according to others (Stevens 2002). Given this slight discrepancy the researcher removed item 15 and ran a revised model. Results of the revised model revealed that the removal of item 15 did not enhance the overall fit of the model. Specifically, all fit indices revealed weaker values, CFI = 0.850, TLI = 0.832, SRMR = 0.089, and RMSEA = 0.068. Given these results, the revised model was rejected in favor of the original model, which included item 15.

In addition to the individual factor loadings for each item, the researcher examined the covariance between the various factors to see if the values were significant at $p < 0.05$. This was done to understand the relation that exists between the sub-constructs. Significant findings were found between several factor pairings (see Table 4). All factors were significantly correlated with one another except factor 2 (Using Data and Understanding Systemic Change) and factor 3 (Developing Cross-Cultural Relationships). This finding indicates that participants are likely to respond similarly to the factors with significant covariance estimates. For example, the covariance between Factor 1 (Knowledge of Multicultural Concepts), Factor 2 (Using Data and Understanding Systemic Change), Factor 3 (Developing Cross Cultural Relationships), Factor 4 (Multicultural Counseling Awareness), Factor 5 (Multicultural Assessment), and Factor 6 (Racial and Cultural Knowledge to Practice) indicates that participants who report higher endorsements of Knowledge of Multicultural Concepts are also likely to report higher endorsements on the other factors (Factors 2-6).

Predictors of Multicultural Self-Efficacy

Linear regression analyses were conducted to evaluate the relation between selected sociodemographic variables, including race, degree, years of experience, and perceptions of

multicultural self-efficacy, as measured by the total score on PMCES (Aim 3). Additionally, linear regression analyses were also conducted to examine the relation between the PCMES total score and scores for both multicultural experiences and multicultural desires, as measured with the two MEQ subscales (Aim 2).

Sociodemographic Variables

Sociodemographic variables and social desirability were entered into the model in two blocks. In the first block, the researcher entered race, degree, and years of experience variables. The hierarchical multiple regression analysis results revealed that race was the only sociodemographic predictor that accounted for a significant proportion of the variance in multicultural self-efficacy (see Table 5). More specifically, members of any racially minoritized group had significantly higher ratings of multicultural self-efficacy ($b = -5.422, p = <.001$) compared to White colleagues. This confirmed the researcher's hypothesis that culturally diverse participants would endorse higher ratings of multicultural self-efficacy when compared to White participants. The type of degree and years of experience were not significantly related to multicultural self-efficacy (see Table 5).

Additionally, the researcher added a second block to the regression analysis to determine the relation between perceptions of multicultural self-efficacy and socially desirable responding, given the finding indicating a statistically significant correlation between participants' proclivity to engage in socially desirable responding and PMCSE endorsements. Results of the analysis revealed that ratings on the SDS-17 did not significantly impact the relation between PMCSE and any of the three examined predictor variables, and race remained the only variable significantly related to multicultural self-efficacy endorsements ($b = -4.216, p = .008$).

Multicultural Experiences & Desire

To determine if ratings of multicultural experiences and multicultural desire on the MEQ were predictors of multicultural self-efficacy, a hierarchical regression analysis was also conducted. In the first block, the researcher entered the variables multicultural desire and multicultural experiences, and in the second block, social desirability was entered. Results of both analyses yielded significant findings for the independent variables, endorsements of multicultural experiences and desires (see Table 6). Higher multicultural experiences were found to be associated with higher ratings of multicultural self-efficacy ($b = -.478, p = .002$). Additionally, more multicultural desires predicted higher ratings of multicultural self-efficacy ($b = -1.282, p < .001$). The finding that participants with more multicultural experiences hold greater perceptions of multicultural self-efficacy aligns with the researcher's hypothesis. Further, the analysis results revealed that ratings on the SDS-17 did not significantly impact the relation between PMCSE and the two predictor variables (see Table 6). Multicultural experiences ($b = -.424, p = .005$) and multicultural desires ($b = -1.314, p < .001$) remained significant predictors of multicultural self-efficacy.

CHAPTER 5

DISCUSSION

Given the growing diversity within the United States population, the need for culturally responsive practices is vital. Studies documenting the need for cultural responsiveness, competence, and sensitivity are endless (Bonder et al., 2001; Brach et al., 2000; Nair et al., 2019). Much of the literature on multicultural practices focuses on the development of multicultural competence through increased knowledge and awareness (Betancourt et al., 2003); however, less research has examined if increases in these domains lead to greater engagement in culturally sensitive behaviors or multicultural self-efficacy. Exploring multicultural self-efficacy is important because it may help to identify areas of training needs that may ameliorate the disparities in service provisions that racially minoritized groups experience (Camps et al., 2019). In spite of the importance of measuring multicultural self-efficacy within a broad array of professionals who provide clinical care, most of the existing measures focus on counselors alone (Hill et al., 2013; Holcomb-McCoy et al., 2008; Matthew et al., 2018). As such, this study conducted a psychometric investigation of an adapted multicultural self-efficacy scale for use with broader clinical populations, the PMCSE. The current study revealed excellent internal consistency for both the total score and subscale scores. This implies the PMCSE is reliable and cohesive in measuring the construct of multicultural self-efficacy, but it can also aid in an accurate analysis at the subscale level to help determine components of multicultural self-efficacy.

The current study also conducted a confirmatory factor analysis (CFA) to evaluate the overall factor structure of the adapted measure (PMCSE). The original study conducted an exploratory factor analysis (EFA) to explore the theoretical structure of the construct being evaluated (SCMES; Holcomb-McCoy, et al., 2008). Results of the CFA revealed evidence that the proposed factor structure within the PMCSE represents the construct being assessed well. The current study also examined the individual item loadings of the variables onto each factor to confirm the revised measure retained solid items. The CFA revealed that all factor loadings, with the exception of one, were above the 0.4 threshold (Stevens, 2002), indicating that the observed variables loaded onto the factors adequately. Most factor loadings were between 0.5 and 0.8, again indicating sound results pertaining to the relation between the observed and latent variables. These findings aligned with the results of the EFA conducted in the original study (Holcomb-McCoy et al., 2008). Although all of the factor loadings were above the threshold set by Hair et al., 2006, given some variability in the literature surrounding cutoff scores, the researcher examined a model that did not include the one slightly sub-threshold item 15; however, this item was retained as removal of this item did not improve model fit and theory supported the retention of this item because of its utility in understanding cross-cultural behaviors and its consistence with the original measure. Overall, the CFA revealed an acceptable factor structure regarding the PMCSE as a valid measure for measuring multicultural self-efficacy amongst behavioral health practitioners.

Results of the current study revealed statistically significant values across factors. Since a specific value for acceptable covariance does not exist (King & Eckersley, 2019), the researcher relied on the significance value and magnitude to evaluate covariance. According to King & Eckersley, 2019, positive covariance values indicate that the variables increase together.

Regarding the current study, most covariance values were above 0.3. These provide further support that this scale measures a unitary construct of multicultural self-efficacy; however, the CFA and the relatively low correlation statistics still indicate that these subconstructs are unique to one another.

The current study also examined the factors that relate to multicultural self-efficacy. More specifically, the researcher examined if a significant relation existed between perceptions of multicultural self-efficacy and sociodemographic variables (i.e., race, degree, years of experience). These specific sociodemographic variables have been documented as typical and important to explore when hoping to understand multicultural self-efficacy and competence within clinicians (Barden et al., 2014; Holcomb-McCoy et al., 2008; Matthews et al., 2018). The findings of the current study align with what has been found within research specific to clinicians within counseling fields. Further, this study adds to the literature by replicating these findings with a broader group of clinicians which aids in the generalizability of the findings and the utility of the measure. Additionally, evaluating potential associations and group differences between these different sociodemographic variables was important in the current study as this can provide valuable data that can be used to understand relevant disparities and inequities (Orkin et al., 2021). This understanding, combined with data showcasing differences in multicultural self-efficacy based on select sociodemographic variables, can allow for more targeted research efforts to improve such disparities and inequities. The results of this study revealed that only race predicted higher perceptions of multicultural self-efficacy. This finding aligned with the researchers' hypothesis and is also heavily supported by multicultural competence and counselor multicultural self-efficacy research (Holcomb-McCoy et al., 2008; Matthew et al., 2018). Further, Hill et al., (2013) found that counselors who identified as White endorsed lower ratings

of multicultural competence than their Black and Latinx counterparts, indicating that a relation between perceived multicultural competence and ethnic identity does exist. A rationale for this difference is due to the differences in experiences that those who identify as members of racially minoritized groups experience as they navigate society and encounter systemic issues (Hill et al., 2013). Given the scarcity of multicultural self-efficacy research on behavioral health clinicians outside of counselors, the current study expands upon the research by confirming the aforementioned findings with a broader group of clinicians.

Additionally, the results of this study found that both multicultural experiences and multicultural desires were also predictors of higher endorsements of multicultural self-efficacy. Specifically, those who reported having higher perceptions of multicultural self-efficacy also reported having more multicultural experiences and desires. Direct interactions with cultural groups different from one's own, also referred to as cultural immersion practices (Szucs et al., 2019), are often promoted within the cultural competency and diversity training literature (Lehman, 2017). This form of immersion and interaction is also regarded as being superior to didactic training methods alone (e.g., diversity coursework, diversity training) and is found to increase self-efficacy in therapeutic skills (Barden et al., 2014). This is due to the positive impact that such experiential learning has on clinician attitudes and understanding of diverse groups (Sparkman et al., 2020; Sue & Sue et al, 2016). According to Sue & Sue (2016), a common critique of multicultural curriculum in training programs is that key components crucial for developing cultural awareness in clinicians are missing. Thus, Sue & Sue (2016) argue that for training courses to be effective, the inclusion of cultural immersion activities is necessary. Further, research pertaining to multicultural interactions reveals that those who engage more with diverse groups are more likely to demonstrate heightened multicultural awareness and

knowledge and more likely to engage in culturally responsive practices (Camphina-Bacota, 2018).

Contrarily, the researcher also hypothesized that greater multicultural desires would predict lower perceptions of multicultural self-efficacy. It was thought that those with more desires may be those who have not had as many multicultural experiences, leading to lower ratings of multicultural self-efficacy. However, a review of self-efficacy research showcased that motivation, which is defined as a general desire or willingness to do something, is positively related to self-efficacy (Zeb & Nawaz, 2016). Further, a process model of cultural competence for healthcare providers includes cultural desires as a component of cultural competence (Camphina-Bacote, 2011). As a component of this model cultural desire was defined as the “want” to be culturally aware, sensitive, and have cultural experiences (Camphina-Bacote, 2018). In alignment with the findings in the current study, Camphina-Bacote (2018) reports that healthcare workers with strong cultural desires are more committed to engaging in culturally just actions. In other words, strong cultural desires can predict multicultural self-efficacy. Given this research, the current study’s finding pertaining to multicultural desires predicting multicultural self-efficacy ratings is understandable.

Limitations

Despite the researcher utilizing maximum efforts to recruit participants from diverse socio-demographic backgrounds, a limitation of this study pertains to participant characteristics. Specifically, the majority of participants identified as psychologists. This limitation may have impacted the measure's overall generalizability due to limited responses from providers in some clinical fields recruited (e.g., social work, marriage family therapist, speech-language pathologist, occupational therapist, board-certified behavior analyst). Additionally, this limitation

may have impacted the findings pertaining to predictors of multicultural self-efficacy. However, due to the similarity in the therapeutic nature of practice within those fields and the fields to which respondents identified as belonging, it is likely that the adapted measure will adequately address practices within most clinical fields. Additionally, the majority of participants did not provide a response when asked to select their degree type. The absence of this information impacted the researcher's ability to analyze the variability in degree type due to the large amount of missing data. It is possible that participants did not respond to this item for a variety of reasons, including the options provided not being representative of the variability in the sample and/or possible ambiguity in options for participants who have not yet earned their degree (e.g., graduate students). It is also possible that some participants just preferred not to provide this information. The sample was also limited in gender diversity. Specifically, all participants identified as female. Future efforts to recruit a more diverse sample in terms of clinical background, degree type, and gender would be beneficial.

Another limitation of this study pertains to the item pool. Specifically, two factors (i.e., factor 2 and factor 6) consisted of a limited number of items (i.e., 3). This is a limitation because having a sufficient number of items per factor is important to ensure accurate measurement of the construct. An insufficient number of items per factor can adversely impact the factor loadings and overall assessment of model fit (Bandalos, 2018). Additionally, although the CFI and TLI indices revealed values below what is regarded as "acceptable," this discrepancy was minimal. Fortunately, the RMSEA and SRMR index values revealed positive findings, yielding results in the acceptable range (Xia et al., 2019). It is possible that the CFI and TLI statistics were slightly below the threshold due to measurement error or characteristics of the sample. Regarding the sample characteristics, it is possible that the current sample size of 198 may have impacted the fit

indices. Although this size was sufficient for the current study, research reports that often-larger sample sizes result in CFI and TLI values closest to 1 (Taasobshirazi & Wang, 2016). It is important to also note that some researchers have argued against the use of a universal cutoff value when interpreting model fit statistics (Barrett, 2007; Marsh 2004) and emphasized the importance of not solely relying on these values when making a decision on model acceptance (Xia et al., 2019). Overall, model fit appears to be sufficient for the model when considering all of the fit indices.

Future Directions

In efforts to continue to support the overall utility of and further validate the PMCSE, several future directions are suggested. First, the current study evaluated the measure's internal consistency using Cronbach's alpha. This statistic revealed a value that fell within the excellent range, indicating that the items were reliable in measuring the intended construct, but it would be helpful to replicate this with a larger sample to examine if this improved model fit statistics for the CFA. Future research would also benefit from examining the discriminant validity of the items in the measure. This will assist in providing insight on whether items in the measure are redundant and, if so, provide insight into further shortening the measure for increased feasibility. Reducing items within a measure is often suggested to reduce the response burden (Rolstad, 2011). Increasing feasibility within measures aimed at gaining insight from healthcare clinicians is also important, given research indicating that surveys soliciting this population often receive fewer responses (Cho et al., 2013). Thus, it is important to consider the negative impact (i.e., missed responses, lack of interest) that time burden may have on responding, especially with this population, given their busy and intense workloads (Booker et al., 2021).

Future research efforts geared at recruiting a more diverse sample in terms of gender and profession would be of value. Given the small percentage of participants identifying as male, non-binary, or in professions other than psychology, the results of the regression analysis aimed at identifying potential predictors of multicultural self-efficacy may have been impacted. It is possible that the current study may have been able to identify additional sociodemographic variables that were predictors of multicultural self-efficacy if there were more participants representing other fields and genders. Additionally, future research targeting recruiting more diverse participants in terms of the profession may further provide information that may lead to enhancements in diversity-focused content within training programs. Further, this is a potential direction for future research as it is likely that life experiences differ amongst those of different races, given the differences in cultural values that exist amongst different groups (Hill et al., 2013). These differences in life experiences are likely to lead to differences in multicultural awareness and sensitivity (Hill et al., 2013). Thus, future research should not just aim to diversify the sample but also examine individual races (e.g., White, Black, Asian, etc.) as potential predictors of multicultural self-efficacy. A step further would be to evaluate the intersectionality of race with other demographic variables such as gender, socioeconomic status, education level, and age.

The current study revealed inconsistent model fit results. Specifically, results of the CFI and TLI fit indices revealed that the data fit the model slightly below what is considered to be acceptable. These fit indices can be impacted by the characteristics of the sample as well as the complexity of the model. Thus, in connection with diversifying the sample, it would be beneficial for future research to consider increasing the sample size as well. Increasing the

sample size will limit the possibility that the results of the fit indices are impacted by the sample size, hopefully increasing the likelihood of a stronger model fit value.

Conclusions

Through understanding practitioner perceptions of their capabilities when treating members of racially minoritized groups, we can learn possible barriers to multiculturally responsive services. However, to explore this construct, a sound measure is necessary. Developing a multicultural self-efficacy measure able to be used with broad clinical populations was believed to be of great importance and need due to the rapid changes in diversity apparent within the United States (US Census, 2021). The development of a psychometrically sound measure to evaluate clinician perceptions of multicultural self-efficacy is also of importance because measurement allows for quantifiable information to be obtained from various sources. This data can then provide insight into clinician behaviors. Although the country is growing in diversity, the cultural/ethnic backgrounds of clinical providers remain unparallel to this change. There has been a continuous aim to diversify the clinical provider workforce in response to these changes in diversity, but this has been shown to be a tangential goal and not enough to influence systemic change within practice. Thus, along with diversifying the workforce, great emphasis must be placed on the development of clinical professionals' multicultural self-efficacy. This is an important area of focus because it has the potential to impact service provisions and interactions for diverse groups and further influence systemic change that can lead to equitable care and treatment for all.

REFERENCES

- Advanced Solutions International, I. (n.d.). *About marriage and family therapists*. Retrieved October 7, 2022, from https://www.aamft.org/About_AAMFT/About_Marriage_and_Family_Therapists.aspx?hkey=1c77b71c-0331-417b-b59b-34358d32b909
- Alegria M, Alvarez K, Ishikawa RZ, DiMarzio K, McPeck S. (2016). Removing Obstacles To Eliminating Racial And Ethnic Disparities In Behavioral Health Care. *Health Aff* (Millwood). 35(6):991-9. doi: 10.1377/hlthaff.2016.0029. PMID: 27269014; PMCID: PMC5027758.
- Alexander-Ruff, J. H., & Kinion, E. (2018). Engaging nursing students in a rural Native American community to facilitate cultural consciousness. *Journal of Community Health Nursing*, 35(4), 196-206. doi: 10.1080/07370016.2018.15164232018
- Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology*. 63(1), 1– 18
- Allen VC Jr, Lachance C, Rios-Ellis B, Kaphingst KA. Issues in the Assessment of "Race" among Latinos: Implications for Research and Policy. *Hisp J Behav Sci*. 2011 Nov;33(4):411-424. doi: 10.1177/0739986311422880. PMID: 23239903; PMCID: PMC3519364.
- American Occupational Therapy Association. (n.d.). About Occupational Therapy. Aota.org. (n.d.).* Retrieved October 7, 2022, from <https://www.aota.org/about/for-the-media/about-occupational-therapy>
- American Psychological Association. (2019). *Demographics of the U.S. Psychology Workforce*. <https://www.apa.org/workforce/data-tools/demographics>. Totals may not sum to 100 percent due

to rounding. Age categories were not broken down to more specific groups due to the small sample sizes of racial- and ethnic-minority psychologists over age 50.

American Speech-Language-Hearing Association. (n.d.). *About the American speech-language-hearing association (ASHA)*. American Speech-Language-Hearing Association. Retrieved October 7, 2022, from <https://www.asha.org/about/>

Bandalos, D. L. (2018). *Measurement theory and applications for the social sciences*. New York, NY: Guilford.

Bandura, A. (1982). *Self-efficacy mechanisms in human agency*. *American Psychologist*, 37, 122-147.

Bandura, A. (2006). *Guide for constructing self-efficacy scales*.

Barden, S.M., Greene, J.H. An Investigation of Multicultural Counseling Competence and Multicultural Counseling Self-Efficacy for Counselors-in-Training. *Int J Adv Counselling* 37, 41–53 (2015). <https://doi.org/10.1007/s10447-014-9224-1>

Behavior Analyst Certification Board. (2022, January 11). *Bacb- about the bacb*. Retrieved October 7, 2022, from <https://www.bacb.com/about/>

Boateng, G. O., Neilands, T. B., Frongillo, E. A., Melgar-Quiñonez, H. R., & Young, S. L. (2018). Best Practices for Developing and Validating Scales for Health, Social, and Behavioral Research: A Primer. *Frontiers in public health*, 6, 149. <https://doi.org/10.3389/fpubh.2018.00149>

Bonsaksen T, Lerdal A, Heir T, et al. General self-efficacy in the Norwegian population: Differences and similarities between sociodemographic groups. *Scandinavian Journal of Public Health*. 2019;47(7):695-704. doi:[10.1177/1403494818756701](https://doi.org/10.1177/1403494818756701)

Booker, Q.S., Austin, J. D., Balasubramanian. (2021). Survey strategies to increase participant response rates in primary care research studies. *Family Practice*, Volume 38, Issue 5, October 2021, Pages 699–702, <https://doi.org/10.1093/fampra/cmab070>

- Brenner, P. S., & DeLamater, J. (2016). Lies, damned lies, and survey self-reports? Identify as a cause of measurement bias. *Social Psychology Quarterly*, 79, 333–354.
- Campbell, S., Greenwood, M., Prior, S., Shearer, T., Walkem, K., Young, S., Bywaters, D., & Walker, K. (2020). Purposive sampling: complex or simple? Research case examples. *Journal of research in nursing : JRN*, 25(8), 652–661. <https://doi.org/10.1177/1744987120927206>
- Campinha-Bacote, J., (December 4, 2018) "Cultural Competemility: A Paradigm Shift in the Cultural Competence versus Cultural Humility Debate – Part I" *OJIN: The Online Journal of Issues in Nursing* Vol. 24, No. 1
- Center for Behavioral Health Statistics and Quality. (2021). *Racial/ethnic differences in mental health service use among adults and adolescents (2015-2019)* (Publication No. PEP21-07-01-002). Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from <https://www.samhsa.gov/data/>
- Cho, Y. I., Johnson, T. P., & VanGeest, J. B. (2013). Enhancing surveys of Health Care Professionals. *Evaluation & the Health Professions*, 36(3), 382–407. <https://doi.org/10.1177/0163278713496425>
- Choi, K. M., VanVoorhis, R. W., & Ellenwood, A. E. (2015). Enhancing critical consciousness through a cross-cultural immersion experience in South Africa. *Journal of Multicultural Counseling and Development*, 43, 244-261. doi: 10.1002/jmcd.12019
- Cohen R, Swerdlik M. (2010). *Psychological testing and assessment*. Boston: McGraw-Hill Higher Education.
- Colby, Sandra L. and Jennifer M. Ortman. (2014). *Projections of the Size and Composition of the U.S. Population: 2014 to 2060*, Current Population Reports, P25-1143, U.S. Census Bureau, Washington, DC, 2014.

- Crowne, D. P., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology*, 24, 349-354.
- Cunningham, C.T., Quan, H., Hemmelgarn, B. *et al.* Exploring physician specialist response rates to web-based surveys. *BMC Med Res Methodol* 15, 32 (2015). <https://doi.org/10.1186/s12874-015-0016-z>
- Daniels, J. A., & Larson, L. M. (2001). The Impact of Performance Feedback on Counseling Self-Efficacy and Counselor Anxiety. *Counselor Education & Supervision*, 41(2), 120–130. <https://doi.org/10.1002/j.1556-6978.2001.tb01276.x>
- Decety, J., & Fotopoulou, A. (2015). Why empathy has a beneficial impact on others in medicine: unifying theories. *Frontiers in behavioral neuroscience*, 8, 457. <https://doi.org/10.3389/fnbeh.2014.00457>
- Demby, G. (2014, June 16). *On the census, who checks 'Hispanic,' who checks 'white,' and why*. NPR. Retrieved October 12, 2022, from <https://www.npr.org/sections/codeswitch/2014/06/16/321819185/on-the-census-who-checks-hispanic-who-checks-white-and-why>
- Dodou, D., & De Winter, J. C. F. (2014). Social desirability is the same in offline, online, and paper surveys: A meta-analysis. *Computers in Human Behavior*, 36, 487–495.
- Guiney, Meaghan C., Harris, Abigail, Zusho, Akane, & Cancelli, Anthony. (2014). School Psychologists' Sense of Self-Efficacy for Consultation, *Journal of Educational and Psychological Consultation*, 24:1, 28-54, DOI: 10.1080/10474412.2014.870486
- Harris, K. P. (2004). *Speech-language pathologists' professional efficacy beliefs about assessing the language skills of bilingual/bicultural/bidialectal students*. [Theses and dissertations] (Paper 1070). <http://scholarcommons.usf.edu/etd/1070>

- Harris, P. N., Shillingford, M. A., & Bryan, J. (2018). Factors Influencing School Counselor Involvement in Partnerships With Families of Color: A Social Cognitive Exploration. *Professional School Counseling*. <https://doi.org/10.1177/2156759X18814712>
- Heppner, P. P., Wang, K. T. (2014). A cross-cultural immersion program: Promoting students' cultural journeys. *The Counseling Psychologist*, 42(8), 1159-1187. doi: 10.1177/0011000014548899
- Hill, N. R., Vereen, L. G., & McNeal, D. (2013). Multicultural Awareness, Knowledge, and Skills among American Counselor Trainees: Group Differences in Self-Perceived Competence Based on Dispositional and Programmatic Variables. *International Journal for the Advancement of Counselling*, 35(4), 261–272. <https://doi.org/10.1007/s10447-012-9181-5>
- Holcomb-McCoy, C., Harris, P., Hines, E. M., & Johnston, G. (2008). School Counselors' Multicultural Self-Efficacy: A Preliminary Investigation. *Professional School Counseling*. <https://doi.org/10.1177/2156759X0801100303>
- Hosp, J. L., Howell, K. W., & Hosp, M. K. (2003, January 1). Characteristics of Behavior Rating Scales: Implications for Practice in Assessment and Behavioral Support. *Journal Of Positive Behavior Interventions*, 5(4), 201–208.
- IBM Corp. (2023). IBM SPSS Statistics for Windows (29) [Computer software]. Armonk, NY: IBM Corp.
- Isaacson, M. (2014). Clarifying concepts: Cultural humility or competency. *Journal of Professional Nursing*, 30(3), 251-258. <http://dx.doi.org/10.1016/j.profnurs.2013.09.01>
- King, A. P., & Eckersley, R. J. (2019). Descriptive statistics II: Bivariate and Multivariate Statistics. *Statistics for Biomedical Engineers and Scientists*, 23–56. <https://doi.org/10.1016/b978-0-08-102939-8.00011-6>

- Kohnert, K., Kennedy, M. R. T., Glaze, L., Kong, P. F., Carney, E. (2003). Breadth and depth of diversity in Minnesota: Challenges to clinical competency. *American Journal of Speech-Language Pathology*, 12, 259–272.
- Latkin CA, Edwards C, Davey-Rothwell MA, Tobin KE. The relationship between social desirability bias and self-reports of health, substance use, and social network factors among urban substance users in Baltimore, Maryland. *Addict Behav.* 2017 Oct;73:133-136. doi: 10.1016/j.addbeh.2017.05.005. Epub 2017 May 9. PMID: 28511097; PMCID: PMC5519338.
- Madonna G.C. (2001). *Multiculturally-Focused Counseling Supervision, The Clinical Supervisor, 20:1, 87-98, DOI: 10.1300/J001v20n01_07*
- María del Rosario Bastera, Elise Trumbull, & Guillermo Solano-Flores. (2011). *Cultural Validity in Assessment : Addressing Linguistic and Cultural Diversity: Vol. 1st ed.* Routledge.
- Matthews, E. J., Clune, L., Luhanga, F., & Loewen, R. (2021). The impact of cultural immersion international learning experiences on cultural competence of nursing students: A critical integrative review. *Journal of Professional Nursing, 37(5), 875–884.*
<https://doi.org/10.1016/j.profnurs.2021.07.002>
- Matthews, J. J., Mehta Barden, S., & Sherrell, R. S. (2018). Examining the Relationships Between Multicultural Counseling Competence, Multicultural Self-Efficacy, and Ethnic Identity Development of Practicing Counselors. *Journal of Mental Health Counseling, 40(2), 129–141.*
<https://doi.org/10.17744/mehc.40.2.03>
- McCoach DB, Gable RK, Madura JP. (2013). Instrument Development in the Affective Domain. *School and Corporate Applications*, 3rd Edn. New York, NY: Springer.
- McDonald JD. (2008). Measuring personality constructs: The advantages and disadvantages of self-reports, informant reports and behavioural assessments. *Enquire.1(1):75-94.*

- Meyer PA, Penman-Aguilar A, Campbell VA, Graffunder C, O'Connor AE, Yoon PW. (2013). *Centers for Disease Control and Prevention (CDC). Conclusion and future directions. CDC Health Disparities and Inequalities Report - United States, 2013. MMWR Suppl. 62(3):184-6. PMID: 24264513.*
- Middleton, R, Stadler, H., Simpson, C., Guo, Y., Brown, M., Crow, G., & Lazarte, A. (2005), Mental health practitioners: The relationship between white racial identity attitudes and self- reported multicultural counseling competencies. *Journal of Counseling and Development, 83, 444-456.* doi:10.1002/j.1556-6678.2005.tb00366.x
- Morgado, F.F.R., Meireles, J.F.F., Neves, C.M. et al. (2018). Scale development: ten main limitations and recommendations to improve future research practices. *Psicol. Refl. Crit. 30, 3.* <https://doi.org/10.1186/s41155-016-0057-1>
- Muthén, L. K., & Muthén, B. O. (2021). Mplus (Version 1.6) [Computer software]. Los Angeles, CA: Muthén & Muthén.
- National Association of School Psychologists (NASP). (n.d.). *Vision, core purpose, core values, & strategic goals.* Retrieved October 7, 2022, from <https://www.nasponline.org/utility/about-nasp/vision-core-purpose-core-values-and-strategic-goals>
- NASW, National Association of Social Workers. (n.d.). *About.* Retrieved October 7, 2022, from <https://www.socialworkers.org/About/Ethics/Code-of-Ethics/Code-of-Ethics-English>
- Narvaez, D., Endicott, L., & Hill, P. (2010). *The Multicultural Experiences Questionnaire.* South Bend, IN: University of Notre Dame Press.
- Narvaez, D., & Hill, P. L. (2010). The relation of multicultural experiences to moral judgment and mindsets. *Journal of Diversity in Higher Education, 3(1), 43-55.* doi: 10.1037/a0018780

- Nieto, (2006). The Cultural Plunge: Cultural immersion as a means of promoting self-awareness and cultural sensitivity among student teachers. *Teacher Education Quarterly*, 33(1), 75-84.
Retrieved from <http://files.eric.ed.gov/fulltext/EJ795210.pdf>
- Nuby, J. (2010). An awakening through an inner- city immersion experience. *Multicultural Perspectives*, 12(1), 42-49.
- Orkin AM, Nicoll G, Persaud N, Pinto AD. Reporting of Sociodemographic Variables in Randomized Clinical Trials, 2014-2020. *JAMA Netw Open*. 2021;4(6):e2110700.
doi:10.1001/jamanetworkopen.2021.10700
- Owens, D., Bodenhorn, N., & Bryant, R. M. (2010). Self-efficacy and multicultural competence of school counselors. *Journal of School Counseling*, 8, 1-20. Retrieved from <http://jsc.montana.edu/>
- Riess H., Kelley J. M., Bailey R. W., Dunn E. J., Phillips M. (2012). Empathy training for resident physicians: a randomized controlled trial of a neuroscience-informed curriculum. *J. Gen. Intern. Med.* 27, 1280–1286. 10.1007/s11606-012-2063-z
- Robinson, M. A. (2018). Using multi-item psychometric scales for research and practice in human resource management. *Human Resource Management*, 57(3), 739–750.
<https://doi.org/10.1002/hrm.21852>
- Roller, M. C. & Ballestas, H. C. (2013). Cultural competency: Measuring the sustainability following an immersion program for undergraduate students. *Journal of the New York State Nurses Association*, 45(1), 21-28. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=rzh&AN=124595694&site=ehost-live>
- Rolstad S, Adler J, Rydén A. (2011). Response burden and questionnaire length: is shorter better? A review and meta-analysis. *Value Health*. 14(8):1101-8. doi: 10.1016/j.jval.2011.06.003.

- Roseberry-McKibbin, C. A., & Eicholtz, G. E. (1994). Serving children with limited English proficiency in the schools: A national survey. *Language, Speech, and Hearing Services in Schools*, 25(3), 156–164. <https://doi.org/10.1044/0161-1461.2503.156>
- Palinkas LA, Horwitz SM, Green CA, Wisdom JP, Duan N, Hoagwood K. Purposeful Sampling for Qualitative Data Collection and Analysis in Mixed Method Implementation Research. *Adm Policy Ment Health*. 2015 Sep;42(5):533-44. doi: 10.1007/s10488-013-0528-y. PMID: 24193818; PMCID: PMC4012002.
- Parveen, S., & Santhanam, S. Priya. (2021). Speech-Language Pathologists' Perceived Competence in Working With Culturally and Linguistically Diverse Clients in the United States. *Communication Disorders Quarterly*, 42(3), 166–176. <https://doi.org/10.1177/1525740120915205>
- Shapiro, C. J., Watson MacDonell, K., & Moran, M. (2021). Provider self-efficacy in delivering evidence-based psychosocial interventions: A scoping review. *Implementation Research and Practice*. <https://doi.org/10.1177/2633489520988258>
- Sheu, H. B., & Lent, R. W. (2007). Development and initial validation of the Multicultural Counseling Self-Efficacy Scale-Racial Diversity Form. *Psychotherapy: Theory, Research, Practice, Training*, 44, 30-45. doi: 10.1037/0033-3204.44.1.30
- Sheu, H.-B., Rigali-Oiler, M., & Lent, R. W. (2012). *Multicultural Counseling Self-Efficacy Scale – Racial Diversity Form: Factor structure and test of a social cognitive model*. *Psychotherapy Research*, 22(5), 527–542. doi: 10.1080/10503307.2012.683344
- Sparkman, D. J., & Hamer, K. (2020). Seeing the human in everyone: Multicultural experiences predict more positive intergroup attitudes and humanitarian helping through identification with all

humanity. *International Journal of Intercultural Relations*, 79, 121–134.

<https://doi.org/10.1016/j.ijintrel.2020.08.007>

Satici, S. A., & Can, G. (2016). Investigating academic self-efficacy of university students in terms of socio-demographic variables. *Universal Journal of Educational Research*, 4(8), 1874–1880.

<https://doi.org/10.13189/ujer.2016.040817>

Stevens, J. (2002). *Applied multivariate statistics for the social sciences*. Mahwah, NJ: LEA.

Stoeber, Joachim. (2001). The Social Desirability Scale-17 (SDS-17): Convergent validity, discriminant validity, and relationship with age. *European Journal of Psychological Assessment*. 17. 222-232. 10.1027//1015-5759.17.3.222.

Streiner D. (2003). Starting at the beginning: an introduction to coefficient alpha and internal consistency. *Journal of personality assessment*.80:99-103. 10.1207/S15327752JPA8001_18

Szucs, L. E., Shipley, M., McNeill, E. “Beth,” Housman, J., & Vinal, C. (2019). Developing Preservice Teachers’ Cultural Competency through Urban Immersion. *American Journal of Health Studies*, 34(2), 69–79.

Taasoobshirazi, G., & Wang, S. (2016). The Performance of the SRMR, RMSEA, CFI, and TLI: An Examination of Sample Size, Path Size, and Degrees of Freedom.

Tavakol M, Dennick R. (2011). Making sense of Cronbach's alpha. *Int J Med Educ*. 2:53-55. doi: 10.5116/ijme.4dfb.8dfd. PMID: 28029643; PMCID: PMC4205511.

Tittler, M. V., Liu, S., Wei, M., Cheng, D., & Wang, C. (2021). Concerns About Counseling Racial Minority Clients: Ethnocultural Empathy, Insight, and Multicultural Intervention Self-Efficacy. *Training And Education In Professional Psychology*. <https://doi.org/10.1037/tep0000333>

Tourangeau, R., & Yan, T. (2007). Sensitive questions in surveys. *Psychological Bulletin*, 133, 859–883.

- U.S. Census Bureau (2018). *Healthcare Still Largest US Employer-2018*. Retrieved from [https://www.census.gov/library/stories/2020/10/health-care-still-largest-united-states-employer.html].
- U.S. Census Bureau (2021). *Modified Race Data-2021*. Retrieved from [https://www.census.gov/data/datasets/2021/demo/popest/modified-race-data-2021.html].
- Usher, E. L., Mamaril, N. A., Li, C., Economy, D. R., & Kennedy, M. S. (2015, June). *Sources of self-efficacy in undergraduate engineering*. In 2015 ASEE Annual Conference & Exposition (pp. 26-1386).
- Vasquez, M. J. T. (2007). Cultural difference and the therapeutic alliance: An evidence-based analysis. *American Psychologist*, 62(8), 878–885. https://doi.org/10.1037/0003-066X.62.8.878
- Verhoef MJ, Casebeer AL. (1997). Broadening horizons: Integrating quantitative and qualitative research. *Can J Infect Dis.* (2):65-6. doi: 10.1155/1997/349145. PMID: 22514478; PMCID: PMC3327344.
- Xia, Y., Yang, Y. RMSEA, CFI, and TLI in structural equation modeling with ordered categorical data: The story they tell depends on the estimation methods. *Behav Res* 51, 409–428 (2019). https://doi.org/10.3758/s13428-018-1055-2
- Yeager, K. A., & Bauer-Wu, S. (2013). Cultural humility: essential foundation for clinical researchers. *Applied nursing research: ANR*, 26(4), 251–256. https://doi.org/10.1016/j.apnr.2013.06.008
- Zeb, Saman & Nawaz, Allah. (2016). Impacts of Self-Efficacy on Organizational Commitment of Academicians A Case of Gomal University. *Information and Knowledge Management*. 6. 36-42.

Zhang, N., & McCoy, V. A. (2008). Discussion of racial difference in counseling: A counselor's perspective. *Journal of College Student Psychotherapy*, 23(1), 3–15.

10.1080/87568220802367479

Zimmerman, Mark & Walsh, Emily & Friedman, Michael & Boerescu, Daniela & Attiullah, Naureen. (2017). Are Self-Report Scales as Effective as Clinician Rating Scales in Measuring Treatment Response in Routine Clinical Practice?. *Journal of Affective Disorders*. 225. 10.1016/j.jad.2017.08.024.

APPENDIX A

PRACTITIONER MULTICULTURAL SELF-EFFICACY SCALE

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
Statement	1	2	3	4	5
When in practice, I can address societal issues that affect the development of clients	1	2	3	4	5
I can discuss how culture affects the help-seeking behaviors of clients.	1	2	3	4	5
I can assess my own racial/ethnic identity development in order to enhance my practice.	1	2	3	4	5
I can give examples of how stereotypical beliefs impact the therapeutic process.	1	2	3	4	5
I can assess how my speech (e.g., jargon) and tone influence my relationship with diverse clients.	1	2	3	4	5
I can discuss how environmental factors such as poverty can influence the success of clients.	1	2	3	4	5
I can use culturally appropriate interventions.	1	2	3	4	5
I can identify when to use data (e.g., research data, client outcome data, etc.) as an advocacy tool to promote individual client success.	1	2	3	4	5
I can use data (e.g, research data, client outcome data, etc.) to advocate for diverse clients.	1	2	3	4	5
I am able to integrate client family beliefs into the treatment process.	1	2	3	4	5
I can develop friendships with people from other racial-ethnic groups.	1	2	3	4	5
I can verbally communicate with culturally diverse clients.	1	2	3	4	5

I can coexist comfortably with culturally diverse colleagues.	1	2	3	4	5
I can develop positive relationships with clients who identify as members of cultural groups different from my own.	1	2	3	4	5
I can nonverbally communicate my acceptance of culturally diverse clients.	1	2	3	4	5
I can identify when my helping style is inappropriate for a culturally diverse client.	1	2	3	4	5
I can identify when my own biases negatively influence my provision of services to clients.	1	2	3	4	5
I can identify when my helping style is appropriate for a culturally diverse client.	1	2	3	4	5
I can adjust my helping style when it is inappropriate for a client from a different cultural background than my own.	1	2	3	4	5
I can recognize when my beliefs and values are interfering with providing the best services to my clients.	1	2	3	4	5
I can identify when specific cultural beliefs influence clients' response to treatment.	1	2	3	4	5
I can identify whether or not the assessment process is culturally sensitive.	1	2	3	4	5
I can advocate for fair assessment and the appropriate use of assessment for clients from diverse backgrounds.	1	2	3	4	5
I can discuss how biased assessment can lead to inequitable opportunities for culturally diverse clients.	1	2	3	4	5
I can explain assessment information (i.e., results, purpose) to culturally diverse clients.	1	2	3	4	5
I can identify unfair policies that discriminate against clients of culturally different backgrounds.	1	2	3	4	5
I can challenge my colleagues when they discriminate against clients.	1	2	3	4	5

I can define and discuss racism.	1	2	3	4	5
I can challenge others racist and/or prejudiced beliefs and behaviors.	1	2	3	4	5

Table 1
Participant Demographics

Variable	n	Percentage
<u>Gender</u>		
Female	185	93.4
Male	11	5.4
Non-Binary	2	1.0
<u>Race</u>		
White	105	53.03
Racially/Ethnically Diverse	85	42.93
Prefer Not to Say	8	4.04
<u>Age</u>		
18-24	30	15.2
25-34	99	50.0
35-44	33	16.7
45-54	27	13.6
Over 55	9	4.5
<u>Classification</u>		
Psychologist	136	68.69
Social Work	23	11.62
Marriage and Family Therapist	14	7.07
Speech and Language Pathologist	11	5.56
Occupational Therapist	10	5.05
Board Certified Behavior Analyst	4	2.02
<u>Occupational/Academic Status</u>		
Student	98	49.49
Practicing Professional	92	46.46
Prefer Not to Say	8	4.04
<u>Degree</u>		
PhD	36	18.18
Masters	35	17.68
PsyD	15	7.58
EdD	8	4.04
Prefer Not to Say	104	52.53
<u>Years of Experience</u>		
1-10	143	72.2
11-20	37	18.7
21-30	16	8.1
31-40	2	1.0

Note. N = 198.

Table 2
Confirmatory Factor Analysis Fit Statistics

RMSEA	CFI	TLI	SRMR
0.066	0.856	0.839	0.079

Table 3
Confirmatory Factor Analysis Standardized Factor Loadings

Factor	Item	Factor Loading	<i>p</i>
1	1	0.604	<.001
1	2	0.657	<.001
1	3	0.612	<.001
1	4	0.620	<.001
1	5	0.592	<.001
1	6	0.501	<.001
1	7	0.562	<.001
2	8	0.710	<.001
2	9	0.832	<.001
2	10	0.481	<.001
3	11	0.711	<.001
3	12	0.669	<.001
3	13	0.518	<.001
3	14	0.786	<.001
3	15	0.305	<.001
4	16	0.760	<.001
4	17	0.710	<.001
4	18	0.778	<.001
4	19	0.737	<.001
4	20	0.702	<.001
4	21	0.628	<.001
5	22	0.703	<.001
5	23	0.727	<.001
5	24	0.708	<.001
5	25	0.563	<.001
5	26	0.635	<.001
6	27	0.567	<.001
6	28	0.728	<.001
6	29	0.788	<.001

Table 4
Covariance Matrix of Latent Factors in Confirmatory Factor Analysis Model

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Factor 1					
Factor 2	0.611*				
Factor 3	0.287*	0.142			
Factor 4	0.702*	0.639*	0.340*		
Factor 5	0.660*	0.802*	0.409*	0.711*	
Factor 6	0.673*	0.384*	0.296*	0.467*	0.569*

Note. * indicates significance at or below .005.

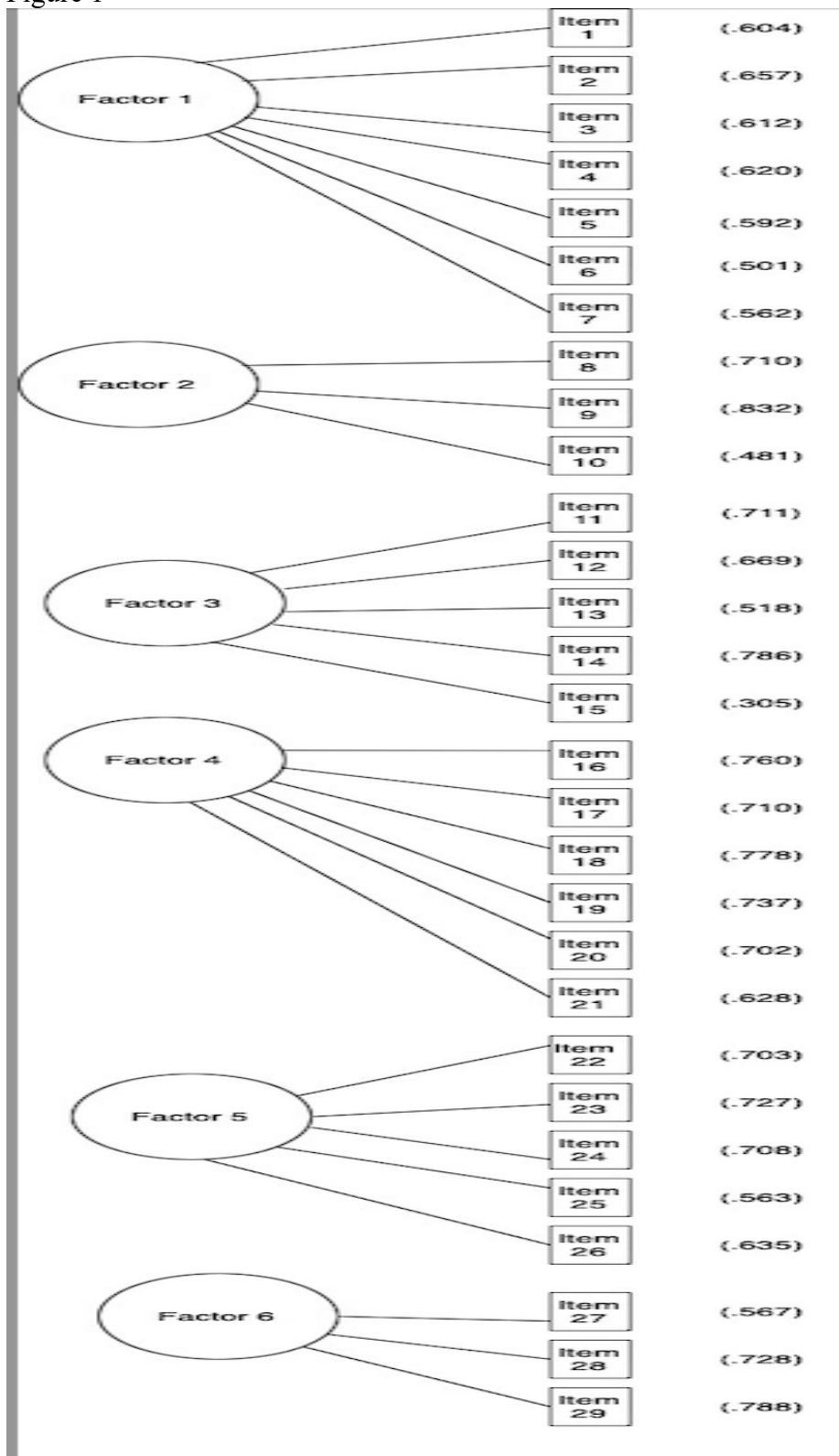
Table 5
Hierarchical Regression Analysis Predicting Multicultural Self-Efficacy with Sociodemographic Variables

Variable	β	t	p
Step 1			
Race	-5.422	-3.455	<.001*
Masters	1.594	.722	.471
EdD	6.092	1.453	.148
PsyD	4.211	1.423	.157
Years of Experience	.674	.568	.570
Race	-4.216	-1.92	.008*
Masters	2.147	.072	.323
EdD	6.571	-.113	.111
PsyD	2.767	.068	.346
Years of Experience	.773	.048	.506
Social Desirability	-.651	-.226	.002*

Table 6
Hierarchical Regression Analysis Predicting Multicultural Self-Efficacy with Multicultural Experiences and Multicultural Desires

Variable	β	t	p
Step 1			
Multicultural Desires	-1.282	-4.312	<.001*
Multicultural Experiences	-.478	-3.089	.002*
Multicultural Desires	-1.314	-4.621	<.001*
Multicultural Experiences	.424	-2.861	.005*
Social Desirability	-.785	-4.420	<.001*

Figure 1



Note. all of the items loaded significantly at $p < .001$