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## The Client Assessment of Multicultural Competent Behavior (CAMCB): Development and Validation.

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THE CLIENT ASSESSMENT OF MULTICULTURAL COMPETENT BEHAVIOR  
(CAMCB): DEVELOPMENT AND VALIDATION

by

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A dissertation submitted in partial fulfillment of the requirements  
for the degree of Doctor of Philosophy  
in the Department of Child, Family, and Community Sciences  
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## ABSTRACT

The significance of multicultural counseling competence (MCC) has been increasingly recognized in the literature on mental health. Cultural diversification in the United States has prompted greater research in specialized mental health needs among diverse populations. However, despite the specialized mental health needs, diverse cultural groups have faced challenges in finding multiculturally competent mental health services. Accordingly, mental health professions have placed a greater emphasis on the development of therapists' MCC through the training and education, but also made ongoing efforts to integrate MCC into evidenced-based treatment. However, the mental health professions have faced difficulty in exploring evidence for the validity of MCC in therapy, due to a measurement concern regarding MCC. Specifically, such measurement concern in the MCC literature is involved with the fact that there has not existed a client-rated instrument designed to measure therapists' actual MCC performance (i.e., multicultural competent behaviors) in therapeutic process. Therefore, the present study aimed to develop the *Client Assessment of Multicultural Competent Behavior* (CAMCB) and examine its psychometric properties with a sample of clients.

With a correlational research design, the present study involved two phases (Phase I and II) with a sample of diverse clients to inform the development and validation investigation of the CAMCB. Exploratory factor analysis (EFA;  $n = 280$ ) with the initial pool of 30 items resulted in a three-factor, 23-item CAMCB model. Subsequently, confirmatory factor analysis (CFA;  $n = 282$ ) was performed to cross-verify the three-factor, 23-item structure of the CAMCB (as identified from EFA) and accumulate evidence of its psychometric properties. CFA resulted in a final three-factor, 19-item CAMCB model with an acceptable model fit. The final CAMCB was

found to have good internal consistency reliability and initial evidence for convergent validity with the current data. Lastly, results from a multivariate analysis of variance (MANOVA) and one-way analysis of variance (ANOVA) indicated small but significant difference in the CAMCB total or subscale scores by some subgroups (e.g., race, gender, religion). Discussion of results, limitations of the present study, recommendations for future research, and implications for mental health professionals, researchers, and educators are provided.

Dedicated to my parents, brother, fiancé (Soo Hyun), and Remy, who have made me want for nothing, and who have taught how lucky I am.

“Try again, fail again, and fail better”

- Samuel Beckett -

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As I reflected back my journey so far, I have failed in many things in many ways. However, I have never given up trying again and failing again. And, as a developing counselor educator who will face a lot of new challenges, I promise to myself and the people who loves me that I will never give up trying again, failing again, and failing better. Loving you all.

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## CHAPTER ONE: INTRODUCTION

The importance of multicultural counseling competence (MCC) has received attention in the literature of mental health professions (Worthington, Soth-McNett, & Moreno, 2007). A cultural shift in the United States has led to greater research in the area of mental health counseling needs among diverse populations. Diverse cultural groups require specialized, culturally responsive mental health services that are often difficult for these groups to find (Hayes, Owen, & Bieshke, 2015; Sue, Cheng, Sadd, & Chu, 2012). To support clients from diverse cultural backgrounds, mental health professions mandate that therapists develop MCC. As such, MCC is endorsed by professional organizations, integrated into counselor education, training, practice, and research (American Counseling Association [ACA], 2014; American Psychological Association [APA] 2003; National Association of Social Workers [NASW], 2008).

The emphasis on MCC as an ethical and professional mandate is grounded in the premise that therapists who are more multiculturally competent provide more effective therapeutic services for all clients (Ponterotto, Fuertes, & Chen, 2000). However, the mental health professions have faced difficulty in establishing empirical evidence to support such a premise (Huey, Tilley, Jones, & Smith, 2014; Smith, Soto, & Griner, 2016; Worthington et al., 2007). Particularly, researchers in the professions have identified challenges such as the measurement design of the MCC as a major concern for the adoption of MCC into supported treatment (Owen, Leach, Wampold, & Rodolfa, 2011; Smith et al., 2016; Worthington et al., 2007).

Accordingly, the mental health professions have called for the development of reliable instruments that are based on measuring therapists' actual MCC performance (behaviors) from

clients' perspectives (Owen et al., 2011; Ridley & Shaw-Ridley, 2011; Smith et al., 2016; Tao, Owen, Pace, & Imel, 2015; Worthington & Dillon, 2011). Therefore, the purpose of this research is to develop and examine psychometric properties of *Client Assessment of Multicultural Competent Behavior* (CAMCB) scores, an innovative client-rated instrument designed to assess therapists' in-session multicultural competent behaviors in the context of therapeutic processes.

### Background of the Study

According to the 2010 census data, between the years 2000 and 2010, there was a 32% increase in the number of individuals who self-identified with two or more races (Humes, Jones, & Ramirez, 2011). Furthermore, the number of individuals from racial and ethnic minority groups is expected to exceed 57% of the population by 2060 (Colby & Ortman, 2014). In addition to racial diversification, sexual and gender diverse groups account for 4-6% of the United States population (Institute of Medicine [IOM], 2011). Religious minority groups (i.e., non-Christian faiths and unaffiliated groups) have grown by 8% from 2007 to 2014 (Pew Research Center, 2014). The anticipated increase in various culturally diverse groups underscores the importance of having multiculturally competent therapists, equipped to serve all communities, including those from diverse cultural backgrounds.

The importance of MCC has also been supported by a growing body of evidence. The extant research highlights the specialized mental health needs of culturally marginalized groups, as well as disparities among diverse communities in access to and quality of culturally responsive mental health services (Cabral & Smith, 2011; Hayes et al., 2014; Sue et al., 2012). For example, individuals from culturally marginalized groups often experience additive stressors

that amplify their risks of mental health problems, including depression and anxiety (Bostwick, Boyd, Hughes, & West, 2014; Cokley, Hall-Clark, & Hicks, 2011; Lee & Ahn, 2011) and suicidal ideation (Haas et al, 2011). Moreover, racial and ethnic minorities report lower rates of mental health service utilization than their white counterparts (Alegria et al., 2008; Chen & Rizzo, 2010; Lee, Martins, Keyes, & Lee, 2011). Researchers have documented a variety of sociocultural barriers, such as financial costs, service availability, and cultural stigma toward mental health issues that may contribute to the low utilization of the service (Scheppers et al., 2006; Sue et al., 2012). More importantly, even when individuals from minority groups have sought mental health services, they have faced challenges in finding counselors equipped with a multiculturally competent skill set (Abdullah & Brown, 2011; Cabral & Smith, 2011; Malgady, 2011).

An increasing body of research has indicated that some therapists report poor therapeutic outcomes and a lower rate of service retention with racial minority groups than white counterparts (Hayes et al., 2014; Imel et al., 2011; Owen, Imel, Adelson, & Rodolfa, 2012; U.S. Surgeon General, 2001). The quality of culturally responsive services may be ascribed to the therapists' ability to address cultural differences in help-seeking behaviors, conduct culturally sensitive diagnosis and evaluation, and identify differences in the expectations for mental health services among clients (Abdullah & Brown, 2011; Cabral & Smith, 2011; Malgady, 2011). Consequently, professional organizations representing the mental health professions have made efforts to integrate MCC into professional education, training, research, and practice (Worthington et al., 2007).

However, other than theoretical appeal and endorsements by professional organizations, there is limited empirical evidence supporting the value of MCC in the therapeutic process (Arredondo & Toperek, 2004; Coleman, 2004; Huey et al., 2014; Smith et al., 2016; Weinrach & Thomas, 2004; Worthington et al., 2007). In response to the identified concern, there has been an increasing effort to conduct investigations into MCC. While limited, several studies have reported that MCC is positively related to working alliance, satisfaction with counseling services, and therapeutic outcomes (Constantine, 2007; Fuertes et al., 2006; Larrison, Schoppelrey, Hack-Ritzo, & Korr, 2011; Li & Kim, 2004; Owen et al., 2011). Collectively, these studies have supported the validity of MCC in therapeutic processes and outcomes; however, there are methodological shortcomings related to the measurement of therapists' competencies that limit the value of supporting evidence.

For over three decades, the measurement concerns have been considered challenges in the movement of establishing empirical evidence supporting the validity of MCC (Ridley, Baker, & Hill, 2001; Tao et al., 2015; Worthington et al., 2007; Worthington & Dillon, 2011). One measurement concern surrounding MCC involves the overreliance on therapists' self-report measures. Researchers in the professions have pointed to the questionable validity of self-report measures for assessing therapists' actual multicultural competent practice (behaviors) in therapy (Constantine & Ladany, 2001; Ridley et al., 2001; Worthington et al., 2007).

Specifically, therapists' self-report measurements have been criticized for susceptibility to social desirability bias (Constantine & Ladany, 2000; Larson & Bradshaw, 2017; Pope-Davis & Dings, 1994; Worthington et al., 2000). In addition, the validity of the self-report measures to assess therapists' actual competencies in practice may be questionable (Ridley et al., 2001; Shue

& Lent, 2007; Worthington et al., 2007). Self-reported instruments are prone to measure therapists' perceived self-efficacy, rather than their actual ability to perform multiculturally competent behaviors and skills in practice (Constantine & Ladany, 2000; Ladany, Inman, Constantine, & Hofheinz, 1997; Shue & Lent, 2007). Therefore, while a relationship exists between therapists' self-efficacy scores and their behavior (Bandura, 1977; Larson & Daniels, 1998), overreliance on therapists' self-report instruments may fail to provide comprehensive information about therapists' actual ability in such therapeutic behavior.

Given the concerns, the mental health professions have called for the development of reliable measurements that focus on assessment of therapists' actual multicultural competent performance (Owen et al., 2011; Worthington et al., 2007), particularly from the clients' perspectives (Constantine, Kindaichi, Arorash, Donnelly, & Jung, 2002; Worthington & Dillion, 2011; Ridley & Shaw-Ridley, 2011). Since the purpose of MCC is to improve client outcomes and therapeutic engagement, it is important to understand the clients' perception of what constitutes multiculturally competent behaviors in therapy (Constantine, 2002; Fuertes, Bartolomeo, & Nichols, 2001; Pope-Davis et al., 2002; Ridley et al., 2011). However, at present, there is limited availability of reliable client-rated instruments designed to measure therapists' multiculturally competent behaviors in therapy (Owen et al., 2011; Ridley & Shaw-Ridley, 2011; Smith et al., 2016; Worthington & Dillon, 2011). Therefore, the purpose of this research is to develop a reliable client-rated instrument of therapists' multiculturally competent behaviors in therapy.

### History of Multicultural Counseling

The meaning of multicultural counseling has expanded for three decades. The multicultural counseling movement in the mental health professions began with exclusive focus on race and ethnicity. In the 1950s, desegregation laws prompted the mental health professions to discuss cultural consideration in the provision of mental health services for racial and ethnic minorities (Jackson, 1995). Subsequently, the civil right movements of the 1960s led to various controversies regarding mental health needs of racial and/or ethnic minority clients as well as the efficacy of mental health service for the clients (Harper, 2003; Jackson, 1995). In particular, scholars and researchers began to call into question traditional models of therapy and training for its failures to meet the distinctive needs of racial and ethnic minority clients (Korman, 1974; Pedersen, 1987; Sue, 1978; Sue & Sue, 1971; Wrenn, 1962).

During the 1970s and 1980s, one of the central controversies involved the challenge of the universal approach to mental health on which traditional models of therapy relied. The universal approach was based on cultural universalism (i.e., cultural etic) positing that all individuals operated on the common psychological process that are independent of culture. Therefore, the universal approach was grounded in the premise that basic counseling techniques should be sufficient and beneficial for both ethnic minority and majority clients (McFadden, 1996). The universal approach was challenged by the notion of cultural relativism, emphasizing the role of culture in human beings' psychological processes and behaviors (Pedersen, 1991). The primary tenet of culturally relativism emphasizes the necessary modification of counseling theories and techniques to reflect culturally-learned characteristics of clients. Using the notion of cultural relativism, scholars and researchers criticized the universal approach to mental health for



its theoretical basis on White middle-class criteria (Vontress, 1967; Wrenn, 1962) and for its failure to meet the needs of racial and ethnic minority clients (Korman, 1974; Sue, 1978; Sue & Sue, 1971, 1977). The professional criticisms related to the universal counseling approach led to a movement for inclusion of cultural consideration into training guidelines, for working with racial and ethnic minority clients. By the early 1980s, the first formal description of MCC were proposed in the mental health professions (Sue et al., 1982); however, despite increased recognition of multicultural counseling, the focus of multicultural counseling at the time still relied on a narrow definition of culture that included only race and ethnicity.

Beginning in the 1990s, cultural shifts resulted in an expanded definition of multicultural counseling that included individual diversity (Arredondo & Glauner, 1992; Pedersen, 1991), such as gender, sexual orientation, religion, language, etc. During this time, the concept of multicultural counseling developed into a generic counseling theory and was recognized as the fourth theoretical force in the mental health profession (Pedersen, 1991). As such, multicultural counseling evolved into its own theoretical perspective explaining the impact of various cultural identities on human behavior and the dynamic of culture in counseling relationships (Ivey, Ivey, & Simek-Morgan, 1993; Pedersen, 1991). Even today, multicultural counseling continues to expand its definition, incorporating various aspects of social justice (Lee, 2007; Ratts, Singh, Nassar-McMillan, Butler, & McCullough, 2016)

As multicultural counseling evolved into a theoretical force, the need for specific MCC received much attention (Worthington et al., 2007). In particular, the prominence of MCC has been amplified by rapid cultural diversification within U.S. populations (e.g., racial, gender, and religious diversity; Colby & Ortman, 2014; IOM, 2011; Pew Research Center, 2014). Moreover,

there is growing recognition of the need for distinctive mental health services for culturally marginalized groups (Bostwick et al., 2014; Cox et al., 2010) and current disparity in access to quality of mental health service (Alegria et al., 2008; Owen et al., 2012). As a result, the increased cultural diversification and acknowledgement of distinct mental health needs among diverse populations prompted the development of various models of multicultural counseling competencies necessary for working effectively with all clients.

Over the past 70 years, the concept of multicultural counseling has expanded to include not only race and ethnicity but also broader dimensions of cultural identity. The concept expanded as a way to explain the role of culture in clients' life experiences as well as the dynamics of the relationships. As the definition of multicultural counseling expanded, so did the understanding of constructs of MCC. The next section of this chapter presents various MCC models that will serve as the foundation for the development of a new client-rating assessment.

### Models of Multicultural Counseling Competence

Multiple models on MCC have developed within mental health professions. In general, MCC models have expanded their framework to address multiple dimensions of competence at multiple levels (e.g., individual, interpersonal, professional, organizational, and societal level). Each model has a unique framework that conceptualizes MCC based on therapists' characteristics, treatment and intervention, and therapeutic process. However, it should be noted that these distinctions are broad categorizations because dimensions of each model may overlap.

Models that are reviewed and utilized in counseling include: (a) *Tripartite Model of Multicultural Counseling Competencies* (Sue et al., 1982, 1992); (b) *Process Model of Cultural*

*Competence* (Lopez, 1997); (c) *Alternative Conceptualization of Multicultural Counseling Competence* (Constantine & Ladany, 2001); (d) *Multidimensional Model of Cultural Competence* (MDCC; Sue, 2001); (e) *Multicultural Orientation* (Owen, 2013); and (f) *Multicultural and Social Justice Competencies* (MSJCC; Ratts et al., 2016).

### Tripartite Model

Sue and colleagues (1982, 1992) developed the Tripartite Model of Multicultural Counseling Competencies, which is the most recognized and dominant framework guiding multicultural research, training, and codes of ethic endorsed by various mental health professions (ACA, 2014; APA, 2003; CACREP, 2016; NASW, 2008). The tripartite model conceptualizes MCC within three dimensions; (a) awareness (attitude and belief) – counselors’ awareness of their own assumptions, biases, and values; (b) knowledge – counselors’ understanding of the worldviews of culturally different clients; and (c) skills – counselors’ ability to develop and use culturally appropriate intervention and strategies. Since the first publication, the tripartite model (Sue et al., 1982) has undergone a serial of three subsequent revisions and theoretical expansions: (a) Awareness, Skill, and Knowledge Model (Sue & Sue, 1990); (b) Multicultural Counseling Competencies Model (Sue et al., 1992); and (c) Operationalization of the Multicultural Counseling Competencies (Arredondo et al., 1996).

The original tripartite model, *Cross-Cultural Competencies Model* (Sue et al., 1982) included 11 characteristics of culturally skilled counselors within three broad dimensions: (a) belief and attitude, (b) knowledge, and (c) skills. The original tripartite model was proposed to

mainly address the needs of four major racial and ethnic minority groups, (i.e., African Americans, American Indians, Asian Americans, and Hispanic Americans; Sue et al., 1982).

Sue and Sue (1990) expanded the original tripartite model to include three primary goals for culturally competent counselors: (a) raising awareness of their own assumptions, biases, and values; (b) better understanding of clients' worldviews and experiences in their cultural contexts; and (c) developing skills to identify intervention strategies and techniques that are culturally sensitive. The revised model (Sue & Sue, 1990) highlighted cultural competence as a developmental and aspirational process of achieving these three goals.

Sue, Arredondo, and McDavis (1992) proposed the *Multicultural Counseling Competencies Model*, expanding the theoretical foundation of the initial tripartite model (Sue et al., 1982). Combining the 1982 and 1990 models, Sue et al. (1992) developed a 3x3 matrix model of *characteristics* and *dimensions*. In the model, the three characteristics (Sue & Sue, 1990) were considered to be the main dimensions of MCC, followed by three sub-dimensions (i.e., belief and attitude, knowledge, and skills). Within the framework, Sue et al. (1992) organized a total of 9 competency areas under which a total of 31 multicultural counseling competencies were categorized.

Subsequently, Arredondo and colleagues (1996) attempted to operationalize the 31 competencies from the 1992 model by adding explanatory statements for each competency. Additionally, the authors shifted the focus of tripartite model toward the inclusion of different cultural groups based on gender, sexual orientation, religion, physical disability, socioeconomic status, etc. (Arredondo et al., 1996). As a result of the three revisions, the tripartite MCC model

(Sue et al., 1982; 1992) is identified as the dominant framework within the mental health professions.

### Process Model of Cultural Competence

Lopez (1997) developed the *Process Model of Cultural Competence* that emphasized an understanding of MCC within the framework of therapeutic processes in lieu of therapists' characteristics. Lopez (1997) viewed MCC as "the ability of the therapists to move between two cultural perspectives in understanding the culturally based meaning of clients from diverse cultural backgrounds" (p. 573). The model consisted of four dimensions of MCC in the context of therapeutic process: (a) engagement, (b) assessment, (c) theory, and (d) methods. Lopez conceptualized therapists' MCC as being reflected in their ability to incorporate clients' cultural perspectives within the therapeutic process (Lopez, 1997). Despite his re-conceptualization of MCC, Lopez's model failed to detail the process for operationalizing the four dimensions of MCC in the therapeutic processes. At present, Lopez model is considered a secondary model of MCC and is not widely utilized in the extant literature (Mollen, Ridley, & Hill, 2003).

### Alternative Conceptualization of Multicultural Counseling Competence

Constantine and Ladany (2001) proposed a six-dimension MCC model to address limitations of the Tripartite Model, expanding the conceptual framework of the Tripartite Model to incorporate common factors of the therapeutic process. Similar to Lopez, Constantine, and Ladany (2001) sought to clarify the role of MCC across various contexts of the therapeutic process. The model included six dimensions: (a) counselor self-awareness, (b) general

knowledge about multicultural issues, (c) multicultural counseling self-efficacy, (d) understanding of unique client variables, (e) an effective counseling working alliance, and (f) multicultural counseling skills (Constantine & Ladany, 2001, p. 490). However, dimensions underlying the model were less clearly defined and not subjected to validation studies.

### Multidimensional Model of Cultural Competence

Sue (2001) developed the *Multidimensional Model of Cultural Competence* (MDCC) to address issues identified in the literature of multicultural competence: lack of a common definition for MCC and an inadequate conceptual framework of the multiple facets of MCC. MDCC was composed of three primary dimensions, each with multiple sub-factors: (a) components of cultural competence with sub-factors of awareness of attitude and belief, knowledge, and skills, (b) foci of cultural competence with sub-factors of individual, professional, organizational, and societal levels, and (c) cultural group-specific worldviews with sub-factors of African American, Asian-American, Latino American, Native American, and European American (Sue, 2001). The MDCC model highlighted MCC for its ability to consider a combination of the primary dimensions and sub-factors. Sue (2001) developed MDCC model to be distinct from the Tripartite Model by including (a) the issue of social justice in the conceptualization of MCC, (b) an expanded conceptualization of personal identity, and (c) the additional dimension of foci of MCC.

### Multicultural Orientation Model

Owen (2013) proposed the *Multicultural Orientation Model* that reflected on counselors' way of being as a parallel, yet distinct, construct of MCC. Owen (2013) emphasized differences between multicultural orientation (MCO) and MCC by claiming that "multicultural orientation was considered a way of being with the client whereas multicultural competencies are viewed as a way of doing" (Owen et al., 2011, p. 274). The model consisted of three dimensions: (a) cultural humility, (b) cultural opportunities, and (c) cultural comfort (Owen, 2013). Cultural humility referred to therapists' attitude that involved humility and a respectful curiosity of clients' cultural heritage (Hook, Davis, Owen, Worthington, & Utsey, 2013; Tevalon & Murray-Garcia, 1998). Cultural opportunity involved therapists' ability to engage clients in exploring presenting concerns in relation to their cultural backgrounds. Cultural comfort was defined as therapists' ability to create a safe therapeutic environment where clients were likely to explore their cultural identities and experiences. In summary, the *Multicultural Orientation Model* provided a new way to conceptualize MCC, emphasizing counselors' predilection toward openness and consideration of clients' cultural experience and values.

### Multicultural and Social Justice Counseling Competencies Model

Ratts and colleagues (2016) proposed the *Multicultural and Social Justice Counseling Competencies* model (MSJCC) by addressing the limitations of the Tripartite Model and the evolution of MCC and social justice literature. The evolution resulted from an increased body of literature on: (a) intersectionality of identity, (b) the effect of oppression on mental health, (c) socioecological perspectives, and (d) social justice advocacy (Ratts et al., 2016).

The MSJCC model introduced three layers of framework to conceptualize multicultural and social justice counseling competencies (MSJCCs). The three layers of framework included *quadrants, domains, and competencies*. The four quadrants were introduced to articulate how power dynamics between counselors and clients change, depending on their privileged or marginalized statuses. Within each quadrant, Ratts and colleagues (2016) identified four developmental domains that represent the constructs of MSJCC. Within the domains, the authors defined four developmental competencies that guided counselors to develop within each domain.

Ratts and colleagues (2016) highlighted the developmental sequence of the MSJCC domains and competencies, indicating that MSJCC must begin to develop from within counselors (i.e., internal awareness) and resulting in demonstrable practice of MSJCC. As compared to the Tripartite Model, the MSJCC included the issue of counselor-client interaction as an influential aspect of the therapeutic process. Furthermore, Ratts and colleagues (2016) added the competency action to emphasize the importance of the behavioral aspects of MSJCC to operationalize the three existing competencies (i.e., attitude and belief, knowledge, and skill).

### Existing Instruments of Multicultural Counseling Competence

Multiple instruments were developed based on the aforementioned multicultural competence models. Of the instruments, many were therapists' self-report measures of MCC concepts (i.e., multicultural awareness, knowledge, skills, and/or behaviors) based on the Tripartite Model. However, a few of the self-report instruments assessed parallel constructs to MCC, rather than MCC directly. Within the extant literature, only three client-rated instruments were identified that assessed therapists' MCC or related concepts. The two primary client-rated



instruments are the *Cross-Cultural Counseling Inventory-Revised* (CCCI-R; LaFromboise, Coleman, & Hernandez, 1991) and the *Multicultural Therapy Competency Inventory-Client Version* (MTCI-CV; Cole, Piercy, Wolfe, & West, 2014). The third client-rated instrument is the *Cultural Humility Scale* (CHS; Hook, Davis, Owen, Worthington, & Utsey, 2013) that was designed to assess a related concept of MCC. For the purpose of the present research, the researcher will focus the present review to the existing client-rated instruments (either originally developed for or adopted as such) that are to measure therapists' MCC or related concepts.

#### Existing Therapists' Self-Report Instruments

In Chapter 1, the researcher lists therapists' self-report instruments designed to measure therapists' MCC and/or parallel constructs to MCC (Table 1). The listed instruments include the mostly utilized therapists' self-report instruments in the literature as well as those that indirectly inform the development of CAMCB. In Chapter Two, the researcher provides a more thorough review on the therapists' self-report instruments.

Table 1

## List of Therapists' Self-Report Instruments

Author(s)	Year	Name
D'Andrea, Daniels, & Heck	1991	Multicultural Awareness, Knowledge, and Skills Survey (MAKSS)
Sodowsky, Taffe, Gitlin, & Wise,	1994	Multicultural Counseling Inventory (MCI)
Ponterotto, Gretchen, Utsey, Rieger, & Austin,	2000	Multicultural Counseling Knowledge and Awareness Scale (MCKAS)
Sheu & Lent	2007	Multicultural Counseling Self-Efficacy Scale-Racial Diversity Form (MCSE-RD)
Ancis, Szymanski, & Ladany,	2008	Counseling Women Competencies Scale (CWCS)
Dailey, Robertson, & Gill	2015	Spiritual Competency Scale (SCS)

## Existing Client-Rated Instruments

Cultural Humility Scale.

The *Cultural Humility Scale* (CHS; Hook et al., 2013) is a 12-item, client-rated instrument that measures a related construct of therapists' MCC, cultural humility, that is a dimension of multicultural orientation (MCO). The concept of cultural humility involves the capability of therapists to develop an interpersonal stance that underscores the demonstration of respectful curiosity and openness toward aspects of clients' cultural identity and values (Davis, Worthington, & Hook, 2010; Hook et al., 2013). The CHS was developed based on the MCO model (Owen, 2013) and consisted of two factors, including positive other-oriented and negative self-oriented (Hook et al., 2013). Each item is rated on a 5-point Likert scale ranging from 1

(*strongly disagree*) to 5 (*strongly agree*). Internal consistency for the CHS 12 items was .93 and were .93 and .90 for two subscales (i.e., the positive other-oriented and the negative self-oriented, respectively). The developers reported evidence of concurrent validity of the CHS with clients' perception of therapists' MCC and working alliance, as well as predictive validity with the improved client outcome (Hook et al., 2013). However, given that the purpose of the CHS was to measure therapists' orientation toward multicultural competence (i.e., multicultural orientation), the instrument was not designed to measure therapists' multicultural competent behaviors in practice.

#### Cross-Cultural Counseling Inventory-Revised.

The CCCI-R (LaFromboise et al., 1991) is a 20-item instrument that was developed for use by observers or supervisors in assessing their supervisees' MCC. The 20 items are rated on a 6-point Likert scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). The CCCI-R was developed to assess the three dimensions of MCC in the Tripartite Model (i.e., belief and attitude, knowledge, and skills; Sue et al., 1982). The CCCI-R has been utilized in more than 70% of multicultural research in relation to variables such as working alliance, satisfaction, session depth, client outcome, and general counseling competence (Owen et al., 2011; Tao et al., 2015; Worthington et al., 2007).

The authors conducted three studies to investigate the factor structure and psychometric properties of the CCCI-R (LaFromboise et al., 1991). Internal consistency for the CCCI-R was found to be .95 for the 20 items, with correlations among items ranging from .18 to .73 ( $N = 86$ ). Studies reported evidence of content validity for the CCCI-R through the examination of expert

raters (LaFromboise et al., 1991; Sanbani & Ponterotto, 1992). Evidence of criterion-related validity was found through the observers' ratings of counselors identified as possessing high levels of MCC (LaFromboise et al., 1991). The CCCI-R was originally developed with three factors; cultural counseling skills, sociopolitical awareness, and cultural sensitivity (LaFromboise et al., 1991). However, due to the high loading of 19 items on the first factor, researchers consider the CCCI-R to be a unidimensional scale (one single score; LaFromboise et al., 1991; Ponterotto et al., 1994).

Despite its original purpose for use by supervisors, the CCCI-R has been adapted for use as a client-rated instrument through revisions of wording, subject, and content of items (Drinane, Owen, Adelson, & Rodolfa, 2016). However, the content validity of the adapted CCCI-R is questionable. A recent study recruited content experts ( $n = 19$ ) to examine the content validity of the adapted 20 items. Of the items examined, only 7 were identified to be viable for rating by clients (Drinane et al., 2016). Additionally, the validity of the client-version of the CCCI-R is questionable at assessing therapist's multicultural competent performance (behaviors) in therapy (Constantine & Ladany, 2007; Owen et al., 2011). Critics of the instrument identified a lack of behavioral indicators, specificity, and contextualization to relevant multicultural counseling contexts as limiting factors (Owen et al., 2011; Ridley & Shaw-Ridley, 2011). The limitations of CCCI-R have led some researchers to conclude that the instrument may more accurately measure therapists' orientation toward MCC, rather than their actual practice (Owen et al., 2011; Ridley & Shaw-Ridley, 2011; Tao et al., 2015).

### Multicultural Therapy Competency Inventory – Client Version.

The MTCI-CV (Cole et al., 2014) is a 32-item instrument that was developed for use by clients in assessing therapists' level of multicultural competence. The 32 items were rated on the following 3-point Likert scale ranging from 1 (*does this very well*) to 2 (*does this adequately*) and to 3 (*does this poorly*). The lower score reflects the higher level of therapists' MCC. The MTCI-CV was based on different models of MCC to be inclusive of six factors reflecting the cognitive and process dimensions of MCC (Dyche & Zayas, 1995; Seedall, Holtrop, & Parra-Cardona, 2013; Sue et al., 1992; Tervalon & Murray-Garcia, 1998). Analysis of the psychometrics features of the MTCI-CV indicated a coefficient reliability of .98, as well as a unidimensional factor structure, similar to CCCI-R (Cole et al., 2014). Despite the thorough validation process, several limitations in the MTCI-CV were noted by the developers; (a) homogeneous sample, (b) limited evidence of validity, and (c) multi-collinearity (Cole et al., 2014). Moreover, the validity of MTCI-CV as a client-rated instrument of MCC is questionable because of a lack of behavioral indicators and contextual specificity within the items.

### Statement of the Problem

MCC is an ethical and professional mandate for working effectively with all clients (ACA, 2014; APA, 2010; CACREP, 2016; NASW, 2008). The importance of MCC is supported by the cultural diversification in the U.S. population as well as disparities among diverse cultural communities in accessing to multiculturally competent mental health services (Colby & Ortman, 2014; Sue et al., 2012; Hayes et al., 2014). Despite the importance, there is limited evidence indicating that multicultural competent therapists work more effectively with all clients.

Particularly, concerns regarding the measurement of therapists' MCC are a barrier to the validation of MCC in therapeutic processes.

Attempts to evaluate the role of MCC in the therapeutic process have been assessed by instruments that focus on the therapists' self-efficacy in demonstrating multicultural competent behaviors. Despite the association between self-efficacy and behaviors (Bandura, 1977; Larson & Daniels, 1998), measures of self-efficacy in MCC may not directly measure demonstrated multicultural competent behaviors. An alternative design proposed in the literature uses client-rated instruments to evaluate therapists' MCC in practice. However, existing client-rated instruments have a variety of design limitations; including a lack of behavioral indicators and contextual specificity within instrument items. Consequently, at present, few reliable client-rated instruments exist to measure therapists' multicultural competent behaviors in practice. Therefore, further research is needed to advance a reliable instrument that is designed to measure client's perception of their therapists' MCC in practice.

### Significance of the Study

The researcher addresses the measurement concerns in literature of the mental health professions by developing a client-rated instrument designed to measure therapists' multiculturally competent behaviors in the context of the therapeutic processes. The client-rated instrument can contribute to the understanding of how competence in the areas of cultural awareness, knowledge, and skills manifest in counselor's practice. Specifically, the instrument measures client perceptions of therapists' multiculturally competent behaviors throughout the therapeutic process. As such, the instrument can aid in identifying specific multicultural

competent behaviors and skills that are important for working effectively with all clients. Additionally, the client-rated instrument could be used to explore the effect of multicultural competent behaviors on the therapeutic process and client outcomes in subsequent studies. Particularly, given the instrument item's behavioral specificity and contextualization to therapeutic process, the present instrument may serve to clarify covariance between MCC and similar therapeutic constructs (e.g., working alliance and general counseling competencies). In terms of training, the instrument could be adapted into an observer-rated format which would allow therapist educators and supervisors to provide specific behavioral feedback to supervisees. Lastly, the instrument could be used with other MCC instruments to study how therapists translate multicultural awareness, knowledge, and self-efficacy into in-session behaviors.

### Purpose and Research Questions

Despite the evolving nature of MCC and various theoretical models, scholars and researchers agree that MCC is multidimensional in nature (Arredondo et al., 1996; Hook et al, 2013; Owen, 2013; Ratts et al., 2016; Sue et al., 1992). Therefore, the researcher followed the same multidimensional assumption, related to MCC, while developing the instrument for this study. To wit, the researcher hypothesized that the *Client Assessment of Multicultural Competent Behavior* (CAMCB), which incorporates different dimensions of multicultural competent behaviors that are contextualized and specified in therapeutic process, will yield a multidimensional factor structure of multicultural competent behavior.

However, given the exploratory nature of the study, and its emphasis on the factor structure of CAMCB, the researcher does not propose specific hypotheses about the factor

structure of the model (Mududu & Sink, 2013). Instead, the researcher developed the following research questions to support the exploration of the CAMCB. The specific research questions that the researcher investigated in this dissertation included the following:

#### Research Question 1

What is the factor structure of the items on the CAMCB with a sample of clients?

#### Research Question 2

What are psychometric properties of the CAMCB scores with a sample of clients?

#### Researcher Question 2a

What is the internal consistency reliability of the CAMCB scores with a sample of clients?

#### Research Question 2b

What is the relationship between the CAMCB scores with Cross-Cultural Counseling Inventory-Revised-7 scores (examining convergent validity)?

#### Research Question 2c

What is the relationship between the CAMCB scores and Working Alliance Inventory scores (examining convergent validity)?



### Research Question 2d

What is the relationship between the CAMCB scores and Marlowe-Crowne Social Desirability Scale scores (examining social desirability of clients' response)?

### Research Question 3

What is the difference between the CAMCB score and participants' demographic and background data?

### Research Design

The research design for the investigation was a correlational design (Gall, Gall, & Borg, 2007). Since the purpose of this investigation was to examine the relationships between variables without manipulation, a correlational design was deemed appropriate. This research investigation focused on developing the CAMCB and examining the psychometrics properties (i.e., reliability and validity) of the data with a sample of clients. Particularly, this research involved two phases to inform the development and validation of the CAMCB: Phase I included the initial development and the pilot test of the CAMCB to improve the content-oriented evidence of validity; and Phase II involved the administration of the CAMCB to a development sample to collect data necessary for quantitative validation. Detailed descriptions of the development procedure (i.e., Phase I and II) are presented in Chapter Three of this dissertation.

### Population and Sampling Procedure

This research aimed to include a target population of clients who received mental health services in the United States. The accessible population was a sample of clients from various mental health service environments (i.e., community-based, university-based, and private mental health centers) in the Southern United States. Additionally, the researcher utilized a web-based tool to solicit involvement by participants outside of the accessible geographic area who self-identified as having received therapeutic services.

For the sampling method, the researcher used a non-probability, convenience sampling procedure (Gall et al., 2007) with eligibility criteria. The specific eligibility criteria for participation in this study were: (a) age 18 or older; (b) currently receiving mental health services or have received mental health services within the past four weeks; (c) have completed at least three sessions with their therapists; and (d) utilized any modality of mental health service (e.g., individual, couple and family, psychoeducational group, and career counseling). Three modes of data collection procedure were used; (a) face-to-face contact and face-to-face administration with pencil-and-paper questionnaire, (b) face-to-face contact and self-administration with electronic version of assessments, and (c) online contact and online administration with electronic version of assessments. Details in data collection procedure are presented in the following section of data collection procedure.

Despite the various recommendations regarding the minimum sample size for factor analysis, it is in general agreement in the methodological literature that the sample size should be determined based on the number of participants to the number of scale items ratio (Costello & Osborne, 2005; Hair et al., 2010; Mvududu & Sink, 2013). For the social sciences,

participant/item number ratios of 10:1 or 20:1 are considered appropriate (Hair et al., 2010; Mvududu & Sink, 2013). However, Costello and Osborne (2005) indicated that the majority (62%) of studies using EFA relied on a 10:1 or less ratio on average. Therefore, following the recommendation in the literature (Costello & Osborne, 2005; Hair et al., 2010; Mvududu & Sink, 2013), the researcher aimed to establish a 10:1 participants/item ratio to conduct exploratory factor analysis (EFA) and confirmatory factor analysis (CFA).

Given the number of the CAMCB total items (i.e., 30 items), the researcher aimed to obtain a sample of 600 client participants and then randomly split the sample in half, which allowed for a 10:1 ratio for EFA as well as the sufficient sample size for CFA. Sufficient sample size for CFA varies, but 250 or larger is considered sufficient to conduct CFA (MacCallum, Widaman, Zhang, & Hong, 1999; Schumacker & Lomax, 2016).

### Instrument Development Procedures and Instrumentation

The purpose of the present research investigation was to develop the CAMCB instrument and examine its psychometric properties (e.g., reliability and validity). In addition, the researcher developed a general demographic form to obtain basic background information relevant for use in the analysis. Prior to recruitment and data collection, the present research investigation obtained approval from the university's Institutional Review Board (IRB; Appendix A). All participants were provided with a letter of informed consent outlining the purpose, procedures, and any associated risks prior to participating in the study (Appendix B).

Development of the CAMCB consulted a combined recommendation for steps in scale development (American Educational Research Association [AERA], American Psychological Association [APA], & National Council on Measurement in Education [NCME], 2014; Crocker & Algina, 2008; DeVellis, 2017; Dimitrov, 2012; Kline, 2005; Wolfe & Smith, 2007). Specific steps in the development of the CAMCB involves the following steps: (a) determining clearly what is being measured, (b) creating an initial pool of items, (c) determining the response format, (d) having the items reviewed by a team of experts, (e) pilot-testing the instrument with a sample of population, (f) revising the instrument based on findings collected from the pilot test, (g) considering inclusion of validation items, (h) administering the revised instrument to a development sample, (i) evaluating the performance of items following statistical analysis, and (j) optimizing scale length on reliability. Details of each step are presented in Chapter Three.

The current research included four instruments and a demographic questionnaire: (a) the CAMCB (see Appendix D); (b) *Cross-Cultural Counseling Inventory-Revised-7* (CCCI-R-7; Drinane et al., 2016; LaFromboise et al., 1991; see Appendix E); (c) *Working Alliance Inventory-Short Form Revised* (WAI-SR; Hatcher & Gillaspay, 2006; see Appendix F); (d) *Marlowe-Crowne Social Desirability Scale* (MCSDS-X1; Strahan & Gerbasi, 1972; see Appendix G); and (e) a demographic questionnaire (see Appendix C). The first instrument was the CAMCB which was developed in this research investigation. The second and third instrument, CCCI-R-7 and WAI-SR, were included to explore evidence for convergent validity of the CAMCB. The fourth instrument, the MCSDS-X1, was to examine role of social desirability in participants' response to the CAMCB. And the fifth instrument, a demographic questionnaire, was administrated to

obtain participants' background information as well as relevant data for use in the analysis for this research. A brief description of each instrument is provided in the following section.

### Client Assessment of Multicultural Competent Behavior

This research investigation involved developing and psychometrically examining the instrument CAMCB scores. The CAMCB was a client-rated instrument designed to assess therapists' multicultural competent practice in the context of therapeutic process, through a clients' perspective. The CAMCB had two purposes in its function, serving as a tool to obtain clients' perceptions about their therapists' multicultural competent behaviors that influence their therapeutic process and as a mechanism for further studies on the effects of multicultural competent behaviors on the therapeutic process and outcomes.

A thorough description of item development and refinement are presented in Chapter Three. Following expert reviews and a pilot study, the item pool of the CAMCB included 30 items scored on a 5-point Likert scale ranging from 1 (*Strongly Agree*) to 5 (*Strongly Disagree*). The CAMCB measures therapists' multicultural competent behaviors in the context of the therapeutic process within the following four dimensions: (a) multicultural therapeutic relationships, (b) multicultural assessment, (d) multicultural case conceptualization and goal setting, and (e) multicultural intervention. A manual for the CAMCB was created to outline the theoretical framework used in the instrument's development, as well as to describe procedures for the administration and scoring of the CAMCB. Additionally, the manual contains detailed operationalization of dimensions and operationalized definitions for each item.

### Cross-Cultural Counseling Inventory-Revised-7

The *Cross-Cultural Counseling Inventory-Revised-7* (CCCI-R-7; Drinane et al., 2016; LaFromboise et al., 1991) is a revised version of the original client-rated Cross-Cultural Counseling Inventory-Revised instrument (LaFromboise et al., 1991). The CCCI-R-7 includes seven items that were retained from the content validation of the original 20 items (Drinane et al., 2016). The instrument's seven items are rated on a 6-point Likert scale, ranging from 1 (*Strongly Disagree*) to 6 (*Strongly Agree*), yielding a total score of 7 to 42. Content validation of the revised CCCI-R-7 supported use as a client-rated instrument, while capturing important factors of therapists' MCC (Drinane et al., 2016). Internal consistency for the seven-item scale was .91, with all item being loaded onto one factor (Drinane et al., 2016). The CCCI-R-7 was found to have evidence of convergent and yet discriminant validity ( $r = .43, p < .001$ ) when compared to an existing instrument measuring working alliance (Drinane et al., 2016).

### Working Alliance Inventory-Short Form Revised

The *Working Alliance Inventory-Short Form Revised* (WAI-SR; Hatcher & Gillaspay, 2006) is a 12-item instrument that is a revised short version of the Working Alliance Inventory (WAI; Horvath & Greenberg, 1989) and Working Alliance Inventory-Short Form (WAI-S; Tracey & Kokotovic, 1989). The WAI-SR was designed to assess the respondents' perception of the level of working alliance between therapists and clients. The WAI-SR consists of three subscales that represent essential factors of working alliance: (a) Goal, (b) Task, and (c) Bond. Each item is rated on 5-point Likert scale ranging from 1 (*seldom*) to 5 (*always*), with the half of items being positively worded while the other half was negatively worded. Higher scores represent

stronger working alliances between therapists and clients. The internal consistency of the WAI-SR ranged from .91 to .92 for the 12 items as well as from .85 to .90 for the subscales, with test-retest reliability of .93 (Hatcher & Gillaspy, 2006). Convergent and predictive validity of the WAI-SR was identified through comparisons with other measures of working alliance and client outcomes (Hatcher & Gillaspy, 2006; Horvath, Del Re, Flückiger, & Symonds, 2011).

### Marlowe-Crowne Social Desirability Scale

The third instrument, *Marlowe-Crowne Social Desirability Scale* (MCSDS-X1; Strahan & Gerbasi, 1972), is a 10-item instrument designed to assess respondents' social desirability. The MCSDS-X1 is a shortened version of the original 33-item Marlowe-Crowne Social Desirability Scale (MCSDS; Crown & Marlowe, 1960). The MCSDS-X1 uses a dichotomous scale (*True* or *False*). Items that are designed to be socially desirable responses are scored as 1. Total score on the instrument ranges from 0 to 10, with higher scores indicating that participants respond in a more socially desirable way. The internal consistency of the MCSDS-X1 ranged from .50 to .88 (Ballard, 1992; Barger, 2002; Fischer & Fink, 1993; Strahan & Gerbasi, 1972).

### Demographic Questionnaire

A demographic questionnaire was developed to gather demographic information about participants as well as relevant background information for use in the research investigation. The questionnaire collected various demographic information of client participants (e.g., gender, age, race and/or ethnicity, and religion or spirituality). In addition, the demographic questionnaire included questions that elicited relevant

background information for this research related to experience in therapy, including: therapy modalities, types of therapists, level of satisfaction with therapy, and culturally-based presenting concerns.

### Data Collection Procedure

Data collection procedure were conducted in three modes: (a) face-to-face contact and face-to-face administration with pencil-and-paper questionnaire, (b) face-to face contact and self-administration with electronic version of assessments, and (c) an online contact and online administration with electronic version of assessments. The researcher employed a mixed mode of data collection to represent more demographically diverse participants, increase the overall sample size, and enhance the generalizability of the study.

Data collection occurred between November 17<sup>th</sup>, 2017 to April 2<sup>nd</sup>, 2018. For the face-to-face contact/face-to face administration, the researcher visited a variety of mental health service centers in the Southern United States (e.g., community-based and university-based) and recruited client participants from the centers via in-person contact. Participants who consented to participating in the study were asked to complete a paper-and-pencil version of a demographic questionnaire and a battery of four instruments in a reserved room, in the presence of the researcher. For the out-of-state community-based mental health centers, directors in the centers recruited client participants and administered the instruments.

The self-administration with electronic version of questionnaire method was used for client participants recruited from the mental health centers who were not immediately able to complete the paper-and-pencil survey or wanted to complete it at their home. The researchers



created an electronic version of the demographic questionnaire and instruments using Qualtrics (Qualtrics Labs, Inc., 2012). During face-to-face contact, the participants received a brochure with an online link and QR code to the Qualtrics survey. They participated in the study at their own convenience by typing the link or scanning the QR code. Participants received a \$3 gift card as monetary compensation for their participation in the study. Lastly, for the online survey administration, client participants were recruited through a web-based tool for participant recruitment, Amazon's Mechanical Turk (MTurk; Buhrmester, Kwang, & Gosling, 2011). A description and eligibility criteria for the study was published in MTurk to recruit participants. The participants recruited from MTurk were redirected to an online survey system (Qualtrics) to complete the electronic version of the instruments. MTurk participants received a monetary compensation of \$1.00 for their completion of the instruments.

Factor analysis was utilized to examine the underlying relationship among the CAMCB items (Spearman, 1939). Specifically, given the exploratory nature of this study, EFA was utilized to analyze the internal structure (i.e., underlying factor structure) of the CAMCB that underlies observed variables (Mvududu & Sink, 2013). Subsequently, CFA was utilized to cross-verify the identified factor structure from EFA and accumulate evidence of its validity (AREA et al., 2014; Brown, 2015).

### Ethical Consideration

The present research investigation followed ethical guideline. Before conducting data collection, the researcher obtained university IRB approval (Appendix A) for all aspect of the study, including the research protocol, participants' informed consent, and sampling and analysis

procedures. In addition, prior to data collection, the researcher verbally explained to potential participants the purpose of the study and study procedures, and provided them with a letter of informed consent. All research personnel involved in this study completed Collaborative Institutional Training Initiative (CITI) Research training prior to data collection. To ensure confidentiality, participants were provided with a research number so that no personally identifying information was recorded on study documents. All results from the present research will be reported without any identifying information about participants. Lastly, the present study did not involve any foreseeable risks and/or discomforts to participants.

#### Potential Limitations of Study

Several limitations should be considered when interpreting results from this study. First, an ideal sample size of 600 participants was not able to be secured, which may affect the data analysis and confound the results. Another expected limitation is the generalizability of the data. For example, client participants were recruited through convenience sampling, which limits generalizability of the study. Additionally, despite the use of three modes of data collection, the researcher could not achieve a diverse representation of participants in terms of (a) demographics, (b) therapeutic modality, and (c) types of mental health professionals that they worked with. Third, although MTurk was considered an effective data collection strategy in social science that allowed for more demographically diverse participants, there was no guarantee that the MTurk effectively limited participation to those meeting the eligibility criterion. Fourth, since there was limited extant research on therapists' multicultural competent behaviors in the therapeutic process, the CAMCB may not have captured the range of

multicultural competent behaviors in practice. Finally, despite the cross-verification of CFA on the CAMCB, a replication study with an independent sample should be conducted for the finalized CAMCB.

### Chapter Summary

This chapter described the procedures used to develop a client-rated instrument to assess therapists' multicultural competent behaviors in the therapeutic process. A brief review of the literature in MCC, including the history of multicultural counseling and increasing importance of MCC, were presented within this chapter. Moreover, the chapter addressed the problems and gaps in the literature of MCC measurements and presented the rationale for the development of a reliable client-rated instrument to assess therapists' demonstrated multiculturally competent behaviors in practice. Lastly, the chapter provided brief information regarding the purpose and significance of the study and concluded with a description of research methodology and data analysis procedures for the development of the instrument. Chapter Two will present a literature review on (a) the history and theoretical foundations of multicultural counseling and MCC, (b) the increased importance of MCC in the therapeutic process, (c) definition of key terms, (d) existing body of empirical research on MCC, (e) existing models and instruments of MCC, and (f) theoretical dimensions of multicultural competent behaviors within the context of therapeutic process.

## CHAPTER TWO: LITERATURE REVIEW

Chapter two provides an overview of the history of multicultural counseling including increased importance of MCC. Specifically, this chapter includes a discussion of (a) the historical paradigm of multicultural counseling and competence, (b) the theoretical foundation of MCC, (c) the importance of MCC, (d) a definition of key terms, (e) empirical evidence regarding MCC, (f) models and instruments of MCC, and (g) different dimensions of multicultural competent behaviors in the context of therapeutic process. The rationale for new clients' rating measures of multicultural competent behavior are also discussed.

### Historical Overview

#### Historical Paradigm of Multicultural Counseling

##### Origin of Multicultural Counseling – 1960s.

According to Jackson (1995), the origin of the multicultural counseling movement emerged from social justice movements beginning in the late 1950s and 1960s. During these times, the United States was in a period of social transformation inspired by desegregation laws and the civil rights and women 's movements (Harper, 2003). The landmark desegregation law in the case of Brown v. Board of Education (1954) prompted the civil rights and women equal rights movement of the 1960s. Organized groups led the social justice movements to protest racism embedded in the sociocultural structure of the U.S. Particularly, the Civil Rights Act in 1964 revealed multiple inequalities and discrimination across various aspects of society (e.g.,

education, employment, and health cares) to minority groups because of their cultural backgrounds (e.g., race, ethnicity, and gender).

Consequently, the series of the 1960s social movements and societal changes in the prompted mental health professionals to recognize *scientific racism* (i.e., Euro-centric assumptions rooted in counseling approaches and theories). This recognition of the Euro-centric value in counseling led to academic debates about cultural considerations regarding the mental health needs of and efficacy of the mainstream counseling approaches for racial and/or ethnic minorities (Harper, 2003; Jackson, 1995; Vontress, 1967; Wrenn, 1962). For example, Wrenn introduced the phrase, culturally encapsulated counselors, to highlight counselors who were not prepared to work with racial minority clients. Vontress also initiated an academic dialogue about cross-cultural counseling with the use of a new phrase, culturally different, substituting it for existing terms such as culturally deprived or disadvantaged. This initial recognition and discussion about cultural issues in counseling continued to expand in 1970s.

#### Emergence of Scholarship in Multicultural Counseling – 1970s.

During the 1970s, there was a significant rise in academic discussion regarding the adequacy of the universal approach to mental health. The universal approach involves cultural universalism (i.e., cultural etic), hypothesizing that all individuals' experiences and behaviors are governed by the same psychological process across cultures. Proponents of the universal approach criticized attempts to modify counseling skills and knowledge for use in different cultures, observing that counseling must be effective for all clients of any cultural backgrounds (McFadden, 1996). However, the premise of the universal approach clashed with the idea of

cultural relativism which underscored the unique role of culture in individuals' psychological process (Pederson, 1991).

Scholars who espoused cultural relativism challenged the universal approach to mental health for its theoretical ground on the dominant culture of the White middle-class (Pederson, 1991). Sue and Sue (1971) criticized the invalidity of the universal approach to identity development and mental health by describing its failure to explain the unique process of identity formation for Chinese Americans. Sue and Sue (1977) also pointed out that certain counseling skills (e.g., confrontation) were built upon Eurocentric values and were not applicable for clients from non-European cultural groups. Additionally, researchers raised questions about the effectiveness of the universal approach for serving the distinctive needs of racial and/or ethnic minorities (Korman, 1974; Sue, 1977; Sue & Sue 1971). For example, Sue (1977) highlighted the ineffectiveness of the universal counseling treatments on racial/ethnic minorities, highlighting that racial minorities reported higher rates of early termination than did their White counterparts. The critique of the universal counseling approach contributed to giving consideration to culture in training models for therapists (Atkinson, Morten, & Sue, 1979; Korman, 1974; Sue, 1978). Finally, at the 1973 Vail Conference, attending mental health professionals passed an initial resolution that counselor preparation programs must teach counselors-in-training cultural issues and content in counseling (Korman, 1974).

#### Gaining Momentum and Initial Exploration of Multicultural Counseling – 1980s.

During the 1980s, a growing body of literature began to address what constituted MCC when working with racial/ethnic minority clients. Sue and colleagues (1982) made the first

formal presentation in the mental health profession with their position paper on cross-cultural counseling competencies. This document described 11 cross-cultural competencies necessary for working effectively with racial and/or ethnic minority clients. These 11 competencies were conceptualized using three dimensions (attitude and belief, knowledge, and skills) and served as a foundation for MCC research and practice over the following three decades.

Another multicultural movement during the 1980s involved the discussion of including cultural consideration into professional ethical codes and training guidelines. Scholars and researchers advocated for extending the existing ethical codes to address the distinctive concerns of racial/ethnic minority and including cultural consideration in the areas of counselor training, research, assessment, and practice (Casas, Ponterotto, & Guterrez, 1986; Ibrahim & Arredondo, 1986). Although these requests for changes were not reflected in the ethical standards of American the Association for Counseling and Development (AACD, 1998), they served as a catalyst for inclusion of cultural considerations into counselor preparation and ethical codes in 1990s.

In the late 1980s, there was also a paradigm shift from a narrow focus of multicultural counseling for racial minority groups to more inclusion of other cultural groups (e.g., sexual and gender minority groups). Some scholars and researchers called for expanding the scope of multicultural counseling to include all cultural marginalized groups (Dworkin & Gutierrez, 1989; Lee, 1989). This paradigm shift toward inclusion of all cultural groups laid the groundwork for the theoretical expansion of multicultural counseling in the 1990s.

### Expansion and Maturation of Multicultural Counseling – 1990s.

During the 1990s, multicultural counseling expanded its definition to address individual diversity and within-cultural differences (Arredondo & Glauner, 1992; Pedersen, 1991). This expanded definition of multicultural counseling was inspired by a shift in emphasis toward broadening the definition of culture. With the increased diversification of the U.S. population and social inclusion that occurred during the 1990s, the narrow definition of culture, which only included race or ethnicity, gradually expanded to include individual and sociocultural diversity such as sexual orientation, gender, socioeconomic status, disability, religion and spirituality, political orientations, nationality, language, etc. (Ho, 1995; Pedersen, 1991; Segal, Desan, Berry, & Poortinga, 1990). For example, Pedersen (1991) suggested a broad definition of culture that embraced demographic (e.g., age, gender), social status (e.g., socioeconomic status, education), affiliation (e.g., informal and formal), as well as racial and ethnic backgrounds. Pedersen (1991) advocated for the broad definition of culture as it widened the horizons of understanding about the complex human behaviors between and within every cultural group.

In addition, other scholars broadened the meaning of culture into a set of learned behaviors and beliefs that individuals acquired through interaction with the various sociocultural factors. For example, Segal and colleagues (1990) conceptualized culture as a part of ecological force that shape one's behaviors and psychological functions. Ho (1995) also viewed culture as a substantial force within a society that "operates within the individual that shape (not determine) personality formation and various aspects of psychological functioning" (Ho, 1995, p. 5). As a result, since the 1990s, multicultural counseling has endorsed the broad definition of culture to



comprehend any dimension of human identity and the impact of culture on human behavior and experience.

Moreover, it was not until the 1990s that multicultural counseling became recognized as a theoretical force (Ivey et al., 1993; Pedersen, 1991). During the 1980s, given the narrow definition of culture, multicultural counseling was considered a counseling method for racial minority groups rather than a generic theory (Pedersen, 1991). However, beginning in the 1990s, multicultural counseling gradually endorsed the broad definition of culture and expanded its scope to explain all aspects of cultural identity and experiences.

Particularly, during this time, multicultural counseling also expanded its theoretical underpinnings by integrating the cultural universalism (i.e., cultural etic) with cultural relativism (i.e., cultural emic). By integrating two opposite perspectives, multicultural counseling became a theoretical framework capable of analyzing how both cultural-specific and general characteristics impact human behaviors, psychological functioning, and the dynamic of the counseling relationship (Ivey et al., 1993; Pedersen, 1991). This resulted in the endorsement of the broad definition of culture. The expanded theoretical underpinnings advanced multicultural counseling into a fourth theoretical force in the mental health professions (Ivey et al., 1993; Pedersen, 1991).

With multicultural counseling developing into a theoretical force, increased attention was given to the need for specific multicultural competencies and standards for training of therapists. Sue and colleagues (1992) published a paper entitled “Multicultural Counseling Competencies and Standards: A Call to the Profession,” advocating for integration of MCC and standards into counselor preparation and counseling practice. In the paper, Sue et al. (1992) proposed specific guidelines for 31 MCC, with the goals of training multiculturally competent counselors who

were able to work effectively with all clients. For the first time in the history of the ethics code, the guidelines for MCC were reflected in the ACA Code of Ethics (ACA, 1995) and were also endorsed by Divisions 17 and 45 of the APA (APA, 1999).

### 21<sup>st</sup> Century Movement of Multicultural Counseling.

Beginning in 21<sup>st</sup> century, a new advance emerged in multicultural counseling, highlighting various aspects of social justice (Lee, 2007; Ratts et al., 2016). Social justice involves a value of fairness and equality in rights, resources, and opportunity to all groups, across various aspects of society, such as education, employment, treatment, etc. (Fondacaro & Weinberg, 2002). Similarly, social justice in multicultural counseling refers to efforts to reduce systemic barriers to the quality of mental health care as well as to ensure the efficacy of the care at individual, societal, national, and international levels (Sue, 2001). Although the origin of multicultural counseling emerged from the social justice movements in the 1950s and 1960s, topics of social justice were not discussed as agendas in multicultural counseling education, practice, and competencies for decades. In fact, it was not until the 21<sup>st</sup> century that social justice issues evolved into an important component of multicultural counseling (Lee, 2007; Ponterotto et al., 2010; Sue, 2001).

In the 21<sup>st</sup> century, multicultural counseling has expanded the field of practice beyond the traditional in-session practice to involve communities and systems. Prior to the 2000, the multicultural counseling literature limited its scope to the role of therapists in session (Constantine, Hage, Kindaichi, & Bryant, 2007). However, beginning in the 21<sup>st</sup> century, multicultural counseling has placed greater emphasis on therapists' active roles in fully

recognizing societal and systemic forces that influence clients' mental health (Ratts et al., 2016; Sue, 2001; Vera & Speight, 2003). As such, multicultural counseling has encouraged therapists to engage in facilitating systemic changes (e.g., school systems, community environment, and legislative bodies) in order to maximize the well-being of clients (Constantine et al., 2007; Hage, 2003, Ratts et al., 2016). Even today, multicultural counseling continues to be committed to various agendas of social justice (e.g., discrimination and oppression).

### Theoretical Foundations of Multicultural Counseling Competence

MCC is an outcome drawn from various cultural theories across philosophy, sociology, cultural study, anthropology, psychology, feminism, politics, and other fields (Comas-Diaz & Brown, 2016). Philosophically, in the 19<sup>th</sup> century, Karl Marx and Fredrich Engels examined how sociocultural factors shaped individual and collective experiences and behaviors. Informed by their philosophy (i.e., Marxism and conflict theory), Sigmund Freud (1930) first conceptualized the relationship between culture and human psychological functioning. In his theory of unconsciousness (i.e., id, ego, superego), he indicated that psychological dysfunction resulted from intricate tensions caused by the constraint of society and/or culture (i.e., superego) against individuals' natural psychic (i.e., id). His works and theory informed the subsequent social and cultural studies investigating conflicts and tensions of cultural socialization in individuals' identity development, life experiences, and behaviors (Comas-Diaz & Brown, 2016).

The social and cultural perspective on human behaviors and psychological functioning was also supported by other psychiatrists and psychoanalysis. For example, cultural

psychoanalysts, such as Fromm, Horney, Sullivan, and Kardiner, emphasized the role of sociocultural interaction that shaped the development of human behaviors, as well as that oppressed ethnic minority' psychological well-beings (Comas-Diaz & Brown, 2016). Within the field of psychiatry, Devereux examined the way social, cultural, and historical factors influenced the understanding of onset, cause, manifestation, and treatment of mental disorders (Comas-Diaz, 2010). In particular, in combining anthropology and psychiatry, Kleinman (1980) proposed a model explaining the role of cultural context in individuals' perceptions of mental disorders. Kleinman's model emphasized the clinician's invitation to clients to illustrate their cultural worldview on their distress, cultural idioms, and expectation for treatment.

The fields of sociology and social psychology contributed to understanding how sociocultural contexts shape one's identity development and psychological functioning. Social theories and psychologists emphasized that one's identity is constructed through interaction with multiple sociocultural factors (Elliot, 2001; Markus & Kunda, 1986; Schlenker & Weigold, 1989). Additionally, theories in social psychology supported the idea that certain aspects of sociocultural identity (e.g., race, gender, social status, etc.) are psychologically salient to individuals, and that the individual's sense of the salient identities is influenced by the social and cultural contexts in which they are embedded (Bennett & Sani, 2004; Hewstone, Turner, Kenworthy, & Crisp, 2006). In particular, some theorists asserted that culturally marginalized individuals are more likely to develop and adapt their salient identities within devalued and oppressive environments, thereby causing an internalized inferiority and oppression (Abound, 1993; McKown & Weinstein, 2003; Quintana, 2007).

Theories of intersectionality and ecology provided further explanations to the complex interaction of multiple identities within multiple sociocultural systems as well as its consequence on psychological functioning. Theories of intersectionality emerged from the field of gender studies (McCall, 2005) and acknowledged the limitations of using gender as a meta-analytic framework to explain the complexity of identity development and social group memberships. The theories proposed that the intersection of multiple sociocultural identities (e.g., race, gender, sexual orientation, spirituality, etc.) occurs at various points in the course of one's identity development (Harley, Jolivet, McCormick, & Tick, 2002). This intersection of social cultural identity influences individuals' identity, determining their social group memberships. As such, each individual could possess different privileges and experience distinctive oppression, as determined by their social group memberships (Croteau, Talbot, Lance, & Evans, 2002; Samuels & Ross-Sheriff, 2008). Lastly, ecological theories emphasized the role of varying ecological systems (e.g., individual, micro, meso, exo, and macro systems) in the development of one's identity, life experiences, and sense of power for change (Bronfenbrenner, 1992).

In summary, the aforementioned multiple theories derived from different disciplines have informed core concepts of MCC (Comas-Diaz & Brown, 2016). Relying on these multiple theories, MCC underscores the ability of therapists to examine cultural-specific factors and processes that are necessary for working effectively with all clients. As a core concept and outcome of the multiple theories, MCC entails awareness, knowledge, and skills that allow therapists to understand the influence of sociocultural factors on both therapists and clients' identities, psychological processes, multiple levels of life experience, and power dynamics embedded within counseling relationships.

## Increased Importance of Multicultural Counseling Competencies

### Cultural Diversification.

As multicultural counseling evolved into a theoretical force, the literature related to MCC has received much attention (Worthington et al., 2007). Particularly, the prominence of MCC has been amplified by rapid diversification in the U.S. population as well as increased social inclusion of cultural groups. Data from the 2010 Census indicated that racial and ethnic minority groups (i.e., all racial groups but non-Hispanic White population) were projected to comprise 57% of the U.S. population by 2060 (Colby & Ortman, 2014). Specifically, although the non-Hispanic White population was projected to decrease by 8.2% from 2014 to 2060, racial and ethnic minority populations were projected to grow within the same timeframe by an increase of 115% for Hispanics, 128% for Asians, and 42% for African Americans. Moreover, the number of individuals who self-identified with two or more races increased by 32% between the years 2000 and 2010 and were projected to increase by 226% from 2014 to 2060 (Colby & Ortman, 2014; Humes et al., 2011).

Additionally, it is important to recognize the increased social inclusion of other cultural groups. According to Institute of Medicine (IOM, 2011), an estimated 4% to 10% of the adult population identified as lesbian, gay, bisexual, and transgender (LGBT). Data from Gallup (Gate, 2017) reported that approximately 4.1% of the adult population identified as LGBT. This represents an increase of 0.6% from 2012. Furthermore, the religious minority population (i.e., non-Christian faiths and unaffiliated groups) increased by 8% from 2007 to 2014 (Pew Research Center, 2014). Specifically, non-Christian faiths groups (e.g., Judaism, Muslim, Buddhism, and Hinduism) increased by 1.2%, and the religiously unaffiliated population grew by 6.7% (Pew

Research Center, 2014). The proportion of the Christian population, according to the Pew Research Center, was expected to decline by 11.9% between 2010 and 2050, whereas the number of religiously unaffiliated individuals was projected to increase by 10%. Collectively, this expected increase in a variety of cultural groups highlights the significance of training therapists who are equipped to serve diverse individuals representing diverse values, worldviews, and mental health needs.

#### Specialized Needs and Health Disparities.

A growing body of literature has also supported the importance of MCC. The extant research underlines the necessity of multiculturally competent counseling services for the specialized mental health needs of culturally marginalized groups (Cabral & Smith, 2011; Sue et al., 2012). Given the minority membership, cultural minority groups are more exposure to additive stressors (e.g., discrimination experience), which increases their risks of mental health problems. For example, Cokley and colleagues (2011) reported that ethnic minority students ( $n = 246$ ,  $M = 2.13$ ,  $SD = .57$ ) perceived discrimination significantly ( $p < .001$ ,  $\eta^2 = .04$ ) more than their white counterpart ( $n = 167$ ,  $M = 1.93$ ,  $SD = .43$ ), with the perceived discrimination being significantly correlated to emotional distress ( $p < .001$ ,  $\beta = -.26$ ). Additionally, King and colleagues (2008) reported in their meta-analysis that the risk for depression and anxiety disorder was at least 1.5 times higher in lesbian, gay, and bisexual individuals than in heterosexual individuals ( $ns = 213, 344$ ; risk ratio range [PR range] = 1.54 to 2.58). Similarly, Bostwick and colleagues (2014) reported that lesbian, gay, and bisexual individuals ( $n = 577$ ) who experienced both sexual orientation and racial/ethnic discrimination were more likely to experience mood and

anxiety disorders (Odd Ratio [OR] =2.25, 95% CI [1.02, 4.95]). Furthermore, in a meta-analysis with 23 independent studies with Asian American who experienced racial discrimination, Lee and Ahn (2011) found that the experience of racial discrimination was significantly correlated to overall distress ( $r = .23, p < .01$ ), specifically to depression ( $r = .26, p < .01$ ) and anxiety ( $r = .28, p < .01$ ). Collectively, these aforementioned findings support the importance of MCC to serve the specialized needs of cultural minority groups.

Various cultural groups have faced difficulty in access to and the quality of culturally responsive mental health care. For example, racial and ethnic minority groups report underutilization of mental health services, compared to their White counterpart (Alegria et al., 2008; Chen & Rizzo, 2010; Lee et al., 2011). Lee and colleagues (2011) found that Asian Americans diagnosed with lifetime mood disorder ( $n = 1,332$ ) reported a significant lower utilization of mental health services (OR = .31, 95% CI [.21, .46]) than their White counterparts ( $n = 24,507$ ). In a similar study of racial minorities with depressive disorder (African Americans = 2,890, Asians = 1,435, Latino = 1,603), Alegria and colleagues (2008) reported that 63.7% of Latino, 68.7% of Asians and 58.8% of African Americans did not utilize any type of mental health services. This was significantly lower ( $p < .001$ ) than their White counterpart ( $n = 2,834$ ). Though limited, few researchers reported that various sociocultural barriers (e.g., financial costs, service availability, and cultural stigma attached to mental health issues) could be attributed to the low utilization of mental health services (Scheppers et al., 2008; Sue et al., 2012).

Several researchers have revealed the disparities in the quality of mental health services among culturally diverse groups. Hayes and colleagues (2015) investigated 36 therapists and 228 clients to test whether there were differences in therapists' effectiveness between clients of color



and White clients. They found that some therapists had better outcomes ( $p < .001$ , 95% CI [3.38, 64.74]) with White clients ( $n = 148$ ,  $M_s = 56.07$ ,  $47.43$ ,  $SD_s = 20.43$ ,  $23.42$ ) than racial/ethnic minority (REM) clients ( $n = 80$ ,  $M_s = 61.35$ ,  $51.93$ ,  $SD_s = 24.12$ ,  $26.64$ ), with race and ethnicity explaining 19.1% variance of therapists' effectiveness. Similarly, Imel and colleagues (2011) examined 582 psychotherapy trials where adolescents ( $n = 582$ ) who abused cannabis use were treated by therapists ( $n = 13$ ) and tested whether clients' racial and ethnic backgrounds made differences in therapists' effectiveness. Although there was no difference in the outcome ( $r = -.16$ , 95% CI  $[-.67, .49]$ ) between White and REM clients, they found that some of the therapists were relatively more effective with White clients than clients of color.

Owen, Imel, Adelson, and Rodolfa (2012) conducted a study with 332 clients (racial/ethnic minority [REM] = 155, White = 117) treated by 44 therapists with the goal of investigating differences in the rate of early drop-out. They found that REM clients had a significantly higher probability of early drop-out than did their White counterparts ( $\gamma = 100.37$ , 95% CI [0.70, 0.08]). Lastly, Larrison et al. (2011) investigated therapists ( $n = 62$ ) and clients ( $n = 551$ ; African American = 140 [25%], White = 441, [75%]) with mental disorders. They found a significant difference ( $\chi^2 = 421.5$ ,  $p < .01$ ) in the therapeutic outcome between African American and White clients which was moderated by therapists' effectiveness. Specifically, 12 of the 62 therapists (20%) reported substantial to moderate differences in outcome for African American clients as compared to White clients. Though limited, researchers have ascribed the lack of therapists' MCC to the disparities in the quality of culturally responsive services among cultural groups (Cabral & Smith, 2011; Malgady, 2011).

## Definition and Key Terms

### Multicultural Counseling Competence versus Competencies

The terms Multicultural Counseling Competence (MCC) and Multicultural Counseling Competencies (MCCs) are often used interchangeably in the literature of multicultural counseling (Ridley, Mendoza, Kanitz, Angermeier, & Zenk, 1994; Ridley & Shaw-Ridley, 2011). Using the two terms without clear distinctions has caused confusion and hindered researchers in conceptualizing what is measured (MCC or MCCs) and in investigating its influence on therapeutic process and outcome (Owen et al., 2011; Ridley & Shaw-Ridley, 2011). To make clear distinctions between the two constructs, Ridley, Mollen, and Kelly (2011) defined competence as “the determining, facilitating, evaluating, and sustaining of intended outcome” (p. 835) and competencies as “subsets of competence” (p. 836). They further clarified the two constructs, highlighting that competence entails “coordination and integration of a set of competencies” (p. 835) and that each of the competencies has “a unique purpose in the process of facilitating therapeutic changes” (p. 836). Therefore, following the distinctions of Ridley and colleagues (2011), the researcher in the present study differentiated MCCs from MCC as following: MCCs are subsets of MCC and each competency has a unique purpose and functioning to facilitate therapeutic changes in multicultural counseling encounter.

### Multicultural Counseling Competence (MCC)

The definition of MCC varies and has continued to evolve across the mental health professions. Sue, Arredondo, and McDavis (1992) described multiculturally competent therapists as having the following three characteristics: belief and attitude, knowledge, and skills. Despite

the effort to describe characteristics of MCC, Sue and colleagues (1992) did not provide their operationalized definition of MCC. Sue (2001) first defined MCC as follows:

Multicultural counseling competence is defined as the counselors' acquisition of awareness, knowledge, and skills needed to function effectively in a pluralistic democratic society [...] to develop new theories, practices, policies and organizational structures that are more responsive to all groups. (p. 802)

The first definition of MCC highlights the counselors' acquisition of three competencies (belief and attitude [awareness], knowledge, and skills) and underscores developmental and inspirational aspects of MCC.

The definition of MCC that underscored the acquisition of the three competencies (MCCs) has been traditionally accepted and gradually expanded in the mental health professions (Whaley & Davis, 2007). Other scholars defined MCC within the framework of therapeutic processes, focusing on the fluid nature of such competence as contingent on client-counselor interactions. For example, Lopez (1997) defined an essence of MCC as "the ability of the therapist to move between two cultural perspectives in understanding the culturally based meaning of clients from diverse cultural backgrounds" (p. 573). In addition, Collins and Arthur (2005) re-conceptualized MCC within a framework of working alliance, introducing a new definition of culture-infused counseling competence as follows:

the integration of attitudes and beliefs, knowledge, and skills essential for awareness of the impact of culture on personal assumptions, values, and beliefs, understanding of the worldview of the client, and coming to agreement on goals and tasks in the context of a trusting and culturally sensitive working alliance. (p. 48)

This definition emphasized MCC as the ability to apply a set of competencies (attitudes and beliefs, knowledge, skills) across therapeutic processes in a way that is culturally responsive to clients. Recently, scholars expanded the definition of MCC to include the framework of social justice (Nassar-McMillian, 2014; Singh & Salazar, 2010). Ratts and colleagues (2016) emphasized the integration of four competencies (i.e., attitude and belief, knowledge, skill, and action) to understand issues of oppression and power that influence aspects of counseling processes and maximize the effectiveness of counseling treatment at individual and systemic levels.

In summary, the definitions of MCC vary as a function of divergence in scholars' assumptions and emphases. Nevertheless, mental health professionals have agreed that MCC requires acquisition of belief and attitude (i.e., awareness), knowledge, and skills, and applies the acquisition to counseling practice for all clients (Sue et al., 2009). Therefore, based on the aforementioned definitions as well as the conceptual distinctions by Ridley et al. (2011), the researcher operationally defined MCC as following: the integration of multicultural counseling competencies, including awareness (beliefs and attitude), knowledge, and skills, into the counseling processes that maximize the effectiveness of counseling for clients at individual, systemic, and societal level (Collins & Arthur, 2005; Lopez, 1995; Ratts et al., 2016; Sue, 2001; Sue et al., 1992)

#### Definition of Multicultural Competent Behavior

Multicultural counseling competence (MCC) has been defined as the integration of a set of multicultural counseling competencies (MCCs). Scholars in the mental health professions

have supported the idea that each competency is developed in a sequence that begins from awareness (belief and attitude) to knowledge to skill (Constantine & Ladany, 2000; Ratts et al., 2016; Sue et al., 1992; Sue & Sue, 2016). *Awareness* refers to the commitment of therapists to examining their own culture and values and reflecting on their attitudes toward cultural differences (Constantine & Ladany, 2000; Ratts et al., 2016; Sue et al., 1992; Sue, 2001). Possessing awareness leads to the development of *knowledge*, which refers to therapists' understanding of their clients' culture, worldview, and life experience within multiple contexts (Ratts et al., 2016; Sue, 1992; Sue et al., 1992). Once therapists possess self-awareness and knowledge, they develop skills that allow for an analysis of the way cultural factors influence the clients' presenting concerns and the development of culturally responsive interventions (Ratts et al., 2016; Sue, 2001; Sue et al., 1992).

Despite the definitions of the three competencies, the existing models of MCC tended to conceptualize internal (awareness), informational (knowledge), and cognitive (skill) aspects of MCC but overlook the behavioral skill aspect. To wit, the MCC literature focused on the research of what multicultural awareness, knowledge, and cognitive skill are, rather than how therapists execute the acquisition of MCC in sessions with clients (Constantine, 2001; Huey et al., 2014; Owen et al., 2011). For example, some scholars claimed that the acquisition of awareness, knowledge, and skill is not sufficient unless these competencies are operationalized (Ivey et al., 2010; Nassar-McMillian, 2014). In a response to the identified concern, Ratts et al. (2016) added action as a competency to the last sequence of MCC development, underscoring the ability of the therapists to take action by operationalizing self-awareness (beliefs and attitudes), knowledge, and skills in practice.

Despite the limited literature on the behavioral component of MCC, some scholars referred to the concept of multicultural competent behaviors as the actions of therapists, translating cultural awareness and knowledge into demonstrable skills (Sue et al., 1992; Sue & Sue, 1996). Lopez (1997) briefly described how therapists could demonstrate multicultural competent behaviors in the therapeutic process. Additionally, other scholars conceptualized the behavioral aspect of MCC as the ability of therapists to address various cultural factors that influence the aspects of therapeutic process (Collins & Arthur, 2010; Constantine & Ladany, 2001).

In summary, there is a lack of literature on the behavioral components of MCC in the professions. In response to the concern, the professions have placed greater emphasis in studying how the areas of competence in awareness, knowledge, and skill manifest in practice (Ivey et al., 2010; Nassar-McMillian, 2014; Ratts et al., 2016). Therefore, for the purpose of this research and for the first time in the literature, the researcher has operationally defined multicultural competent behavior as follows: therapists' ability to translate multicultural awareness, knowledge, and skills into demonstrable multiculturally competent in-session behaviors that facilitate collaborative, therapeutic processes that are responsive to clients' cultural values and experiences (Collins & Arthur, 2010; Lopez, 1997; Ratts et al., 2016; Sue et al., 1992).

### Empirical Investigation on Multicultural Counseling Competence

The mental health professions have placed a greater emphasis in integrating MCC into empirical-supported treatment. Though limited, there has been a growing number of researchers who have investigated the role of MCC in the therapeutic process. Specifically, empirical

investigation of MCC has been conducted to examine relationship between clients' perceptions of their therapists' MCC and (a) clients' experience in the therapeutic process or (b) client outcome (Tao et al., 2015; Worthington et al., 2007).

Therapeutic process involves all aspects of interactions between therapists and clients during the course of therapy (Orlinsky & Howard, 1986). In the literature of MCC, aspects of therapeutic process have been measured by the working alliance, satisfaction, session depth, and general counseling competence (Tao et al., 2015; Worthington et al., 2007). Client outcome (i.e., therapeutic outcome or treatment outcome) has been assessed via measures of changes in level of presenting concerns and/or daily life psychological functioning (e.g., social interaction and life satisfaction). According to a meta-analysis (Tao et al., 2015), 18 empirical studies have been conducted to clarify the relationship between therapists' MCC (or parallel constructs) and therapeutic processes or the impact of MCC on client outcome. The following section provides information regarding the existing empirical investigation on the role of MCC in either therapeutic process or client outcome.

### MCC and Working Alliance

A major concern surrounding the MCC literature is whether or not the MCC are distinct from other therapeutic processes, including working alliance (Drinane et al., 2016). A growing number of researchers has reported a strong, positive relationship between clients' perception of therapists' MCC and the working alliance (Tao et al., 2015; Worthington et al., 2007). For example, Constantine (2007) conducted a study with African American clients ( $n = 40$ ) and White therapists ( $n = 19$ ) and reported a significantly positive and strong relationship ( $r = .70, p$

< .001) between the clients' rating of their therapists' MCC and working alliance. Similarly, Owen and colleagues (2011) studied 176 clients (White = 95, people of color = 81), indicating a strong positive relationship ( $r = .73, p < .001$ ) between the clients' perceptions of therapists' MCC and the working alliance. In another study with 51 counseling dyads, researchers found a similar positive and strong relationship ( $r = .73, p < .001$ ) in the clients' rating ( $n = 51$ ) of their therapists' MCC and the working alliance (Fuertes et al., 2006). Moreover, researchers reported, in a series of three studies of Asian American clients ( $ns = 78, 61, 52$ ) that there were significantly positive relationships between the clients' rating of their therapists' MCC and working alliance ( $rs = .56, .59, .72, ps < .01, .001, .01$ ; Kim, Li, & Liang, 2002; Kim, Ng, & Ahn, 2009; Li & Kim, 2004). A recent study with 134 clients from a university-based counseling center also reported significantly positive correlations between the clients' rating of the therapists' MCC and the working alliance ( $r = .62, p < .001$ ; Hook et al., 2013).

Several researchers have investigated the relationship between the working alliance and parallel constructs of MCC, including therapists' racial microaggression and cultural humility (Tao et al., 2015). For example, Constantine (2007) conducted a study with African American clients ( $n = 40$ ), indicating a significantly negative relationship between the clients' rating of their White therapists' racial microaggression and the working alliance ( $r = -.40, p < .001$ ). In another study with women clients ( $N = 121$ ), researchers found a similar relationship, wherein the clients' rating of therapist's racial microaggression were negatively correlated with the working alliance ( $r = -.33, p < .001$ ; Owen, Tao, & Rodolfa, 2010). In two different studies with university students clients ( $ns = 472, 134$ ), researchers found that clients' perceptions of



therapists' cultural humility were significantly and positively correlated with a strong working alliance ( $r_s = .75, .60, p < .001$ ; Hook et al., 2013).

Lastly, Tao and colleagues (2015) conducted a meta-analysis with 18 multicultural studies (20 independent samples and 53 effect sizes) regarding the relationship between therapists' MCC and the therapeutic process as well as the MCC and the client outcome. In their meta-analysis of the 25 identified effect sizes associated with the relationship between the working alliance and MCC, Tao et al. (2015) found that 37% of the variance in the working alliance could be accounted for by the clients' perceptions of therapists' MCC, with moderate to large effect size ( $r = .61, k = 16, 95\% \text{ CI } [.50 \text{ to } .71], I^2 = 90.35\%, Q(15) = 155.48, p < .001$ ).

Collectively, these findings have supported the role of MCC in the development of a working alliance; however, the results from the aforementioned studies should be interpreted with caution. Despite the heterogeneity in the effect sizes, the majority of the studies indicated a high correlation (i.e., strong and large effect size) between the clients' rating of therapists' MCC and the working alliance. This high correlation could indicate that a strong working alliance is more likely to develop when therapists demonstrate more MCC. On the other hand, MCC could not be a construct distinct from working alliance. Instead, these two constructs are conflated or correlated by the virtue of third variable such as general counseling competencies (GCCs).

Lastly, the high correlation between MCC and working alliance could be ascribed to measurement error. A majority of the studies relied on the client-version of CCCI-R (Lafromboise et al., 1991) to assess clients' perception of therapists' MCC. Given the questionable validity of the CCCI-R (e.g., lack of behavioral details in items and contextualization to multicultural contexts (Drinane et al., 2016; Owen et al., 2011; Ridley &

Shaw-Ridley, 2011; Tao et al., 2015), clients may have had difficulty in distinguishing MCC from working alliance. In fact, several scholars have raised concerns about the limitations of CCCI-R that could contribute to the high correlations between MCC and other therapeutic constructs (Smith et al., 2016; Tao et al., 2015). Therefore, it is important to improve client-rated measurements of MCC to allow for further clarifying relationship or covariances between MCC and working alliance (Drinane et al., 2016; Smith et al., 2016; Tao et al., 2015).

### MCC and Client Satisfaction

The extant MCC literature has indicated a strong positive relationship between the clients' perception of therapists' MCC and satisfaction with counseling services (Tao et al., 2015; Worthington et al., 2007). Constantine (2002, 2007) conducted two studies with racial minority clients ( $ns = 112, 40$ ), indicating significantly positive correlations between the client's perception of therapists' MCC and their satisfaction with counseling services ( $rs = .59, .64, ps < .001$ ). In a series of two studies with clients ( $ns = 85, 51$ ), researchers also reported significantly positive correlations between clients' perception of therapists' MCC and satisfaction ( $rs = .79, .83, ps < .001$ ; Fuertes & Brobst, 2002; Fuertes et al., 2006). Furthermore, Kim and colleagues (2009) conducted a study with 61 Asian American clients and found strong positive relationship between clients' rating of therapists' MCC and scores on two items of a satisfaction instrument ( $r = .61, .43$ ).

In a meta-analysis with 18 multicultural studies to examine the association between clients' perceptions of therapists' MCC and counseling satisfaction, Tao et al. (2015) identified eight of 53 effect sizes. Tao et al. (2015) reported that approximately 52% of variance in the

client satisfaction could be accounted for by the clients' perception of therapists' MCC, with a range of a moderate to large effect size ( $r = .72$ ,  $k = 5$ , 95% CI [.63, .80],  $I^2 = 63.82\%$ ,  $Q(4) = 11.05$ ,  $p = .03$ ).

As with the strength of relationship between MCC and working alliance, most of the studies revealed a strong correlation between clients' ratings of therapists' MCC and their satisfaction with counseling services. This high correlation could suggest that if therapists demonstrate more MCC, clients are more likely to experience higher level of satisfaction with counseling services. Alternatively, clients' perception of therapists' MCC could be a function of their general impression about the counseling services. That is, level of satisfaction with the services could be an overarching positive-evaluation factor that influences the degree to which therapists' MCC are evaluated in a positive light. Further studies are warranted to clarify the correlation or direction of the relationship between these two constructs.

### MCC and General Counseling Competencies

Another concern in the MCC literature is whether the MCC are a unique construct from general counseling competencies (GCCs), such as therapists' expertness, trustworthiness, and attractiveness (Coleman, 1998; Drinane et al., 2016). Although few studies have been conducted, a high correlation between MCC and GCCs has been observed in the MCC literature. For example, Constantine (2002) conducted a study of racial and ethnic minority (REM) clients ( $n = 112$ ) who were asked to evaluate their therapists' MCC and GCCs. He found a significantly strong correlation between the clients' ratings of therapists' MCC and GCCs ( $r = .78$ ,  $p < .001$ ). A similar study with 85 graduate student clients (REM = 32, White = 53) showed a strong

correlation between the clients' perception of therapists' MCC and GCCs ( $r = .72, p < .001$ ; Fuertes & Brobst, 2002). Moreover, a series of three studies (Kim et al., 2002; Kim et al., 2009; Li & Kim, 2004) of Asian American clients ( $ns = 78, 61, 52$ ) indicated significantly strong correlations between two constructs ( $rs = .62, .65, \text{ and } .68; ps < .01$ ). Lastly, in a meta-analysis of 18 multicultural studies (53 effect sizes), Tao et al. (2015) found that eight effect sizes were involved in the examination of relationship between MCC and GCCs. The meta-analysis indicated approximately 38% of the variance in the GCCs that was explained by the clients' perceptions of therapists' MCC, effect size ( $r = .62, k = 7, 95\% \text{ CI } [.49 \text{ to } .73], I^2 = 79.51\%, Q(6) = 29.29, p = .001$ ).

Collectively, the findings reviewed in this study indicated a strong relationship between the two constructs. This strong relationship could imply that MCC can be subsumed under a category of GCCs (Drinane et al., 2016). Alternatively, measurement error could contribute to inflating the strong relationship between two constructs. All of these studies utilized the CCCI-R (Lafromboise et al., 1991) as a measure of therapists' MCC. However, the validity of the CCCI-R has been questioned as it lacks the contextualization of items to multicultural contexts (Owen et al., 2011; Ridley & Shaw-Ridley, 2011). Therefore, the limitation of the CCCI-R may have made it difficult for participants to differentiate MCC from GCCs.

### MCC and Session Depth

Few researchers have examined the potential effect of therapists' MCC on session depth, indicating a moderate and positive correlation (Tao et al., 2015). Session depth is involved with the degree to which clients perceive the value of a therapy session (Stiles & Snow, 1984). A

series of three studies (Kim et al., 2002; Kim et al., 2009; Li & Kim, 2004) with Asian American clients ( $n_s = 78, 61, 52$ ) showed that clients' rating of therapists' MCC were significantly correlated to their perceptions of session depth ( $r_s = .39, .64, .69$ ;  $p_s < .01, .001, .01$ ). In a meta-analysis of 18 multicultural studies (53 effect sizes), Tao and colleagues (2015) identified three effect sizes regarding the relationship between the two constructs. They reported that clients' perceptions of therapists' MCC could explain approximately 34% of the variance in their experience with session depth, with a moderate to large effect size ( $r = .58, k = 3, 95\% \text{ CI} = .37 \text{ to } .73; I^2 = 70.74\%, Q(2) = 6.83, p = .033$ ).

### MCC and Therapeutic Outcome

Though limited, several studies have been conducted to examine the impact of the therapists' MCC on therapeutic outcome (Tao et al., 2015; Worthington et al., 2007). In one study of 143 clients and 31 therapists, Owen et al. (2011) found a significantly positive correlation between the clients' ratings of therapists' MCC and the clients' ratings of therapeutic outcomes ( $r = .31, p < .001$ ). Other studies have been conducted to examine the relationship between a related construct of MCC (e.g., therapists' cultural humility and microaggression) and therapeutic outcome. In a study with 134 clients, Hook and colleagues (2013) reported a significantly positive relationship between the clients' ratings of therapists' cultural humility and clients' ratings of therapeutic improvement including symptom reduction and social improvement ( $r = .59, p < .001$ ).

Additionally, in a study of female clients ( $n = 121$ ), Owen et al. (2010) reported that the clients' ratings of the level of therapists' gender microaggression were negatively correlated to

clients' symptom reduction and social improvement ( $r = -.22, p < .01$ ). In another study by Owen (2011) with 232 clients (racial minority = 111), the clients' evaluation of level of therapists' racial microaggression were negatively correlated to the clients' symptom reduction ( $r = -.18, p < .01$ ). A similar study with racial minority clients ( $n = 120$ ) reported a significantly negative correlation between the clients' rating of therapists' racial microaggression and the clients' rating of therapeutic outcome ( $r = -.27, p < .01$ ). Lastly, Tao and colleagues (2015) conducted a meta-analysis of 18 multicultural studies and found nine effect sizes regarding the relationship between MCC and therapeutic outcome. They reported that approximately 8% of the variance in the therapeutic outcome could be accounted for by clients' ratings of the therapists' MCC, with an small effect size ( $r = .29, k = 7, 95\% \text{ CI } [.16 \text{ to } .41]; I^2 = 76.12\%, Q(6) = 25.13, p < .001$ ). As compared to the strength of relationship between MCC and therapeutic process (e.g., working alliance and satisfaction), the relationship between MCC and therapeutic outcome was found to be much smaller (Tao et al., 2015).

Overall, the studies reviewed in the present study provide some evidence of the effect of MCC on therapeutic outcome. However, the results from the studies should be interpreted with caution. First, these studies heavily relied on retrospective research design and were lacking in longitudinal design. A limitation of retrospective research includes reporting bias or error; clients may have trouble in recalling subtle aspects of their therapeutic experience or may only recall recent events in their therapy (Rubin & Baddeley, 1989). Further research to examine the effect of MCC on clients over time is warranted. Additionally, the reviewed studies reported inconsistent effect sizes for the relationship between therapists' MCC and therapeutic outcome. The different effect sizes could be due to the type of MCC measures. Although in one study, a

measure designed to directly assess therapists' MCC was used, other studies utilized measures intended to evaluate related constructs of MCC (e.g., cultural humility and microaggression). Future studies would benefit from investigating the potential effect of the type of MCC measures of the relationship between MCC and therapeutic outcome. Lastly, measurement error can be a threat to the value of the evidence. Client-rated measures (e.g., CCCI-R; Lafromboise et al., 1991) utilized in the reviewed studies lacked behavioral indicators in their items. This may have hindered clients from evaluating therapists' actual MCC performance and its impact on their therapeutic outcome. Developing a client-rated measure that is designed to measure therapists' behaviors would be helpful for clarifying the relationship between MCC and therapeutic process or client outcome (Ridley & Shaw-Ridley, 2011; Worthington & Dillon, 2011).

### Summary

The extant literature focused on MCC has indicated a growing body of evidence for the effect of the MCC on therapeutic processes and therapeutic outcome (Tao et al. 2015; Worthington et al., 2007). Overall, clients' perceptions of therapists' MCC were found to be strongly correlated to four areas of the therapeutic processes (working alliance, client satisfaction, GCCs, and session depth) with different effect sizes across the studies (Tao et al., 2015). With the smaller effect sizes, several researchers also reported the positive relationship between clients' perceptions of therapists' MCC and their therapeutic outcomes (Tao et al., 2015). However, despite the promising evidence for the effect of MCC in therapeutic process and client outcome, there are several limitations that can mitigate the value of the evidence; (a) overreliance on retrospective research design, (b) utilization of different MCC measures, and (c)

measurement issues. Particularly, measurement issues have been considered a major barrier for multicultural research and posed a threat to the value of supporting evidence (Ridley, Baker, & Hill, 2001; Smith et al., 2016; Tao et al., 2015; Worthington & Dillon, 2011; Worthington et al., 2007).

### Models of Multicultural Counseling Competence

Several MCC models have evolved within the mental health professions. MCC models have gradually developed into integrated frameworks that addresses multiple dimensions of competence at several levels. Each model includes a distinct framework that defines MCC, depending on its focus on characteristics of therapists, intervention and skills, or therapeutic process. However, it is important to recognize that despite the divergent frameworks, each model has overlapping dimensions. In this study, the following MCC models have been reviewed: (a) *Tripartite Model of Multicultural Counseling Competencies* (Sue et al., 1982, 1992); (b) *Process Model of Cultural Competence* (Lopez, 1997); (c) *Alternative Conceptualization of Multicultural Counseling Competence* (Constantine & Ladany, 2001); (d) *Multidimensional Model of Cultural Competence* (MDCC; Sue, 2001); (e) *Multicultural Orientation* (Owen, 2013); (f) *Multicultural and Social Justice Competencies* (MSJCC; Ratts et al., 2016).

#### Tripartite Model of Multicultural Counseling Competencies

Sue and colleagues (1982;1992) proposed the first MCC model: Tripartite Model of MCC. This tripartite model has been recognized as the most prevalent framework that influences multicultural research, training curriculum, codes of ethic, and practice (ACA, 2014; APA, 2003;



CACREP, 2016; NASW, 2008). The framework of the original tripartite model (Sue et al., 1982) has been expanded through a series of three revisions : (a) *Awareness, Skill, and Knowledge model* (Sue & Sue, 1990), (b) *Multicultural Counseling Competencies model* (Sue et al., 1992), and (c) *Operationalization of the Multicultural Counseling Competencies* (Arredondo et al., 1996).

#### Original Tripartite Model.

In 1982, Sue and colleague developed the initial tripartite model, the *Cross-Cultural Competencies Model* describing 11 characteristics of culturally competent (skilled) counselors within three broad components: (a) belief and attitude, (b) knowledge, and (c) skills. First, the belief and attitude component involved the ability of counselors to reflect on their own values, cultural background, and stereotype and biases toward cultural differences. The knowledge component was described as the ability of counselors to understand the role of culture in clients' worldviews, psychological processes, and behaviors. Lastly, the skill component was explained as the ability of counselors to identify culturally appropriate interventions for clients. Despite the first conceptualization of MCC, the original tripartite model limited its framework to address only the needs of racial and/or ethnic minority groups (Sue et al., 1982).

#### Awareness, Knowledge, and Skill Model – 1990's Revision.

Sue and Sue (1990) revised the original tripartite model by integrating three primary goals for culturally competent counselors: (a) developing awareness of their own biases and cultural values; (b) increasing the understanding of clients' worldview and experience; and (c)

developing intervention strategies and techniques that are culturally relevant and sensitive. In the revised model, Sue and Sue (1990) expanded the meaning of MCC into a developmental and aspirational process of accomplishing the three goals.

With the three primary goals, Sue and Sue (1990) clarified the three components, identified in the original tripartite model as three dimensions of cultural competence: (a) awareness (referred as “belief and attitude” in the original tripartite model), (b) knowledge, and (c) skill. Each dimension represented the same competency as described in the three components of the original tripartite model. However, as compared to the original tripartite model, the revised model relabeled the belief and attitude to awareness, highlighting the importance of counselors’ self-awareness toward their own biases. The revised model also highlighted the knowledge dimension as cognitive empathy regarding the uniqueness of clients’ cultural worldviews and their related daily living experiences and struggles. Lastly, the revised model emphasized the skill dimension as the ability of counselors to tailor counseling styles, techniques, and interventions in a way that fit clients’ cultural values.

#### Multicultural Counseling Competencies Model – 1992.

Sue, Arredondo, and McDavis (1992) developed the *Multicultural Counseling Competencies Model* by expanding the theoretical framework of the original tripartite model. Sue and colleagues (1992) proposed a 3 x 3 matrix model (i.e., 3 characteristics x 3 dimensions) that combined the 1982 and 1990 tripartite models. They cross-classified the three primary goals (referred as “characteristics” in the 1992 model), as identified in the 1990 model, with the three components (referred as “dimensions” in the 1992 model), as described in the 1982 model.

As with the three goals described in the 1990 model, the 1992 model described the three characteristics of MCC counselors as (a) having awareness of their own values and biases, (b) understanding of clients' worldviews and cultural backgrounds, and (c) developing culturally appropriate intervention strategies and skills. In the 1992 model, each characteristic represented three primary dimensions of MCC comprised of three sub-dimensions (i.e., belief and attitude, knowledge, skills). Therefore, the 1992 model resulted in a total of nine competency categories.

Within the model, Sue and colleagues (1992) proposed a total of 31 MCCs organized by the nine categories of competency. For example, the awareness dimension included a sub-dimension of belief and attitude. Within the category of "belief and attitude under the awareness" competency, the model described several beliefs and attitudes that helped counselors develop their self-awareness. With the expanded framework, the 1992 tripartite model has been recognized as the most prevailing framework, one that informs multicultural practice, training, and research. However, Sue and colleagues (1992) acknowledged the limitations of the model in that the definition of each competency was described in the abstract rather than specifically operationalized.

#### Operationalization – 1996's Revision.

To address the limitations, Arredondo and colleagues (1996) tried to operationalize the 31 MCCs, providing explanatory statements for each competency. Additionally, Arredondo et al. (1996) expanded the theoretical framework of the 1992 model by including the *Dimension of Personal Identity Model* [DPI] (Arredondo & Glauner, 1992). The DPI model emphasized within-cultural differences and individual diversity that shaped the development process of

individual identity. With the DPI model, Arredondo et al. (1996) shifted the focus of the tripartite model toward the inclusion of within-cultural differences, individual diversity, and social identities (e.g., gender, religion and spirituality, nationality, SES, disability, etc.).

Within the framework, Arredondo and colleagues (1996) also suggested the integration of the three dimensions of the DPI model (referred as dimension A, B, C) into the 1992 MCC model. Dimension A was referred to as predetermined or having fixed features (e.g., age, gender, race, language) that influence personal identity. Dimension B was involved with dynamic features (e.g., education and work experience) of personal identity as a consequence of the dimensions A and C. Lastly, Dimension C included contextual factors (e.g., sociopolitical, historical, and economical contexts) that shape one's life experience and worldview. Therefore, this 1996 model emphasized the ability of counselors to understand how multiple interactions of predetermined, dynamic, and contextual factors influence clients' worldview, experience, and behaviors.

### Summary

The tripartite model of MCCs has expanded and refined its framework through a series of three revisions (Arredondo et al., 1996; Sue et al., 1982, 1992; Sue & Sue, 1990). The essence of the tripartite model is reflected in its conceptualization of MCCs (i.e., awareness [attitude and belief], knowledge, and skill). It has been considered as the benchmark model that guided multicultural research, training, and practice. Also, this model influenced different guidelines for training and ethical codes, including the Guidelines on Multicultural Education, Training, Research, Practice, and Organizational Change for Psychologists (APA, 2002), Advocacy

Competencies in American Counseling Association (Lewis et al., 2002), NASW code of ethic (NASW, 2008), the Council for Accreditation of Counseling and Related Educational Program Standard (CACREP, 2016), and ACA code of ethic (ACA, 2014).

### Process Model of Cultural Competence

Lopez (1997) proposed the Process Model of Cultural Competence that conceptualized MCC in the context of therapeutic processes. He utilized the term process to highlight the dynamic nature of cultural competence that is contingent on therapeutic relationships and processes. Lopez (1997) defined MCC as “the ability of the therapists to move between two cultural perspectives in understanding the culturally based meaning of clients from diverse cultural backgrounds” (p. 573). Within the framework, Lopez (1997) highlighted the essence of MCC as the ability of counselors to elicit clients’ cultural perspectives and integrate them in therapeutic processes.

Lopez (1997) conceptualized MCC within four dimensions of therapeutic process: (a) engagement, (b) assessment, (c) theory, and (d) methods. Engagement refers to the counselor’s ability to establish a strong therapeutic relationship with clients, thereby helping them to openly share their cultural perspectives of presenting concerns and expectations for counseling services. Secondly, assessment is involved with counselors’ ability to balance their own and clients’ cultural perspectives to determine the nature of clients’ presenting issues. Multiculturally competent counselors continue to gather cultural data (e.g., cultural norms and values) relevant for clients’ concerns and integrate the data into the assessment process.

Theory is related to the ability of counselors to recognize how cultural contexts influence clients' understanding of their presenting concerns. In many cultural contexts, clients have their own cultural templates for understanding which may not be identical to those of their therapists. Multiculturally competent counselors can elicit the clients' perceptions of their concerns and integrate them into the case conceptualization. Lastly, method refers to counselors' abilities to adapt their interventions and methods in a way that fits clients' cultural values and belief systems. As with the skill dimension from the tripartite model (Sue et al., 1982, 1992), Lopez (1997) also emphasized the ability of counselors to individualize treatment strategies and interventions in a way that fits clients' cultural expectations and values.

Overall, this model focused on the dynamic nature of MCC in the contexts of therapeutic processes. In the model, Lopez (1997) emphasized MCC as the ability of counselors to collaborate with clients in facilitating therapeutic processes that align with clients' cultural values. Although the model contributed to expanding the framework of MCC within the therapeutic process, the model lacked details in how each domain could be operationalized in practice.

#### Alternative Conceptualization of Multicultural Counseling Competence

Constantine and Ladany (2001) introduced a six-dimension MCC model by expanding the theoretical foundations of the tripartite model (Sue et al., 1982). Specifically, this six-dimension model was proposed to address gaps in the MCC literature (i.e., the lack of conceptualization of MCC within common characteristics of therapeutic process). The common characteristics of therapeutic process included (a) therapeutic relationship, (b) mutually agreed

upon worldview between counselors and clients, (c) clients' expectations for counseling, and (d) use of interventions that fit expectations for both counselors and clients (Fisher, Jome, & Atkinson, 1998). Informed by a framework of the common characteristics (Fisher et al., 1998) Constantine and Ladany (2001) expanded the framework of MCC to six dimensions: (a) counselor self-awareness, (b) general knowledge about multicultural issues, (c) multicultural counseling self-efficacy, (d) understanding of unique client variables, (e) an effective counseling working alliance, and (f) multicultural counseling skills.

First, counselors' self-awareness refers to the ability of counselors to reflect on their own identity development, including the influence of their own biases and assumptions on their behaviors and interactions with others (Constantine & Ladany, 2001). Secondly, knowledge about multicultural issues refers to the ability of counselors to recognize cultural issues embedded in a multicultural society and understand the effect of cultural factors on clients' psychosocial functioning. The model indicated that the acquisition of such knowledge allows counselors to differentiate between culture-specific and -general variables that collectively influence clients' presenting concerns (Constantine & Ladany, 2001).

Third, multicultural counseling self-efficacy is involved with counselors' beliefs in their ability to perform MCC in session. Following Bandura's (1982) definition of self-efficacy, Constantine and Ladany (2001) differentiated between the construct self-efficacy of and the self-perception of MCC. They claimed that self-efficacy relates to one's confidence in the provision of specific behaviors and skills, whereas self-perception involves one's belief about attitude, awareness, and knowledge. Fourth, the understanding of unique client variables involves the ability of counselors to analyze the influence of various sociocultural factors on clients' mental

health needs. Understanding clients' presenting concerns in their cultural contexts is a cornerstone of identifying a culturally appropriate intervention for the client (Constantine & Ladany, 2001).

Next, the effective working alliance refers to the ability of counselors to facilitate the development of strong working alliance in a culturally appropriate way. Bordin (1979) defined working alliance as a meta-theory conceptualizing three aspects of therapeutic process: (a) goal, (b) task, and (c) bond. In the model, Constantine and Ladany (2001) highlighted the ability of counselors to collaborate with clients in facilitating the three aspects of the therapeutic process. Lastly, multicultural counseling skills focus on the ability of counselors to identify relevant cultural issues related to clients' presenting concerns and to provide interventions that are responsive to clients' cultural values.

In summary, Constantine and Ladany (2001) expanded the existing tripartite model by reconceptualizing MCC within the common factors associated with the therapeutic process. In their model, MCC was proposed as an aspirational process in which counselors makes ongoing efforts to achieve. However, despite their theoretical expansion, they failed to describe how each competency can be operationalized in practice.

### Multidimensional Model of Cultural Competence

The *Multidimensional Model of Cultural Competence* (MDCC; Sue 2001) was proposed to address limitations in the literature of multicultural counseling. There has been little consensus on definitions for MCC and a simplified framework that generalizes multiple dimensions of MCC. In the MDCC model, Sue (2001) introduced the very first definition of MCC as follows:



Multicultural counseling competence is defined as the counselor's acquisition of awareness, knowledge, and skills needed to function effectively in a pluralistic democratic society (ability to communicate, interact, negotiate, and intervene on behalf of clients from diverse backgrounds), and on an organizational/societal level, advocating effectively to develop new theories, practices, policies and organizational structures that are more responsive to all groups. (p. 802)

Sue (2001) developed the MDCC model consisting of three primary dimensions followed by several sub-factors: (a) components of cultural, (b) foci of cultural competence, and (c) cultural group-specific worldviews. First, the components of cultural competence dimension are subdivided into three sub-factors (i.e., awareness of attitudes and belief, knowledge, skills) adopted from the tripartite model (Sue et al., 1982; 1992). Second, the foci of cultural competence dimension refer to four levels (i.e., individual, professional, organizational, societal level) at which counseling interventions need to take place to maximize clients' well-beings. Third, the cultural group-specific worldviews dimension pertains to the ability of counselors to tailor counseling interventions in a way that aligns with cultural values based on five major ethnicities (i.e., African American, Asian-American, Latino American, Native American, and European American).

Overall, Sue (2001) emphasized the essence of MCC as the ability of counselors to consider the multiple interactions of the three primary dimensions when working with culturally diverse clients. As compared to the tripartite model (Sue et al., 1982, 1992), the MDCC model was more inclusive and complex in that it included the issues of social justice, individual and social identities, and additional dimensions (i.e., foci) of MCC.

## Multicultural Orientation

Owen (2013) developed the *Multicultural Orientation Model* (MCO) which focused on counselors' ways of being in multicultural encounters. Owen et al. (2011) highlighted a distinct nature of MCO, distinguishing it from MCC, by proposing that

multicultural orientation was considered a way of being with the client whereas MCCs are viewed as a way of doing or perhaps how well a therapist engages in and implements her or his multicultural awareness and knowledge while conducting therapy. (p. 274)

Owen (2013) conceptualized MCO within three interrelated dimensions: (a) cultural humility, (b) cultural opportunities, and (c) cultural comfort. First, the cultural humility dimension can be defined as therapists' disposition toward humbleness, being a life-long learner, and having respectful curiosity about clients' cultural values and experiences (Hook et al., 2013; Tevalon & Murray-Garcia, 1998). Therapists who possess cultural humility are able to develop an accurate view of their limited knowledge and biases against other cultural values. They can also maintain respect and mutual partnerships with clients by continuously incorporating clients' perspectives into therapeutic process. Owen (2013) hypothesized that the demonstration of cultural humility may strength therapeutic relationships between therapists and clients.

Cultural opportunity refers to the ability of counselors to engage clients in further exploration of and reflection on cultural issues related to their presenting concerns when it is appropriate (Owen, 2013). Cultural opportunity relates to moments in therapy sessions when therapists engage clients in meaningful discussion of cultural issues in a contextual way that naturally links to their presenting concerns. Lastly, cultural comfort is involved with therapists' willingness to create a positive therapeutic environment where clients safely explore their

cultural identities and issues. Therapists who possess cultural comfortability are likely to facilitate direct or indirect discussion regarding clients' heritages, identities, and experiences in sessions (Owen, 2013).

In summary, Owen (2013) proposed the MCO model as a new approach to the conceptualization of MCC by emphasizing the importance of therapists' ways of being with clients. The MCO model informed a subsequent development of a measurement for therapists' cultural humility in the Cultural Humility Scale (CHS; Hook et al., 2013). However, the MCO model lacked detailed description in each dimension as well as complexity in how the dimensions were interrelated and operationalized.

### Multicultural and Social Justice Counseling Competencies

The *Multicultural and Social Justice Counseling Competencies* model (MSJCC; Ratts et al., 2016) was developed to reflect several changes that occurred in the literature of multicultural and social justice counseling: (a) intersectionality of multiple sociocultural identities, (b) the influence of oppression on well-beings, (c) socioecological perspective, and (d) advocacy for social justice in counseling. Ratts and colleagues (2016) conceptualized MSJCC within three layers of framework: (a) quadrants, (b) domains, and (c) competencies.

First, the quadrants are used to describe intersection of multiple identities and the dynamic of privileged and marginalized statuses that counselor and clients bring to the counseling relationship. Ratts and colleagues (2016) introduced the quadrants to illustrate the dynamic nature of the counseling relationship in which both counselors and clients bring their own power, privilege, and oppression, based on their own privileged and marginalized statuses. These

privileged and marginalized statuses were organized into four quadrants: (a) privileged counselor – marginalized client quadrant, (b) privileged counselor – privileged client quadrant, (c) marginalized counselor – privileged client quadrants, and (d) marginalized counselor – marginalized client.

Within the four quadrants, Ratts and colleagues (2016) introduced four developmental domains of MSJCC: (a) self-awareness, (b) client worldview, (c) counseling relationship, and (d) counseling and advocacy interventions. Self-awareness refers to counselors' awareness of their cultural values, beliefs, and biases as well as how such values and beliefs influence interactions with others. The client worldview domain involves the ability of counselors to comprehend the role of multiple cultural factors in shaping clients' worldviews and identity development. Third, the counseling relationship pertains to counselors' understanding of different ways in which power, privilege, and oppression influence the counseling relationship. Lastly, counseling and advocacy interventions involve the ability of counselors to conduct culturally appropriate interventions and strategies that enable therapeutic changes at individual, systemic, community, and international levels. Within the MSJCC model, Ratts and colleagues (2016) emphasized the following developmental sequence of these domains; MSJCC should begin to evolve from internal reflection (i.e., self-awareness) to external behaviors (i.e., counseling and advocacy inventions).

Within these three developmental domains, Ratts et al. (2016) further identified four developmental competencies: (a) attitude and belief, (b) knowledge, (c) skills, and (d) action. The MSJCC model adopted the first three competencies from the original tripartite model (Sue et al., 1992) and added a fourth developmental competency, action. Attitude and belief refer to

counselors' awareness of their own values, beliefs, and biases they possess as members of privileged and marginalized groups (Ratts et al., 2016). Knowledge pertains to counselors' understanding regarding the influences of multiple cultural factors on or the impact of privileged and marginalized statuses on clients' worldviews, identity development, and well-being (Ratts et al., 2016). Skills refer to the cognitive ability of counselors to identify and develop intervention strategies that are congruent with clients' cultural values and expectations. Lastly, action involves the ability of counselors to operationalize attitude and beliefs, knowledge, and skills in session with clients. Adding the action competency, in particular, reflected the concerns that possessing the three competencies was not enough unless they were translated to in-session behaviors (Ivey, Ivey, & Zalaquett, 2010; Nassar-McMillan, 2014). Furthermore, the MSJCC model emphasized the developmental sequence of these four competencies (Ratts et al., 2016) that counselors must develop from within themselves (i.e., belief and attitude) to demonstrate behaviors in practice (i.e., action).

In summary, the MSJCC model was proposed to address the recent advancements of multicultural and social justice counseling. The MSJCC model highlighted the ability of counselors to recognize the intersectionality of diverse cultural factors on individuals' identity and social membership, as well as its consequential impact on clients' well-beings. Lastly, the MSJCC model highlighted the significance of behavioral components of MSJCC.

### Existing Instruments of Multicultural Counseling Competence

Along with the development of various MCC models, there has also been the development of a number of instruments to measure multiple dimensions of MCC or constructs

parallel to MCC. Most of the existing measurements are therapists' self-report instruments that measure dimensions of MCC based on the tripartite model (Sue et al, 1982, 1992). However, the therapists' self-report instruments are criticized for their invalidity in assessing therapists' actual multicultural competent behaviors in session (Ridley et al., 2001; Smith et al., 2016; Worthington et al., 2007). Therefore, other forms of reliable instruments that are designed to assess therapists' actual multicultural competent performance are needed.

There is a dearth of other forms of instruments attempting to measure behavioral aspects of therapists' MCC, particularly from the perspective of clients. Moreover, the few existing instruments are not effective for clients to measure therapists' actual multicultural competent behaviors; behavioral indicators in the items are lacking and are not contextualized or specified to multicultural contexts (Ridley & Shaw-Ridley, 2011; Smith et al., 2016; Tao et al., 2015). In this section, the researcher presents information about nine different existing instruments. First, the researcher briefly describes six therapists' self-report instruments to assess therapists' MCC or related-constructs of MCC, which have been frequently utilized in the literature as well as informed the CAMCB development. Subsequently, the researcher provides a thorough review on three existing client-rated instruments designed to measure therapists' MCC or related constructs.

### Existing Therapists' Self-Report Instruments

#### Multicultural Awareness, Knowledge, and Skills Survey.

The *Multicultural Awareness, Knowledge, and Skills Survey* (MAKSS; D'Andrea et al., 1991) is a 60-item self-report instrument that was developed to evaluate the effectiveness of

multicultural counseling training. The MAKSS consists of three subscales; (a) awareness, (b) knowledge, and (c) skills. The MAKSS uses a 4-point Likert scale, ranging from 1 (*very limited*) to 4 (*very good*) for most of the items; 1 (*very limited*) to 4 (*very aware*) for the three of the items; 1 (*strongly disagree*) to 4 (*strongly agree*) for the remaining items. The MAKSS was found to have internal consistency of .75, .90, and .96 for the awareness, knowledge, and skills subscales respectively. Additionally, the developers reported evidence of content and criterion-related (D'Andrea et al., 1991). Despite the reported validity-related evidence, the MAKSS has been criticized for its limitations, including small sample size, poor sampling procedure and statistical analysis, and lack of information about evidence of validity (Ponterotto & Alexander, 1996; Pope-Davis & Dings, 1995). More importantly, Constantine and Ladany (2000) reported that the MAKSS skills subscale was significantly related to social desirability bias ( $r = .20, p < .005$ ). Additionally, the MAKSS scores were found to be not significantly related to behavioral aspect of MCC, multicultural case conceptualization ability (Constantine & Ladany, 2000).

#### Multicultural Counseling Inventory.

The *Multicultural Counseling Inventory* (MCI; Sadowsky et al., 1994) is a 40-item self-report instrument that was designed to “operationalize some of the proposed constructs of multicultural counseling competencies” (p. 139). The MCI consists of four subscales: (a) multicultural counseling awareness, (b) multicultural counseling knowledge, (c) multicultural counseling skills, and (d) multicultural counseling relationship. The MCI item is rated on a 4-point Likert scale, ranging from 1 (*very inaccurate*) to 4 (*very accurate*), yielding a total score of 40 to 160. Cronbach's alphas for the MCI 40 items was .87 as well as .78, .77, .80, and .68 for

the awareness, knowledge, skill, and relationship subscales respectively (Sodowsky et al., 1998). The developers reported evidence of good content and criterion validity through experts' review of items and experienced counselors' higher scores on the scale. However, Sodowsky et al. (1998) found a significant positive relationship between the MCI 40 items and multicultural social desirability biases. Moreover, Constantine and Ladany (2000) reported no relationship between the MCI and multicultural case conceptualization ability.

#### Multicultural Counseling Knowledge and Awareness Scale.

The *Multicultural Counseling Knowledge and Awareness Scale* (MCKAS; Ponterotto et al., 2000) is a 32-item self-report instrument that was designed to assess perceived multicultural knowledge and awareness. Each item is rated on a 7-point Likert scale, ranging from 1 (*not at all true*) to 7 (*totally true*). The MCKAS is a revised version of the original scale, the *Multicultural Counseling Awareness Scale-Form B* (MCAS-B; Ponterotto et al., 1996) and is comprised of two factors: knowledge and awareness. The MCKAS was found to have internal consistency of .85 for each subscale and evidence of content and criterion-related validity (Ponterotto et al., 2000). Moreover, Constantine and Ladany (2000) reported a significant negative relationship between the MCKAS awareness subscale and social desirability ( $r = -.31, p < .01$ ). However, no significant relationship between the MCKAS and multicultural case conceptualization ability was found (Constantine & Ladany, 2000).



### Multicultural Counseling Self-Efficacy Scale-Racial Diversity Form.

The *Multicultural Counseling Self-Efficacy Scale-Racial Diversity Form* (MCSE-RD; Sheu & Lent, 2007) is a 37-item self-report instrument designed to measure therapists' self-efficacy in delivering culturally sensitive services for racially diverse clients. Informed by social-cognitive theory and literature on multicultural counseling competency, the MCSE-RD consists of three dimensions: (a) multicultural intervention, (b) multicultural assessment, and (c) multicultural session management. Sheu and Lent (2007) emphasized that the self-report format is appropriate for assessing one's self-efficacy rather than actual competencies. Additionally, the MCSE-RD was developed to address limitations of existing therapists' self-report instruments, such as unspecified domains and contexts to measure.

The multicultural intervention subscale consists of items measuring therapists' self-efficacy as to develop and deliver culturally appropriate interventions when working with racially diverse clients. Multicultural assessment is the second subscale measuring therapists' self-perceived ability in conducting culturally responsive assessment and evaluation of clients' mental health problems. Lastly, the multicultural session management subscale measures therapists' self-efficacy in delivering culturally responsive session management, termination, and referral.

The MCSE-RD includes 37 items being rated on a scale, ranging from 0 (not confident at all) to 9 (complete confident) with higher scores representing higher levels of self-efficacy. The MCSE-RD exhibited internal consistency reliability of .98 on the entire scale as well as ranging from .92 to .98 on the subscales. Additionally, test-retest reliability within two weeks for the MCSE-RD total score indicated .77 and ranged from .69 to .88 for the three subscales. The

MCSE-RD reported a nonsignificant relationship ( $r = .09$ ) with scores on Multicultural Social Desirability Scale (Sodowsky, Kuo-Jackson Richardson, & Corey, 1998), indicating evidence of discriminant validity with social desirability. The MCSE-RD was found to have evidence of convergent validity with other measures of counselors' self-efficacy and MCC ( $r_s = .79, .68$ ; Sheu & Lent, 2007).

### Spiritual Competency Scale.

The *Spiritual Competency Scale* (SCS; Dailey, Robertson, & Gill, 2015) is a 21-item self-report instrument designed to assess therapists' competencies in addressing spiritual/religious issues in counseling. The development of SCS was informed by Association for Spiritual, Ethical, and Religious Values in Counseling's spiritual competencies (ASERVIC, 2009). The SCS is comprised of six factors: (a) culture and worldview, (b) counselor self-awareness, (c) human and spiritual development, (d) communication, (e) assessment, and (f) diagnosis and treatment. These six factors are representative of the categories within which the revised ASERVIC's competencies (2009) were organized.

The cultural and worldview factor refers to recognition of spirituality and/or religion as a salient aspect of culture that influences one's worldview and experience. Counselor self-awareness refers to therapists' awareness of their own spiritual and/or religious beliefs, attitudes, and values. The human and spiritual development factor relates to understanding of how spiritual and human development are interconnected. The communication factor refers to therapists' awareness of and openness to spiritual and/or religious issues in counseling. The assessment factor refers to therapists' efforts to integrate aspects of spirituality and religion into assessment.

Lastly, the diagnosis and treatment factor is involved with understanding how clients' spirituality influences diagnosis and treatment of mental health problems.

The SCC is rated on a 6-point Likert scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). Internal consistency reliability for the SCS total score was .84 and ranging from .60 to .71 for the subscales. Dailey and colleagues (2015) acknowledged limited evidence of construct validity (e.g., convergent and discriminant validity) for the SCC and recommended a subsequent validation study be conducted.

#### Counseling Women Competencies Scale.

The Counseling Women Competencies Scale (CWCS; Ancis, Szymanski, & Ladany, 2008) is a therapists' self-report instrument designed to assess their self-perceived competencies in counseling female clients from diverse cultural backgrounds. The CWCS is a 20-item instrument, rated using a 7-point Likert scale ranging from 1 (not at all true) to 7 (totally true). The development of CWCS was informed by various literature (e.g., multicultural competence, feminism theory, psychology of women) and guidelines for counseling women. The CWCS consists of two factors, including knowledge and skills and self-awareness. Knowledge refers to therapists' understanding of psychosocial issues pertaining to diverse females. Skill relates to therapists' ability to conduct culturally sensitive interventions for diverse female clients. Finally, self-awareness is involved with therapists' self-reflection of their own assumptions, attitudes, and biases about gender role.

The content validity of CWCS was supported by a pilot test with 32 experts (female = 91%, male = 9%) in the area of counseling women. The pilot test allowed for improving clarity

and relevancy for each item as well as adequacy of measurement format. Additionally, the CWCS provided evidence of reliability and validity. The CWCS exhibited internal consistency reliability of .90 for the full scale, .89 for knowledge and skill subscale, and .78 for self-awareness. The CWCS total score reported significant relationship with knowledge and skill ( $r = .97$ ) and self-awareness ( $r = .75$ ) subscales. Two subscales were moderately correlated ( $r = .56$ ). The CWCS exhibited convergent validity by showing a significant relationship with other instruments measuring a similar concept such as Attitudes Toward Feminism and the Women's Movement Scale (FWM; Fassinger, 1994) with  $r = .39$ , Active Commitment Subscale of Feminist Identity Development Scale (FIDS; Bargad & Hyde, 1991) with  $r = .50$ , and Multicultural Counseling Knowledge and Awareness Scale (MCKAS; Ponterotto et al., 2002), with  $r = .64$ . The CWCS also demonstrated discriminant validity as it showed no significant relationship ( $r = -.19$ ) with social desirability biases (Ancis et al., 2008).

### Existing Client-Rated Instruments

#### Cultural Humility Scale

The *Cultural Humility Scale* (CHS; Hook et al., 2013) is a client-rated measure of their therapists' cultural humility in practice. Cultural humility is a dimension of the multicultural orientation model (MCO; Owen, 2013) and refers to counselors' commitment to a respectful curiosity and openness toward clients' culture and experience (Davis et al., 2010; Hook et al., 2013). The CHS consists of 12 items on a 5-point Likert scale, ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The CHS was developed within two factors (i.e., two sub-scales), including positive other-oriented and negative self-oriented (Hook et al., 2013). The positive

other-oriented factor represented characteristics of cultural humility (e.g., openness and respect toward others); whereas the negative self-oriented indicated the opposite characteristics of cultural humility (e.g., superiority attitude and careless assumptions).

Hook and colleagues (2013) conducted three studies to investigate the factor structure and psychometric properties of the CHS. In the first study, they administered the initial 32-item version of the CHS to 472 college students who received therapeutic services in the past. With the use of exploratory factor analysis, they decided to remove 20 items that either did not have strong factor loading or overlapped with other items (Hook et al., 2013), resulting in 12 items. Subsequently, they recruited a sample of 134 adult clients and conducted confirmatory factor analysis on the remaining 12 CHS items to assess its validity and reliability. Hook and colleagues (2013) reported internal consistency of .93 for the 12 CHS items and of .93 and .90 for two subscales (i.e., positive other-oriented and negative self-oriented, respectively). Additionally, Hook et al. (2013) found the CHS to have concurrent validity with other clients' rated measures of MCC ( $r = .64$ ) and working alliance ( $r = .60$ ). Lastly, Hook and colleagues (2013) conducted a study of racial minority clients ( $N = 120$ ) to further accumulate evidence of validity of the CHS. They found evidence for predictive validity of the CHS with a measure of client outcome ( $r = .59$ ).

In summary, Hook and colleagues (2013) developed the CHS to measure a related construct of MCC, cultural humility. With the series of three studies, they provided evidence for validity and reliability of the CHS. However, it is important to recognize that the CHS was not designed to measure therapists' actual MCC performance in practice; instead, the CHS aimed to assess therapists' disposition or orientation toward MCC.

### Cross-Cultural Counseling Inventory-Revised.

The *Cross-Cultural Counseling Inventory-Revised* (CCCI-R; LaFromboise et al., 1991) is an observer-rated and 20-item measure of therapists' MCC. LaFromboise and colleagues (1991) developed the CCCI-R to measure three dimensions of MCC in the tripartite model; belief and attitude, knowledge, and skills (Sue et al., 1982). The CCCI-R utilizes a 6-point Likert scale, ranging from 1 (*strongly disagree*) to 6 (*strongly agree*), with a total score ranging from 20 to 120.

LaFromboise and colleagues (1991) conducted a series of three studies to assess the factor structure of and psychometrically examine the CCCI-R. In the first study, eight doctoral students from a counseling psychology program were asked to rate the content validity of each item. The authors reported that with overall level of agreement of 80%, each item on the CCCI-R was classified in accordance with its original intent of the tripartite model. Interrater reliability among the raters indicated .58 at  $p < .001$ . In the second study, LaFromboise and colleagues (1991) recruited three experts in multicultural counseling to examine reliability of the CCCI-R. The raters were asked to view 13 videotaped counseling sessions, where White practicum students conducted multicultural counseling interview with a Mexican American client. After viewing the videotapes, the raters were instructed to evaluate the counselors using the CCCI-R. LaFromboise and colleagues (1991) reported an average reliability of .78 among three raters.

Lastly, the third study aimed to explore the factor structure of the CCCI-R and evaluate its psychometric features. LaFromboise et al. (1991) recruited 81 university students who were asked to view a mock counseling session in which White counselors conducted a counseling interview with clients. After viewing the mock counseling sessions, the participants were asked

to rate the counselor using the CCCI-R. The study reported internal consistency of .95 for the 20 items and correlation among items ranging from .18 to .73 (LaFromboise et al., 1991). Additionally, the CCCI-R was found to have evidence of criterion-related validity with an observer-rated measure of counselors' MCC (LaFromboise et al., 1991).

The CCCI-R was originally designed to have three factors, including (a) cross-cultural counseling skills, (b) sociopolitical awareness, and (c) cultural sensitivity. However, their principal components analysis indicated that 19 of the 20 items were significantly loaded on a single factor ( $r \geq .55$ ), with 51% of the variance explained. Alternatively, the authors conducted another factor analysis with varimax rotation, identifying three factors of MCC that explained 63% of variance. However, LaFromboise et al. (1991) recommended that the CCCI-R should be considered to be a unidimensional scale (i.e., one factor scale) for the following reasons: large eigenvalue on the first factor and overlapping constructs among three factors. Thus, the CCCI-R has been considered and utilized as a unidimensional scale that measures global characteristics of MCC.

Although the CCCI-R was originally developed as an observer-rated instrument, the CCCI-R has been revised as a client-rated version through modification of wording and content of items. For example, an example of CCCI-R items includes "aware of professional responsibilities." In the client-rated version, this item was changed to be "my counselor is aware of the professional and ethical responsibilities of counselor." Approximately 70% of multicultural research used the client-rated version of the CCCI-R as an instrument to assess the relationship between MCC and other therapeutic constructs, such working alliance (Owen et al., 2011; Tao et al., 2015; Worthington et al., 2007). However, despite its widespread use, the

client-version of CCCI-R has been criticized for its questionable content validity. For example, Drinane and colleagues (2016) surveyed a team of 19 experts in the area of MCC on the content validity of the adapted 20 items. The experts were asked to rate content validity of each item using a Likert scale ranging from -3 (*really bad item*) to +3 (*really good item*). Only 7 items were found to be reliable for rating by clients (Drinane et al., 2016).

Moreover, scholars and researchers have criticized the client-version of the CCCI-R for its questionable validity in assessing therapists' actual MCC performance in practice. Specifically, several studies highlighted a lack of behavioral details (e.g., abstract description) in the CCCI-R (Owen et al., 2011; Ridley & Shaw-Ridley, 2011; Tao et al., 2015). Also, the CCCI-R items were not contextualized to specific multicultural contexts (Owen et al., 2011; Ridley & Shaw-Ridley, 2011). As a result, referring to the limitations of the CCCI-R, some researchers have indicated that the CCCI-R may better assess therapists' orientation or disposition toward MCC, rather than therapists' actual ability to perform MCC in session (Owen et al., 2011; Ridley & Shaw-Ridley, 2011).

#### Multicultural Therapy Competency Inventory – Client Version.

The *Multicultural Therapy Competency Inventory-Client Version* (MTCI-CV; Cole et al., 2014) is a client-rated instrument to assess clients' perceptions of their therapists' MCC. The MTCI-CV has 32 items, which are rated on a 3-point Likert scale ranging from 1 (*does this very well*) to 2 (*does this adequately*) to 3 (*does this poorly*). Lower scores indicate that therapists possess a higher level of MCC. The MTCI-CV was developed using six factors representing cognitive and process dimensions of MCC (Dyche & Zayas, 1995; Seedall et al., 2013; Sue et



al., 1992; Tervalon & Murray-Garcia, 1998). The six factors include: (a) counselor awareness of own cultural values and biases, (b) counselor awareness of clients' worldview, (c) culturally appropriate intervention strategies, (d) respectful curiosity, (e) naiveté, and (f) multicultural counseling relationship (Cole et al., 2014).

The development of the MTCI-CV was categorized into three phases: (a) item generation and theme development, (b) client feedback and interrater reliability, and (c) piloting and validity testing (Cole et al., 2014). For the first phase, 123 participants were recruited from a variety of community settings (e.g., church and university intentional club) and were asked to complete an open-ended questionnaire that elicited their perspectives on multicultural knowledge, belief, and skills. Based on the participants' responses, the developers created an initial pool of 212 items; subsequently, the developers reviewed each item for reliability and face validity and reduced the 212 items to 58 items.

For Phase 2, Cole and colleagues (2014) recruited seven clients from a family therapy center who were asked to indicate unclear items. In addition, the developers also solicited feedback from three family and marriage counseling experts on the content validity of each item. The developers calculated interrater agreement among the three experts on each item. Items that did not have 100% agreement among the three experts were considered for revision or elimination. As a result, the MTCI-CV was shortened from 58 items to 48 items after Phase 2. Lastly, Cole and colleagues (2014) conducted a study with 211 client participants to examine the factor structure of the MTCI-CV and to assess its psychometric properties. They removed an additional 16 items to mitigate the overly high reliability for the 48 items, leaving 32 items. Internal consistency for the final 32 items was .98, with 79% of the variance explained. Given

the overly high reliability for the items, the developers considered the MTCI-CV to be a unidimensional scale (e.g., one single factor).

Despite the thorough development process, the validity of the MTCI-CV is questionable due to several limitations; (a) sampling bias (homogenous sample), (b) lack of evidence for validity, and (c) multicollinearity (overly high reliability). First, the development of MTCI-CV relied on the homogenous sample (female = 70.1%; White = 82.4%) recruited from a family-based clinic department. This homogeneity may limit the generalizability of the MTCI-CV for diverse cultural groups and in various therapeutic modalities. Additionally, the developers reported limited evidence for validity of MTCI-CV, including convergent, divergent, and criterion-related validity. The high internal consistency ( $r = .98$ ) for the 32 items indicated multicollinearity, suggesting that all items repeatedly measured the same construct.

Additionally, behavioral indicators were lacking in the MTCI-CV items. The absence of behavioral details in items may make it difficult for clients to capture nuanced aspects of therapists' MCC (Ridley & Shaw-Ridley, 2011; Tao et al., 2015). Researchers who aim to develop a client-rated instrument should avoid an assumption that clients already have knowledge and skills to evaluate counselors (Ridley & Shaw-Ridley, 2011). Additionally, the MTCI-CV items were not specific to relevant multicultural contexts; the MTCI-CV tends to measure general counseling skills rather than specific skills related to MCC. As a result, the limitations of the MTCI-CV bring into question the instrument's validity in measuring therapists' actual ability to perform MCCs in practice.

### Dimensions of Multicultural Competent Behaviors in Therapeutic Processes

There exist several dimensions in the MCC literature that represent multicultural competent behaviors in the context of therapeutic processes. Based on the literature review of various MCC models and multicultural research, MCC includes four dimensions; (a) self-awareness (belief and attitude), (b) knowledge, (c) skill, and (d) behavior.

This section of the review of the dimensions of multicultural competent behaviors contains a brief description of the first three dimensions (i.e., self-awareness, knowledge, and skills), given that the three dimensions are precursor competencies required for achieving the last competency, behavior (Collins & Arthur, 2010; Constantine, 2000; Ratts et al., 2016; Sue et al., 1992). Subsequently, the researcher will review four dimensions of multicultural competent behaviors that are contextualized and specified in the therapeutic process: (a) multicultural therapeutic relationship, (b) multicultural assessment, (c) multicultural case conceptualization and goal setting, and (d) multicultural intervention.

#### Precursor Competencies to Development of Multicultural Competent Behavior

##### Self-Awareness

Sue and colleagues (1982, 1992) defined self-awareness as the ability of therapists to reflect on their own heritages and values as well as to examine their assumptions about cultural differences. Similarly, Constantine and Ladany (2001) described self-awareness as counselors' on-going efforts to recognize their own biases and assumptions about a variety of cultural groups. Moreover, Ratts and colleagues (2016) referred to self-awareness as the ability of

therapists to be introspective about their own cultural identity and social group membership as well as examine the power and privilege they may have. It is agreed in the MCC literature that therapists' MCC must first develop from their self-awareness; possessing self-awareness allows therapists to develop the second competency, knowledge of how cultural factors influence clients' cultural worldviews and experiences (Constantine, 2000; Ratts et al., 2016; Sue et al., 1992).

### Knowledge

Sue and colleagues (1982, 1992) defined knowledge as the ability of therapists to understand the influence of cultural factors on their clients' worldviews, identity, values, and experiences. Similarly, Constantine and Ladany (2001) referred to knowledge as the capability of therapists to cognize the role of multiple sociocultural factors in the way clients experience and perceive their concerns. Lastly, Ratts and colleagues (2016) expanded the meaning of knowledge into therapists' cognition regarding how social group members are related to power and privilege as well as its consequential influence on clients' worldview, values, and behaviors. Once the knowledge is developed, therapists begin to develop the third competency, skill (Constantine, 2000; Ratts et al., 2016; Sue et al., 1992).

### Skills

Sue and colleagues (1992) described skills as the cognitive ability of therapists to identify multicultural responsive interventions as well as behavior ability to deliver the interventions to clients. Although they implied behavioral aspects of skill competency, their description of skill

competency was more focused on the cognitive aspect of skill competency. Ratts and colleagues (2016) described skill competency as the analytic ability of therapists to conceptualize the influence of cultural factors and socio group membership on clients' presenting concerns and well-being as well as therapeutic process.

### Dimensions of Multicultural Competent Behavior

Sue and colleagues (1982, 1992) implied behavioral aspects of MCC as the ability of therapists to transform their cultural beliefs, attitudes, and knowledge into cultural skill sets. Lopez (1997) conceptualized multicultural competent behaviors in the context of therapeutic processes by highlighting the ability of therapists to incorporate clients' cultural perspectives into the therapeutic process. Moreover, other scholars described behavioral aspects of MCC as the ability of therapists to take actions to facilitate strong therapeutic relationships, conduct multiculturally responsive interventions, and address cultural issues with clients in therapeutic processes (Collins & Arthur, 2010; Constantine & Ladany, 2001). In 2016, Ratts and colleagues defined multicultural competent behaviors as counselors' ability to "take actions by operationalizing attitudes and belief, knowledge, and skills" (p. 38).

For this research, the researcher operationally defined *multicultural competent behavior* as follows: therapists' ability to translate multicultural awareness, knowledge, and skills into demonstrable multiculturally competent in-session behaviors that facilitate collaborative, therapeutic processes that are responsive to clients' cultural values and experiences (Collins & Arthur, 2010; Lopez, 1997; Ratts et al., 2016; Sue et al., 1992). The following section presents

information regarding four dimensions of multicultural competent behaviors that are contextualized in the therapeutic process.

### Multicultural Therapeutic Relationship

There are multicultural competent behaviors that facilitate the development of strong therapeutic relationships. Although specific behavioral skills were not identified, Lopez (1997) highlighted the importance of therapists' in-session behaviors that create multicultural therapeutic relationships in which clients safely share with therapists their cultural perspectives on presenting concerns and expectations for counseling services. Alternatively, other scholars underscored the therapists' ability to discuss cultural issues with clients in the therapeutic process as leading to the development of strong working alliances (Collins & Arthur, 2010; Constantine & Ladany, 2001). Ratts and colleagues (2016) highlighted therapists' action to initiate discussion with clients about potential power differences between therapists and clients. Having such discussions is assumed to facilitate safe and trusting therapeutic relationships (Ratts et al., 2016).

Additionally, the American Psychiatric Association supported the idea of discussing any cultural differences (e.g., race, gender, language, social status) between therapists and clients as a way to develop safe therapeutic relationships (APA, 2013). Moreover, Day-Vines and colleagues (2007) emphasized the importance of counselors broaching behaviors to develop strong therapeutic relationships. They defined broaching behaviors as the therapists' ability to discuss cultural differences (e.g. race, gender) with clients or relevant cultural issues that influence the therapeutic process. Alternatively, other scholars highlighted cultural humility as an essential

aspect of multicultural competent behavior that strengthens therapeutic relationships (Hook et al., 2013; Owen, 2013). Cultural humility was involved with the ability of therapists to demonstrate their respectful curiosity toward clients' cultural values and backgrounds (Hook et al., 2013; Owen, 2013).

Though limited, few studies have investigated the effect of multicultural competent behaviors on therapeutic relationships. For example, researchers reported that therapists who discussed racial differences with clients tended to have stronger therapeutic alliances and safer therapeutic relationships and that this allowed clients to share cultural aspects of themselves (Knox, Burkard, Suzuki, & Ponterotto, 2003; Poston, Craine, & Atkinson, 1991; Thompson, Worthington, & Atkinson, 1994; Zhang & McCoy, 2009). Additionally, in a qualitative study, Rogers-Sirin, Melendez, Refano, and Zegarra (2015) reported that immigrant clients ( $n = 10$ ) felt more appreciated and safer when therapists self-disclosed their limited understanding of the clients' cultures and demonstrated their curiosity to learn the cultures. Moreover, Fuertes and colleagues (2002) conducted a qualitative study with White therapists ( $n = 9$ ) and found that therapists had a better therapeutic relationship with clients of color when discussing racial differences in the relationship.

Similarly, a series of two qualitative studies indicated that clients more appreciated their therapists when therapists discussed cultural differences embedded in the therapeutic relationship or cultural misunderstandings that emerged during the therapeutic process (Chang & Beck, 2009; Chang & Yoon, 2011). In a study with 135 undergraduate students, Choi and colleagues (2015) asked participants to evaluate one of four mock counseling sessions where Canadian and Korean counselors either broached or did not broach cultural differences (e.g., language and nationality).

They found that the participants reported higher levels of interpersonal attractiveness of Canadian counselors who broached the cultural differences ( $p = .004$ ,  $\eta^2 = .06$ ). Thus, broaching cultural differences within counseling relationships can be an important multiculturally competent behavior that could strengthen the therapeutic relationship.

Furthermore, Hook and colleagues (2013) investigated the effect of a multicultural competent behavior (cultural humility) on the therapeutic relationship. In a series of two studies with clients ( $ns = 134, 120$ ), they examined the association of therapists' cultural humility with therapeutic relationship. The studies found significantly positive relationships between the clients' perceptions of their therapists' cultural humility and working alliance ( $rs = .60, .74$ ;  $ps < .001$ ). Davis and colleagues (2016) also supported the idea that therapists' demonstration of cultural humility contributed to the development of a strong therapeutic relationship. They found a similar positive relationship between the clients' perceptions ( $n = 128$ ) of therapists' cultural humility and working alliance ( $r = .70$ ,  $p < .006$ ).

In summary, despite the dearth of literature on multicultural competent behaviors related to the development of therapeutic relationships, scholars and researchers agree the existence of these behaviors could contribute to the development of strong therapeutic relationships. Specifically, such behaviors include therapists' ability to discuss cultural differences (e.g., race, gender) between clients and therapists and demonstrate their cultural humility toward clients' cultural values and experience.



### Multicultural Assessment.

In the MCC literature, there are multicultural competent behaviors related to assessment. Lopez (1997) suggested that multicultural competent behaviors are reflected in the extent to which therapists gather cultural data from clients and integrate the data into assessment processes. Additionally, American Psychiatric Association (APA, 2013) highlighted the ability of therapists to discuss the role of sociocultural factors in the clients' well-beings in the assessment process. Moreover, professional organizations mandate that multicultural competent counselors must demonstrate their ability in discussing cultural issues when conducting assessments with their clients (AAMFT, 2004; ACA, 2014; ALGBTIC, 2013; ASERVIC, 2009).

Specifically, APA recommended therapists to assess four cultural domains with clients throughout the assessment process: (a) cultural identity of clients, (b) cultural conceptualizations of distress, (c) psychosocial stressors and cultural features of vulnerability and resilience, and (d) cultural features of the relationship between the individuals and clinician (APA; 2013, p.750). Aggarwal and colleagues (2013) conducted a study with therapists ( $n = 7$ ) who worked with 32 clients diagnosed with mental health disorders. The therapists were required to assess the four cultural dimensions with their clients at the initial assessment. In this study, the therapists reported that they could develop a better understanding of clients' presenting concerns in their cultural contexts, and the clients expressed that they were more satisfied and engaged with their therapists (Aggarwal et al., 2013).

Additionally, other scholars emphasized therapists' initiatives to discuss with clients their cultural identity, systemic challenges, and social support factors throughout the assessment process (Dana, 2005; Grieger, 2008; Ridley et al., 1994). Zigarelli and colleagues (2016)

conducted a case study with an African American female (age = 15). At the initial assessment session, the therapist was asked to discuss with the client various cultural factors (e.g., family value, social status, race, gender, social support). Zigarelli et al. (2016) found that assessing such cultural factors aided in developing evidenced-based treatment plans that considered a client's cultural values. As a result, despite the paucity of literature on multicultural competent behaviors in the context of assessment process, it has been agreed that multicultural competent therapists need to demonstrate their ability to discuss and integrate various cultural factors into the assessment processes.

#### Multicultural Case Conceptualization and Goal Setting.

Sodowsky, Taffe, Gutkin, and Wise (1994) proposed multicultural case conceptualization as a potential aspect of multicultural competent behavior. Similarly, Ladany and colleagues (1997) highlighted multicultural case conceptualization skill as an appropriate indicator of therapists' multicultural competent behaviors in practice. They defined multicultural case conceptualization as the ability of therapists to analyze the impact of cultural factors on clients' presenting concerns. Furthermore, Owen (2013) proposed the construct of cultural opportunity to explain how multicultural case conceptualization skill could be demonstrated in practice. Owen (2013) described that demonstration of such skill reflects a moment when therapists purposefully engage clients in a discussion about cultural issues that may relate to their presenting concerns. Other scholars also supported the idea that multicultural competent therapists should engage clients in reflecting the way multiple cultural factors influence their presenting concerns (Constantine & Landay, 2001; Lopez, 1997; Ratts et al., 2016; Sue & Sue, 2016).

In addition, multicultural competent therapists can establish therapeutic goals in a way that fits clients' cultural values and expectations. For therapy to be culturally effective, Sue, Ivey, and Pedersen (1996) underscored the ability of therapists to define "goals consistent with the life experiences and cultural values of the client" (p. 19). Specifically, other scholars emphasized the importance of therapists' in-session behaviors that facilitate collaboration with clients in setting therapeutic goals that align with cultural values and expectations of clients and their significant others (Collins & Arthur, 2010; Constantine & Ladany, 2001).

Despite the recognized importance, there is a dearth of empirical evidence indicating that therapists who discussed the influence of culture on their clients' presenting concerns have better therapeutic outcomes or therapeutic processes. In 2016, Owen and colleagues studied 247 clients to examine the relationship between such cultural discussion and therapeutic outcome. In their study, therapists, who did not miss an opportunity to discuss cultural issues regarding their presenting concerns with clients, reported having better outcomes ( $r = -.497, p < .001$ ). Additionally, Smith and colleagues (2011) found that therapists-clients' agreement on therapeutic goals contributed to the improvement of therapeutic outcomes. In summary, it is important that therapists initiate discussion about the role of culture on clients' presenting concerns and collaborate with clients in establishing culturally appropriate goals.

### Multicultural Intervention.

Sue and colleagues (1982, 1992) described behavioral aspects of MCC as the therapists' skill to tailor interventions in a way that is consistent with the life experience and cultural values of the client. Similarly, Lopez (1997) also highlighted the importance of therapists' behaviors to

individualize therapeutic methods and interventions for clients' cultural expectations. Other scholars emphasized the therapists' collaboration with clients in finding interventions that integrate both clients' and therapists' perspectives (Collins & Arthur, 2010; Constantine & Ladany, 2001). Researchers supported the idea that multicultural competent behaviors are reflected in the extent to which therapists appropriately tailor treatment plans and interventions for clients' cultural beliefs and values (Benish et al., 2011, Bernal et al., 2009, Castro et al., 2010). Ratts and colleagues (2016) also indicated that multicultural competent counselors should be able to provide interventions that address clients' presenting concerns at multilevel of their cultural contexts for maximizing therapeutic changes. Collectively, the MCC literature underscored the act of therapists to discuss and synthesize clients' cultural values and expectations into treatment inventions.

Though limited, little empirical research was conducted to examine the effect of culturally tailored (responsive) interventions on clients' experience with therapy. In three meta-analyses, Hodge and colleagues (2010a; 2010b; 2012) investigated the effectiveness of culturally tailored interventions for racial and ethnic minority (REM) youth. In a meta-analysis with 21 studies examining REM youth with behavioral problems, Hodge and colleagues (2010a) found that culturally tailored interventions were effective for REM youth, with a small effect size ( $g = 0.24$ , 95% C.I = [.139, .339],  $p < .001$ ). In another meta-analysis ( $n = 11$  studies), Hodge and colleagues (2010b) found a similar effectiveness of the culturally tailored interventions for Latino youth with externalizing behaviors ( $g = 0.18$ , 95% C.I = [.019, .338],  $p = .028$ ) and health-related problems ( $g = 0.2$ , 95% C.I = [.038, .361],  $p = .016$ ). In the third meta-analysis, Hodge et al. (2012) examined 10 studies targeted for REM youth with substance use. The meta-

analysis reported a small effectiveness of culturally tailored interventions for the youth, with an effect size ( $g = 0.118$ , 95% C.I. = [.004 .232],  $p = .043$ ).

In addition, Griner and Smith (2006) studied the effectiveness of culturally tailored interventions for REM adults. Their meta-analysis examined 76 studies which used single group, quasi-experimental, and/or experimental designs for REM clients with mental illness and/or daily life concerns. Across 76 studies, Griner and Smith (2006) reported a moderately significant effectiveness of the culturally tailored interventions for REM adults ( $d = .45$ , 95% CI = [.36, .53],  $p < .0001$ ). Of particular importance is that most studies (84%) reported that their culturally tailored interventions were related to discussion and integration of clients' cultural values into the interventions. Subsequently, Smith and colleagues (2011) conducted a meta-analysis of 65 studies using quasi- and experimental designs comparing the effectiveness of culturally tailored interventions to traditional interventions. Analyzing the 65 studies with a total of 8,620 clients with psychological problems, Smith and colleagues (2011) found that the culturally-tailored interventions were more effective for REM clients than the traditional interventions ( $d = .46$ , 95% CI = [.36, .56],  $p < .001$ ). Similarly, Benish, Quintana, and Wampold (2011) conducted a meta-analysis of 21 studies which compared culturally tailored interventions to non-tailored interventions. Benish and colleagues (2011) reported that the culturally tailored interventions produced better outcomes for REM clients than non-tailored traditional interventions ( $d = .32$ , 95% C.I. = [.21, .43],  $p < .05$ ). As a result, these collective findings supported the importance of therapists' multicultural competent behaviors to discuss and incorporate clients' cultural values, experiences, expectation into interventions.

### Chapter Summary

In Chapter Two, the researcher provided the literature review related to the construct of interest as follows: The first section provided information regarding the historical paradigm of multicultural counseling and competence. The second section focused on theoretical foundations resulting in MCC. The third section addressed the contexts that increase the importance of MCC. The fourth section included definitions of key terms. The fifth section contained a review of existing multicultural research regarding the effect of MCC on therapeutic processes and client outcome. The sixth and seventh sections presented a discussion of existing models and instruments of MCC. Section eight was a review of different domains of multicultural competent behaviors in the context of therapeutic process. The literature review in this chapter highlighted the need for ongoing investigation into MCC and supported the need for the development of a reliable client-rated instrument that (a) follows thorough scale development procedures, (b) is rooted in theoretical and empirical MCC literature, and (c) is designed to measure therapists' multicultural competent behaviors in therapeutic processes. Chapter Three presents information regarding research methodologies and procedures for this research.

## CHAPTER THREE: METHODS

Chapter Three presents the research methods and procedure for the development and validation of the CAMCB scores. The purpose of this study was to develop the CAMCB and examine its psychometric properties with a sample of clients. This research was broadly organized into two phases for developing and psychometrically examining the instrument. Specifically, Chapter Three of the dissertation present following information regarding the research methods: (a) research design, (b) population and sampling procedure, (c) data collection procedure, (d) instrument development procedure, (e) instrumentation, (f) research purpose and hypotheses, (g) data analysis plan, (h) ethical considerations, and (i) limitations of the study.

### Research Design

This research employed a correlational research design to explore the relations between variables without manipulation (Gall et al., 2007). This research aimed to develop the CAMCB and its psychometric properties with a sample of clients. Procedures for developing and examining the CAMCB were organized into two research phases. Specific steps in the CAMCB development and evaluation procedure are outlined in Table 2.

Table 2

Flowchart Describing Steps in Developing and Psychometrically Examining the CAMCB

Phase	Steps	Process
Phase 1	1	Defining the construct of interest
	2	Developing initial item pool
	3	Selecting response format
	4	Surveying expert review on the initial item pool (First-round)
	5	Following-up with the experts after initial revision (Second-round)
	6	Pilot test
	7	Revising CAMCB to reflect findings from pilot test
	8	Surveying expert review on the revised CAMCB, along with findings from the pilot test (Third-round)
	9	Consultation among dissertation committees
	10	Final round of surveying expert review
Phase 2	11	Inclusion of validation items
	12	Administrating CAMCB to a developmental sample
	13	Psychometric Investigation – EFA / CFA
	14	Interpretation and report of study findings



### Population and Sampling Procedure

The purpose of this study was to develop a client-rated measurement of therapists' multicultural competent behaviors in the therapeutic process and to examine the psychometric features of the instrument with a sample of clients. For this study, a target population included clients who received mental health services in the U.S. The researcher recruited the accessible population of clients from various mental health counseling settings (e.g., community-based, university-based, and private mental health centers) in the Southern United States. A web-based tool, Amazon's Mechanical Turk (MTurk; Buhrmester et al., 2011), was also utilized to recruit client participants across the United States (i.e. from 48 states).

For this study, sampling methods included a non-probability, convenience sampling procedure with eligibility criteria (Gall et al., 2007). Specifically, participants for this study (a) were age 18 or older; (b) receiving, currently or within the past four weeks, any modality of mental health services (e.g., individual, family and marriage, couple, career, and group counseling); and (c) had completed a minimum of three sessions with their therapists. This study utilized three modes of data collection procedures; (a) face-to-face contact and face-to-face administration with paper-and-pencil version of assessments, (b) face-to-face contact and self-administration with electronic version of assessments, and (c) online contact and online administration with electronic version of assessments.

For face-to-face contact recruitment, the researcher visited multiple mental health service settings in the Southern U.S., including one university-based mental health center and four community-based mental health centers. A convenience sample of clients identified at the centers were invited to participate in the study. The names of the centers were de-identified in

this dissertation. The researcher also invited counseling students from two universities who were receiving counseling services (either of their own volition or as a course requirement). For the online contact recruitment, the researcher recruited participants through the web-based recruitment tool, MTurk (Buhrmester et al., 2011). Mixed method of data collection procedures improved the geo-demographic diversity of client participants and the generalizability of the data.

Appropriate sample size should be considered for use of factor analysis for measurement development (DeVellis, 2017). Despite the required large sample size for examining internal factor structure of a measurement (Comrey, 1988), little consensus exists in the methodological literature regarding the minimum sample size necessary for factor analysis (Floyd & Widaman, 1995). As a general guideline for the minimum sample size, Comrey and Lee (1992) suggested a sample of 300 participants as good, 500 as very good, and 1000 as excellent for use of factor analysis (p. 217). Although the general guideline above is usable, such cut-off rules for minimum sample size is not considered the best practice for its failure to consider the effect of the number of items on a measure (DeVellis, 2017).

Alternatively, the extant methodological literature indicated that the minimum sample size needed to be determined based on the ratio of participants to the number of items (Costello & Osborne, 2005; Hair et al., 2010; Mvududu & Sink, 2013). A participant/item ratio between 10:1 and 20:1 is deemed appropriate for factor analysis in the social science (Hair et al., 2010; Mvududu & Sink, 2013); however, approximately 62% of research utilized an average 10:1 or less ratio for factor analysis (Costello & Osborne, 2005). Therefore, for this study, the researcher aimed to obtain a minimum sample of 600 client participants and randomly divided the sample in

half, with the goals of establishing a 10:1 ratio for use of EFA (i.e., 300 client participants for EFA based on 10 participants for every 1 item for a total of 30 items) and sufficient sample size required for CFA (i.e., 300 client participants for CFA). While no firm agreement has been established regarding sufficient sample size for CFA, a sample size of at least 250 is recommended as general rule of thumb for CFA (MacCallum et al., 1999; Schumacker & Lomax, 2016). As a result, for this study, the researcher recruited a total of 654 clients from a variety of mental health centers as well as the online-based recruitment tool. Following the data cleaning, this research resulted in a final, usable sample size of 563 (86.08% useable response rate).

#### Data Collection Procedure

Prior to any recruitment and data collection, the researcher obtained approval from Institutional Review Board (IRB) at the University of Central Florida. Additionally, the researcher obtained permission from each author of the instruments used in this study (Appendix H and I). Once approved, the researcher recruited the sample of clients and distributed the assessment packet via three modes of data collection procedures: (a) face-to-face contact and face-to-face administration with paper-and-pencil version of assessments, (b) face-to-face contact and self-administration with electronic version of assessments, and (c) online contact and online administration with electronic version of assessments. The researcher utilized the multiple data collection procedures to ensure geographic and demographic diversity in the sample.

Overall, the data collection procedures began on November 17<sup>th</sup>, 2017 and completed on April 2<sup>nd</sup>, 2018. First, the face-to-face contact/face-to-face survey administration occurred

between November 17<sup>th</sup>, 2017 and April 2<sup>nd</sup>, 2018. The researcher received approval from directors of mental health counseling centers in the Southern United States to recruit their clients to participate in this study. Upon receipt of approval, the researcher visited five different mental health service settings, including one university-based mental health center and four community-based mental health centers (one center was outside of an accessible geographic area, thus the clinic director served as a proxy for the researcher during face-to-face recruitment). Specifically, the university-based mental health center was a campus agency designed to provide free mental health counseling services to students enrolled in classes at the university. Of the four community-based mental health centers, two centers were outpatient-based agencies providing mental health services for co-occurring disorders, substance abuse, and/or family or relationship issues to community members of Central Florida. The other two community-based centers were non-profit mental health centers at Southern universities, offering individual, couple and family counseling services to community members.

Clients from the centers were invited to participate in the study using informational brochures and word of mouth. Mental health professionals working at the centers aided in recruiting client participants by sharing the brochure with their clients. Participants who chose to participate were asked to complete a paper-and-pencil version of the assessment packet before leaving the clinic (e.g., CAMCB, CCCI-R-7 [Drinane et al., 2016; LaFromboise et al., 1991], MCSDS-X1 [Strahan & Gerbasi, 1972]; WAI-SR [Hatcher & Gillaspy, 2006]; and demographic questionnaire). Participants were provided a reserved room and asked to return the packet to the researcher once completed. Upon completion of the survey packet, participants were provided monetary compensation in the form of a \$3 gift card to a local grocery store.

Next, the face-to-face contact/self-administration with electronic version of assessments occurred between November 17<sup>th</sup>, 2017 and April 2<sup>nd</sup>, 2018. This second method of data collection procedure was used with participants recruited from centers via face-to-face contact, but who preferred to complete the assessments at their home or who were otherwise unable to complete the packet at the clinic. The researcher adapted the paper and pencil version of the assessments to an electronic format using Qualtrics (Qualtrics Labs, Inc., 2012). During the face-to-face contact, the participants were provided a brochure that included an online link and QR code to the Qualtrics survey. The participants were asked to type the link or scan the QR code to participate in the study at their own convenience. The participants were also compensated with a \$3 gift card for completing the packet of assessments.

Lastly, data collection for the online contact/online administration occurred between January 12<sup>th</sup>, 2018 and March 12<sup>th</sup>, 2018. For the online contact and online administration, client participants were recruited through Amazon's Mechanical Turk (MTurk). MTurk is a website that operates as an online-based tool for recruitment and data collection (Buhrmester et al., 2011). It is reported that MTurk has access to more than 500,000 participants from 190 countries (Amazon Mechanical Turk Requestor Tour, 2017). Researchers (referred as "requesters" in MTurk) recruit participants (i.e., workers) registered in MTurk to complete a variety of research-related tasks (i.e., human intelligence tasks [HITs]) for monetary compensation (Chandler, Muller, & Paolacci, 2014). MTurk is considered a useful online platform that allows researchers to recruit geo-demographically diverse participants (Buhrmester et al., 2011). Due to financial considerations, the online data collection procedures did not begin on the same date as the other two data collection procedures.

The researcher published the study in MTurk portal where participants were able to preview relevant information about the study, including the purpose of the study, eligibility criteria, time commitment, and compensation rate. Participants meeting the eligibility criteria and opting to proceed with the study, were instructed to click a link directing them to the electronic assessments in Qualtrics. Participants who completed all instruments (i.e., four assessments and one demographic questionnaire) were provided a completion code which was used to receive their monetary compensation. Monetary compensation was set at \$1.00 for participants who completed the study.

#### Overview of Instrument Development Procedures

In this research, the researcher aimed to develop the CAMCB and examine its psychometric features (e.g., reliability and validity) with a developmental sample of clients adhered to systemic strategies for content-oriented scale development recommended by scholars (Crocker & Algina, 2008; DeVellis, 2017; Dimitrov, 2012; Kline, 2005; Wolfe & Smith, 2007) as well as to the standards for educational and psychological testing (AERA et al., 2014). The development procedures helped to establish content-oriented evidence for the CAMCB (Lambie, Blount, & Mullen, 2017).

As outlined in Table 2, the development and testing procedure for the CAMCB involved two phases of research. Phase I included (a) the initial instrument development using deductive analysis of MCC literature and theory (e.g., Constantine, 2001; Lopez, 1997; Owen, 2013; Ratts et al., 2015; Sue et al., 1992; Sue, 2001) and (b) pilot testing (pretesting items) with a small sample of clients for improvement of content-oriented evidence. Phase II involved the

examination of psychometric features of the CAMCB with data collected from a developmental sample of clients. Specifically, the researcher employed the following sequence of steps for the development of the CAMCB: (a) defining clearly what is measured, (b) developing an item pool, (c) determining the response format for the scale measurement, (d) surveying a panel of expert reviewers on the initially developed items, (e) pilot-testing the instrument with a sample of population, (f) revising the instrument based on findings and feedback collected from the pilot test, (g) considering the inclusion of validation items, (h) administering the revised instrument to a development sample of clients, (i) evaluating the performance of items following statistical analysis, and (j) optimizing the scale length on reliability. Steps (a) to (f) (Phase I) are described in the following section.

### Phase I: Initial Development and Pilot Test

#### Step 1: Defining Clearly What Is Being Measured

The first step of the measurement development was to clearly define and conceptualize the construct of interest (DeVellis, 2017; Wolfe & Smith, 2007). Clear definitions of the construct should be based on (a) relevant theories for the phenomenon, (b) supporting literature, (c) existing measurement, (d) the level of specificity at which the construct is measured, and (d) clear parameters for what to include in the measurement (DeVellis, 2017; Lambie et al., 2017). To inform the development of the CAMCB, the researcher conducted an extensive literature review on various theoretical models of MCC (e.g., Lopez, 1997; Owen, 2013; Ratts et al., 2015; Sue et al., 1992) and previous MCC instruments (e.g., Cole et al., 2014; Hook et al., 2013;

LaFromboise et al., 1991). This literature review helped to establish the theoretical and empirical basis for the CAMCB.

Following the extensive literature review, the researcher operationally defined the construct of interest, *multicultural competent behavior*, as: therapists' ability to translate multicultural awareness, knowledge, and skills into demonstrable multiculturally competent in-session behaviors that facilitate collaborative, therapeutic processes that are responsive to clients' cultural values and experiences (Collins & Arthur, 2010; Lopez, 1997; Ratts et al., 2016; Sue et al., 1992).

Based on the operationalized definition, therefore, the CAMCB was designed to measure therapists' demonstrated multicultural competent behaviors in the context of the therapeutic process. The researcher developed the CAMCB in a way that addressed limitations of existing MCC or MCC-related instruments. Specifically, each CAMCB item was developed with specific behavioral indicators and cultural factors. Additionally, each of the CAMCB dimensions and items were operationally defined with behavioral descriptors and contextualized to the therapeutic process. Based on the literature review, the researcher hypothesized that multicultural competent behaviors were multidimensional, consisting of such dimensions within the context of therapeutic process: (a) multicultural therapeutic relationship, (b) multicultural assessment, (c) multicultural case conceptualization and goal setting, and (d) multicultural intervention.

## Step 2: Developing an Item Pool

Developing the item pool for a scale measurement involved creating and selecting items that reflected the purpose of the measurement and the construct of interest (DeVellis, 2017). The



researcher conducted a thorough deductive analysis of the theoretical and empirical literature on MCC to develop an initial item pool. Specifically, the literature review included (a) various theoretical models of MCC and related construct (e.g., Lopez, 1997; Owen, 2013; Ratts et al., 2016; Sue et al., 1992); (b) previous instruments that measure MCC or related constructs of MCC (e.g., Ancis et al., 2008; Cole et al., 2014; Hook et al., 2013; LaFromboise et al., 1991; Sheu & Lent, 2007; Sadowsky et al., 1994); and (c) ethical codes and competency standards from professional organizations across the mental health professions (AAMFT, 2004; ACA, 2014; ALGBTIC, 2013; ASERVIC, 2009; CACREP, 2016).

The researcher developed an initial pool of 151 items which was narrowed down to 30 items through expert reviews and the pilot study. The researcher began with the large item pool in this early stage of the measurement development as it allowed for the more comprehensive representation of the construct and influenced reliability (DeVellis, 2017). In the process of writing and wording the items, the researcher followed nine rules suggested by Kline (2005) to develop each item. The rules dictated that each item (a) represents only one idea; (b) is precise; (c) is concise; (d) has clear construction and readable wording; (e) includes relevant information; (f) is positively worded; (g) refrains from double negatives; (h) avoids determiners (e.g., all or none); and (i) avoids adverbs (e.g., sometimes or frequently) (pp. 34-35). Additionally, the researcher was attentive to using culturally sensitive terms (e.g., gender-neutral terms) as cultural biases in item may play a role in the way respondents complete the measurement (DeVellis, 2017; Lambie et al., 2017).

### Step 3: Determining the Response Format for the Scale Measurement

Another important consideration for the scale measurement development was to determine the response format which corresponded with the measurement items and its theoretical orientation (DeVellis, 2017). The researcher selected a Likert-type response format for the CAMCB. The Likert-type format was deemed to be appropriate in the measurement assessing respondents' opinions, perception, and beliefs (DeVellis, 2017) and useful for factor analysis in social science (Mvududu & Sink, 2013). A traditional Likert-type response anchor (i.e., strongly disagree to strongly agree) was chosen to indicate the degree to which respondents agreed with each item. Prior to the pilot test, a 7-point Likert type scale was initially selected because it allowed for a wide range of options to capture fine distinctions in respondents' perception and opinion as well as producing better distribution of data with increased variance (DeVellis, 2017; Leung, 2011).

However, based on feedback collected from the pilot test and expert reviews, the researcher modified the number of scale points from seven to five. The 5-point Likert scale, ranging from 1 (*strongly disagree*) to 5 (*strongly agree*), was selected for three reasons; (a) reducing cognitive taxing for respondents; (b) increasing response rate and response quality; (c) having a better chance of higher correlation among items (Sachdev & Verma, 2004; McKelvie, 1978).

### Step 4: Surveying Expert Reviewers on Initial Item Pool

Surveying a panel of expert reviewers on the initial items was important to enhance the content-oriented evidence of the measurement items (DeVellis, 2017). The researcher solicited

feedback from a team of 10 experts from eight different universities on item relevancy to the construct, clarity and readability of items, and the overall scale development procedure (Croker & Algina, 2008; DeVellis, 2017). The panel of experts consisted of educators and researchers in the fields of counseling and psychology with expertise and knowledge of MCC literature and scale development methodology. Specifically, seven of the experts were faculty members in counselor education programs (female = 3, male = 4); the others were faculty members in the counseling psychology programs ( $n = 3$ ; female = 1, male = 2). The expert reviewers also self-identified as Asian Americans ( $n = 4$ ), African Americans ( $n = 3$ ), and Caucasian Americans ( $n = 3$ ).

The expert reviewers were supplied with specific instructions (Appendix K) for providing feedback. First, they were instructed to rate the degree to which items are relevant to the construct using a three-point Likert scale (1 = low, 2 = moderate, 3 = high) and provide reasoning for any low-rated items. Items with a mean relevance rating of less than 1.25 (i.e., more than 8 raters scored item low) were considered for elimination. In addition, the expert reviewers provided suggestions to improve (a) item clarity, (b) remove redundant and irrelevant items, (c) add new items, and (d) assess response format and scale development procedure.

Considering the mean relevance rating, the reviewers' narrative feedback, and the theoretical foundations, the researcher eliminated or combined 87 items from the initial pool of 151 items that were considered irrelevant and redundant; leaving 64 items on the revised instrument. Additionally, the CAMCB was revised to (a) avoid double-barred items, (b) combine subscales that were overlapped and redundant, (c) ensure cultural sensitivity of items (e.g., using gender-neutral terms), and (d) rephrase items that read as abstract with no behavioral indicators.

After the first revision, the researcher followed up with the panel of 10 experts to complete another review of the instrument. Three of the expert reviewers (African female = 1, Caucasian male = 1, Caucasian female = 1), from three different universities, agreed to participate and provided feedback on the revised item for relevancy, clarity, redundancy, and cultural sensitivity.

Following the two rounds of expert reviews, the researcher pilot-tested the CAMCB with a small sample of clients ( $N = 31$ ) in an attempt to enhance content-oriented evidence. Table 3 provides summary of information regarding the initial expert reviews. Given that the CAMCB was designed for use by clients, pilot-testing was necessary to understand the client's level of literacy related to the construct and the scale's ease of use for clients. The following section describes details in the procedure of the pilot test, its findings, and results.

Table 3

Summary of Initial and Follow-up Expert Review

Step	<i>N</i>	Backgrounds	Areas to Review
Initial expert review	10	Counselor Education ( $n = 7$ ) Clinical Psychology ( $n = 3$ )	Item relevancy Item clarity Item redundancy Additional items Response format Cultural sensitivity
Follow-up expert review	3	Counselor Education	Item relevancy Item clarity Cultural sensitivity

*Note.* The panel of 10 experts were recruited from eight different universities.

### Pilot Test

The purpose of the pilot test was to enhance content-oriented evidence based on client participants' feedback for the CAMCB. The pilot test with an identified sample of clients allowed the researcher to evaluate items that performed poorly and to revise the instrument (Lambie et al., 2017; Wolfe & Smith, 2007). Specifically, the pilot test was conducted to evaluate, from clients' perspectives, (a) item performance (e.g., item clarity, relevancy, and utility); (b) the CAMCB ease of use; and (c) length of time needed complete the instrument. Additionally, the researcher solicited qualitative data regarding what clients expected from multiculturally competent therapists in therapy; therefore, the researcher included additional CAMCB items that reflected clients' perspective on therapists' multiculturally competent behaviors. In summary, the pilot study included two primary goals: (a) reflection of client participants' perspective to improve content-oriented evidence of the CAMCB, prior to a validation investigation of its psychometric features, and (b) to better understand the behavioral skills clients perceive as multiculturally competent during their therapy. The following sections describe the pilot test in detail.

### Research Design and Sampling Method

The researcher used a non-probability, convenient sampling method for the recruitment (Gall et al., 2007). The researcher recruited client participants ( $N = 31$ ) from a community-based mental health center within a large metropolitan public university in the southeast United States. The inclusion criteria for participation in the pilot study were for individuals to be 18 years of age or older and receiving mental health services at the time of the study (e.g., individual, family

and couple, and career counseling). With the approval from the director of the center, the researcher used an informational brochure about the pilot study and face-to-face contact to recruit participants from the center. A total of 180 clients received counseling services from the center. Of the 180 clients, the researcher identified 145 clients who met the eligibility criteria (e.g., age 18 or older); those clients were invited to participate in the study. Thirty-one clients consented to participate in the pilot study and complete the battery instruments (21.4% response rate). The consenting participants were provided a battery of three assessments: (a) a paper-and-pencil version of CAMCB, (b) open-ended feedback questionnaire, and (c) demographic questionnaire. The participants were asked to complete the battery of assessments in a reserved room in the center, in the presence of the researcher. The participants received a \$2 gift card as an incentive for their participation.

### Demographic Characteristic of Participants

Table 4 presents demographic characteristics for the sample of clients ( $N = 31$ ) for this pilot study. About 56% of the clients self-identified as White ( $n = 17$ ), 20% as Hispanic ( $n = 6$ ), 10% as African American ( $n = 3$ ), 3% as Asian American ( $n = 1$ ), and 3% as other race or ethnicity ( $n = 1$ ). Three participants (10%) did not report their racial or ethnic backgrounds. Additionally, the participants who identified their gender identity as female, male, gay or lesbian, and other gender were 43%, 36%, 6%, and 6% respectively ( $ns = 13, 11, 2, 2$ ). Approximately 83% of the participants ( $n = 25$ ) reported English as their native language. In the pilot study, the client participants completed an average of eight sessions with their therapists. Additionally, participants were asked to identify important aspects of their cultural identity; nearly 40%

identified family values ( $n = 12$ ), 16% identified as race and/or ethnicity ( $n = 5$ ), 10% identified as socioeconomic status ( $n = 3$ ), 10% identified as gender ( $n = 3$ ), and 3% identified religion and/or spirituality ( $n = 1$ ).

Table 4

Participants' Demographic Information for Pilot Test

Pilot Test Sample ( $N = 31$ )					
	Total ( $n$ )	%		Total ( $n$ )	%
Ethnicity			Age		
African American	3	10	< 30	15	53.6
Asian American	1	3.3	30 – 34	3	9.9
White	17	56.7	35 – 39	4	13.3
Hispanic	6	20	40 – 44	2	6.6
Other	1	3.3	45 – 50	1	3.3
			> 50	3	9.9
Gender			Native Language		
Male	11	36.7	English	25	83.3
Female	13	43.3	Spanish	3	9.6
Gay/lesbian	2	6.7	Other	3	9.6
Other	2	6.7			
Socioeconomic Statuses			Salient Cultural Background		
less than 9,999	6	20	Race/Ethnicity	5	16.7
10,000 – 19,999	3	10	Gender	3	9.9
20,000 – 29,999	4	13.3	Religion/Spirituality	1	3.3
30,000 – 39,999	4	13.3	Family value	12	40
40,000 – 49,999	1	3.3	Language	1	3.3
50,000 – 59,999	4	13.3	Socioeconomic status	3	10
60,000+	3	13.3			
do not know	2	6.7			
Educational Background			Modality of Therapy		
High school	12	40	Family therapy	1	3.3
Bachelor	9	30	Couple counseling	4	13.3
Master	2	6.7	Individual counseling	23	76.7
Other	5	16.7			

## Instrumentation

### CAMCB (Pilot)

The pilot test aimed to improve content-oriented evidence by incorporating feedback from the identified sample of clients on the instrument items; specifically, for item relevancy, clarity, and performance. For the pilot test, the initial version of CAMCB consisted of 64 items on a 7-point Likert scale, ranging from 1 (*Strongly Disagree*) to 7 (*Strongly Agree*). CAMCB also included two check boxes for participants to identify “unclear” or “not relevant” items. In addition, CAMCB included a comment box at the end of the instrument that allowed participants to provide rationale for any responses provided, including for unclear or irrelevant items.

### Demographic Questionnaire

The participants were also asked to complete a demographic questionnaire designed to collect background information including (a) race and/or ethnicity, (b) gender, (c) age, (d) primary language, (e) level of education, (f) annual household income, (g) the number of complete sessions, (h) modality of therapy, and (k) important cultural identity.

### Open-ended Feedback Questionnaire

Lastly, the participants completed an open-ended feedback questionnaire (Appendix L) that included three questions which invited them to share their expectation of multiculturally competent therapists. The questionnaire included a space for participants to identify multiculturally competent behaviors they would expect from therapists. The followings: (a) “what aspects of your cultural backgrounds did you wish your counselor would have discussed



more with you?” (b) “do you feel your counselor was sensitive to your culture? If yes, how did your counselor communicate or demonstrate cultural sensitivity in the session? If no, what did you think your counselor could have done differently to demonstrate cultural sensitivity?” and (c) “What skills, knowledge, and behaviors do you want/expect to see in a culturally sensitive counselor?” This open-ended questionnaire was designed to understand the clients’ perspective on multiculturally competent behaviors and identify additional items that reflected the clients’ perspective.

### Data Collection

The identified sample of client participants ( $N = 31$ ) evaluated the CAMCB’s 64 items. As the participants completed the CAMCB, they were asked to mark the “not relevant” check box next to any items they felt were not relevant to their presenting concerns or to their relationship with their therapist. Additionally, they were asked to mark the “unclear” check box next to any items they felt were confusing. All participants completed the CAMCB in the presence of the researcher. After the completion of the CAMCB, the participants were provided with the open-ended questionnaire to collect qualitative data. Following the pilot test, the researcher evaluated participants’ quantitative and qualitative feedback related to each item.

### CAMCB Revision (Post Pilot Test)

Revision of the CAMCB was conducted following the pilot test. The revision process involved several iterations of reviews and item revisions. Table 5 outlines the steps in the revision process of the CAMCB.

Table 5

## Flowchart of Pilot Test and Expert Review

Steps	<i>N</i>	Results	Number of Remaining Item
Pilot Test	31	Elimination of 24 irrelevant items Consideration of 10 irrelevant items for elimination or revision Suggestion for additional 5 items Modification of the number of scaling point from 7 to 5 points Identification of unclear items Inappropriate response option	45
Follow-up Expert Review	5	Elimination of additional 7 irrelevant items Combination of 6 items into a single item Suggestion of how to clarify the unclear items Feedback on adequate response options	33
Consultation among Dissertation Committee	4	Review of items for clarity, redundancy, and relevancy Feedback on adequate response options Suggestion of final round of expert review	33
Final-round Expert Review	5	Combined 4 redundant items into a single item Review of items for clarity and relevancy Review of wording of the instruction, response option, and the form layout	30

Findings from Pilot Test and First Revision

Items that more than 70% of participants (i.e., 22 or more participants) found to be irrelevant were considered for elimination. Of the CAMCB's 64 items, 24 items failed to meet the criteria. With additional review of the MCC theoretical literature and CAMCB framework,

the 24 items were eliminated. A group of expert reviewers then cross-checked the validity of the eliminations. Additionally, 10 other items were identified as irrelevant by approximately 50% of participants ( $n = 15$ ). These items were further evaluated by the expert reviewers for possible elimination or revision. Items indicated as “unclear” were revised to improve clarity.

The participants also provided qualitative feedback on the CAMCB in the comment box at the end of the assessment. Examples of the qualitative feedback included (a) difficulty to differentiate among response options on the 7-point Likert scale (i.e., cognitively taxing), (b) irrelevancy of the response options that did not correspond well with items (i.e., leading respondents to answer in dichotomous way), and (c) redundancy of items (i.e., items that were too similar). Based on the clients’ feedback and literature review in methodology (Sachdev & Verma, 2004; McKelvie, 1978), the researcher revised the number of scale points from seven to five.

Furthermore, from the separate open-ended feedback questionnaire, the participants provided their opinions and expectations regarding the cultural backgrounds they wished to discuss with therapists. Additionally, five items were added to the instrument based on a combination of the findings from the open-ended questionnaire and theoretical backing. In summary, the researcher eliminated 24 of the CAMCB’s 64 items, then added five items; a total of 45 items were included. The number of points on item scales was reduced from seven to five as well. After the revisions were made, the researcher followed up with a team of expert reviewers for further evaluation of content-oriented evidence.

### Follow-up Expert Review

The researcher sent the revised 45-item CAMCB to a panel of experts ( $N = 5$ ), along with the findings from the pilot test. The panel of five expert reviewers were recruited from three different universities. Two of the expert reviewers (Biracial female = 1, Caucasian female = 1) were doctoral students in a counselor education program, while the other three experts (Asian female = 1, Asian male = 1, Caucasian female = 1) were faculty members in counselor education programs. The reviewers had relevant knowledge of MCC literature or instrument development. With the findings from the pilot test, the panel of experts were asked to (a) evaluate items for redundancy and relevancy, (b) revise unclear items, and (c) provide feedback on adequacy of the response options.

Of the 10 instrument items identified as irrelevant by more than 50% of participants in the pilot study, seven were identified as irrelevant by more than 60% ( $n \geq 3$ ) of expert reviewers and were subsequently eliminated by the researcher. Additionally, the expert reviewers identified six separate items that were redundant to a content domain. The redundant items were combined into a single item. Lastly, the expert reviewers also recommended rewording unclear items, reviewed the revised item scale, and provided suggestions for different types of response options. In summary, the number of items on the CAMCB were reduced to 33 from 45 following the expert review.

### Consultation among Dissertation Committee

Following the pilot test and subsequent expert review, the researcher presented the revised 33-item CAMCB to dissertation committee during the proposal defense and requested

further feedback on the CAMCB. The dissertation committee members provided feedback on item relevancy, redundancy, and clarity. The committee members also reviewed the wording of the instrument instructions and layout. The committee was also provided three different types of response options and asked to identify the most appropriate option for the instrument. Based on the committee's feedback, the researcher finalized the revised five-points Likert scale, ranging from 1 (*Strongly agree*) to 5 (*Strongly disagree*). Lastly, the committee asked the researcher to conduct the final round of surveying five expert reviewers on the CAMCB, prior to a validation investigation.

#### Final Round of Expert Review

The researcher solicited feedback from a panel of expert reviewers ( $N = 5$ ) from five different universities. All experts were faculty members (African female = 2, Asian female = 1, Caucasian female = 1, Caucasian male = 1) in counselor education programs with relevant expertise in MCC literature and scale development procedure. The experts assessed item for relevancy, redundancy, and clarity, and reviewed the revised response options and layout. Particularly, approximately 60% of the experts ( $n \geq 3$ ) identified four items as being homogenous and recommended combination into a single item. Based on the expert feedback as well as support from extant literature, the researcher consolidated the four items into one. In addition, the researcher rephrased unclear items, as identified in the experts' feedback.

## Summary

As Table 5 outlines, the researcher conducted several iterations of expert review and item revision to enhance content-oriented evidence of the CAMCB. In summary, conducting the pilot test and several rounds of expert reviews resulted in (a) the elimination of 31 irrelevant items, (b) the combination of 10 overlapping items into two items, (c) the inclusion of five additional items, (d) the clarification of unclear item verbiage, (e) the modification of scale points (i.e., from a 7-point to 5-point scale), (f) the clarification of the CAMCB's purpose and directions. Therefore, the current version of the CAMCB, as used in the study, included 30 items with a 5-point Likert scale ranging from 1 (*Strongly disagree*) to 5 (*Strongly agree*).

### Phase II: Administration and Validation Investigation

The purpose of Phase II was to administrate the 30-item CAMCB to a sample of clients and assess the factor structure and psychometric properties of the CAMCB. Additionally, Phase II aimed to explore the relationship between participants' responses and their demographic characteristics. To avoid confusion, this section first describes the remaining steps of the instrument development procedure that took place in Phase II of this study. Subsequently, the researcher describes research methodology the researcher employed in Phase II.

#### Step 5: Inclusion of Validation Items

The next step in the measurement development was the inclusion of validation items that would be to assist in examining the validity of the final form of the measurement scores (DeVellis, 2017). First, the researcher included a validation item that served to detect potential

random or haphazard responses in the data. For the CAMCB, the additional validation item was included as item number 16 and read, “*To monitor quality, please select “strongly disagree” for this item.*” Any participant response other than *strongly disagree* (1) was considered a potentially haphazard response and flawed data. Subsequent to the data collection process, the researcher examined the raw data and identified 30 cases (0.04%) where participants selected a response other than *strongly disagree* for the validation item and used an identifiable pattern of responses to all other items (i.e., endorsing all items with a specific response option).

Additionally, the researcher included three existing instruments that served to examine construct validity of CAMCB: (a) *Cross-Cultural Counseling Inventory-Revised-7* (CCCI-R-7; Drinane et al., 2016; LaFromboise et al., 1991); (b) *Marlowe-Crowne Social Desirability Scale* (MCSDS-X1; Strahan & Gerbasi, 1972); (c) *Working Alliance Inventory-Short Form Revised* (WAI-SR; Hatcher & Gillaspay, 2006). The researcher examined the convergent and/or discriminant validity of the CAMCB by measuring the direction and strength of the correlation between CAMCB scores and scores on each of the other three instruments. Based on the MCC literature, the researcher hypothesized that the CAMCB scores would be positively correlated with CCCI-R-7 scores (i.e. convergent validity); negatively correlated with the MCSDS-X1 scores (i.e., discriminant validity); and positively correlated with, yet distinct from, the WAI-SR (i.e., convergent and/or discriminant validity). A thorough description of each existing instrument is included in the instrumentation section of this chapter.

#### Step 6: Administrating the Instrument to a Development Sample

Next, the researcher administrated the CAMCB to a development sample of clients (e.g., the norm group of clients on which the factor structure and psychometric features of CAMCB were validated). The sample included adult clients (e.g., age 18 or older) who currently or within the preceding four weeks received any type of mental health services. Following the data cleaning (e.g., examining the eligibility criteria, missing data, outliers, etc.), the researcher recruited a final sample size of 563 clients (usable response rate 86.08%). Details in sampling method and data collection are presented in Chapter Four.

#### Step 7: Evaluating the Items

Next, the researcher evaluated the performance of each item with the developmental sample to determine which items should be retained or removed from the final form of the CAMCB (DeVellis, 2017). To accomplish this, the researcher randomly split the data into two equal subsamples. Data from the first subsample ( $n = 280$ ) was analyzed to examine the factor structure of the CAMCB. Specifically, the researcher used EFA with the first subsample to examine; (a) item-scale correlations; (b) inter-correlations among the CAMCB items; (c) item variances and means; and (d) internal consistency reliability. The researcher utilized CFA procedures with the data from the second subsample ( $n = 282$ ) to cross-validate the factor structure of the CAMCB, as identified from the EFA. Chapter four presents the results from the evaluation of items.



### Step 8: Optimizing Scale Length

The final step for the measurement development involved creating a final form of the measurement that was brief and yielded reliable scores. By removing the poor performing items, the internal consistency of the measurement scores could be improved (Crocker & Algina, 2008; DeVellis, 2017). The researcher removed items from the CAMCB, based on a review of the theoretical framework and applying the following priori criterion for item retention: (a) parallel analysis; (b) a value of 0.5 or greater for Kaiser-Meyer-Olkin (KMO; Kaiser 1970, 1974) measure of sampling adequacy for the entire scale, (c) a significant value ( $p < .05$ ) of Bartlett's test of sphericity, (d) a value of 0.5 or greater measurement sample accuracy (MSA) for each item, (e) a value of 0.2 or greater differences between factor loadings if items are cross-loaded, and (f) a factor loading value of 0.32 or greater (Hair et al., 2010; Mvududu & Sink, 2013; Tabachnick & Fidell, 2013). Following the removal of the poor performing items, the final form of the CAMCB consisted of 19 items that loaded onto three factors.

### Instrumentation

This research aimed to develop the CAMCB and examine its psychometric features. To that end, the researcher used four instruments and a demographic questionnaire in this study: (a) CAMCB, (b) CCCI-R-7 (Drinnane et al., 2016; LaFromboise et al., 1991), (c) WAI-SR (Hatcher & Gillaspay, 2006), (d) MCSDS-X1; Strahan & Gerbasi, 1972), and (e) demographic questionnaire. First, the CCCI-R-7 (Drinnane et al., 2016; LaFromboise et al., 1991) was used for assessing convergent validity of the CAMCB. The WAI-SR (Hatcher & Gillaspay, 2006) was also utilized to examine convergent validity of the CAMCB. This study also included the

MCSDS-X1 (Strahan & Gerbasi, 1972) to examine potential biases of social desirability in the participants' responses to the CAMCB. Lastly, the demographic questionnaire was included to solicit background information on client participants for relevant analysis in this research. Details in each instrument are presented in the following section.

### Client Assessment of Multicultural Competent Behavior

The CAMCB was designed as a client-rated measure of therapists' multicultural competent behaviors in the therapeutic process. The current version of the CAMCB comprised 30 items on a 5-point Likert scale, ranging from 1 (*Strongly disagree*) to 5 (*Strongly agree*). Example items include, "*My therapist discussed gender differences between us during therapy*" and "*My therapist asked me if there were aspects of my cultural background that made a difference in my presenting issues.*" Additionally, a validation item was included in the current CAMCB to identify potentially random response patterns. The validation item reads, "*To monitor quality, please select 'strongly disagree' for this item.*" A cover sheet (Appendix J) was also attached as the first page of the CAMCB and included detailed information about the purpose of the CAMCB and instructions. A thorough description of the CAMCB (e.g., description of content domains; directions for administration and scorings; and review of theoretical and empirical literature) is presented in the manual.

### Cross-Cultural Counseling Inventory-Revised-7

The CCCI-R-7 (Drinane et al., 2016; LaFromboise et al., 1991) is 7-item client-rated measure of therapists' MCC. The CCCI-R-7 is comprised of seven items retained from the

original 20-item CCCI-R after an investigation of its content validity (LaFromboise et al., 1991). Drinane and colleagues (2016) found only seven of the original 20 items to be viable for clients' rating, and yet better representing essential components of therapists' MCC. The CCCI-R-7 includes a single factor (i.e., unidimensional scale) and uses a 6-point Likert scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). The CCCI-R-7 produces a total score between 7 and 42, with a higher score representing a higher level of MCC. An example item includes, "*My counselor values and respects cultural differences.*" The Cronbach's alpha was .91 for the 7-item instrument (Drinane et al., 2016). The CCCI-R-7 indicated evidence of convergent and discriminant validity with an inventory measuring working alliance ( $r = .43, p < .001$ , 18.5% of the variance explained; Drinane et al., 2016).

#### Working Alliance Inventory-Short Form Revised

The WAI-SR (Hatcher & Gillaspie, 2006) is a 12-item client-rated measure of working alliance with their therapists. The WAI-SR items are rated on a 5-point Likert scale ranging from 1 (*seldom*) to 5 (*always*), yielding a total score between 12 and 60. The WAI-SR was developed to measure three factors of working alliance: (a) Goal (agreement on therapeutic goals between therapists and clients), (b) Task (agreement on therapeutic tasks between therapists and clients), and (c) Bond (affective bond between therapists and clients). Example items include, "*My therapists and I are working toward mutually agreed upon goals,*" and "*My therapists and I respect each other.*" The internal consistency for the 12-item scale ranged from .91 to .92 as well as from .85 to .90 for the three subscales (Hatcher & Gillaspie, 2006). The WAI-SR was found to

have evidence of convergent and predictive validity when compared to existing measures of working alliance and client outcome (Hatcher & Gillaspay, 2006; Horvath et al., 2011).

#### Marlowe-Crowne Social Desirability Scale

The MCSDS-X1 (Strahan & Gerbasi, 1972) was designed to measure the level of respondents' social desirability. The MCSDS-X1 is a 10-item instrument that was revised from the original 33-item Marlowe-Crowne Social Desirability Scale (MCSDS; Crown & Marlowe, 1960). Respondents rate each item as being true or false. Responses which are considered socially desirable are scored as 1 while non-socially desirable responses are scored as 0. The MCSDS-XI yields a total score between 0 and 10, with higher score representing more socially desirable response. A sample item includes, "*I always try to practice what I preach.*" The internal consistency reliability for the 10-item scale ranged from .50 to .88 (Ballard, 1992; Barger, 2002; Fischer & Fink, 1993; Strahan & Gerbasi, 1972).

#### Demographic Questionnaire

The researcher utilized a demographic questionnaire to obtain participants' demographic characteristics as well as other background information relevant for the study. Specifically, this demographic questionnaire collected following demographic information of participants: (a) age, (b) sex, (c) race and/or ethnicity, (d) gender, (e) sexual orientation, (f) level of education, (g) employment status, (h) annual household income (i.e., socioeconomic status), (i) religion or spirituality, and (j) primary language (i.e., first language).

Additionally, the demographic questionnaire consisted of questions designed to obtain background information related to therapeutic experience and settings, including: (a) therapy modalities, (b) the number of complete session, (c) types of therapists, (d) important aspect of cultural background, (e) culturally-based presenting concerns, (f) level of satisfaction with therapy and (g) racial and/or gender difference in therapeutic relationship. The demographic questionnaire also asked participants to rate how important it is to discuss in therapy the aspect of their cultural background that is most important to their identity. The researcher solicited feedback from panel of seven experts (e.g., dissertation committee and research colleagues) on the demographic questionnaire for clarity and readability.

### Purpose and Research Questions

The purpose of this research was to develop the CAMCB and investigate psychometric properties of the CAMCB scores with a sample of client participants. In this study, the researcher addressed the following research questions with the sample of client participants.

#### Research Question 1

What is the factor structure of the items on the CAMCB with a sample of clients?

#### Research Question 2

What are psychometric properties of the CAMCB scores with a sample of clients?

Researcher Question 2a

What is the internal consistency reliability of the CAMCB scores with a sample of clients?

Research Question 2b

What is the relationship between the CAMCB scores with Cross-Cultural Counseling Inventory-Revised-7 scores (examining convergent validity)?

Research Question 2c

What is the relationship between the CAMCB scores and Working Alliance Inventory scores (examining convergent validity)?

Research Question 2d

What is the relationship between the CAMCB scores and Marlowe-Crowne Social Desirability Scale scores (examining social desirability of clients' response)?

Research Question 3

What is the difference between the CAMCB score and participants' demographic and background data?

### Data Analysis Plan

Exploratory Factor Analysis (EFA) was utilized to identify the factor structure of the CAMCB that underlay the set of data. Then, Confirmatory Factor Analysis (CFA) was used to cross-verify the factor structure as identified from the EFA. Specially, the researcher developed a measurement model based on findings from EFA and used CFA to test the fit of the measurement model to the set of data. This study developed and evaluated the measurement model with use of CFA to investigate the validity of the CAMCB; however, at a future time point, the researcher will develop a Structural Equation Modeling (SEM) with additional structural models, based on a literature review regarding the constructs of interest. The Statistical Package for the Social Science (SPSS Version 24, 2016) and the MPlus version 8 (Muthén & Muthén, 2017) were utilized for data analysis in this study. Prior to any data analyses, the researcher examined the data for missing data and outliers (Osborn, 2013; Tabachnick & Fidell, 2013). In addition, the data were tested for statistical assumptions (e.g., normality, linearity, and multicollinearity) required for data analyses used in this study. The following sections describe the data analysis procedures used for this study.

### Steps in Exploratory Factor Analysis

In this research, factor analysis was used to explore the underlying factor structure of the CAMCB and to examine the correlations underlying the scale items (Spearman, 1939). Factor analysis identifies factors (latent variables) of items that measure a common construct by discovering patterns of variables derived from a large set of variables and determining the amount of common variance from each group of items (Mvududu & Sink, 2013). Factor analysis

aim to identify a parsimonious model that consists of a small set of factors while accounting for the shared variance among items at maximum (Henson & Roberts, 2006).

Given the exploratory nature of this research, the researcher utilized EFA to identify the underlying factor structure of the CAMCB (Croker & Algina, 2006; Mvududu & Sink, 2013). EFA is one way to explore and determine factor structure by reducing data into a smaller set of variables and identifying underlying patterns of variables (Mvududu & Sink, 2013). EFA is deemed an appropriate statistical method if there is insufficient evidence for researchers in the social science to predict which variables comprise a factor (Devellis, 2017); and if the nature of research investigation is exploratory (Croker & Algina, 2008; Mvududu & Sink, 2013).

Prior to conducting EFA, data cleaning (e.g., missing data and outliers) should be addressed (Tabachnick & Fidell, 2013). Furthermore, assumption testing must be conducted to determine whether or not the data is adequate for EFA: (a) normality, (b) linearity, (c) absence of multicollinearity, and (d) factorability (Field, 2013; Tabachnick & Fidell, 2013). Following the assumption testing, EFA requires a series of following steps: determining (a) factor extraction method, (b) the number of factors to retain, (c) the appropriate method of factor rotation, and (d) interpretation of factors. Following sections further describe each step of EFA.

#### Data Cleaning and Assumption Testing

Prior to conducting EFA, the researcher cleaned the data for missing values and outliers (Tabachnick & Fidell, 2013). The researcher examined the proportion of missingness on each variable and the pattern of missing data (e.g., MCAR or MAR). Cases that included extensive missing data (i.e., participants that complete less than 50% of the CAMCB) were removed. Cases



that included inaccurate responses to the validation item (i.e. *to monitor quality, please select “strongly disagree” for this item*) were considered for removal. Univariate and multivariate outliers were examined with use of visual inspections and statistic tests (e.g., simple scatter and box plots, standardized z-score, and Mahalanobis distance; Hair et al., 2010; Mvududu & Sink, 2013). Following the data cleaning, the researcher examined assumptions necessary to conduct EFA: (a) normality, (b) linearity, (c) multicollinearity, and (d) factorability (Field, 2013; Tabachnick & Fidell, 2013).

To determine the factorability of the data, the researcher first created an intercorrelation matrix and examined inter-correlations among items (variables). The data collected was considered factorable if most of correlation coefficients were in the range of .20 to .80 (Field, 2013; Tabachnick & Fidell, 2013). Correlation coefficients that were larger than .80 were to be multicollinear. Additionally, the researcher conducted Kaiser-Meyer-Olkin (KMO; Kaiser, 1974) test to further examine the strength of intercorrelation among items and sampling adequacy for each item. KMO test values must be greater than .60 (Kaiser, 1974; Tabachnick & Fidell, 2013), with values ranging from .80 to .90 representing ideal adequacy for the EFA (Pett, Lackey, & Sullivan, 2003). Lastly, Bartlett’s test of sphericity was examined to confirm the existence of correlations among items that are necessary for EFA. A significant value (*p* value) should be less than .05 on Bartlett’s test (Tabachnick & Fidell, 2013). Results from data cleaning and assumptions testing are present in Chapter Four.

### Factor Extraction Method

Factor extraction involved the process of partitioning out the shared variance related to each variable from its unique variance and error variance (Mvududu & Sink, 2013). There were several factor extraction methods available, including principal components analysis (PCA), principal axis factoring (PAF), and maximum likelihood factor analysis (MLFA). PCA is a data reduction method assuming that “the factors are a linear combination of the observed variables” (O’Rourke & Hatcher, 2013, p.55). In other words, PCA does not hypothesize the latent factors or underlying factors that are responsible for covariation in each variable, as opposed to factor analysis. Therefore, many researchers in methodological literature supported that PCA differed from factor analysis in its purpose and should *not* be used if research aims to identify the nature and number of latent factors underling a data set (Costello & Osborn, 2005; O’Rourke & Hatcher, 2013). Instead, it was recommended to use other factor analysis extraction methods, including PAF and MLFA (Costello & Osborn, 2005).

PAF and MLFA are the two most commonly used extraction methods for factor analysis (Brown, 2015; Costello & Osborn, 2005). The PAF, which is grounded in the common factor model, is considered an appropriate extraction method if data is *not* normally distributed (e.g., violation of multivariate normality; Costello & Osborn, 2005; Watson, 2017). When a relatively normal distribution is found in data, the MLFA is preferred as it allows researchers to test the significance of factor loadings, estimate intercorrelation among factors, and generate indexes of the goodness of fit (Fabrigar, Wegener, MacCallum, & Strahan, 1999). In this research, the researcher employed PAF to address the non-normality of the data and meet the goal of this research.

### Determining the Number of Factors to Retain

Following the factor extraction, the next step in factor analysis was to determine the number of factors to retain. Several criteria are available for factor retention decision-making; (a) Kaiser greater-than-one rule (Kaiser, 1960); (b) scree test; (c) parallel analysis; and (d) proportion of variance extracted. First, Kaiser greater-than-one criterion indicates that only factors with eigenvalues ( $\lambda$ ) greater than 1.00 should be retained (Kaiser, 1960). Eigenvalues represent the amount of variance that is explained by a given factor (Mvududu & Sink, 2013; O'Rourke & Hatcher, 2013). Although it is a useful criterion, only using the Kaiser greater-than-one rule for factor retention is considered *less* appropriate in common factor analysis because the Kaiser rule tends to overestimate the number of factors (Dimitrov, 2012; O'Rourke & Hatcher, 2013).

The scree test involves creating a plot of eigenvalues related to extracted factors and identifying a "break" in the plot where the slope of factors with relatively large eigenvalues ends (Cattell, 1996). Although the scree test is deemed more accurate than the Kaiser greater-than-one rule, it also has the tendency to over-extract factors due to a sensitivity to the sampling errors and the least-squares biases (Henson & Roberts, 2006; O'Connor, 2000).

Parallel analysis (PA) is an alternative method for factor retention decision-making (Horn, 1965). PA has been deemed the most accurate factor retention method to address overestimation-related issues with Kaiser greater-than-one rule and scree test (Hayton, Allen, & Scarpello, 2004; O'Connor, 2000). Therefore, in this research, the researcher used PA as a primary criterion to determine the number of factors to retain. Specifically, the researcher performed PA via the permutations of the raw data by adapting the SPSS syntax program for PA

permutation (O' Connor, 2000; <https://people.ok.ubc.ca/briocconn/nfactors/rawpar.sps>). The PA permutations is "highly accurate and most relevant, especially in cases where the raw data are not normally distributed or when they do not meet the assumption of multivariate normality" (see <https://people.ok.ubc.ca/briocconn/nfactors/rawpar.sps>). With PA, meaningful factors underlying an actual data set must have eigenvalues larger than those of parallel factors extracted from the permutations of the actual raw data (Dimitrov, 2012; Horn, 1965; O' Connor, 2000). Therefore, the researcher derived eigenvalues from the actual data set and only retained the factors with greater values than were computed from the permutations of the actual raw data sets.

Another criterion in deciding which factors to retain was to examine the proportion of the total variance explained by the given factors. In methodological literature, there was no exact percentage of the total variance that should be accounted for by the retained factors; however, it is recommended to retain a number of factors that explains at least 50% of the variance (Mvududu & Sink, 2013; Watson, 2017). Lastly, communalities of and factor loading on each item should be examined when determining the number of factors to retain, with at least three items (variables) that are significantly loaded ( $r > .32$ ) on each retained factor (Mvududu & Sink, 2013). Detailed criteria for communality and factor loadings are presented in subsequent sections.

### Factor Rotation Method

Initially, extracted and retained factors can be difficult to interpret. Rotating the factors results in a simpler factor structure and straightforward interpretation (Dimitrov, 2012). Two factor rotation methods exist: orthogonal rotation and oblique rotation. Despite the shared goal of

creating a simple factor structure, each rotation method has different underlying assumptions. An orthogonal rotation is grounded in an assumption that factors are uncorrelated or independent of one another; however, in an oblique rotation, factors are assumed to be correlated (DeVellis, 2017; Dimitrova, 2012). Therefore, determining rotation methods should be based on the theoretically hypothesized relationship among factors. In this research, an oblique rotation (i.e., *promax*) method was selected because it is recommended for use in social science studies where most constructs are assumed to be correlated at some degree (Costello & Osborn, 2005; Mvududu & Sink, 2013). Additionally, factors of multicultural competent behaviors were assumed to be correlated based on the MCC literature (Lopez, 1997; Ratts et al., 2016; Sue et al., 1992). There are two oblique rotation methods to choose; direct oblimin and *promax*. No preferred method existed in the literature as the two methods tended to produce similar results (Fabrigar et al., 1999). The *promax* oblique rotation was selected for this research as it had advantages of clarifying correlation between factors and facilitating the simpler interpretation of the factor structure (Tabachnick & Fidell, 2013).

### Interpreting Factors

Once the simplest factor structure is determined and the factors are rotated, researchers should evaluate and interpret factors by examining each item that represents each factor. First, communalities of each item should be examined. Communality values refer to the amount of variance in each item accounted for by the retained factors. Items that indicated high (i.e., equal to or exceed 1.00) or low communality values (i.e., less than .40) were considered for removal (Costello & Osborn, 2005; Pett et al., 2003). It was recommended in the literature of

methodology that items with communality values ranging from .40 to 1.00 be retained, such that much of the shared variance in items was accounted for by the retained factors (Hair et al., 2010; Mvududu & Sink, 2013; Pett et al., 2003).

Next, factor loadings related to each item should be interpreted. Although criterion for sufficient factor loading varies among scholars, it was recommended that only items with factor loading greater than 3.2 should be retained (Tabachnick & Fidell, 2013). An item with strong factor loading ( $r > 3.2$ ), on two or more factors, must be assigned to the highest-loading factor; however, if there is .10 or less difference between the highest and the second highest factor loading for an item, researchers should remove the item from all factors (Tabachnick & Fidell, 2013). Following the examination of the communalities and factor loading, researchers name each retained factor based on a review of its related items.

### Steps in Confirmatory Factor Analysis

Once an internal structure (i.e., latent or underlying factor structure) of an instrument is determined with use of EFA, it is important to analyze the internal structure of the instrument and build evidence of validity (AERA et al., 2014). CFA serves as a tool to evaluate the internal structure of the instrument and accumulate evidence of construct validity and internal reliability (Brown, 2015). Following EFA, researchers need to perform CFA to cross-verify the number of underlying factors (latent variables) and the pattern of item-factor relationship that are identified from the preceding EFA (Brown, 2015). Therefore, in this research, the researcher conducted CFA on 23-item CAMCB (as identified from EFA) to verify its internal structure and to examine its construct validity and internal reliability.

CFA is a measurement portion of Structural Equation Modeling (SEM). CFA differs from SEM in that CFA assumes correlation (i.e. covariance) between latent variables; however, with SEM, directional relationship between latent variables are assumed (Schumacker & Lomax, 2016). In this study, the researcher used CFA to develop a measurement model based on the findings from the EFA and to cross-verify the internal structure of the CAMCB. Prior to conducting CFA, necessary conditions for CFA must be met: (a) multivariate normality, (b) linearity, (c) absence of multicollinearity, and (d) sufficient sample size (Tabachnick & Fidell, 2013). After the necessary conditions were examined, the researcher conducted CFA following a series of steps: (a) measurement model specification (i.e., CFA model), (b) measurement model identification, (c) measurement model estimation, (d) measurement model testing, and (e) measurement model modification (Kline, 2016; Schumacker & Lomax, 2016). The following section describes each step of CFA.

#### Sample Size Necessary for CFA

An essential step in conducting CFA is to determine a minimum sample size required to yield adequate precision, statistical power of a model, and precise indexes of model-fit. Although the minimum sample size necessary for CFA varies among scholars, 250 or more participants is considered a sufficient sample size for conducting CFA (Schumacker & Lomax, 2016). Some scholars suggested that a minimum sample size of at least 200 participants was required for CFA (MacCallum et al., 1999). In addition to the rules of thumb, the sufficient sample size for CFA is based on the precision and power of the parameter estimates (Schmitt, 2011). MacCallum, Browne, and Sugawara (1996) recommended calculating a minimum sample size for CFA based

on the root mean square error of approximation (RMSEA), with the desired power, degree of freedom, and alpha level. Using the SAS program developed by MacCallum and colleagues (1996), the researcher calculated the minimum sample size for the CFA model in the present study, based on a power of .8, alpha .05, RMSEA = .05, and degree of freedom = 227. The recommend sample size for the initial CFA model (based on the EFA findings) was 148 participants. Additionally, Muthén and Muthén, (2012) utilized Monte Carlo approach to calculate sufficient sample sizes for CFA models under various circumstance. The results from the Monte Carlo approach indicated a minimum sample size of 265 for the CFA model with non-normality of the data without missing values at power of .08. The present study included a sample size of 282 participants, which exceeded all recommended sample sizes for the CFA.

### Measurement Model Specification

The first step in CFA is model specification. Researchers develop a theoretical model of the relationship between latent factors and observed variables (Schumacker & Lomax, 2016). Researchers specify the relationships between the observed variables to the latent factors within the model, based on a review of the existing literature and prior evidence (Schumacker & Lomax, 2016). For CFA, correlation among the latent factors (i.e. covariance) should be determined (Schumacker & Lomax, 2016). Using a CFA software program, researchers can identify a series of equations in and create a visual diagram of the specified model. In this research, the researcher used MPlus version 8 (Muthén & Muthén, 2017) to specify the equations and create the visual diagram for a measurement model.



### Measurement Model Identification

Next, researchers determine if the model is identified and evaluate the viability of the model for a solution and parameter estimates (Schumacker & Lomax, 2016). Model identification involves the examination of the number of the estimated free parameters versus the number of known values (i.e., observed values) in the variance-covariance matrix. The number of known values must be greater or equal to the number of free parameters to be estimated (Schumacker & Lomax, 2016), which is considered *overidentified model*. To calculate the known values, it is recommended to use the following formula:

$$\text{Known Values} = p(p+1)/2$$

where p is the number of observed variable in the variance-covariance matrix (Hair et al., 2010). Researchers can allow parameters to be fixed with a value (i.e., restricting factor loadings to a fix value) or free to estimate. In this research, the researcher hypothesized the factor structure, as identified from the preceding EFA, and used CFA to cross-verify the factors structure and empirically support the model.

### Model Estimation

Following the model identification, researchers determine a method to estimate all parameters in the identified measurement model (Schumacker & Lomax, 2016). The goal of the model estimation is to yield the implied variance-covariance matrix ( $\Sigma$ ) that fits as close as possible to the observed variance-covariance matrix ( $S$ ; Schumacker & Lomax, 2016). Maximum likelihood (ML) is considered the most common method of estimating parameters to maximize the generalizability of the data for the population (Kline, 2016). Assumption of multivariate

normality should be met for using ML. If a violation exists in the assumption of multivariate normality, ML estimator tends to yield biased estimates; therefore, other estimation methods are recommended to be used (Bollen, 1989; Lei & Lomax, 2005). An alternative estimation method is maximum likelihood estimator with robust standard errors (MLR), which is a sandwich estimator with chi-squares and standard errors (Muthén & Muthén, 2017). MLR is considered robust to the non-normality because MLR decreases the influence of the non-normality on chi-square and standard errors (Asparouhov & Muthén, 2005). An increasing number of studies also reported that MLR significantly performs better and provide more accurate estimates than ML with the non-normality of the data (Asparouhov & Muthén, 2003; Curran, West, & Finch, 1996; Hu, Bentler, & Kano, 1992; Maydeu-Olivares, 2017). Therefore, in the present study, the researcher selected MLR estimator for the CFA due to the multivariate non-normality in the data.

### Model Testing

The next step is to test the measurement model to determine the degree to which the implied model fits the data (Schumacker & Lomax, 2016). Multiple indexes of model fit should be analyzed for the assessment of model fit. Recommended indexes for the analyses of model fit include the Tucker-Lewis index (TLI), comparative fit index (CFI), the root-mean-square error of approximation (RMSEA), and standardized root mean residual (SRMR; Fan & Sivo, 2005; Hu & Bentler, 1999). If TLI and CFI values are greater than or equal to .95, the model is considered a good fit (Hu & Bentler, 1999). The model is considered an acceptable fit if TLI and CFI values are between .90 and .95 (Hu & Bentler, 1999). The RMSEA value indicates the degree to which the implied model fits the observed model. If RESEA value is less than or equal to .06, it

indicates close fit between the models (Hu & Bentler, 1999). Lastly, SRMR value less than or equal to .08 reflects good model fit (Hu & Bentler, 1999). In addition, values for chi-square difference test ( $\Delta\chi^2$ ) was utilized to examine the extent to which a modified model indicate an improvement over its previous model. Given the utilization of MLR estimator in the present study, the researcher conducted the chi-square difference tests based on the formula developed by Satorra (2000). Akaike information criterion (AIC) and Bayesian information criterion (BIC) values were also reported to assess the improvement fit of modified models.

### Model Modification

The final step in CFA is to modify the proposed original model. When the proposed model fits poorly with the data, modifications can be made to improve model fit. Using modification indices, researchers re-specify the model with the existing data by adding parameters to the proposed model, removing items with the problematic standardized residuals (i.e., greater than 2.58), or correlating error terms between manifest variables (Bandalous & Finny, 2010; Brown, 2015, Hair et al., 2010; Schumacher & Lomax, 2016). Given the exploratory nature of the model modification, it is recommended to cross-validate the modified model with a separate and new data set (Bandalous & Finny, 2010).

## Analysis of Reliability and Validity

### Reliability

The researcher used Cronbach's coefficient alpha ( $\alpha$ ) to examine the internal consistency reliability of the CAMCB as well as of its each factor. Internal consistency involves a measure of

reliability that relies on how consistently respondents endorse items on an instrument (Crocker & Algina, 2008; DeVellis, 2017). Internal consistency is grounded in the idea that correlation among items are associated with the relationship of items to latent variables or factors (DeVellis, 2017). Alpha coefficient (internal consistency) ranges from 0 to 1, with value closer to 1 representing high reliability (DeVellis, 2017; Dimitrov, 2012). An alpha coefficient of .70 or higher is considered an acceptable level of reliability (Stern, 2003). However, alpha coefficients should be interpreted with caution because it is susceptible to inflation depending on the number of survey items. Therefore, the researcher used alpha coefficients of .70 as a reference point to examine the internal consistency, rather than a cut-off score.

### Validity

The researcher used bivariate correlational analyses to explore evidence for the validity of the CAMCB with a sample of clients (AREA et al., 2014; DeVellis, 2017). Given the non-normality of data, the researcher used Spearman's rank correlation coefficient (Spearman's rho correlation) as a nonparametric equivalent to bivariate correlational analysis (Pallant, 2013). Specifically, the researcher examined convergent validity (i.e., a form of construct validity) of the CAMCB with CCCI-R-7 (Drinane et al., 2016; LaFromboise et al., 1991) and WAI-SR (Hatcher & Gillaspie, 2006). Evidence for convergent validity was established by examining the strength of correlation between two different instruments that were designed to measure theoretically-related constructs (Gall et al., 2007; Watson & Flamez, 2015). In the present study, the researcher expected a positive and yet distinctive (i.e. weak-to-moderate) correlation between the CAMCB and CCCI-R-7, which is a measure of therapist's orientation toward performing

MCC that is theoretically related to therapists' MCC performance in practice. The researcher also anticipated a positive but weak-to-moderate correlation between CAMCB and WAI-SR, which is an instrument to assess therapeutic working alliance that is theoretically associated with the construct of MCC (Owen et al., 2013). Lastly, the researcher examined correlation between CAMCB and MCSDS-X1 (Strahan & Gerbasi, 1972) to account for the social desirability in participants' responses to the CAMCB. A lack of correlation or negative correlation between the CAMCB and MCSDS-X1 would provide evidences for little influence of social desirability biases on participants' response to the CAMCB.

### Additional Analyses

A series of multivariate analysis of variance (MANOVA) and analysis of variance (ANOVA) were conducted to explore differences in the CAMCB scores by client participants' demographic data and background information. A series of MANOVAs were separately conducted for each independent variable with multiple dependent variables (i.e., CAMCB factors [subscales]). ANOVAs were also performed to exam difference in a dependent variable (i.e., CAMCB total score) by each independent variable. The research included the following independent variables: (a) race and/or ethnicity, (b) gender, (c) sexual orientation, and (d) faith tradition (e.g., religion and spirituality). Given that MCC can be more important to certain cultural groups (e.g., racial, gender, sexual, and religious minority; Constantine, 2002; Sue & Sue, 2012, Sue & Zane, 1987; Yeh, 2003), clients' demographic characteristics or cultural group membership may influence their perceptions of MCC and responses to the CAMCB. In addition to clients' demographic information, other independent variables included were background

characteristics, including mental health service settings and type of therapists. To mitigate threats to the validity of the results, additional analyses of variance were conducted to examine potential difference in the response to the CAMCB based on data collection methods.

### Ethical Considerations

The researcher followed ethical guideline required by the IRB. The researcher obtained IRB approval for research design, instruments, informed consent, and sampling and analysis procedures. Prior to data collection, the researcher provided the participants with the informed consent that explained the purpose of the study, as well as their rights, including voluntary participation, discretion to withdraw without penalty, and confidentiality. No identifying information about the participants was collected or recorded on study documents. The researcher reported any findings or result from this research without any identifying information. Lastly, the researcher did not anticipate risks and discomforts involved in this research to participants.

### Limitations

Although the researcher attempted to diminish threats to validity and its associated limitations, this study included several limitations that warrant consideration. First, this study was vulnerable to several threats to internal and external validity, based on (a) population validity, (b) characteristic correlations, (c) measurement errors, and (d) testing. Participants' MCC literacy may have influenced how they responded to instrument items. Moreover, participants' demographic characteristics or their important cultural identity may have played a significant role in their responses to some of the CAMCB items. Additionally, participants may

have responded to the instruments in a socially desirable way based on a fear that the evaluation could jeopardize their therapeutic relationships.

Furthermore, despite the use of multiple data collection methods, a diverse representation of participants may have been limited to a certain therapeutic modality (e.g., individual counseling service) and a type of mental health professional (e.g., professional counselor). Additionally, this study utilized a convenience sample, which may not represent the population of interest and may have resulted in selection bias. Moreover, the length of the instrument battery (e.g., four instruments and a demographic questionnaire) may have caused participants' mental fatigue and led to increased rates of random-responses, non-responses, or attrition. Lastly, the sample from MTurk may have included responses from participants who may not have fully met the eligibility criterion, which may limit the validity of the data. In Chapter Five, the researcher discusses steps taken to mitigate threats to validity and potential implications of limitations.

### Chapter Summary

This research aimed to develop the CAMCB and investigate its psychometric features with a sample of clients. Chapter Three presented information regarding the research methods, including (a) research design, (b) population and sampling procedure, (c) data collection procedure, (d) CAMCB development procedure, (e) instrumentation, (f) research purpose and questions, (g) data analysis plan, (h) ethical consideration, and (i) potential limitations. Chapter Four provides information regarding the results of this research.

## CHAPTER FOUR: RESULTS

Chapter Four presents results of the analysis of data to respond to each research question related to the current study. In this study, the researcher examined the factor structure and psychometric properties of the CAMCB scores with a sample of clients. The researcher analyzed data using SPSS Version 24 and MPlus version 8 (Muthén & Muthén, 2017). Specifically, the researcher analyzed data for each research question using: (a) EFA, (b) CFA, (c) Cronbach's (1951) alpha, (d) Spearman Rho correlations, and (e) one-way analysis of variance (ANOVA and MANOVA). Chapter 4 presents descriptive statistics for the sample and results for each research question in the following order: (a) research question 1, EFA and CFA, (b) research question 2, Cronbach's alpha and correlation analysis, and (c) research question 3, ANOVA and MANOVA.

### Sampling and Data Collection Procedures

Clients who received mental health services in the U.S. were the target population of this study. The researcher utilized a non-probability, convenience sampling method with the following eligibility criteria: clients should be (a) age 18 or older; (b) receiving, currently or within the past four weeks, any modality of mental health services; and (c) had finished at least three sessions with their therapists. The accessible population of clients were recruited from different mental health counseling settings in the Southern United States. Clients across the U.S. were also invited to participate in the study through a web-based recruitment tool. The researcher conducted three modes of data collection procedures; (a) face-to-face contact and face-to-face administration with paper-and-pencil version of assessments, (b) face-to-face contact and self-administration with electronic version of assessments, and (c) online contact and online



administration with electronic version of assessments. The data collection process occurred between November 17<sup>th</sup>, 2017 and April 2<sup>nd</sup>, 2018. Details in sampling and data collection procedures were presented in Chapter Three.

### Response Rate

The response rate was calculated for a total sample, as well as for each data collection procedure. In total, 735 participants were invited via three data collection procedures. Of the 735 participants, 654 participants consented to participate in the study and completed the CAMCB instrument (88.97% response rate). However, several participants ( $n = 61$ ) did not meet the eligibility criteria for the study, whereas some participants ( $n = 30$ ) provided random and identifiable patterns of responses. Therefore, the researcher obtained a final sample of 563 participants and a useable response rate of 86.08%. The following section presents details regarding the response rates for each data collection procedure (see Table 6).

#### Face-to-Face Contact/Face-to-Face administration

The researcher visited five mental health service centers to recruit participants. A total of 168 clients were invited and consented to participate in the study (i.e., distributed 168 survey packets). However, three participants who received and previewed the survey opted to withdraw from the study due to their restricted time and returned an incomplete packet (98.20% response rate). Subsequently, some participants ( $n = 5$ ) responded to all items with a single response option as well as did not select the appropriate response for the validate item (i.e., to monitor quality, please select “strongly disagree” for this item). The researcher decided to remove those

five participants from the study. Therefore, the face-to-face contact/face-to-face administration resulted in 160 useable responses (95.23% useable response rate).

#### Face-to-Face Contact/Self-Administration

The researcher created 200 brochures with an online link and QR code to the electronic version of the survey (Qualtrics survey). Of the 200 brochures created, 146 brochures were distributed to clients from the centers who showed interests in participating in the study during the face-to-face contact. Of the invited 146 clients, a total of 79 clients participated in the survey at their own convenience by typing the link or scanning the QR code (54.1% response rate). However, one participant was removed due to his or her use of an identifiable pattern of responses to all items and inappropriate response to the validation item. Therefore, recruitment through face-to-face contact/self-administration resulted in 78 useable responses (53.42% useable response rate).

#### Online Contact/Online Administration

Lastly, the researcher recruited participants through Amazon MTurk. Initially, a total of 421 participants consented to participate in the study and previewed the survey. Of the 421 participants, 11 participants opted not to participate and did not initiate the survey. This resulted in 410 participants completing the CAMCB in its entirety (97.38% response rate). However, of the 410 participants, the researcher removed 61 participants (14.8%) who did not meet the eligibility criteria for the study based on their responses to the two screening questions (i.e., receiving, currently or within the past four weeks, mental health services; and had completed

three sessions at minimum with their therapists). Subsequently, the researcher examined the raw data and further screened out 24 participants (6.8%) who chose an incorrect response for the validate item and utilized a recognizable pattern of responses to all other items (i.e., endorsing all items with a single response option). As a result, the researcher obtained 325 useable responses (77.19% useable response rate) through MTurk recruitment.

Table 6

Sampling and Response Rates

	Participant Responses ( <i>N</i> )	Participants Invited	Response Rate	Usable Response ( <i>n</i> )	Usable Response Rate
Data Source					
Face to Face / Face to Face	165	168	98.2%	160	95.23%
Face to Face / Self-administration	79	146	54.1%	78	53.42%
Online / Online	410	421	97.38%	325	77.19%
Total	654	735	88.97%	563	86.08%

Participant Demographic and Background Information

Data collection yielded a final sample size of 563 client participants. Subsequently, the researcher randomly split the sample in half to account for EFA ( $n = 281$ ) and CFA ( $n = 282$ ). It is important to note that after examining the presence of missing data, the researcher found that one participant in the EFA sample failed to respond to a single item of the CAMCB. Therefore, the researcher decided to use listwise deletion when conducting EFA (see the Missing Data Analysis section for details). This resulted in the inclusion of 280 participants for the EFA.

However, the researcher included the original EFA sample of 281 participants when presenting participants' demographic and background information, because it provided readers with demographic characteristics of all participants in the study. Following is a description of the demographic characteristics of participants and their backgrounds, by subsample.

#### EFA Sample: Demographic and Background Information

In the EFA subsample, approximately 54% of client participants self-identified as White ( $n = 153$ ), 13% as Asian or Asian American ( $n = 38$ ), 13% as Hispanic or Latina/Latino ( $n = 37$ ), 11% as Black or African American ( $n = 32$ ), 2% as biracial ( $n = 7$ ), and 3% as Native American or other ( $n = 9$ ). Approximately 58% of clients self-identified as female ( $n = 162$ ), 39% as male ( $n = 110$ ), and 1% as transgender or other ( $n = 4$ ). About 80% of participants self-identified as heterosexual ( $n = 227$ ), 10% as bisexual ( $n = 29$ ), 4% as gay ( $n = 11$ ), 2% as lesbian ( $n = 6$ ), and 1% as other ( $n = 2$ ). Additionally, approximately 49% of participants indicated their faith as Christianity ( $n = 137$ ), 17% as Atheism or Agnosticism ( $n = 48$ ), 8% as spirituality ( $n = 22$ ), 7% as Hinduism ( $n = 19$ ), 3% as Islam ( $n = 9$ ), 2% as Judaism ( $n = 7$ ), and 2% as Buddhism ( $n = 5$ ). Client participants' ages ranged from 18 to 64 with an average age of 31.2 years ( $SD = 9.53$ ). Table 7 presents details regarding demographic characteristics of participants in the EFA sample.

Table 7

## Participants' Demographic Characteristics for EFA Sample

Characteristics		Frequency ( <i>n</i> )	Percentage (%)
Race and/or Ethnicity			
	White or Caucasian	153	54.4
	Asian or Asian American	38	13.5
	Hispanic or Latino/Latina	37	13.2
	Black or African American	32	11.4
	Biracial	7	2.5
	Native American	5	1.8
	Other	4	1.4
	No response	5	1.8
Gender			
	Female	162	57.1
	Male	110	39.1
	Transgender	2	.7
	Genderqueer or non-confirming	1	.4
	Other	1	.4
	No response	5	1.8
Sexual Orientation			
	Heterosexual	227	80.8
	Bisexual	29	10.3
	Gay	11	3.9
	Lesbian	6	2.1
	Other	2	.8
	No response	6	2.1
Faith Tradition			
	Christianity	137	48.8
	Agnostic	25	8.9
	Atheist	23	8.2
	Spiritual but not religious	22	7.8
	Hinduism	19	6.8
	Nothing in particular	16	5.7
	Islam	9	3.2
	Judaism	7	2.5
	Buddhism	5	1.8
	Catholic	3	1.1
	Other	10	3.6
	No response	5	1.8
Educational Attainment			
	Bachelor's Degree	110	39.1

Characteristics	Frequency ( <i>n</i> )	Percentage (%)	
Employment Status	Some University or College	78	27.8
	Master’s Degree	45	16.0
	High School Graduate or GED	35	12.5
	Ph.D	3	1.1
	Other	4	1.4
	No response	6	2.1
	Full-time Employed	151	53.7
	Part-time Employed	50	17.8
	Full-time Student	29	10.3
	Unemployed	26	9.3
	Part-time Student	7	2.5
	Retired	2	0.7
	Self-employed	2	0.7
	Other	8	2.8
	No response	6	2.1
Household Income	Less than 10,000	33	11.7
	10,000 to less than 20,000	38	13.5
	20,000 to less than 30,000	50	17.8
	30,000 to less than 40,000	28	10.0
	40,000 to less than 50,000	35	12.5
	50,000 to less than 60,000	23	8.2
	60,000 to less than 70,000	18	6.4
	More than 70,000	50	17.8
	No response	6	2.1
	Primary Language	English	243
Spanish		15	5.3
Other		18	6.4
No Response		5	1.8

*Note.* Age ( $M = 31.2$ ;  $SD = 9.53$ ;  $MIN = 18$ ;  $MAX = 64$ ).

The researcher also elicited relevant background information about participants for this study. In the EFA subsample, 243 participants were currently receiving therapeutic services (86%), whereas 38 participants (14%) had received the services within the past four weeks. Approximately 44% of participants received therapeutic services from community-based counseling centers ( $n = 125$ ), 43% from private counseling centers ( $n = 123$ ), and 10% from a

university counseling center ( $n = 29$ ). Additionally, participants reported their therapists as professional psychologists ( $n = 73$ , 26%), professional counselors ( $n = 55$ , 19%), counselors-in-training ( $n = 44$ , 16%), professional social workers ( $n = 21$ , 7%), and professional therapists whose exact credentials were unknown ( $n = 44$ , 15%). Approximately 81% of participants received individual counseling services ( $n = 227$ ), whereas 5% of participants received family counseling service ( $n = 15$ ), and 5% of participants utilized couples' counseling services ( $n = 14$ ). Participants worked with their therapists on the average number of 17.39 sessions ( $SD = 33.29$ ), ranging from three to 350 sessions. Detailed background information for the EFA sample is presented in Table 8.

Table 8

## Background Information for EFA Sample

Variables	Frequency ( <i>n</i> )	Percentage (%)
Currently Receiving Therapeutic Service		
Yes	243	86.5
No. I received within the past four weeks	38	13.5
Therapeutic Environment		
Community-Based Counseling Center	125	44.5
Private Counseling Center	123	43.8
University-Based Counseling Center	29	10.3
Other	2	0.7
No response	2	0.7
Type of Therapist		
Professional Psychologist (PsyD)	73	26.0
Professional Counselor (LPC, LMHC)	55	19.6
Counselor-in-Training (CIT)	44	15.7
Professional Social Worker (MSW, LCSW)	21	7.5
Professional Marriage & Family Therapist (LMFT)	14	5.0
Counseling Intern	9	3.2
Psychiatrist (MD)	1	0.4
Do not know the credential, but it is a professional therapist	60	21.4
Really do not know	2	0.7
No response	2	0.7
Modality of Therapy		
Individual Counseling	227	80.8
Family Counseling	15	5.3
Couple Counseling	14	5.0
Group Counseling	12	4.3
Career Counseling	6	2.1
Other	2	0.7
No response	5	1.8

*Note.* Participants completed a minimum of three and a maximum of 350 sessions with their therapists.



Moreover, when asked for the aspects of cultural background that were most salient to their identity, participants identified family background or value ( $n = 59$ , 21%), gender ( $n = 51$ , 18.1%), religion or spirituality ( $n = 38$ , 13.5%), race and/or ethnicity ( $n = 36$ , 12.8%), social economic status ( $n = 14$ , 5%), and disability ( $n = 13$ , 4.6%). Participants were also asked to rate how important it was for their therapists to discuss the aspect of cultural identity by using a 5-point Likert scale, ranging from 1 (*not all important*) to 5 (*very important*). Most participants reported somewhat to very important ( $n = 194$ , 69.1%), but approximately 29% reported little to not important ( $n = 80$ ). In addition, participants indicated that their presenting concerns were associated with family values ( $n = 84$ , 29.9%), gender ( $n = 27$ , 9.6%), socioeconomic status ( $n = 23$ , 8.2%), race and/or ethnicity ( $n = 23$ , 8.2%), religion and/or spirituality ( $n = 19$ , 6.8%), and disability ( $n = 17$ , 6.0%). Approximately 14% indicated that no cultural background was related to their concern ( $n = 39$ ). Lastly, when asked to rate the level of satisfaction with the therapeutic service, participants reported that they were satisfied ( $n = 121$ , 43.1%) or very satisfied ( $n = 112$ , 39.9%), as compared to those who reported neutral ( $n = 33$ , 11.7%), dissatisfied ( $n = 6$ , 2.1%), or very dissatisfied ( $n = 1$ , 0.4%). Table 9 presents details regarding participants' cultural background and experience with therapy for the EFA sample.

Table 9

## Participants' Cultural Identity and Therapeutic Experience

Variables	Frequency ( <i>n</i> )	Percentage (%)
Important Aspect of Cultural Identity		
Family Background or Value	59	21.0
Gender	51	18.1
Religion or Spirituality	38	13.5
Race and/or Ethnicity	36	12.8
Socioeconomic Status	14	5.0
Disability	13	4.6
Sexual Orientation	12	4.3
Political Orientation	8	2.8
Age	8	2.8
Nationality	7	2.5
Language	5	1.8
Other	3	1.1
No Response	27	9.6
Level of Importance to Discuss the Aspect of Cultural Identity		
Not at All Important (1)	47	16.7
Little Important (2)	33	11.7
Somewhat Important (3)	93	33.1
Important (4)	55	19.6
Very Important (5)	46	16.4
No response	7	2.5
Cultural Background Related to Presenting Concern		
Family Background or Value	84	29.9
Gender	27	9.6
Race and/or Ethnicity	23	8.2
Socioeconomic Status	23	8.2
Religion or Spirituality	19	6.8
Disability	17	6.0
Sexual Orientation	11	3.9
Political Orientation	6	2.1
Language	4	1.4
Age	4	1.4

Variables	Frequency ( <i>n</i> )	Percentage (%)
Nationality	2	0.7
Other	12	4.3
Not Related to My Concern	39	13.9
No response	10	3.6
Level of Satisfaction with Therapy		
Very Dissatisfied (1)	1	0.4
Dissatisfied (2)	6	2.1
Neutral (3)	33	11.7
Satisfied (4)	121	43.1
Very Satisfied (5)	112	39.9
No response	8	2.8

#### CFA Sample: Demographic and Background Information

In the CFA subsample, approximately 57% of participants self-identified as White ( $n = 161$ ), 11% as Black or African American ( $n = 46$ ), 11% as Asian or Asian American ( $n = 33$ ), 9% as Hispanic or Latina/Latino ( $n = 26$ ), 1% as biracial ( $n = 3$ ), 1% as Native American ( $n = 3$ ), and 1% as other ( $n = 3$ ). Additionally, 153 participants self-identified as female (54%), whereas 121 participants self-identified as male (42%), and two participants self-identified as transgender (1%). The majority of participants were heterosexual ( $n = 235$ , 83%), with the remaining participants identifying as bisexual ( $n = 21$ , 7.4%), lesbian ( $n = 8$ , 3%), gay ( $n = 6$ , 2%), or other ( $n = 5$ , 2%). Additionally, approximately 50% of participants reported their faith as Christianity ( $n = 142$ ), 17% as Atheism or Agnosticism ( $n = 49$ ), 9% as spirituality ( $n = 26$ ), 7% as Hinduism ( $n = 19$ ), 2% as Judaism ( $n = 7$ ), and 2% as Buddhism ( $n = 7$ ). Participants ranged in age from 18 to 69 years ( $M = 32.01$ ,  $SD = 9.6$ ) years. Details regarding demographic characteristics are presented in Table 10.

Table 10

## Participants' Demographic Characteristics for CFA Sample

Characteristics		Frequency ( <i>n</i> )	Percentage (%)
Race and/or Ethnicity			
	White or Caucasian	161	57.1
	Black or African American	46	16.3
	Asian or Asian American	33	11.7
	Hispanic or Latino/Latina	26	9.2
	Biracial	3	1.1
	Native American	3	1.1
	Other	3	1.1
	No response	7	2.5
Gender			
	Female	153	54.3
	Male	121	42.9
	Transgender	2	.7
	Genderqueer or non-confirming	0	0
	Other	0	0
	No response	6	2.1
Sexual Orientation			
	Heterosexual	235	83.3
	Bisexual	21	7.4
	Lesbian	8	2.8
	Gay	6	2.1
	Other	5	1.8
	No response	7	2.5
Faith Tradition			
	Christianity	142	50.4
	Agnostic	26	9.2
	Spiritual but not religious	26	9.2
	Atheist	23	8.2
	Hinduism	19	6.7
	Nothing in particular	14	5.0
	Judaism	7	2.5
	Buddhism	7	2.5
	Islam	5	1.8

Characteristics	Frequency ( <i>n</i> )	Percentage (%)
Catholic	1	0.4
Other	7	2.5
No response	5	1.8
Educational Attainment		
Bachelor's Degree	136	48.2
Some University or College	67	23.8
Master's Degree	38	13.5
High School Graduate or GED	27	9.6
Ph.D	5	1.8
Other	4	1.4
No response	5	1.8
Employment Status		
Full-time Employed	154	54.6
Part-time Employed	44	15.6
Full-time Student	35	12.4
Unemployed	19	6.7
Part-time Student	9	3.2
Retired	4	1.4
Self-employed	2	0.7
Other	10	3.5
No response	5	1.8
Household Income		
Less than 10,000	41	14.5
10,000 to less than 20,000	41	14.5
20,000 to less than 30,000	36	12.8
30,000 to less than 40,000	29	10.3
40,000 to less than 50,000	27	9.6
50,000 to less than 60,000	30	10.6
60,000 to less than 70,000	18	6.4
More than 70,000	54	19.1
No response	6	2.1
Primary Language		
English	260	92.2
Spanish	9	3.2
Other	9	3.2
No Response	5	1.8

*Note.* Age ( $M = 32.01$ ;  $SD = 9.6$ ;  $MIN = 18$ ;  $MAX = 69$ ).

In the CFA subsample, approximately 87% of participants were currently receiving therapeutic services ( $n = 247$ ), whereas 12% of participants had received the service within the past four weeks ( $n = 35$ ). Additionally, about 44% of participants received the therapeutic services from private counseling centers ( $n = 123$ ), and 42% of participants utilized community-based counseling centers ( $n = 117$ ) and 13% used a university-based counseling center ( $n = 37$ ). Participants identified their therapists as professional psychologists ( $n = 76$ , 27%), professional counselors ( $n = 59$ , 20%), counselors-in-training ( $n = 39$ , 14%), professional social workers ( $n = 17$ , 6%), and professional therapists whose exact credentials were unknown ( $n = 61$ , 22%). Most of the participants received individual counseling services ( $n = 238$ , 84%) as compared to participants who received family counseling service ( $n = 14$ , 5%), couple counseling service ( $n = 14$ , 5%). Participants ranged in completing the number of sessions from three to 300 ( $M = 17.98$ ,  $SD = 31.69$ ). More background information for the CFA sample is presented in Table 11.

Table 11

## Background Information for CFA Sample

Variables	Frequency ( <i>n</i> )	Percentage (%)
Currently Receiving Therapeutic Service		
Yes	247	87.6
No. I received within the past four weeks	35	12.4
Therapeutic Environment		
Private Counseling Center	123	43.6
Community-Based Counseling Center	117	41.5
University-Based Counseling Center	37	13.1
Other	5	1.8
Type of Therapist		
Professional Psychologist (PsyD)	76	27.0
Professional Counselor (LPC, LMHC)	59	20.9
Counselor-in-Training (CIT)	39	13.8
Professional Social Worker (MSW, LCSW)	17	6.0
Professional Marriage & Family Therapist (LMFT)	15	5.3
Counseling Intern	7	2.5
Psychiatrist (MD)	2	0.7
Do not know the credential, but it is a professional therapist	64	22.7
Really do not know	3	1.1
Modality of Therapy		
Individual Counseling	238	84.4
Family Counseling	14	5.0
Couple Counseling	14	5.0
Group Counseling	10	3.5
Other	1	0.4
No response	5	1.8

*Note.* Participants completed a minimum of three and a maximum of 300 sessions with their therapists ( $M = 17.98$ ,  $SD = 31.69$ ).

Additionally, when asked to identify the most important aspect of cultural identity, participants identified gender ( $n = 52$ , 18%), family background or value ( $n = 49$ , 17%), religion

or spirituality ( $n = 42$ , 15%), race and/or ethnicity ( $n = 35$ , 12%), and sexual orientation ( $n = 16$ , 6%) as the most important aspect of their identity. Moreover, approximately 71% of participants found it somewhat important (3) to very important (5) for their therapists to discuss the aspect of their identity in therapy ( $n = 201$ ), as compared to 27% of participants found it of little importance to not at all important ( $n = 75$ ). Furthermore, participants reported that their presenting concerns were related to family values ( $n = 85$ , 30.1%), gender ( $n = 35$ , 12.4%), disability ( $n = 23$ , 8.2%), socioeconomic status ( $n = 19$ , 6.7%), religion and/or spirituality ( $n = 18$ , 6.4%), and race and/or ethnicity ( $n = 17$ , 6%), as compared to those who reported that their concerns were not related to any aspect of their cultural background ( $n = 39$ , 13.8%). Lastly, most participants reported that they were either satisfied ( $n = 124$ , 44%) or very satisfied ( $n = 105$ , 37.2%) with their therapeutic services, as compared to those who felt neutral ( $n = 39$ , 13.8%), dissatisfied ( $n = 6$ , 2.1%), and very dissatisfied ( $n = 2$ , 0.7%). Table 12 presents details regarding participants' cultural identity and experience with therapy.

Table 12

#### Participants' Cultural Identity and Therapeutic Experience

Variables	Frequency ( $n$ )	Percentage (%)
Important Aspect of Cultural Identity		
Gender	52	18.4
Family Background or Value	49	17.4
Religion or Spirituality	42	14.9
Race and/or Ethnicity	35	12.4
Sexual Orientation	16	5.7
Socioeconomic Status	13	4.6
Nationality	13	4.6
Disability	10	3.5
Age	7	2.5



Variables	Frequency ( <i>n</i> )	Percentage (%)
Language	7	2.5
Political Orientation	4	1.4
Other	6	2.1
No Response	28	9.9
Level of Importance to Discuss the Aspect of Cultural Identity		
Not at All Important (1)	41	14.5
Little Important (2)	34	12.1
Somewhat Important (3)	84	29.8
Important (4)	60	21.3
Very Important (5)	57	20.2
No response	6	2.1
Cultural Background Related to Presenting Concern		
Family Background or Value	85	30.1
Gender	35	12.4
Disability	23	8.2
Socioeconomic Status	19	6.7
Religion or Spirituality	18	6.4
Race and/or Ethnicity	17	6.0
Age	12	4.3
Sexual Orientation	11	3.9
Nationality	4	1.4
Political Orientation	3	1.1
Language	3	1.1
Other	2	0.7
Not Related to My Concern	39	13.8
No response	11	3.9
Level of Satisfaction with Therapy		
Very Dissatisfied (1)	2	0.7
Dissatisfied (2)	6	2.1
Neutral (3)	39	13.8
Satisfied (4)	124	44.0
Very Satisfied (5)	105	37.2
No response	6	2.1

### Baseline Difference Test Between EFA and CFA samples

Prior to any data analysis, considering that the original data were randomly divided into two subsamples, the researcher examined for potential baseline differences that might exist between the randomly assigned subsamples (e.g., EFA and CFA samples). A one-way ANOVA was conducted to determine if there were differences in the CAMCB 30-item total scores between the two subsamples. The results from the ANOVA indicated no significant differences between the subsamples ( $p = .880$ ). An additional one-way MANOVA was conducted to examine baseline differences between the two subsamples on the CAMCB total scores, age, the number of completed therapy sessions. The result from the MANOVA indicated no significant differences between the two subsamples ( $p = .175$ ).

### Results Based on Research Questions

The researcher analyzed the data using the SPSS version 24 and Mplus version 8 (Muthén & Muthén, 2017). Prior to any data analysis, the researcher screened the data to ensure that statistical assumptions were met for each analysis in this study. The following sections present results for each research question.

#### Research Question 1

##### What is factor structure of the items on the CAMCB with a sample of clients?

For research question 1, the researcher conducted EFA to explore the factor structure of the items on the CAMCB. Subsequently, CFA was performed to cross-verify the factor structure of the CAMCB, as identified from the EFA. Results for Research Question 1 are presented as

follows: (a) results from data screening and statistical assumptions for EFA, (b) results for EFA, (c) results from data screening and statistic assumptions for CFA, and (d) results for CFA.

### Result – EFA Data Screening and Statistic Assumptions

It is necessary to screen the data for missing values and outliers, as well as to examine statistical assumptions necessary for EFA (Hair et al., 2010; Osborne, 2013). Therefore, the researcher began the data analysis with examination of statistical assumptions for EFA, including: (a) adequate sample size, (b) missing data analysis, (c) outliers, (d) normality, (e) linearity, (f) multicollinearity, and (g) factorability (Tabachnick & Fidell, 2013). The following section presents results from the tests of each statistical assumption.

#### Adequate sample size

As described previously, the researcher randomly split in half the total sample of 563, resulting in a subsample of 281 participants for EFA. Of the 281 participants in the sample, one participant missed a response on an item of the 30 items. Listwise deletion was selected to deal with the missing value, resulting in 280 participants for the final EFA (see following section for details). Therefore, the researcher established approximately 9:1 participants/item ratio for EFA (e.g., 280 participants for 30 items). Despite some disagreement among the recommended participants/item ratio for EFA, a range of between 5:1 to 10:1 participants/item ratio is considered sufficient for EFA (Costello & Osborn, 2005; Dimitrov, 2012; Hair et al., 2010; Mvududu & Sink, 2013; Tabachnick & Fidell, 2013). Therefore, the 9:1 participants/item ratio ( $n = 280$ ) was considered a moderately strong ratio and was sufficient for conducting EFA.

### Missing Data Analysis

Missing data can cause significantly biased results in any form of data analysis (Tabachnick & Fidell, 2013). Using the Descriptive Statistics in SPSS, the researcher examined the existence of missing data across the variables of interest (e.g., CAMCB 30 items). As a result, the researcher found one missing value on a single item; yielding less than 0.5% of the missing data for the current analysis. Subsequently, the researcher conducted Little's MCAR test to examine the reasonableness of data missing at random (MAR) or missing completely at random (MCAR). Little's MCAR test revealed a statistically significant result,  $\chi^2 (29) = 47.187$ ,  $p = 0.18$ , and indicated that the missing data were *not* missing at completely random (MCAR). However, a further visual review of missing patterns with the two items indicated no identifiable or particular patterns of missing. Therefore, the missing data were considered data missing at random (MAR).

Despite the various approaches to dealing with missing data, missing 5% or less of values on a single variable may be of less significant concern (Kline, 2011; Tabachnick & Fidell, 2013). Three approaches are used to deal with missing data: (a) listwise, (b) pairwise, (c) replacing missing values (Osborn, 2013; Schumacker & Lomax, 2016). Listwise deletion is recommended for EFA if the missing data is in random patterns and sample size is relatively large (Tabachnick & Fidell, 2013). Therefore, given the minimal proportion of missing data (< 0.5%), sufficient sample size of these data, and random pattern of missing data, listwise deletion was considered the best practice for this research. Therefore, the current analysis for EFA included 280 client participants.

### Univariate Outliers

Outliers are data points that exceed the expected range of normal with extreme values, which can influence statistical results (Osborn, 2013; Schumacker & Lomax, 2016). To identify the presence of univariate outliers, the researcher converted respondents' total CAMCB scores to z-scores and examined values that were greater than 3.29 standard deviations from the mean (Tabachnick & Fidell, 2013). The researcher identified no univariate outliers for the CAMCB total score. Information on how to deal with multivariate outliers is presented in following section.

### Univariate and Multivariate Normality

Factor analysis was fairly robust to the violation of normality (Mvududu & Sink, 2013; Tabachnick & Fidell, 2013). If the assumption of normality is met, factor solution is enhanced; yet even if the assumption is not met, it still can produce reliable factor solutions (Tabachnick & Fidell, 2013). The researcher examined the assumptions of normality using a series of visual inspections and statistical tests, including (a) the skewness and kurtosis values; (b) histograms; (c) quartile-quartile (Q-Q) plots; (d) probability-probability (P-P) plots; (e) Shapiro-Wilk value; and (f) multivariate outliers and normality.

Skewness values that were within  $\pm 2.0$  and kurtosis values that within  $\pm 3$  were considered acceptable (Garson, 2012). The researcher examined skewness and kurtosis values for each item of the CAMCB as well as the entire scale (e.g., total score). Skewness and kurtosis values for all items and total score were found to be within the acceptable range. Given the influence of large sample size on the estimation of skewness and kurtosis values (Pallant, 2013),

the researcher further conducted visual inspection on histograms for each item and CAMCB's entire scale. (Figures 1, 2, and 3)

Examination of histograms for each item revealed non-normality of data for all items, including positively and negatively skewed distributions (i.e., no bell-shaped distribution). The Normal Q-Q plots also supported the non-normality of data for all items, with observed values on items being deviated from a straight line of normal distribution. Non-normal distribution of the histogram and the Q-Q plot were also found for the entire scale.

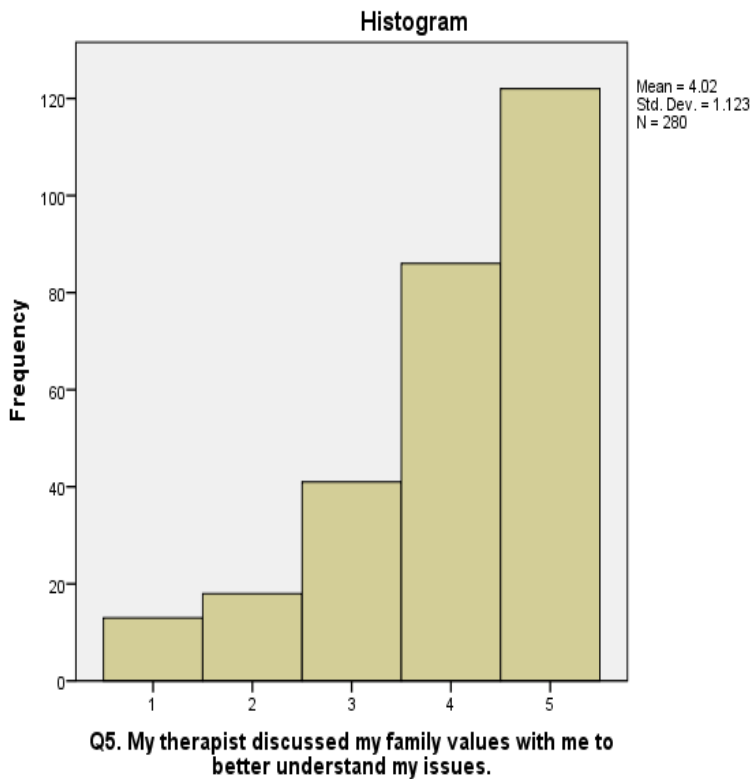


Figure 1. Histogram of CAMCB Item 5

Normal Q-Q Plot of Q5. My therapist discussed my family values with me to better understand my issues.

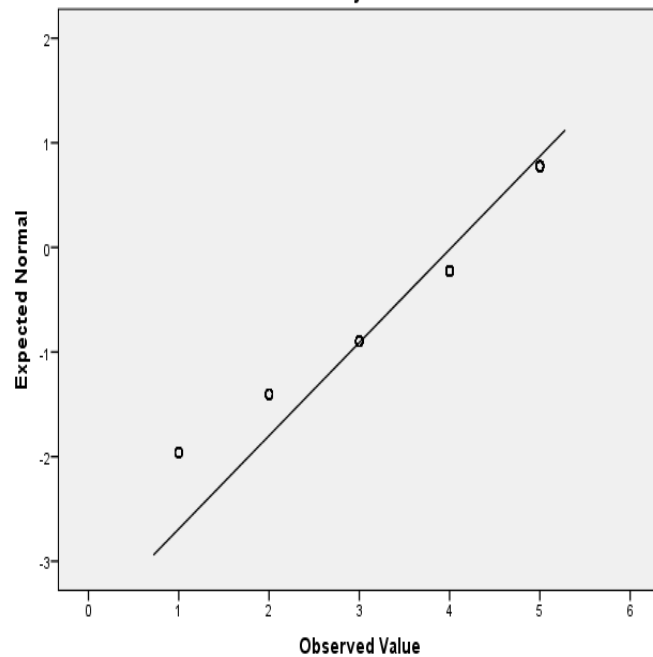


Figure 2. Q-Q Plot for CAMCB Item 5

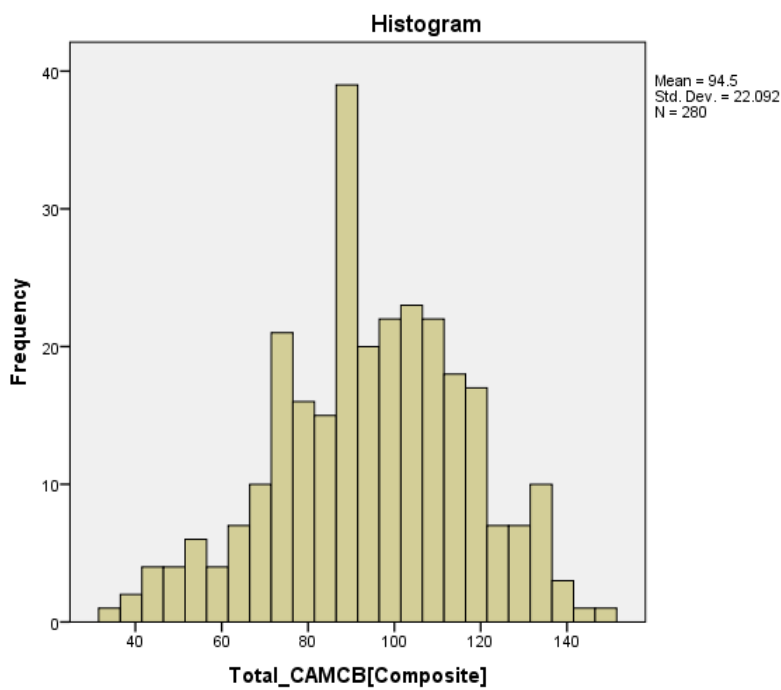


Figure 3. Histogram of CAMCB Total Score

Additionally, the researcher conducted a Shapiro-Wilk test for each item and the entire 30-item scale. It was recommended to use the Shapiro-Wilk test for a study that included less than 2,000 participants (Pallant, 2013). The Shapiro-Wilk test revealed significant values ( $p < .001$ ) and violated the assumptions of normality for all items, which further supported the non-normality of data. The non-significant Shapiro-Wilk value ( $p = .313$ ) was found for the entire 30-item scale; however, the non-normal distribution of histogram and Q-Q plot indicated the violation of normality for the entire scale as well.

Because the univariate non-normality of data were found, the researcher assumed non-normality at the multivariate level (Hair et al., 2010). To further examine multivariate normality, a linear regression was conducted for all items (i.e., independent variables) with the participants' identification numbers (i.e., dependent variables; Pallant, 2013). The researcher found 12 cases (0.04%) that exceeded the maximum critical values of Mahalanobis distance (59.703), which indicated multivariate outliers. However, the researcher decided not to remove the 12 multivariate outliers because the researcher considered the outliers as legitimate values that represented the target population and did not want to reduce the sample size (Osborn, 2013). Moreover, the researcher tested the influence of removing the 12 multivariate outliers from the data set and found that none of the statistical tests (Shapiro-Wilk test) and visual inspections (histogram and Q-Q plot) indicated significant improvement without the outliers. Therefore, the researcher retained the multivariate outliers for the current analysis.



### Linearity

To assess for linearity, the researcher conducted visual inspections of bivariate scatterplots between the variables (Tabachnick & Fidell, 2013). The researcher found no clear patterns of nonlinear relationship between the variables. Therefore, the researcher determined that the assumption of linearity was met for the data in this research.

### Multicollinearity

Presence of extreme multicollinearity can be a serious concern for EFA (Tabachnick & Fidell, 2013). To assess for multicollinearity, the researcher examined the variance inflation factor (VIF) and tolerance values. The absence of multicollinearity is assumed if VIF values are less than 10.00 and tolerance values are greater than .10 (Pallant, 2013). All items indicated less than 10.00 VIF values and greater than .10 tolerance values. Therefore, the researcher concluded that the assumption of multicollinearity (i.e. absence of multicollinearity) was satisfied with the data.

### Factorability

Correlation among variables (items) should be factorable for EFA (Tabachnick & Fidell, 2013). To assess for the factorability, the researcher first examined an intercorrelation matrix. The examination of the intercorrelation matrix indicated that the most of correlation coefficients among all variables were greater than .20, supporting the factorability of the data for EFA (Mvududu & Sink, 2013). Subsequently, the researcher referred to Bartlett's test of sphericity and found a significant value of  $\chi^2(435) = 3944.765, p < 0.001$ , which further supported the

factorability of the intercorrelation matrix (Tabachnick & Fidell, 2013). Lastly, the KMO measure of sampling adequacy indicated a value of .91, supporting the factorability of the intercorrelation matrix for EFA (Kaiser, 1974).

### Results for EFA

Because the assumptions for EFA were met, the researcher proceeded to conduct the EFA. As fully described in the Chapter Three (see data analysis plan section), the researcher utilized a principal axis factoring (PAF) extraction method with an oblique (promax) rotation. Principal Component Analysis (PCA) was not deemed to be a form of factor analysis because “it makes no assumption about underlying causal structures; it is simply a variable reduction procedure that results in a relatively small number of components accounting for most variance in a set of observed variables” (O’Rourke & Hatcher, 2013, p.7). Instead, scholars in the methodological literature supported the use of maximum likelihood factor analysis (MLFA) or PAF (Costello & Osborn, 2005; O’Rourke & Hatcher, 2013; Tabachnick & Fidell, 2013). PAF is preferable to MLFA if the data are not normally distributed (Costello & Osborn, 2005; Fabrigar et al., 1999; Watson, 2017). Therefore, given the non-normality of the data and the exploratory nature of the present study, the researcher determined to use PAF.

In addition, the researcher selected oblique rotation (promax) as the factor rotation method. As described in Chapter Three, oblique rotation was deemed an appropriate rotation choice in this research because the correlation among factors was assumed in the social sciences (Costello & Osborn, 2005; Mvududu & Sink, 2013). Of the two oblique rotation methods,

promax rotation was selected as opposed to direct oblimin because of its advantages of making the interpretation of factor structure simpler (Tabachnick & Fidell, 2013).

The initial PAF EFA with promax rotation was conducted with the 30-item CAMCB. The initial PAF EFA resulted in a five-factor solution with eigenvalues greater than one (i.e., 10.03, 3.270, 1.574, 1.243, 1.054), which described 57.23% of the cumulative variance. However, a limitation of eigenvalues greater-than-one rule as a criterion for factor retention decision-making was to overextract factors due to the sampling error (Dimitrov, 2012; O'Rourke & Hatcher, 2013; Zwick & Velicer, 1986). Additionally, the researcher examined factor loading of items on each factor and found that Factor 4 and 5 had fewer than three items with factor loadings greater than .32 (see Table 13). The results from the factor loading examination further indicated the problem with the initial five-factor solution and supported the reevaluation of factor structure and items. Therefore, to find a new and better factor solution, the researcher proceeded to examine each item based on the criteria for retention of items and factors.

Table 13

Initial Factor Loading with CAMCB 30 items

	Factor Loading									
	Pattern Matrix					Structure Matrix				
	1	2	3	4	5	1	2	3	4	5
11. My therapist brought up racial differences between us during therapy.	.818	.000	-.167	-.065	.193	.713	.163	.116	.136	.099
6. My therapist discussed how my racial/ethnic background influence the therapeutic relationship.	.771	-.083	-.093	.206	-.011	.774	.264	.195	.408	-.113

	Factor Loading									
	Pattern Matrix					Structure Matrix				
	1	2	3	4	5	1	2	3	4	5
19. My therapist has asked me if there were stigma against the use of mental health service within my racial group that prevented me from getting the help I need.	.766	-.141	.120	-.033	.028	.738	.215	.310	.197	-.016
21. My therapist has asked me what role my racial/ethnic background plays in my life.	.754	-.122	.066	.023	-.216	.762	.287	.269	.276	-.273
14. My therapist helped me develop more positive beliefs about myself as a member of my racial group.	.753	.189	-.052	-.135	-.208	.791	.468	.277	.208	-.331
24. My therapist has asked me if I had ever experienced discrimination because of my minority status that might influence the therapeutic relationship.	.738	-.128	.022	.046	.201	.686	.148	.238	.221	.142
3. My therapist discussed with me the meaning of my issues in relation to the cultural norm of my racial group.	.682	-.002	-.080	.108	-.053	.695	.288	.192	.321	-.152
28. My therapist asked me to teach him/her about my cultural backgrounds that are part of my identity.	.644	.004	.098	.055	.021	.697	.335	.348	.296	-.060
15. My therapist has asked me if there were power differences between us that made me feel uncomfortable	.612	.104	.014	.001	.527	.597	.219	.311	.177	.427
12. My therapist asked me if there were aspects of my cultural background that made a difference in my presenting issues.	.610	.050	.094	.014	-.013	.671	.359	.345	.267	-.097
1. My therapist discussed gender differences between us during therapy.	.607	.064	-.111	.130	.294	.602	.223	.190	.288	.182

	Factor Loading									
	Pattern Matrix					Structure Matrix				
	1	2	3	4	5	1	2	3	4	5
7. My therapist asked me if I had experienced unfair treatment because of my gender.	.598	-.034	.224	-.096	.140	.617	.256	.400	.134	.100
20. My therapist has asked me if I had unpleasant experiences with previous therapist(s) who did not respect my culture.	.573	.025	.105	-.002	.223	.594	.254	.332	.198	.152
18. My therapist discussed with me how my upbringing regarding gender roles may relate to my presenting issues.	.490	-.009	.384	-.127	.056	.575	.335	.522	.132	.032
27. My therapist has asked me to talk about my issues as it relates to my spirituality and/or religion.	.450	-.007	-.025	.419	.049	.572	.314	.250	.553	-.062
9. My therapist asked me to correct him/her if he/she wrongly assumed what cultural values are important to me.	.417	.237	.037	.084	.122	.540	.427	.344	.311	-.002
26. My therapist asked for my opinion on whether the way he/she communicated with me was directive or non-directive	.380	.181	.195	.018	.278	.497	.375	.447	.232	.190
10. My therapist asked me if there are family support that are helpful to me.	-.374	.316	.363	.191	.000	-.051	.438	.454	.291	-.053
22. My therapist provided feedback in my preferred style (e.g., positive encouragement or objective evaluation) on my performance in achieving the therapeutic goals.	-.159	.758	.106	-.113	.188	.126	.656	.439	.137	.024
31. My therapist used my preferred processing style (i.e., talking through my problems or drawing or writing my thoughts down) to help me express my emotions.	-.109	.651	.063	.054	.085	.186	.640	.398	.281	-.081

	Factor Loading									
	Pattern Matrix					Structure Matrix				
	1	2	3	4	5	1	2	3	4	5
4. My therapist helped me develop healthier behaviors that are consistent with my cultural value(s).	.359	.638	-.146	-.148	-.082	.525	.667	.288	.196	-.280
25. My therapist helped me navigate systems (e.g., school, neighborhood, community) that impact my well-being.	.047	.621	.083	-.076	.026	.300	.648	.419	.205	-.132
8. My therapist provided coping strategies that align with my spirituality and/or religious beliefs.	.203	.362	-.144	.337	-.077	.420	.519	.217	.520	-.250
17. My therapist has asked me what my family may expect me to gain from therapy.	.092	-.016	.578	.001	.243	.265	.273	.612	.151	.259
23. My therapist asked me how my family may perceive my presenting issues.	-.004	.058	.564	.069	-.084	.255	.415	.610	.258	-.088
29. My therapist discussed with me how my economic background may contribute to my presenting issues.	.332	-.129	.533	-.084	.042	.438	.252	.560	.117	.069
5. My therapist discussed my family values with me to better understand my issues.	-.114	.235	.510	.108	-.168	.221	.556	.621	.327	-.213
30. My therapist has asked me about the influence of my family's values in the development of the therapeutic relationship.	.001	.179	.506	.094	.369	.534	.576	.268	-.204	.022
13. My therapist helped me consider my family culture into my therapeutic goals.	.109	.215	.422	.010	-.148	.369	.534	.576	.268	-.204
2. My therapist discussed with me whether I had religious or spiritual practices that have been helpful to me	.101	-.129	.144	.723	.029	.339	.270	.310	.741	-.044

*Note.* Extraction Method: Principal Axis Factoring. Rotation Method: Promax with Kaiser Normalization. <sup>a</sup> Rotation converged in 14 iterations.

As described in Chapter Three, several criteria were utilized to evaluate factors with the goal of identifying problematic items. Initially, the researcher examined the extracted communalities for items and sought to remove items with the communality of less than 4.0 (Costello & Osborn, 2005; Pett et al., 2003). This examination of the extracted communality resulted in the removal of two items (i.e., items 9 and 10). When removing the items with the low communality, the researcher did one item at a time and consulted other criteria (e.g., factor loading, cross-loading, and theoretical relevance) to obtain the best combination of item removal.

Next, the researcher examined factor loadings of items, with the goal of removing items with factor loadings of less than .32 (Tabachnick & Fidell, 2013). All the remaining 28 items were found to have significant factor loadings on at least one factor, except one item (i.e., item 26). Therefore, item 26 with a non-significant factor loading was removed. Subsequently, the researcher examined items that were significantly loaded on more than one factor (i.e., cross-loading). The researcher sought to remove the cross-loading items that had differences of less than .10 (Tabachnick & Fidell, 2013). This led to the removal of two more items (i.e., items 18 and 27). Following the removal of the cross-loading items, the researcher reexamined factor structure with the remaining 25 items and found that one factor had only one item (i.e., item 2) with a significant factor loading. Additionally, item 2 was not significantly loaded on any other factors. The researcher, therefore, decided to remove item 2 yielding a total of six items removed and 24 items remaining.

The researcher re-conducted PAF EFA with the remaining 24 items and reevaluated the extracted communality and factor loading for each item. All items were significantly loaded on at least one factor and yet not cross-loaded on more than one factor. Most items had extraction

communalities of above 4.0; however, three items (i.e., items 8, 20 and 29) were found to have the extraction communalities of less than 4.0. Of the three items, the researcher decided to remove only item 20, based on a combination of the low communality, theoretical irrelevancy, and item redundancy. In contrast, items 8 and 29 were retained for their unique contribution to the factor structure and theoretical relevance in relation to use of the instrument in clinical, educational, and research practice. In summary, the series of examining items led to a total of the removal of seven items, resulting in a 23-item CAMCB. It is also important to note that the researcher conducted the inspection and deletion of items in a way that reflected other possible combinations of factor structure with the goal of deriving the best factor solution.

After the reduction to items that had strong psychometric features and theoretical relevance, the researcher re-conducted the PAF EFA with promax rotation on the 23 items of the CAMCB. KMO value and the Bartlett's test of sphericity were assessed to ensure the factorability of the correlation among the 23 items of the CAMCB. KMO indicated a value of .908, and Bartlett's test of sphericity yielded a statistically significant value of  $\chi^2(253) = 2923.85$  at  $p < 0.001$ , which supported the factorable correlation among the items (Kaiser, 1974; Tabachnick & Fidell, 2013). The extraction communalities for all items were above 4.0, except for two items: items 8 and 29 (see Table 14). However, as previously described, the researcher decided to retain these two items for their theoretical relevance and unique contribution to the factor structure of the CAMCB.

Regarding the interpretation of factor solution, the researcher initially examined eigenvalues and found a four-factor solution with greater-than-one eigenvalues (i.e., 8.03, 2.88, 1.45, 1.02). However, given the well-documented limitation (e.g., over-extraction) of the



eigenvalue greater-than-one rule (Henson & Roberts, 2006), a parallel analysis (PA) was conducted to identify more accurate factor solution that best fit the data. Specifically, the researcher adapted the SPSS syntax program developed for PA with the permutation strategy (O'Connor, 2000) and conducted the PA on the permutations of the original data. According to O'Connor, PA via the permutations of the original data is considered "highly accurate and most relevant, especially in cases where the raw data are not normally distributed or when they do not meet the assumption of multivariate normality" (see <https://people.ok.ubc.ca/briocconn/nfactors/rawpar.sps>). Therefore, the PA under the permutation strategy was deemed the best practice for this research.

In addition, PA can be conducted using principal component (PA-PCA) and principal axis factoring method (PA-PAF). Scholars in the methodology literature have disagreed on whether the PA-PCA or PA-PAF method should be used when researchers use principal axis factoring to conduct a factor analysis (O'Connor, 2000; Crawford et al., 2010). Some scholars have advocated conducting parallel analysis with the PAF method because of its congruency with the common factor model (Ford, MacCallum, & Tait, 1986; Humphreys & Montanelli, 1975); however, other scholars have supported using the PCA method in conducting a PA because of its robustness to a bias estimated result as well as its theoretical relevance for PA, regardless of which extraction method is selected for factor analysis (Buja & Eyuboglu, 1992; Cattle, 1978; Garrido, Abad, & Ponsoda, 2013). Although this issue with the PA extraction method remains unsettled, most studies on PA application have relied on the PCA method that is robust quality (Steger, 2006; Velicer, Eaton, & Fava, 2000). Furthermore, Garrido et al. (2013) reported that PA-PCA performed as well as or better in determining the number of common

factors than PA with common factor extraction methods. Therefore, in the spirit of best practice, the researcher used PA on the permutation of the original data with the use of the PA-PCA method.

The PA-PCA via the permutation strategy was conducted. The researcher compared both the PA 95<sup>th</sup> percentile and mean eigenvalues to the corresponding eigenvalues derived from the actual data. Factors with the original eigenvalues that exceeded the PA 95<sup>th</sup> percentile and mean eigenvalues were retained. As a result, a review of the original and PA eigenvalues indicated a three-factor solution (see Table 15). The third factor was the last factor that had a greater eigenvalue than the PA 95<sup>th</sup> percentile and mean eigenvalues. Additionally, the visual examination of the parallel analysis to the scree plot further supported the three-factor solution (see Figure 4). The researcher also found that all items indicated significant factor loadings ranging from .40 to .84 on at least one factor. This exceeded the threshold for the significance of factor loading (i.e., greater than .32; Tabachnick & Fidell, 2013). No cross-loadings that had a difference of less than .10 occurred across the three factors, and all three factors included at least three or more items (Costello & Osborne, 2005; Tabachnick & Fidell, 2013). In addition, the three-factor structure explained 53.78% of the cumulative variance, which is satisfactory in the social sciences (Hair et al, 2010; Mvududu & Sink, 2013). Therefore, the researcher determined that the three factor-solution had the best fit to the data based on a combination of (a) its consistency with the parallel analysis; (b) the criteria for the strongest and simplest factor structure; and (c) theoretical relevance. Table 16 presents factor loadings on pattern and structure matrix.

The final three-factor solution with CAMCB 23-item accounted for 53.78% of the cumulative variance. Factor 1 consisted of 12 items and explained 34.93%. Except for one item (i.e., item 14), 11 of 12 items on Factor 1 represents therapists' behaviors in relation to facilitating the development of multicultural therapeutic relationship and assessment. Therefore, the researcher labeled Factor 1 as *Multicultural Therapeutic Relationship and Assessment*. Although item 14 presented as being not theoretically relevant to Factor 1, the researcher decided to retain the item at this point because of (a) its strong psychometric features and (b) opportunity to further analyze the performance of the item on Factor 1 with the use of CFA. Secondly, Factor 2 consisted of five items and accounted for 12.52%. All of the five items loaded on Factor 2 represented therapists' behaviors related to multicultural intervention. Therefore, the researcher labeled Factor 2 as *Multicultural Intervention*. Lastly, Factor 3 consisted of six items and explained 6.33%. Five of the six items on Factor 3 represented therapists' behaviors related to multicultural conceptualization and goal setting. Therefore, the third factor was labeled as *Multicultural Conceptualization and Goal setting*. Item 30 on Factor 3 presented as theoretically overlapping with Factor 1, but the researcher determined to retain item 30 for its sound psychometric feature and further opportunity to conduct CFA to test its performance on Factor 3. Examination of the factor correlation matrix (see Table 17) indicated moderate correlations between (a) Factor 1 and Factor 2 ( $r = .408$ ), (b) Factor 1 and Factor 3 ( $r = .428$ ), and (c) Factor 2 and Factor 3 ( $r = .607$ ).

Table 14

## Communality of CAMCB 23-Item

CACMB Item	Initial	Extraction
1. My therapist discussed gender differences between us during therapy.	.453	.450
3. My therapist discussed with me the meaning of my issues in relation to the cultural norm of my racial group.	.562	.505
4. My therapist helped me develop healthier behaviors that are consistent with my cultural value(s).	.528	.523
5. My therapist discussed my family values with me to better understand my issues.	.418	.480
6. My therapist discussed how my racial/ethnic background influence the therapeutic relationship.	.615	.629
7. My therapist asked me if I had experienced unfair treatment because of my gender.	.457	.446
11. My therapist brought up racial differences between us during therapy.	.584	.601
12. My therapist asked me if there were aspects of my cultural background that made a difference in my presenting issues.	.475	.461
13. My therapist helped me consider my family culture into my therapeutic goals.	.450	.448
17. My therapist has asked me what my family may expect me to gain from therapy.	.410	.433
19. My therapist has asked me if there were stigma against the use of mental health service within my racial group that prevented me from getting the help I need.	.524	.549
21. My therapist has asked me what role my racial/ethnic background plays in my life.	.607	.611
22. My therapist provided feedback in my preferred style (e.g., positive encouragement or objective evaluation) on my performance in achieving the therapeutic goals.	.405	.528

CACMB Item	Initial	Extraction
23. My therapist asked me how my family may perceive my presenting issues.	.417	.406
24. My therapist has asked me if I had ever experienced discrimination because of my minority status that might influence the therapeutic relationship.	.585	.543
25. My therapist helped me navigate systems (e.g., school, neighborhood, community) that impact my well-being.	.384	.426
28. My therapist asked me to teach him/her about my cultural backgrounds that are part of my identity.	.528	.487
29. My therapist discussed with me how my economic background may contribute to my presenting issues.	.386	.388*
31. My therapist used my preferred processing style (i.e., talking through my problems or drawing or writing my thoughts down) to help me express my emotions.	.384	.452
8. My therapist provided coping strategies that align with my spirituality and/or religious beliefs.	.347	.322*
15. My therapist has asked me if there were power differences between us that made me feel uncomfortable	.498	.556
30. My therapist has asked me about the influence of my family's values in the development of the therapeutic relationship.	.448	.441
14. My therapist helped me develop more positive beliefs about myself as a member of my racial group.	.655	.678

*Note.* Extraction method is principal axis factoring. Asterisks indicate items that have communality value of less than 4.0.

Table 15

## Parallel Analysis Eigenvalues for CAMCB 23-item

	Eigenvalues of the raw data (original eigenvalues)	PA 95 <sup>th</sup> percentile eigenvalues	PA mean eigenvalues
Factor 1	8.033	1.650	1.558
Factor 2	2.880	1.525	1.463
<b>Factor 3</b>	<b>1.457</b>	<b>1.446</b>	<b>1.391</b>
Factor 4	1.021	1.378	1.330

*Note.* Number of observation was set at 1000.

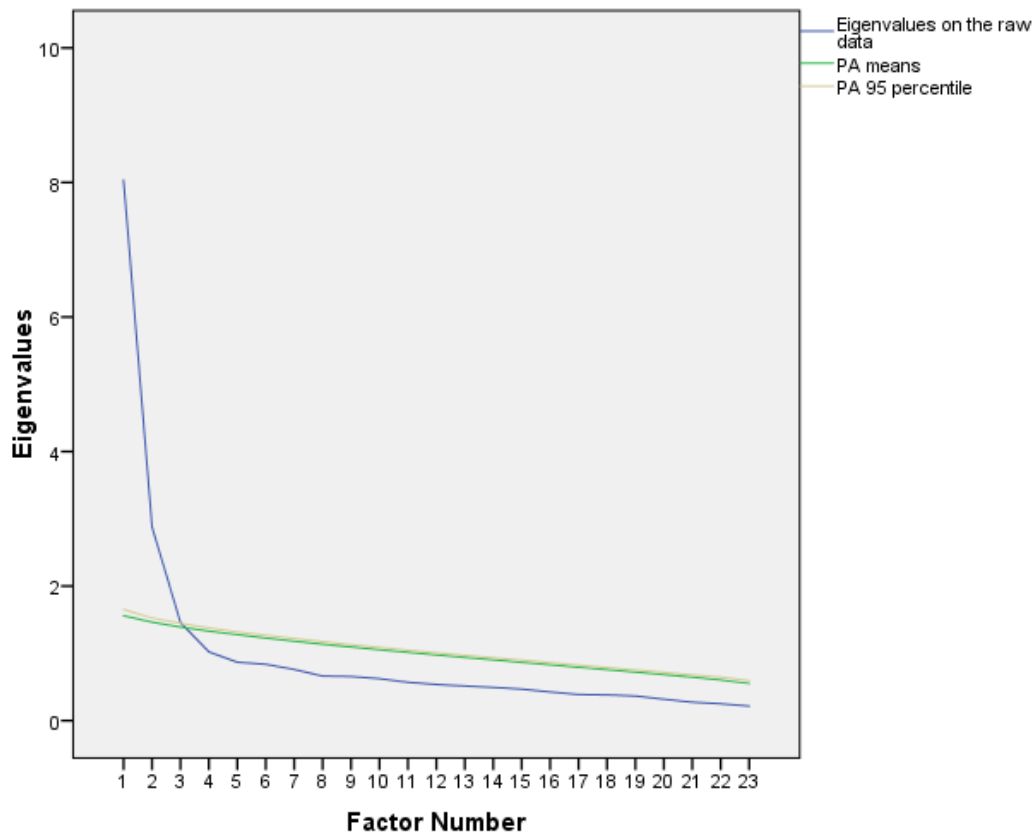


Figure 4. Parallel Analysis and Scree plot for CAMCB 23-item

Table 16

Factor Loading with CAMCB 23 Item

	Factor Loading					
	Pattern Matrix			Structure Matrix		
	1	2	3	1	2	3
11. My therapist brought up racial differences between us during therapy.	<b>.840</b>	.010	-.166	<b>.718</b>	.168	.167
6. My therapist discussed how my racial/ethnic background influence the therapeutic relationship.	<b>.824</b>	-.069	-.035	<b>.789</b>	.258	.281
24. My therapist has asked me if I had ever experienced discrimination because of my minority status that might influence the therapeutic relationship.	<b>.754</b>	-.055	.015	<b>.679</b>	.171	.269
19. My therapist has asked me if there were stigma against the use of mental health service within my racial group that prevented me from getting the help I need.	<b>.748</b>	-.124	.107	<b>.729</b>	.224	.343
21. My therapist has asked me what role my racial/ethnic background plays in my life.	<b>.747</b>	-.080	.036	<b>.766</b>	.301	.328
14. My therapist helped me develop more positive beliefs about myself as a member of my racial group.	<b>.717</b>	.192	-.075	<b>.792</b>	.483	.365
3. My therapist discussed with me the meaning of my issues in relation to the cultural norm of my racial group.	<b>.712</b>	-.029	-.012	<b>.708</b>	.274	.282
1. My therapist discussed gender differences between us during therapy.	<b>.659</b>	.101	-.071	<b>.603</b>	.224	.232

	Factor Loading					
	Pattern Matrix			Structure Matrix		
	1	2	3	1	2	3
28. My therapist asked me to teach him/her about my cultural backgrounds that are part of my identity.	<b>.635</b>	.022	.126	<b>.685</b>	.337	.403
12. My therapist asked me if there were aspects of my cultural background that made a difference in my presenting issues.	<b>.603</b>	.079	.086	<b>.666</b>	.368	.388
15. My therapist has asked me if there were power differences between us that made me feel uncomfortable	<b>.600</b>	.091	.092	<b>.570</b>	.229	.341
7. My therapist asked me if I had experienced unfair treatment because of my gender.	<b>.569</b>	.004	.194	<b>.602</b>	.273	.409
22. My therapist provided feedback in my preferred style (e.g., positive encouragement or objective evaluation) on my performance in achieving the therapeutic goals.	-.199	<b>.758</b>	.099	.107	<b>.667</b>	.447
31. My therapist used my preferred processing style (i.e., talking through my problems or drawing or writing my thoughts down) to help me express my emotions.	-.097	<b>.714</b>	.030	.185	<b>.658</b>	.408
25. My therapist helped me navigate systems (e.g., school, neighborhood, community) that impact my well-being.	.017	<b>.611</b>	.061	.289	<b>.650</b>	.437
4. My therapist helped me develop healthier behaviors that are consistent with my cultural value(s).	.324	<b>.553</b>	-.118	.522	<b>.649</b>	.370
8. My therapist provided coping strategies that align with my spirituality and/or religious beliefs.	.269	<b>.402</b>	-.083	.422	<b>.498</b>	.291



	Factor Loading					
	Pattern Matrix			Structure Matrix		
	1	2	3	1	2	3
17. My therapist has asked me what my family may expect me to gain from therapy.	.057	-.046	<b>.632</b>	.248	.268	<b>.592</b>
23. My therapist asked me how my family may perceive my presenting issues.	-.039	.045	<b>.616</b>	.254	.419	<b>.633</b>
30. My therapist has asked me about the influence of my family's values in the development of the therapeutic relationship.	-.012	.173	<b>.561</b>	.278	.477	<b>.649</b>
5. My therapist discussed my family values with me to better understand my issues.	-.130	.204	<b>.551</b>	.224	.540	<b>.640</b>
29. My therapist discussed with me how my economic background may contribute to my presenting issues.	.264	-.141	<b>.551</b>	.416	.261	<b>.562</b>
13. My therapist helped me consider my family culture into my therapeutic goals.	.062	.152	<b>.483</b>	.364	.523	<b>.622</b>
<i>Eigenvalue</i>	8.034	2.880	1.457			
<i>Total Variance Explained (%)</i>	34.930	12.522	6.337			
<i>Note.</i> Extraction Method: Principal Axis Factoring. Rotation Method: Promax with Kaiser Normalization. <sup>a</sup> Rotation converged in 7 iterations						

Table 17

Factor Correlation Matrix

Factor	1	2	3
1	1.000	.408	.428
2	.408	1.000	.607
3	.428	.607	1.000

*Note.* Extraction Method: Principal Axis Factoring. Rotation Method: Promax with Kaiser Normalization.

## Result – CFA Data Cleaning and Test Assumptions

Prior to conducting CFA, the researcher examined the data for missing values and evaluated statistical assumptions of CFA. Examination of the data and statistical assumptions included: (a) sample size, (b) missing data and outliers, (c) linearity, (d) multicollinearity, and (e) multivariate normality (Tabachnick & Fidell, 2013).

### Sample Size

In the present study, a sample size for the CFA was 282 participants; establishing a 12:1 participants/item ratio (i.e., 282 participants for 23 items). Despite the different recommendations for determining a minimal sample size for CFA, a general rule of thumb was a sample size of 250 or larger for conducting CFA (Schumacker & Lomax, 2016). Additionally, the researcher calculated the sufficient sample size for the CFA based on the RMSEA-based approach recommended by MacCallum and colleagues (1996). The results from the calculation indicated that a sample size of 148 was recommended for the initial CFA model, based on the power of .8, alpha .05, RMSEA = .05, and  $df = 227$ . Using the Monte Carlo approach, Muthén and Muthén (2012) recommended a sample size of at least 265 for the CFA if the data are not normally distributed without missing values. This was the case in the present study. Therefore, the researcher concluded that the sample size of 282 was sufficient for the CFA as it exceeded all recommended sample sizes.

### Missing data and outliers

The researcher examined the presence of missing values in the data set. The examination of missing data was conducted across the variables of interest (i.e., all 23 items). No missing data were found across any variable. Next, the researcher assessed the univariate outliers by using the rule of greater than 3.28 standard deviations (Tabachnick & Fidell, 2013). The researcher found no univariate outliers for the CAMCB total and individual items.

### Linearity

The assumption of linearity is important to ensure the confidence of results from correlation- and regression-based analysis (Tabachnick & Fidell 2013). Similarly, a linear relationship is required for conducting CFA (O'Rourke & Hatcher, 2013; Tabachnick & Fidell, 2013). The researcher evaluated bivariate scatterplots among the variables and found no patterns of nonlinear relationship. Additionally, a visual review of the P-P plot further supported no violation to the assumption of linearity. The examination of bivariate scatterplots between regression standardized residual and predicted values indicated all values within the range between -3 and +3 (standardized residual Max = 2.02, Min = -2.05). Cook distance values were less than one, ranging from .000 to .031. Lastly, the ANOVA test produced a statistically significant result ( $p < .001$ ). Therefore, the researcher determined that the assumption of linearity was met for CFA.

### Multicollinearity

The researcher assessed the multicollinearity of the data. Presence of multicollinearity (i.e., correlation of  $r \geq .9$  among the variables) can yield serious biased results for CFA (Tabachnick & Fidell 2013). The examination of VIF and tolerance values for each variable (i.e., items) indicated the absence of multicollinearity; VIF and tolerance values for each variable were less than 10 and greater than .10, respectively (Pallant, 2013). Additionally, the examination of the correlation between variables was conducted, indicating no high correlation ( $r \geq .90$ ) between the variables. Therefore, the researcher concluded that the assumption regarding the absence of multicollinearity was met.

### Multivariate normality

Many estimation methods used in CFA is based on the assumption of multivariate normality (Tabachnick & Fidell, 2013). If multivariate normality is not met, researchers need to select an estimation method that is robust to and address non-normality (Tabachnick & Fidell, 2013). First, univariate normality of each variable was examined through a series of statistical tests and visual inspections. A review of the K-S and S-W tests indicated significant values ( $p < .001$ ) for all variables, suggesting non-normality of the data. Examination of skewness values revealed the acceptance range of the values for all variables (i.e.,  $\pm 2.0$ ; Garson, 2012), ranging from .26 to 1.14. Additionally, values of kurtosis for all variables ranged between .04 and 1.30, which were within the acceptance range (i.e.,  $\pm 3$ ; Garsons, 2012).

Visual inspections of histograms for each variable indicated non-normal distribution of the data, including positive (e.g., item 7) and negative skewness (e.g., item 5). Additionally,

normal Q-Q plots for most of the items revealed the observed values being depart from a line of expected normal distribution, which further supported the non-normality of the data. The researcher also assessed the K-S and S-W tests, histogram, and Q-Q plot for the CAMCB total score and found non-normal distribution of the data.

Because the non-normality of the data was identified at the univariate level, the researcher did not assume the normality of the data at the multivariate level (Hair et al., 2010; Tabachnick & Fidell, 2013). To evaluate for multivariate normality, the researcher conducted a linear regression for all 23 items to predict the participants' identification numbers (Pallant, 2013). The researcher identified 10 multivariate outlier cases (0.03%) that went beyond the recommended critical values of Mahalanobis distance (49.728; Tabachnick & Fidell, 2013). The researcher determined to retain the 10 multivariate outliers in the analysis. After reviewing the descriptive information and central tendency of the outliers, the researcher deemed the outliers as legitimate values (Osborn, 2013). In addition, the researcher re-conducted tests of normality without the 10 multivariate outliers; but no significant improvements were found in any of statistical tests. Therefore, the researcher decided to include the multivariate outliers for the further analysis and avoid the reduction of sample size.

A multivariate normality is an important assumption for traditional estimation method for CFA, such as maximum-likelihood (ML). However, the ML results in inaccurate parameter estimates and fit index when data are not normally distributed (Bollen, 1989; Lei & Lomax, 2005). Alternatively, a new estimation method, maximum likelihood estimator with robust standard errors (MLR; Muthén & Muthén, 2017) has been recommended for the non-normality of the data as it reduces the biased effect of multivariate non-normality on chi-square and

standard errors (Asparouhov & Muthén, 2005). Additionally, it has been well-documented that MLR performs better and more accurately than the ML estimator if non-normality of the data is presented (Asparouhov & Muthén, 2003; Curran et al., 1996; Hu et al., 1992; Maydeu-Olivares, 2017). Therefore, based on the multivariate non-normality in the current data, the researcher determined to use the MLR estimator method for CFA.

### Results for CFA

After the assumption testing, the researcher conducted CFA on a measurement model based on the factor structure of the CAMCB that were identified from the proceeding EFA. As described in Chapter Three, the researcher followed a series of steps recommended for CFA; (a) model specification and identification; (b) model estimation; (c) model testing; and (d) model modification (Kline, 2016; Schumacker & Lomax, 2016). The CFA models were tested by the multiple indices of model fit (i.e., CFI, TLI, RMSEA, SRMR; Hu & Bentler, 1999). Details in the indices of model fit were described in the Chapter Three. Based on the modification indices, the researcher modified the initial CFA model to achieve a stronger model fit that better represents the current data.

First, the researcher developed the initial CFA model (i.e., measurement model) based on the results from the EFA. The researcher specified a CAMCB three-factor model with 23 indicators (i.e., items), including (a) Factor 1: *Multicultural Therapeutic Relationship and Assessment*, measured with 12 items, (b) Factor 2: *Multicultural Intervention*, measured with five items, and (c) Factor 3: *Multicultural Conceptualization and Goal setting*, measured with six

items. Prior to conducting CFA on the initial model, the researcher examined the overidentification of the model for further analysis.

To test for the overidentification of the model, the researcher calculated the number of known values based on the formula,  $p(p+1)/2$  (see Chapter 3 for details) and subtracted it from the number of free parameters. The subtracted value is called the degrees of freedom, which should be greater or equal to one in order for the model to be overidentified (Schumacker & Lomax, 2016). In this study, the initial model included 276 known values and 49 free parameters to be estimated, resulting in 227 degrees of freedom (276 minus 49): an overidentified model. Therefore, the researcher determined that the initial CFA model (i.e., three-factor, 23-item CAMCB model) met the necessary threshold for the model identification.

The initial CFA was conducted in Mplus version 8 (Muthén & Muthén, 2017) using MLR estimation. The researcher also tested the four-factor model of CAMCB with 30 items, the originally theorized CAMCB model, to compare it with the three-factor, 23-item CAMCB model obtained from the EFA. The four-factor model showed poor fit to the data as compared to the three-factor model (Table 18). Therefore, the researcher was assured that the CAMCB three-factor model (obtained from the EFA) better represented the data and proceeded to further analyze the data using the three-factor model.

The initial CFA three-factor model (see Figure 5) did not result in a good model fit,  $\chi^2(227) = 578.948$ ,  $p < 0.001$ , CFI = .863, TLI = .847, RMSEA = .074, 90% CI [.06, .08], SRMR = .081. All factor loadings indicated significant values ranging from .536 to .826 (Tabachnick & Fidell, 2013). Given the identified poor model fit, the researcher examined the standardized residual values and modification indices to identify the source to improve the model fit.

Table 18

## Model Fit Indices for the Initial CFA Model

	$\chi^2$	<i>Df</i>	CFI	RMSEA [90% CI]	TLI	SRMR	AIC	BIC
4-Factor Model (Originally Theorized Model)	1398.892**	399	.706	.094 [.089, .10]	.679	.112	25648.09	25997.72
3-Factor Model (Obtained from EFA)	578.948**	227	.863	0.074 [.06, .08]	.847	.081	19302.96	19565.18
$\Delta\chi^2$	820.15**							

Note.  $\Delta\chi^2$  = Chi-square difference test. \*\* $p < .0001$



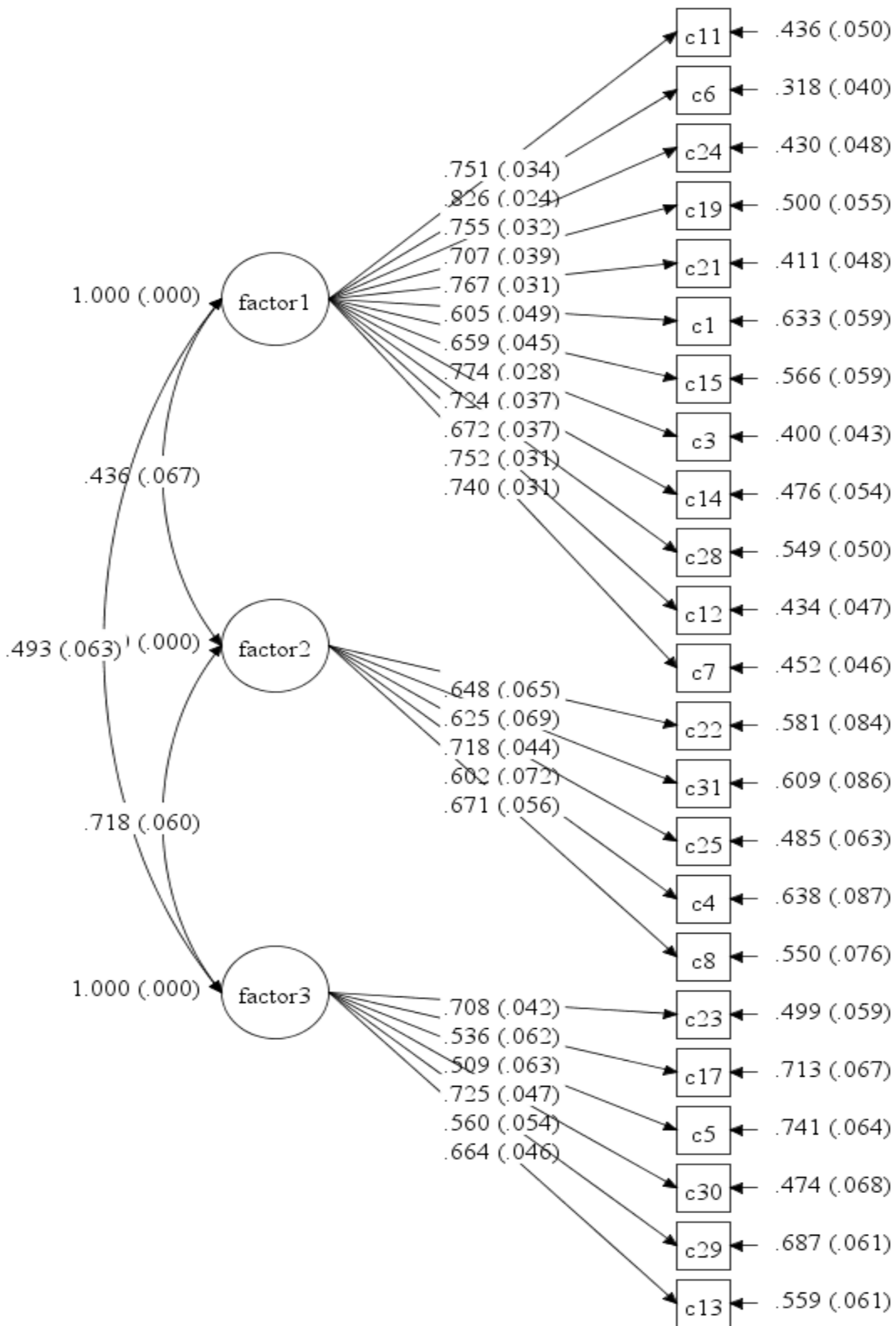


Figure 5. Confirmatory Factor Analysis for Initial CAMCB Three-Factor Model

To make appropriate modifications, the researcher first examined the standardized residual covariance that had values of greater than 2.58 (Brown, 2015). The examination of standardized residuals indicated several standardized residual values greater than 2.58, which were mostly presented among items 4, 5, 14, and 17. The researcher further examined the data, item by item, prior to the removal of the four items. Further examination indicated that item 4 had an unacceptable residual covariance (i.e., standardized residual values = 999.00) with item 8 as well as correlated errors with several other items. Additionally, further inspection revealed that (a) item 5 had relatively lower factor loadings ( $r = .50, p < .001$ ); (b) item 14 did not have theoretical relevance to its loaded factor (Factor 1) as identified from the EFA; and (c) item 17 was a conceptually overlapping item with item 23 on the same factor and included correlated errors with several other items. Therefore, the researcher removed the four items based on their significant standardized residual covariances (i.e., greater than 2.58) and theoretical and psychometric weaknesses. It is also important to note that when removing the items, the researcher did so, item by item, seeking the best combination of the strongest and inclusive model fit.

The revised model with the four items removed showed a stronger model fit,  $\chi^2 (149) = 321.998, p < 0.001$ , CFI = .913, TLI = .900, RMSEA = .064, 90% CI [ .055, .074], SRMR = .070. All items revealed significant factor loadings on the loaded factors with a range between .53 and .83. However, despite the improved model fit, the revised model was not considered an acceptable model fit according to RMSEA (Hu & Bentler, 1999). Therefore, the researcher consulted the modification indices to further improve the model fit. The examination of the modification indices revealed the presence of the correlated error terms (i.e., error

covariance between manifest variables) between (a) items 15 and 11; (b) items 3 and 24; and (c) items 24 and 13.

Correlated error terms should be allowed with theoretical justifications. Item 15, “My therapist has asked me if there were power differences between us that made me feel uncomfortable,” and item 11, “My therapist brought up racial differences between us during therapy” both referred to sociocultural differences that may exist in and influence the therapeutic relationship. Additionally, race and/or ethnicity is a sociocultural group membership that shapes the ways one experiences power and privileges (Croteau et al., 2002). Therefore, given the theoretical reasonableness, the researcher decided to allow the correlation between the error terms between items 15 and 11. Additionally, item 3, “My therapist discussed with me the meaning of my issues in relation to the cultural norm of my racial group,” and item 24, “My therapist has asked me if I had ever experienced discrimination because of my minority status that might influence the therapeutic relationship” both represented clients’ experience as a member of culturally marginalized groups that may influence therapeutic process. Therefore, the researcher determined to correlate the error terms between the items 3 and 24, based on the theoretical relevance. However, the researcher decided not to allow the correlation of error terms between items 24 and 13, “My therapist helped me consider my family culture into my therapeutic goals,” due to lack of theoretical connectedness. The two items were also loaded on two separate factors, which further supported the lack of theoretical relevance for correlating the error terms (Hair et al., 2010). As a result, the researcher included the two correlated error terms (i.e., items 15 and 11; items 3 and 24) in the modified version of the CFA model.

The final CFA model with the removal of the four items and inclusion of two correlated error terms (see Figure 6) resulted in an acceptable model fit,  $\chi^2 (147) = 287.863, p < 0.001$ , CFI = .929, TLI = .918, RMSEA = .058, 90% CI [ .048, .068], SRMR = .069. Specifically, the RMSEA and SRMR values indicated the good fits of the model (e.g., RMSEA  $\leq$  .06, SRMR  $\leq$  .08; Hu & Bentler, 1999). Although the CFI value did not meet the criteria for the goodness of fit (CFI  $\geq$  .95), it was close to a good fit and still within the range of acceptable model fit (CFI  $\geq$  .90; Hu & Bentler, 1999). All factor loadings were sufficient with the range between .540 to .827 (Tabachnick & Fidell, 2013). Therefore, based on the evaluation of the multiple model indices, the researcher determined that the model fit of the final CFA model was acceptable to the data. In addition, chi-square difference test ( $\Delta\chi^2$ ), AIC, and BIC indicated significantly smaller values than its predecessors, which further supported the better fit of the final CFA model over the previous models. Regarding the association between the factors, there were significant correlations between *Multicultural Therapeutic Relationship and Assessment* and *Multicultural Intervention* ( $r = .342, p < .001$ ), between *Multicultural Intervention* and *Multicultural Conceptualization and Goal Settings* ( $r = .735, p < .001$ ), and between *Multicultural Therapeutic Relationship and Assessment* and *Multicultural Conceptualization and Goal Settings* ( $r = .512, p < .001$ ). Table 19 presents the details regarding the model fit indices for the final model and its improved model fit via the modifications.

It is important to note that although there were still strong standardized residual covariances (i.e., greater than 2.58) between few items in the final CFA model, the researcher did not remove the items as further modifications to the model, because the items had the strong psychometric features and theoretical relevance regarding use of the instrument in clinical,

research, and educational practice. Additionally, the model fit did not significantly improve even after the removal of the items. Therefore, the researcher did not make any further modification and retained the final CFA 19-item model.

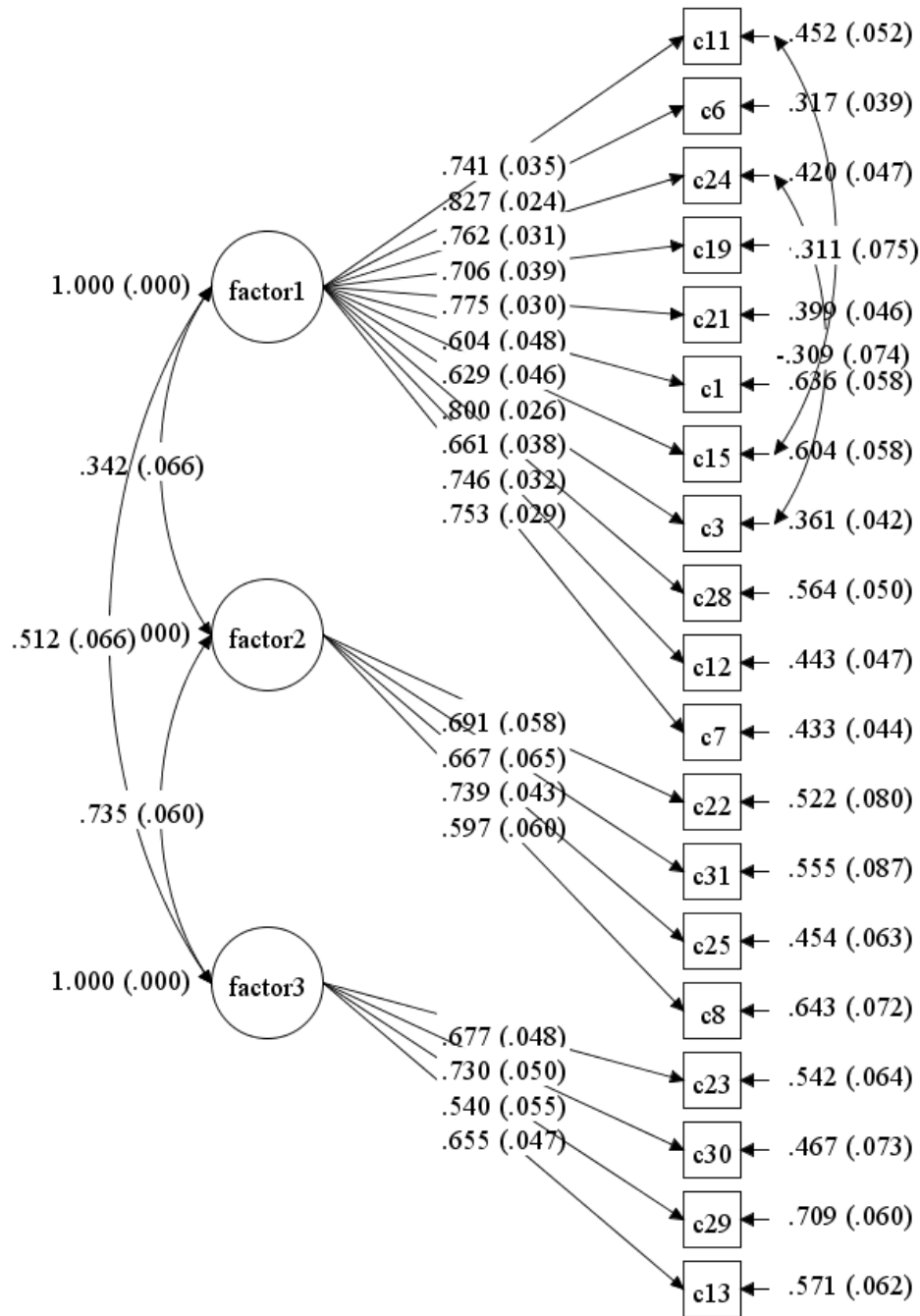


Figure 6. Confirmatory Factor Analysis for the Final CAMCB Three-Factor Model with 19 Items

Table 19

## Model Fit Indices for the Final CFA Model

	$\chi^2$	<i>Df</i>	CFI	RMSEA [90% CI]	TLI	SRMR	AIC	BIC
Initial CFA Model	578.948**	227	.863	0.074 [.06, .08]	.847	.081	19302.96	19565.18
Modified CFA Model (with four items removed)	321.998**	149	.913	.064 [.055, .074]	.900	.070	16007.95	16226.46
Final CFA Model (with four items removed and two correlated errors)	287.863**	147	.929	.058 [.048, .068]	.918	.069	15968.98	16194.78
$\Delta\chi^2$ (Initial and Final Model)	229.532**							
$\Delta\chi^2$ (Modified and Final Model)	28.903**							

Note.  $\Delta\chi^2$  = Chi-square difference test. \*\* $p < .0001$

### Research Question 2

#### What are psychometric properties of the CAMCB scores with a sample of clients?

The purpose of research question 2 was to evaluate the psychometric properties of the CAMCB with a sample of clients. Research question 2 was divided into four sub-questions: (a) What is the internal consistency reliability of the CAMCB with a sample of clients? (b) What is the relationship between the CAMCB score with Cross-Cultural Counseling Inventory-Revised Scores (examining convergent validity)? (c) What is the relationship between the CAMCB score

with Working Alliance Inventory Short Form-Revised Score (examining convergent validity)? and (d) What is the relationship between the CAMCB score and Marlowe-Crowne Social Desirability Scale score (examining social desirability of clients' response)? The following sections present results for the analysis of each sub-question.

#### Research Question 2a: Internal Consistency Reliability of the CAMCB

The purpose of research question 2a was to examine internal consistency reliability of the CAMCB with a sample of clients. For Research Question 2, the researcher computed Cronbach's alpha ( $\alpha$ ) to evaluate the internal consistency reliability of the CAMCB as well as each of its factors. As a preliminary analysis, the researcher first assessed the Cronbach's alpha ( $\alpha$ ) values for the initial 30 items with the total sample ( $N = 562$ ), resulting in the good internal consistency at  $\alpha = .931$ . Next, the researcher examined the internal consistency reliability for each CAMCB model obtained from the EFA and CFA: (a) CAMCB three-factor model with 23 items with the EFA subsample ( $n = 280$ ) and (b) CAMCB three-factor model with 19 items with the CFA subsample ( $n = 282$ ). Results for both subsamples are presented in following sections.

##### Internal Consistency Reliability with the EFA

The researcher evaluated the internal consistency reliability of the three-factor, 23-item CAMCB model, identified from the EFA, as well as three factors with the EFA subsample ( $n = 280$ ). The researcher found good internal consistency reliability for the CAMCB 23-item scale ( $\alpha = .913$ ). The researcher also found acceptable to good internal consistency for all the three factors: (a) *Multicultural Therapeutic Relationship and Assessment* (Factor 1),  $\alpha = .919$ ; (b)



*Multicultural Intervention* (Factor 2),  $\alpha = .752$ ; and (c) *Multicultural Conceptualization and Goal Setting* (Factor 3),  $\alpha = .777$ . Therefore, good internal consistency reliability was found for the CAMCB 23-item scale and all three factors, all of which indicated Cronbach's alpha ( $\alpha$ ) values greater than .70 (Sternner, 2003). Table 20 presents the descriptive statistics of the CAMCB 23 items from the EFA.

Table 20

Descriptive Statistics of CAMCB 23 Items from EFA

	Mean	SD	N
1. My therapist discussed gender differences between us during therapy.	2.53	1.306	280
3. My therapist discussed with me the meaning of my issues in relation to the cultural norm of my racial group.	2.79	1.385	280
4. My therapist helped me develop healthier behaviors that are consistent with my cultural value(s).	3.50	1.287	280
5. My therapist discussed my family values with me to better understand my issues.	4.02	1.123	280
6. My therapist discussed how my racial/ethnic background influence the therapeutic relationship.	2.64	1.342	280
7. My therapist asked me if I had experienced unfair treatment because of my gender.	2.66	1.363	280
8. My therapist provided coping strategies that align with my spirituality and/or religious beliefs.	3.45	1.302	280
11. My therapist brought up racial differences between us during therapy.	2.22	1.328	280
12. My therapist asked me if there were aspects of my cultural background that made a difference in my presenting issues.	2.81	1.324	280

	Mean	SD	N
13. My therapist helped me consider my family culture into my therapeutic goals.	3.55	1.223	280
14. My therapist helped me develop more positive beliefs about myself as a member of my racial group.	2.96	1.343	280
15. My therapist has asked me if there were power differences between us that made me feel uncomfortable	2.47	1.338	280
17. My therapist has asked me what my family may expect me to gain from therapy.	3.48	1.233	280
19. My therapist has asked me if there were stigma against the use of mental health service within my racial group that prevented me from getting the help I need.	2.63	1.375	280
21. My therapist has asked me what role my racial/ethnic background plays in my life.	2.64	1.331	280
22. My therapist provided feedback in my preferred style (e.g., positive encouragement or objective evaluation) on my performance in achieving the therapeutic goals.	3.93	1.094	280
23. My therapist asked me how my family may perceive my presenting issues.	3.79	1.122	280
24. My therapist has asked me if I had ever experienced discrimination because of my minority status that might influence the therapeutic relationship.	2.49	1.314	280
25. My therapist helped me navigate systems (e.g., school, neighborhood, community) that impact my well-being.	3.58	1.230	280
28. My therapist asked me to teach him/her about my cultural backgrounds that are part of my identity.	2.76	1.335	280
29. My therapist discussed with me how my economic background may contribute to my presenting issues.	3.11	1.392	280
30. My therapist has asked me about the influence of my family's values in the development of the therapeutic relationship.	3.60	1.235	280
31. My therapist used my preferred processing style (i.e., talking through my problems or drawing or writing my thoughts down) to help me express my emotions.	4.02	1.131	280

### Internal Consistency Reliability with the CFA

Next, the researcher computed Cronbach's alpha ( $\alpha$ ) to evaluate the internal consistency reliability of the three-factor, 19-item CAMCB model, which was cross-verified from the CFA, as well as each of three factors with the CFA subsample ( $n = 282$ ). Good internal consistency reliability was found for the CAMCB 19-item scale ( $\alpha = .911$ ). Additionally, all three factors were found to have acceptable to good internal consistency; (a) *Multicultural Therapeutic Relationship and Assessment* (Factor 1),  $\alpha = .925$ ; (b) *Multicultural Intervention* (Factor 2),  $\alpha = .766$ ; and (c) *Multicultural Conceptualization and Goal Setting* (Factor 3),  $\alpha = .742$ . Therefore, the researcher found good internal consistency reliability for the CAMCB-19 item scale as well as its three factors. Table 21 provides the descriptive statistics of the CAMCB 19 items from the CFA.

Table 21

Descriptive Statistics of CAMCB 19 Items from CFA

	Mean	SD	N
1. My therapist discussed gender differences between us during therapy.	2.53	1.379	282
3. My therapist discussed with me the meaning of my issues in relation to the cultural norm of my racial group.	2.79	1.375	282
6. My therapist discussed how my racial/ethnic background influence the therapeutic relationship.	2.59	1.363	282
7. My therapist asked me if I had experienced unfair treatment because of my gender.	2.55	1.483	282
8. My therapist provided coping strategies that align with my spirituality and/or religious beliefs.	3.51	1.324	282

	Mean	SD	N
11. My therapist brought up racial differences between us during therapy.	2.31	1.337	282
12. My therapist asked me if there were aspects of my cultural background that made a difference in my presenting issues.	2.83	1.378	282
13. My therapist helped me consider my family culture into my therapeutic goals.	3.56	1.270	282
15. My therapist has asked me if there were power differences between us that made me feel uncomfortable	2.52	1.397	282
19. My therapist has asked me if there were stigma against the use of mental health service within my racial group that prevented me from getting the help I need.	2.74	1.357	282
21. My therapist has asked me what role my racial/ethnic background plays in my life.	2.73	1.403	282
22. My therapist provided feedback in my preferred style (e.g., positive encouragement or objective evaluation) on my performance in achieving the therapeutic goals.	3.80	1.227	282
23. My therapist asked me how my family may perceive my presenting issues.	3.62	1.237	282
24. My therapist has asked me if I had ever experienced discrimination because of my minority status that might influence the therapeutic relationship.	2.53	1.376	282
25. My therapist helped me navigate systems (e.g., school, neighborhood, community) that impact my well-being.	3.55	1.320	282
28. My therapist asked me to teach him/her about my cultural backgrounds that are part of my identity.	2.77	1.337	282
29. My therapist discussed with me how my economic background may contribute to my presenting issues.	3.17	1.383	282
30. My therapist has asked me about the influence of my family's values in the development of the therapeutic relationship.	3.63	1.174	282
31. My therapist used my preferred processing style (i.e., talking through my problems or drawing or writing my thoughts down) to help me express my emotions.	3.94	1.191	282

## Research Question 2b: Convergent Validity between the CAMCB and CCCI-R-7

The researcher utilized a bivariate correlation to examine evidence for the convergent validity between the 19-item CAMCB and CCCI-R-7. Specifically, the researcher examined the convergent validity between the CAMCB total score and the CCCI-R-7 total score as well as between CAMCB three subscales (factors) and CCCI-R-7 total score. Given the purpose of the two instruments measuring a theoretically similar construct, the convergent validity between the two instruments would be established if a significant positive and yet small correlation existed between the two instruments.

Prior to conducting a bivariate correlation analysis, the researcher examined the statistical assumptions necessary for correlational analysis (e.g., homoscedasticity and linearity). Homoscedasticity is related to the degree to which variances are equally distributed (Hair et al., 2010; Pallant, 2013). To assess the homoscedasticity and linearity, the researcher examined the scatterplots of the standardized residuals of the variables. Each scatterplot resulted in relatively linear line tracing over the diagonal lines, suggesting that the assumptions for homoscedasticity and linearity were satisfied. Additionally, the researcher examined normality of the data and found the non-normality of the data. Therefore, due to the non-normality of the data, the researcher used Spearman's rho correlation to assess correlation between the CAMCB and CCCI-R-7.

The researcher examined the correlation between the CAMCB total score and CCCI-R-7 total score using Spearman's rho correlation. A total of 268 client participants completed both the CAMCB and CCCI-R-7. The researcher summed items of the CAMCB and CCCI-R-7 to create composite scores for each instrument. The CAMCB 19-item scale resulted in a statistically

significant and positive correlation with the CCCI-R-7 total scale ( $r = .246, p < .001$ ; 6% of the variance explained). Also, the researcher assessed correlations between three subscales (factors) of the CAMCB and CCCI-R-7 total scale. The researcher created a total score for each factor by summing each item of the three factors. The CCCI-R-7 was a unidimensional instrument that did not include subscales.

The correlational analysis between the factors of the CAMCB and CCCI-R-7 total scale resulted in significant and positive correlations between: (a) *Multicultural Intervention* (the CAMCB Factor 2) and CCCI-R-7 total scale ( $r = .487, p < .001$ ; 23.71% of the variance explained) and (b) *Multicultural Conceptualization and Goal Setting* (the CAMCB Factor 3) and CCCI-R-7 total scale ( $r = .335, p < .001$ ; 11.22% of the variance explained). However, *Multicultural Therapeutic Relationship and Assessment* (the CAMCB Factor 1) was found to have a non-significant yet positive correlation with the CCCI-R-7 total scale ( $r = .109, p = .075$ ; 1.1% of the variance explained). Further examination of correlation between all items on the CAMCB and the CCCI-R-7 total scale revealed that seven of 11 items on Factor 1 were positively but not significantly correlated to the CCCI-R-7 total scale. Correlations between the CAMCB and CCCI-R-7 are presented in Table 22.

#### Internal Consistency Reliability of CCCI-R-7

The researcher computed Cronbach's alphas for the CCCI-R-7 total scale with the sample of clients ( $n = 268$ ). The internal consistency reliability for the 7-item CCCI-R-7 scale were .874. Therefore, the CCCI-R-7 was found to have good internal consistency in this study.

Table 22

Correlations between the CAMCB and CCCI-R-7

	1	2	3	4	5
<b>CAMCB</b>					
1. CAMCB Total	-				
2. Multicultural Therapeutic Relationship and Assessment	.934**	-			
3. Multicultural Intervention	.546**	.296**	-		
4. Multicultural Conceptualization and Goal Setting	.662**	.428**	.522**	-	
<b>CCCI-R-7</b>					
5. CCCI-R-7 Total	.246**	.109	.487**	.335**	-

Note. \*\* $p < .001$

#### Research Question 2c: Convergent Validity Between the CAMCB and WAI-SR

For research question 2c, the researcher evaluated evidence for the convergent validity of the CAMCB through examination of the correlation between the CAMCB and the WAI-SR. A bivariate correlation was utilized to examine the convergent validity between the CAMCB total score and the WAI-SR total score, as well as the CAMCB three factors and the WAI-SR three factors. Specifically, the researcher correlated the factors of the CAMCB with the corresponding factors on the WAI-SR that were assumed to measure a theoretically-related construct, including (a) CAMCB *Multicultural Therapeutic Relationship and Assessment* and WAI-SR *Bond*; (b) CAMCB *Multicultural Intervention* and WAI-SR *Task*; and (c) CAMCB *Multicultural Conceptualization and Goal Setting* and WAI-SR *Goal*.

Statistical assumptions (e.g., homoscedasticity and linearity) for the correlational analysis were examined through the visual inspection of scatterplots. Specifically, the researcher examined the scatterplots in regard to standardized residuals of the variables. Each scatterplot

showed relatively straight diagonal lines, supporting the assumptions of homoscedasticity and linearity. However, the inspections of data normality revealed that data were not normally distributed; therefore, the researcher utilized Spearman's rho correlation analysis to examine correlations between the CAMCB and WAI-SR.

Using Spearman's rho correlation, the researcher assessed correlation between the CAMCB total score and WAI-SR total scores, as well as the CAMCB factors and WAI-SR corresponding factors. In total, 274 client participants completed WAI-SR in entirety. The researcher summed items of the CAMCB and WAI-SR to generate total scores for each instrument. The CAMCB 19-item scale yielded a non-significant, positive correlation with the WAI-SR total scale ( $r = .058, p = .399$ ; less than 1% of the variance explained). Next, the researcher examined the convergent validity of the CAMCB factors by examining correlations between the CAMCB factors and their theoretically-corresponding factors on the WAI-SR. Each item of the WAI-SR factors was summed to create a total score for each factor.

The examination of correlation between the CAMCB factors and WAI-SR corresponding factors resulted in significant and positive correlations between: (a) *Multicultural Intervention* (the CAMCB Factor 2) and WAI-SR *Task* ( $r = .394, p < .001$ ; 15.52% of the variance explained) and (b) *Multicultural Conceptualization and Goal Setting* (the CAMCB Factor 3) and WAI-SR *Goal* ( $r = .126, p < .001$ ; 1.58% of the variance explained). However, CAMCB Factor 1, *Multicultural Therapeutic Relationship and Assessment*, indicated a non-significant and small negative relationship with the WAI-SR *Bond* ( $r = -.017, p = .776$ ; less than 1% of the variance explained).



The further examination indicated that the *Multicultural Intervention* (CAMCB Factor 2) was significantly and positively correlated to other two factors of WAI-SR, including (a) WAI-SR *Bond* ( $r = .317, p < .001$ ; 10.04% of the variance explained) and (b) WAI-SR *Goal* ( $r = .330, p < .001$ ; 10.89% of the variance explained). Additionally, the *Multicultural Conceptualization and Goal Setting* (CAMCB Factor 3) indicated a significantly positive correlation with the WAI-SR *Task* ( $r = .166, p < .001$ ; 2.75% of the variance explained); and a non-significant but positive correlation with the WAI-SR *Bond* ( $r = .113, p = .063$ ; 1.27% of the variance explained). The *Multicultural Therapeutic Relationship and Assessment* (CAMCB Factor 1) indicated a small positive correlation with the WAI-SR *Task* ( $r = .008, p = .90$ ; less than 1% of the variance explained) but reported a significantly negative correlation with the WAI-SR *Goal* ( $r = -.137, p < .05$ ; 1.87% of the variance explained). Table 23 presents details regarding the correlations between the CAMCB and WAI-SR.

#### Internal Consistency Reliability of the WAI-SR

Cronbach's alphas values were computed for the WAI-SR 12-item scale as well as its three subscales (factors). The internal consistency reliability of the WAI-SR was .892 for the 12 items, .753 for the *Bond* subscale, .730 for the *Task* subscale, and .831 for the *Goal* subscale. Therefore, the WAI-SR 12-item and its subscales were found to have good internal consistency reliabilities in this study.

Table 23

Correlations between the CAMCB and WAI-SR

	1	2	3	4	5	6	7	8
<b>CAMCB</b>								
1. CAMCB Total	-							
2. Multicultural Therapeutic Relationship and Assessment	.934**	-						
3. Multicultural Intervention	.546**	.287**	-					
4. Multicultural Conceptualization and Goal Setting	.662**	.442**	.509**	-				
<b>WAI-SR</b>								
5. WAI-SR Total	.058	-.051	.379**	.140**	-			
6. WAI-SR Bond	.071	-.017	.371**	.113	.854**	-		
7. WAI-SR Task	.109	.008	.394**	.166**	.876**	.609**	-	
8. WAI-SR Goal	-.023	-.137*	.330**	.126*	.907**	.651**	.756**	-

Note. \* $p < .05$ . \*\* $p < .001$

#### Research Question 2d. Examination of Social Desirability Biases

For research question 2d, the researcher examined the correlation between the CAMCB and MCSDS-X1 to assess the potential social desirability in the participants responses to the CAMCB. Specifically, the researcher examined the social desirability by assessing correlation between the CAMCB 19-item total score and the MCSDS-X1 total score as well as the three factors of the CAMCB and MCSDS-X1 total score. If non-significant or negative correlations

existed between the two instruments, the participants would be less influenced by social desirability biases.

First, the researcher created scatterplots to assess the statistical assumptions of the correlational analysis: homoscedasticity and linearity. Scatterplots of the standardized residuals of the variables were assessed. The researcher found relatively linear and diagonal lines in each scatterplot which supported the presence of homoscedasticity and linearity in the current data. However, the examination of the normality indicated non-normality of the data. Therefore, Spearman's rho correlation was used to assess correlation between the CAMCB and MCSDS-X1.

The researcher conducted Spearman's rho analysis to assess correlation between the CAMCB and MCSDS-X1 total scores as well as between the three factors of the CAMCB and MCSDS-X1 total score. A total of 270 client participants completed both CAMCB and MCSDS-X1. Approximately 69% of the participants reported a total score of five or less on the MCSDS-X1 ( $M = 4.28$ ,  $SD = 2.28$ ). Each item of the CAMCB and MCSDS-X1 was summed to create total scores for each instrument. The CAMCB 19-item scale resulted in a non-significant, positive correlation with the MCSDS-X1 total scale ( $r = .108$ ,  $p = .077$ ; 1.1% of the variance explained).

Next, the researcher examined correlations between three factors of the CAMCB and MCSDS-X1 total score. A total score for each factor were created through sums of each item of the three factors. Further examination of correlations between the three factors of the CAMCB and MCSDS-X1 total scale resulted in non-significant and negative correlations between: (a) *Multicultural Intervention* (the CAMCB Factor 2) and MCSDS-X1 ( $r = -.043$ ,  $p = .478$ ; less than

1% of variance explained) and (b) *Multicultural Conceptualization and Goal Setting* (the CAMCB Factor 3) and MCSDS-X1 ( $r = -.083, p = .174$ ; less than 1% of variance explained). However, the researcher found a significant and yet small positive correlation between the *Multicultural Therapeutic Relationship and Assessment* (the CAMCB Factor 1) and the MCSDS-X1 ( $r = .15, p < .05$ ). This small positive correlation indicated a small effect size (2.2% of the variance explained; Cohen, 1998; Sink & Stroh, 2006). Table 24 presents correlations between the CAMCB and MCSDS-X1.

#### Internal Consistency Reliability of MCSDS-X1

The researcher computed the Kuder-Richardson 20 reliability for the MCSDS-X1 total score with the sample of clients ( $n = 270$ ). Because the MCSDS-X1 used a dichotomous scale, the Kuder-Richardson 20 reliability was deemed appropriate as a way to assess the internal consistency reliability. The internal consistency reliability for the MCSDS-X1 10-item scale was .643, which was less than the recommended value of .70 or larger (Sternner, 2003). Therefore, the MCSDS-X1 10-item scale indicated the below acceptable level of reliability in this study. However, it is also important to note that the recommended value of .70 was used as a reference point to evaluate the internal consistency, rather than a threshold score.

Table 24

Correlations between the CAMCB and MCSDS-X1

	CAMCB Total Score	CAMCB Factor 1 Multicultural Therapeutic Relationship and Assessment	CAMCB Factor 2 Multicultural Intervention	CAMCB Factor 3 Multicultural Conceptualization and Goal Setting
MCSDS-X1 Total Score	.108	.15*	-.043	-.083

*Note.* \* $p < .05$

### Research Question 3

What is the difference between the CAMCB score and participants' demographic and background data?

For research question 3, the researcher conducted a series of ANOVAs and MANOVAs to examine differences in the participants' responses to the CAMCB (i.e., CAMCB factors and total scale) by the participants' demographic data and background information. Specifically, a series of univariate ANOVAs were separately conducted to examine differences in the CAMCB total score based on the participants' demographic and background information. The researcher also conducted a series of one-way MANOVAs separately for multiple dependent variables (i.e., CAMCB factors) with each independent variable. The participants' demographic data that were used as the independent variables included (a) race and/or ethnicity, (b) gender, (c) sexual orientation, and (d) faith tradition. Because a certain cultural group can be more sensitive to therapists' MCC (e.g., racial, gender, sexual, and religious minority; Constantine, 2002; Sue & Sue, 2012, Sue & Zane, 1987; Yeh, 2003), participants' responses on the CAMCB may vary

depending on their cultural group memberships. Additionally, the participants' background information was used as other independent variables, including (a) mental health service settings and (b) type of therapists.

Prior to conducting the ANOVAs, the researcher examined the data for assumptions necessary for the ANOVA, including normal distribution and homogeneity of variance (Pallant, 2013; Tabachnick & Fidell, 2013). In addition, the researcher examined the statistical assumptions required for MANOVA, including (a) adequate sample size, (b) absence of outliers, (c) multivariate normality, (d) linearity, (e) multicollinearity and singularity, and (f) homogeneity of variance (Tabachnick & Fidell, 2013). Results for the Research Question 3 are presented in the following order: (a) ethnicity/race and CAMCB, (b) gender and CAMCB, (c) sexual orientation and CAMCB, (d) faith tradition and CAMCB, (e) mental health service settings and CAMCB, and (f) types of therapists and CAMCB.

### Participant' Demographic Data and CAMCB

#### Ethnicity/Race and CAMCB

In the present study, participants self-identified one of eight ethnicities or races. Initially, the researcher recategorized ethnicity into two ethnic groups (i.e., white and non-white), as all non-white ethnic/racial groups are considered racial minority in the literature of mental health professions (Sue & Sue, 2012). Considering the ongoing argument on whether or not MCC is of more important to racial minority clients (Constantine, 2002; Owen et al., 2011; Sue & Sue, 2012), it would be beneficial to examine potential differences in the CAMCB score between white and non-white participants. After comparing scores between white and non-white, the

researcher further parsed out potential differences in the CAMCB scores among five ethnic groups.

First, the researcher conducted a univariate (one-way) ANOVA to examine difference in the CAMCB total score between white ( $n = 314$  [55.8%]) and non-white groups ( $n = 249$  [44.2%]). Prior to conducting the ANOVA, the researcher assessed statistical assumptions necessary for the ANOVA, including normal distribution and homogeneity of variance (Pallant, 2013). The current data were found to be slightly not normality distributed through a series of visual and statistical examinations; however, ANOVA is robust to the violation of the normal distribution (Pallant, 2013). The Levene test indicated a non-significant value ( $p > .05$ ), supporting the assumption for homogeneity of variances. Results from the univariate ANOVA indicated a statistically significant difference in the CAMCB total score between white and non-white clients,  $F(1,561) = 15.544$ ,  $p < 0.001$ , partial  $\eta^2 = .027$  (small effect size; 2.7% of the variance explained). Non-white clients reported higher CAMCB total score on average ( $M = 60.41$ ,  $SD = 16.10$ ) than their white counterparts ( $M = 55.40$ ,  $SD = 13.86$ ).

Given the significant difference in the CAMCB total scores, the researcher conducted a MANOVA to further examine difference in the CAMCB factors between white and non-white groups. Prior to conducting the MANOVA, an examination of assumptions for MANOVA was performed. Regarding an adequate sample size for MANOVA, researchers need more cases than the number of dependent variables in each cell (Tabachnick & Fidell, 2013). Also, a minimum sample size of 20 in each cell is necessary to ensure robustness to non-normality of the data (Tabachnick & Fidell, 2013). In the current analysis, both white and non-white groups ( $ns = 314$  [55.8%], 249 [44.2%], respectively) exceeded the minimum sample size of 20 and the number of

dependent variables ( $n = 3$ ; CAMCB three factors). Although unequal sample sizes may cause biased results (e.g., the correlation between main and interaction effects), MANOVA or GLM in the SPSS provides a method (e.g., sequential estimation method – default method) to adjust for unequal sample sizes (Tabachnick & Fidell, 2013). To examine the presence of univariate outliers, the researcher assessed z-scores (greater than 3.29) for the CAMCB total scores and three factors and found no univariate outliers. Furthermore, inspections of Mahalanobis distances indicated one case that exceeded the maximum critical values of 16.26. However, the researcher decided to retain the outlier as it was not an extreme outlier (16.65) and contributed to less than 1% of the data (Osborn, 2013). Despite its high sensitivity to outliers, MANOVA is robust enough to tolerate few and non-extreme outliers (Pallant, 2013).

A series of visual inspections (e.g., histograms, skewness and kurtosis, P-P plots) and statistical tests (Shapiro-Wilk) were conducted to assess normality of the data. The P-P plots indicated no major deviations from normality, and skewness and kurtosis for all variables were within acceptable range (e.g.,  $\pm 2.0$ ;  $\pm 3$ ; Garson, 2012). Inspection of histograms revealed no bell-shaped distribution, and Shapiro-Wilk tests indicated significant values ( $p < .001$ ) for all variables. Therefore, normality of the data was not met at the univariate level; and this suggested multivariate non-normality (Hair et al., 2010). However, MANOVA is considered robust to nonnormality if a sample size is larger than 20 in each cell (Tabachnick & Fidell, 2013), which was the case in the present study. Scatter plots between each pair of the dependent variables for each ethnic group resulted in no evidence of non-linearity, indicating that the assumption for linearity was met. The researcher examined the multicollinearity and singularity by assessing the strength of correlation among the dependent variables. VIF and Tolerance values for all variables



were within the acceptance range (e.g., VIF < 10; Tolerance > .10), and no correlations among the variables exceeded a value of .80 (Pallant, 2013). Therefore, the assumptions for the multicollinearity and singularity were met. Lastly, the examination of the assumption for homogeneity of variance was conducted as parts of the MANOVA output (i.e., Box's M and Levene's test). The significant value for Box's M test was .001, indicating a violation of the assumption for homogeneity of variance. However, the accuracy of Box's M test has been criticized as being too strict based on a sample size (Tabachnick & Fidell, 2013). In addition, the Levene test revealed that none of the dependent variables indicated significant values ( $p < .05$ ; Pallant, 2013), supporting the assumption of equal variance in the current data.

A MANOVA was conducted to determine if there were significant differences between white and non-white participants in their responses to the CAMCB factors and total scale. Regarding statistics for multivariate tests, Wilk's Lambda and Pillai's trace are considered most robust to the violation of statistical assumptions with the greatest power. Additionally, Pillai's trace is deemed more robust if the data includes the unequal sample size in each cell and the violation of equal variances (Tabachnick & Fidell, 2013). Therefore, due to the unequal sample size and violation of the homogeneity of variance from the Box's M test, the researcher opted to use Pillai's trace values in the current analysis. The result indicated a statistically significant difference between white and non-white on the combined dependent variables (i.e., CAMCB three factors),  $F(3, 559) = 18.826$ ,  $p < .001$ , Pillai's Trace = .092, partial  $\eta^2 = .092$ . Given the significant finding from the multivariate test, the researcher further investigated the results for each dependent variable (i.e., each factor) by examining univariate ANOVA results. With a Bonferroni adjusted alpha level of .017 (Tabachnick & Fidell, 2013), the results indicated a

statistically significant difference between white and non-white groups in the CAMCB Factor 1 (i.e., *Multicultural Therapeutic Relationship and Assessment*),  $F(1, 561) = 33.567, p < .001$ , partial  $\eta^2 = .056$  (small effect size; 5.6% of the variance explained). However, there were no significant differences in the CAMCB Factors 2 and 3 ( $ps = .706, .181$ ). An examination of the mean scores revealed that non-white clients reported higher scores on the CAMCB Factor 1 ( $M = 31.70, SD = 11.42$ ) than white clients ( $M = 26.39, SD = 10.26$ ).

Following the comparison between white and non-white groups, the researcher further investigated differences in CAMCB scores among five ethnic groups, including White ( $n = 314$  [55.8%]), Black or African American ( $n = 78$  [13.9%]), Asian or Asian American ( $n = 71$  [12.6%]), Latina or Latino ( $n = 63$  [11.2%]), and Others ( $n = 25$  [4.4%]). The researcher combined Native American ( $n = 8$ ), Biracial ( $n = 10$ ), and other racial groups ( $n = 7$ ) into one ethnic group (i.e., Others [ $n = 25$ ]) because the three ethnic groups did not meet the required number of sample size (i.e., larger than 20) for MANOVA.

The researcher conducted a univariate ANOVA test to examine differences in the CAMCB total scores among the five ethnic groups. No violations for the assumption of homogenous variance were found, as evidenced by the non-significant value ( $p > .05$ ) from the Levene test. Results from the ANOVA test indicated a statistically significant difference in the CAMCB total score among the ethnic groups,  $F(4,546) = 13.519, p < 0.001$ , partial  $\eta^2 = .09$  (small effect size; 9% of the variance explained). Further examination of the Scheffe's post-hoc test showed that Asian Americans reported significantly higher scores on the CAMCB total scale ( $M = 68.18, SD = 14.27$ ) than all other ethnic groups, including African American ( $M = 60.23, SD = 14.62$ ), White ( $M = 55.40, SD = 13.96$ ), Latina or Latino ( $M = 54.70, SD = 15.29$ ), and

Other ( $M = 52.92$ ,  $SD = 15.25$ ) groups. However, of all ethnic groups, only Asian Americans reported significantly different scores within the ethnic group.

Given the significant difference in the CAMCB total score, the researcher conducted a MANOVA to determine if there were significant differences among the five ethnic groups in their responses to the CAMCB factors. Results from the MANOVA indicated a statistically significant difference between the five ethnic groups on the combined dependent variables (CAMCB three factors),  $F(12, 1638) = 7.792$ ,  $p < .001$ , Pillai's Trace = .162, partial  $\eta^2 = .054$ . Further inspection of the univariate ANOVA tests indicated that there were statistically significant differences between the ethnic groups in the CAMCB Factor 1,  $F(4, 546) = 17.344$ ,  $p < .001$ , partial  $\eta^2 = .113$  (medium effect size; 11.3% of the variance explained), and the CAMCB Factor 3,  $F(4, 546) = 5.156$ ,  $p < .001$ , partial  $\eta^2 = .036$  (small effect size; 3.6% of the variance explained). However, no significant difference was found for the CAMCB Factor 2 at the Bonferroni adjusted alpha level of .017,  $F(4, 546) = 2.758$ ,  $p = .027$ , partial  $\eta^2 = .02$ .

A Scheffe's post-hoc test was conducted to further examine the significant dependent variables (CAMCB Factor 1 and 3). Of all the post-hoc tests, Scheffe's test was considered the most cautious and conservative method for decreasing the type I error (Tabachnick & Fidell, 2013). Results from the post-hoc test indicated that Asian Americans reported significantly higher scores on the CAMCB Factor 1 ( $M = 37.27$ ,  $SD = 11.10$ ) than all other ethnic groups, including African American ( $M = 31.21$ ,  $SD = 10.26$ ,  $p < .05$ ), White American ( $M = 26.39$ ,  $SD = 10.26$ ,  $p < .001$ ), Latina or Latino ( $M = 27.60$ ,  $SD = 10.22$ ,  $p < .001$ ), Others ( $M = 27.08$ ,  $SD = 10.38$ ,  $p < .005$ ). In addition, African Americans reported significant higher scores on the CAMCB Factor 1 than White Americans ( $p < .05$ ). For the CAMCB Factor 3, Scheffe's post-hoc

test revealed that Asian Americans reported significant higher scores ( $M = 15.13$ ,  $SD = 3.03$ ) than Latino or Latina ( $M = 13.08$ ,  $SD = 3.66$ ,  $p < .05$ ) and Other ethnic groups ( $M = 11.88$ ,  $SD = 4.05$ ,  $p < .005$ ). However, no significant differences in the score for the CAMCB Factor 3 were found among African Americans ( $M = 13.67$ ,  $SD = 3.77$ ), White Americans ( $M = 14.19$ ,  $SD = 3.72$ ), Latino or Latina Americans ( $M = 13.08$ ,  $SD = 3.66$ ), and Other ethnic group ( $M = 11.88$ ,  $SD = 4.05$ ).

### Gender and CAMCB

Next, the researcher conducted an ANOVA and MANOVA to examine differences in participants' responses to the CAMCB based on their gender. Given the increased recognition of the potential role of gender difference in the perception of MCC and therapeutic process (Griner & Smith, 2006; Owen, Wong, & Rodolfa, 2009), participants' responses to the CAMCB may have varied based on their gender. In the present study, participants self-identified their gender as female ( $n = 315$  [56%]), male ( $n = 231$  [41%]), transgender ( $n = 4$  [.7%]), gender queer ( $n = 1$  [.2%]), and other ( $n = 1$  [.2%]). The researcher excluded transgender, gender queer, and other gender from the current analysis as they all included too small a sample size that did not meet the required size (20) for MANOVA. Therefore, the current analysis included only participants who identified their genders as female ( $n = 315$  [56%]) and male ( $n = 231$  [41%]).

The researcher conducted a univariate ANOVA to investigate potential differences in the CAMCB total score between females and males. There was no violation for the homogenous variance in the Levene test ( $p > .05$ ). The researcher found no statistically significant difference in the CAMCB total score between the two groups,  $F(1,544) = 2.024$ ,  $p > .05$ , partial  $\eta^2 = .004$ .

Male participants reported slightly higher CAMCB total scores on average ( $M = 58.52$ ,  $SD = 15.71$ ) than their female counterparts ( $M = 56.69$ ,  $SD = 14.30$ ). Regarding descriptive statistics for the excluded gender groups, the transgender group ( $n = 4$ ) reported higher scores on the CAMCB factors and total score than all other gender groups. The transgender group reported average scores of 73.50 ( $SD = 13.52$ ), 40.50 ( $SD = 10.47$ ), 17.25 ( $SD = 2.75$ ), and 15.75 ( $SD = 2.98$ ) for the CAMCB total score, and Factors 1, 2, and 3 respectively. Because there was only one participant for gender queer and other gender groups, mean and standard deviation values were not calculated for these two groups.

Although there was no significant difference in the CAMCB total score, the researcher proceeded to conduct a MANOVA to examine any potential differences in the CAMCB factors. Prior to conducting a MANOVA, the preliminary test was conducted to check for the statistical assumptions. No violations were found for linearity, outliers, and multicollinearity. The data were found to be non-normally distributed at the multivariate level; however, MANOVA is robust to multivariate non-normality with a sample size of at least 20 in each cell (Tabachnick & Fidell, 2013). Box's M test indicated a non-significant value, which supported the assumption for homogeneity of variance. Additionally, the Levene test revealed that none of the dependent variables violated the assumption of equal variance, except for the CAMCB Factor 1 ( $p < 0.05$ ). As a result, the researcher used Pillai's trace values in the multivariate test, which was most robust to the violation of equal variance and unequal sample size (Tabachnick & Fidell, 2013).

Results from the MANOVA revealed that there was a statistically significant difference between males and females in the combined dependent variables (CAMCB three factors),  $F(3, 542) = 6.989$ ,  $p < .001$ , Pillai's Trace = .037, partial  $\eta^2 = .037$ . Further examination of the

univariate ANOVA test results revealed that there were statistically significant differences between males and females in the CAMCB Factor 1,  $F(1, 544) = 7.66, p < .017$  (Bonferroni adjusted alpha level), partial  $\eta^2 = .014$  (small effect size; 1.4% of the variance explained), and the CAMCB Factor 2,  $F(1, 544) = 6.49, p < .017$ , partial  $\eta^2 = .012$  (small effect size; 1.2% of the variance explained). However, no significant difference was found for the CAMCB Factor 3. An inspection of the mean scores indicated that female clients reported significantly lower scores on the CAMCB Factor 1 ( $M = 27.48, SD = 10.36$ ) than male clients ( $M = 30.10, SD = 11.62$ ). In addition, female participants reported significantly higher scores on the CAMCB Factor 2 ( $M = 15.22, SD = 3.70$ ) than male participants ( $M = 14.41, SD = 3.56$ ).

### Sexual Orientation and CAMCB

The researcher conducted an ANOVA and MANOVA to examine differences in CAMCB scores based on their sexual orientation. Given the increased evidence supporting the unique mental health need of sexual minority clients and the more importance of therapists' MCC for them (King et al., 2008; Owen et al., 2011; Sue & Sue, 2011), participants' sexual minority status may potentially influence their perception of therapists' MCC. In the present study, participants self-identified their sexual orientation as heterosexual ( $n = 462$ ), bisexual ( $n = 50$ ), gay ( $n = 17$ ), lesbian ( $n = 14$ ), pansexual ( $n = 3$ ), asexual ( $n = 2$ ), and other ( $n = 2$ ). The researcher re-categorized the sexual orientation into two groups, such as heterosexual ( $n = 462$  [82.1%]) and non-heterosexual group ( $n = 101$  [17.9%]). Except for the heterosexual group, all sexual orientation groups were combined into the non-heterosexual group as they all were considered sexual minority groups as opposed to the heterosexual group, as well as most sexual

minority groups had small sample size that did not meet the required sample size for MANOVA. It is also important to note that despite potential biases estimation from unequal sample sizes, MANOVAs adjust the results for unequal sample sizes (Tabachnick & Fidell, 2013).

The researcher conducted a univariate ANOVA test to examine potential differences in the CAMCB total score between the heterosexual and non-heterosexual groups. The Levenen's test indicated no violation of the homogenous variance ( $p > .05$ ). The researcher failed to find a statistically significant difference in the CAMCB total score between the two gender groups,  $F(1,561) = 6.278, p > .05$ , partial  $\eta^2 = .011$ . Investigation of the mean scores revealed that the non-heterosexual group reported a slightly higher CAMCB total score on average ( $M = 61.02, SD = 16.17$ ) than their heterosexual counterpart ( $M = 56.87, SD = 14.81$ ).

Following the ANOVA test, the researcher conducted a MANOVA to examine potential differences in the CAMCB factors between heterosexual and non-heterosexual groups. Examination of statistical assumptions was conducted to check for normality, linearity, outliers, and multicollinearity. The researcher identified no violations of any of the assumptions, except for the slight non-normality of data. Both Box's M and the Levene test showed non-significant values, supporting the homogeneity of variance-covariance matrices in the data. Due to the unequal sample size and non-normality of the data, the researcher referred to Pillai's trace values for the multivariate tests.

As with the ANOVA results, findings from the MANOVA indicated no statistically significant differences between heterosexual and non-heterosexual group in the combined dependent variables (CAMCB three factors),  $F(3, 559) = 2.452, p > .05$ , Pillai's Trace = .013, partial  $\eta^2 = .013$ . Further inspection of the univariate ANOVA tests indicated no statistically

significant differences between the two groups in any of the CAMCB three factors ( $p > .05$ ).

Examination of the mean scores revealed that the non-heterosexual group reported higher scores (a) on the CAMCB Factor 1 ( $M = 30.83$ ,  $SD = 11.90$ ) than the heterosexual group ( $M = 28.28$ ,  $SD = 10.88$ ); (b) on the CAMCB Factor 2 ( $M = 15.63$ ,  $SD = 3.35$ ) than the heterosexual group ( $M = 14.71$ ,  $SD = 3.73$ ); and (c) on the CAMCB Factor 3 ( $M = 14.55$ ,  $SD = 3.75$ ) than the heterosexual group ( $M = 13.88$ ,  $SD = 3.71$ ).

### Faith Tradition and CAMCB

Next, the researcher conducted an ANOVA and MANOVA to examine differences in participants' responses to the CAMCB based on their faith tradition. Despite the diversification of religious/spiritual groups and increased clients' expectation for therapists to address their religious/spiritual concern (Pew Research Center, 2014; Sperry, 2003), few studies have been conducted to examine the potential variance of clients' religious/spiritual status in their perceptions of their therapists' MCC. For the current analysis, the researcher re-categorized the faith tradition into four groups: (a) Christianity ( $n = 279$  [50.5%]), (b) non-Christian religion (e.g., Buddhism, Judaism, Islamism, Other religions;  $n = 99$  [17.9%]), (c) no affiliation group (e.g., Atheist, Agnostic, no religion;  $n = 127$  [23%]) and (d) spirituality group ( $n = 48$  [8.7%]).

Initially, the researcher performed a univariate ANOVA test to explore differences in the CAMCB total score among the four religious groups. No violation was found for the homogeneous variance. There was a statistically significant difference in the CAMCB total score among the four groups,  $F(3,549) = 12.851$ ,  $p < 0.001$ , partial  $\eta^2 = .066$  (small effect size; 6.6% of the variance explained). Further investigation of Scheffe's post-hoc test indicated that the non-



Christian religious group had a significantly higher total score ( $M = 64.10$ ,  $SD = 16.23$ ) than all other religious groups, including Christianity ( $M = 58.16$ ,  $SD = 13.69$ ,  $p < .005$ ), no affiliation ( $M = 52.71$ ,  $SD = 14.50$ ,  $p < .001$ ), and spiritual groups ( $M = 53.58$ ,  $SD = 15.05$ ,  $p < .005$ ). Additionally, the Christianity group reported a significantly higher total score than the no affiliation religious group ( $p < 0.05$ ).

Given the significant difference in the CAMCB total score, the researcher further assessed differences in the CAMCB factor among the faith groups by conducting a MANOVA. Statistical assumption testing for the MANOVA was performed to assess for normality, linearity, outliers, and multicollinearity. No violations were identified for any of the assumptions, with the slight non-normality of data. Box's M revealed non-significant values, indicating that the assumption for the homogeneity of variance-covariance matrices was met. However, Levene's test indicated the violation of the equal variance for CAMCB Factors 1 and 2 ( $p < .05$ ). Therefore, Pillai's trace values were utilized in the multivariate test as it was most robust to the violation of equal variance (Tabachnick & Fidell, 2013).

There was a statistically significant difference between the four faith groups in the combined dependent variables (CAMCB three factors),  $F(9, 1647) = 5.201$ ,  $p < .001$ , Pillai's Trace = .083, partial  $\eta^2 = .028$ . Further examination of the univariate test revealed that there were statistically significant differences between the groups in CAMCB Factor 1,  $F(3, 549) = 14.578$ ,  $p < .001$ , partial  $\eta^2 = .074$  (small effect size; 7.4% of the variance explained), and CAMCB Factor 2,  $F(3, 549) = 3.546$ ,  $p < .017$  (Bonferroni adjusted alpha level), partial  $\eta^2 = .019$  (small effect size; 1.9% of the variance explained). However, there was no significant difference for CAMCB Factor 3 ( $p > .05$ ).

To further parse out the significant difference for CAMCB Factors 1 and 2, a Scheffe's post-hoc test was conducted. Results from the post-hoc test revealed that the non-Christian religious group reported significantly higher scores on CAMCB Factor 1 ( $M = 34.07$ ,  $SD = 12.13$ ) than all other religious groups, including Christianity ( $M = 28.88$ ,  $SD = 10.32$ ,  $p < .005$ ), no affiliation ( $M = 25.24$ ,  $SD = 10.41$ ,  $p < .001$ ), and spiritual groups ( $M = 25.33$ ,  $SD = 9.36$ ,  $p < .001$ ). Additionally, the Christianity group reported significantly higher score on CAMCB Factor 1 than the no affiliation group ( $p < .05$ ). For CAMCB Factor 2, the Christianity group reported a significantly higher score ( $M = 15.16$ ,  $SD = 3.50$ ,  $p < .05$ ) than the no affiliation group ( $M = 14.02$ ,  $SD = 3.98$ ). Non-Christian ( $M = 15.36$ ,  $SD = 3.13$ ) and spiritual groups ( $M = 14.71$ ,  $SD = 4.27$ ) reported no significantly different scores on CAMCB Factor 2, as compared to any other groups.

## Background Information and CAMCB

### Mental Health Service Settings and CAMCB

In addition to clients' demographic factors, the researcher also examined where participants received their mental health services. MCC training is mandated and emphasized across the mental health professions as well as diverse mental health service settings (ACA, 2014; APA, 2003; Bieschke & Mintz, 2012; NASW, 2008). However, community-based mental health centers have been recognized to serve a more culturally diverse clients as compared to other settings (e.g., university-based and private-based settings), which has led to more emphasis on the training of therapists' MCC (Chu et al., 2012; Park-Taylor et al., 2009). Therefore, it would be beneficial to test differences in the CAMCB scores between mental health service

settings. For the current analysis, participants received their services from one of three mental health service settings: (a) private ( $n = 246$  [44.4%]), (b) community-based ( $n = 242$  [43.7%]), and (c) university-based mental health counseling centers ( $n = 66$  [11.9%]).

First, the researcher ran a univariate ANOVA test to explore difference in the CAMCB total score between the mental health service settings. The assumption for the homogenous variance was met, as evidenced by the non-significant value ( $p > .05$ ) from the Levene test. A univariate ANOVA test indicated no statistically significant difference in the CAMCB total score based on the service settings,  $F(2,551) = 1.986$ ,  $p > .05$ , partial  $\eta^2 = .007$ . Further investigation of the mean scores revealed that the university-based mental health center reported slightly higher score on average ( $M = 60.67$ ,  $SD = 14.74$ ) than private ( $M = 58.22$ ,  $SD = 15.07$ ) and community-based centers ( $M = 56.65$ ,  $SD = 15.19$ ).

Following the ANOVA test, the researcher conducted a MANOVA to further assess potential differences in the CAMCB factor based on mental health service settings. The preliminary assumption testing was performed to check for normality, linearity, outliers, and multicollinearity. The researcher found no violation for all assumptions except for the slight non-normality of the data. No violations were found for the homogeneity of variance-covariance matrices, as evidenced by the non-significant values for the Box's M and the Levene test. Therefore, the researcher utilized Pillai's trace values for the multivariate test due to the unequal sample size and non-normality of data (Tabachnick & Fidell, 2013).

Results from the MANOVA indicated a statistically significant difference between the mental health service settings in the combined dependent variables (CAMCB three factors),  $F(6, 1100) = 4.037$ ,  $p = .001$ , Pillai's Trace = .043, partial  $\eta^2 = .022$ . Further inspection of the

univariate test indicated a statistically significant difference in CAMCB Factor 3,  $F(2, 551) = 5.196, p < .017$  (Bonferroni adjusted alpha level) with small effective size (partial  $\eta^2 = .019$ ; Cohen, 1988). However, there were no statistically significant differences between the service settings in CAMCB Factors 1 and 2 ( $p > .05$ ).

A Scheffe's post-hoc test was conducted to further examine the significant difference between the service settings in CAMCB Factor 3. Results from the post-hoc test indicated that the private mental health center received significantly higher scores ( $M = 14.60, SD = 3.59, p < .05$ ) in CAMCB Factor 3 than the community-based mental health center ( $M = 13.59, SD = 3.75$ ). However, no significant difference was found in CAMCB Factor 3 between the community-based and university-based mental health centers ( $M = 13.58, SD = 3.79$ ).

#### Type of Therapists and CAMCB

Next, the researcher also examined differences in the CAMCB scores based on types of therapists with whom participants worked. Although the mental health professions (e.g., psychology, counseling, social work) have emphasized the importance of MCC training (ACA, 2014; APA, 2003; NASW, 2008), few researchers have examined potential differences between each profession in the provision of multiculturally competent counseling services and the development of MCC training. As such, the researcher examined differences in the CAMCB scores between different types of mental health professionals. The researcher categorized the mental health professionals into three professions that reflected the current status of the professions: (a) professional counselors (e.g., LPC or LMHC;  $n = 114$  [37.9%]), (b) professional

clinical psychologists (e.g., PsyD;  $n = 149$  [49.5%]), and (c) professional social workers (e.g., MSW or LCSW;  $n = 38$  [12.6%]).

First, the researcher performed a univariate ANOVA test to assess differences in the CAMCB total scores of mental health professionals. The Levene test indicated that the assumption for the homogenous variance was met ( $p > .05$ ). Results from the univariate ANOVA test indicated that there were no statically significant differences in the CAMCB total score between professional psychologists, counselors, and social workers,  $F(2,298) = 1.774$ ,  $p = .171$ , partial  $\eta^2 = .012$ . Further inspection of the mean scores indicated that professional social workers received slightly higher total scores ( $M = 60$ ,  $SD = 15.66$ ) than the professional clinical psychologists ( $M = 59.51$ ,  $SD = 15.50$ ) and professional counselors ( $M = 56.22$ ,  $SD = 14.66$ ). The professional counselors received the lowest total score as compared to the other two professional groups.

Subsequently, a MANOVA was performed to investigate potential differences in the CAMCB score based on the type of mental health professionals. Testing of the preliminary assumption indicated no violation for linearity, outliers, and multicollinearity. The data were found to be a slightly non-normal distribution. The significant value for the Box's M test was .001, indicating the violation of the homogeneity of variance-covariance matrices. Further inspection of the Levene test results indicated no violation for the assumption of equal variance for all dependent variables, except for CACMB Factor 2. Therefore, the researcher referred to Pillai's trace values rather than Wilk's Lamda for the multivariate test, due to the unequal sample size and violation of the equal variances (Tabachnick & Fidell, 2013).

There was no statistically significant difference between psychologists, counselors, and social workers in the analysis using combined dependent variables (CAMCB three factors),  $F(6, 594) = 1.607, p = .143$ , Pillai's Trace = .032, partial  $\eta^2 = .016$ . Further investigation of the univariate test also showed that there were no statistically significant differences in any of the CAMCB factors (Factors 1, 2, 3) among the mental health professionals ( $p > .05$ ). Examination of the mean scores indicated that the clinical psychologists received slightly higher scores in CAMCB Factor 1 (*Multicultural Therapeutic Relationship and Assessment*;  $M = 30.35, SD = 11.89$ ) than other two professionals, including the professional social worker ( $M = 29.92, SD = 11.68$ ) and professional counselors ( $M = 27.58, SD = 11.14$ ). Professional social workers received slightly higher scores in CAMCB Factor 3 (*Multicultural Conceptualization and Goal Setting*;  $M = 15.21, SD = 3.87$ ) than professional psychologists ( $M = 14.48, SD = 3.34$ ) and professional counselors ( $M = 13.86, SD = 3.80$ ). The professional social workers also received slightly higher scores in CAMCB Factor 2 (*Multicultural Intervention*;  $M = 14.87, SD = 3.35$ ) than professional counselors ( $M = 14.78, SD = 4.08$ ) and clinical psychologists ( $M = 14.68, SD = 3.18$ ). The professional counselors received the lowest mean scores in CAMCB Factors 1 and 3.

#### Additional Analysis for Validity Check

The researcher conducted additional analysis to assess potential influence of the data collection method on the participants' responses to the CAMCB. Given that the original data were randomly split into two subsamples for EFA and CFA, the researcher also examined potential difference in the participants' responses to the CAMCB between the two subsamples. The following sections present results from two additional analyses.

### Data Collection Method and CAMCB

The researcher collected data through (a) face-to-face contact and face-to-face administration with the paper version of the CAMCB, (b) face-to-face contact and self-administration with the electronic version of the CAMCB, and (c) online contact and online self-administration (MTurk) with electronic version of the CAMCB. The researcher conducted an ANOVA to determine if there were differences in the CAMCB total score based on three data collection methods. Given that the data were also collected by either face-to-face contact or online contact (MTurk), the researcher also examined differences in the CAMCB total scores between the two data collection methods.

A one-way ANOVA was conducted to examine differences in the CAMCB total score between the three data collection methods; (a) face-to-face contact and face-to-face administration with the paper-version instrument ( $n = 160$  [28.4%]), (b) face-to-face contact and self-administration with the electronic-version instrument ( $n = 78$  [13.9%]), and (c) online contact and online self-administration ( $n = 325$  [57.7%]). The Levene test indicated that the assumption for equal variance was met ( $p = .460$ ). The results of the ANOVA analysis indicated that there were no statistically significant differences in the CAMCB total score based on the data collection methods,  $F(2,560) = 2.122$ ,  $p = .121$  with negligible effect size ( $\eta^2 = .008$ ; Cohen, 1988). Inspections of the mean scores indicated that the online contact and online administration reported slightly higher score ( $M = 58.65$ ,  $SD = .838$ ) than face-to-face contact and face-to-face administration ( $M = 56.73$ ,  $SD = 1.195$ ) and face-to-face contact and self-administration ( $M = 55.103$ ,  $SD = 1.711$ ).

Next, the researcher combined (a) face-to-face contact and face-to-face administration and (b) face-to-face contact and self-administration into one variable, face-to-face contact data collection method ( $n = 238$ ). Subsequently, the researcher conducted a one-way ANOVA to examine differences in the CAMCB total score between the face-to-face contact and online contact (Mturk;  $n = 325$ ). The assumption for the homogeneity of variance was satisfied, as evidenced by the non-significant value for the Levene test ( $p > .05$ ). The result from the ANOVA indicated that there was no statistically significant difference between the face-to-face and online contacts,  $F(1,561) = 3.638, p = .057$  with negligible effect size ( $\eta^2 = .006$ ; Cohen, 1988). Examination of the mean scores revealed that participants recruited from the online contact reported slightly higher scores ( $M = 58.66, SD = 15.43$ ) than face-to-face contacts ( $M = 56.20, SD = 14.64$ ).

#### EFA and CFA Subsamples and CAMCB

The researcher conducted a one-way ANOVA to determine if there were significant differences in the CAMCB total score between the EFA ( $n = 281$  [49.9%]) and CFA subsamples ( $n = 282$  [50.1%]). The Levene test resulted in non-significant value ( $p = .274$ ), supporting that the assumption for the equal variance was satisfied. The result from the ANOVA showed that there was no statistically significant difference in the CAMCB total score between EFA and CFA subsamples,  $F(1,561) = 0.011, p = .915$ , partial  $\eta^2 = .000$ . The EFA subsample reported a mean total score of 57.55 ( $SD = 14.59$ ), and the CFA subsample reported a mean total score of 57.68 ( $SD = 15.69$ ).



### Chapter Summary

The results of the analysis of the data for the three research questions which guided this study have been presented in Chapter Four. The data analyses for each research question included (a) EFA and CFA, (b) Cronbach's alpha for internal consistency reliability, (c) Spearman's Rho correlations, and (d) MANOVA and ANOVA. In Chapter Five, the researcher presents a discussion of the results and limitations along with implications for further research and mental health professions.

## CHAPTER FIVE: DISCUSSION

In Chapter Five, the researcher provides an overview of the investigation and methods. Additionally, the results from the study are discussed as related to each research question and the existing literature on multicultural counseling competence (MCC). Furthermore, the limitations of the study, recommendations for future research, and implications for researchers, mental health professions, and educators are also provided.

### Study Summary

MCC has received increased attention in the literature of mental health professions (Worthington et al., 2007). The cultural diversification in the U.S population has prompted a growing body of studies in the area of unique mental health needs among diverse populations. Despite the recognized importance of culturally responsive mental health services for diverse cultural groups, the extant literature has indicated disparities among the groups in access to culturally responsive mental health care (Hayes et al., 2015; Sue et al., 2012). To better serve diverse clients, the mental health professions have placed a greater emphasis on the development of therapists' MCC through the integration of MCC into training, practice, and research (ACA, 2014; APA 2003; NASW, 2008).

The emphasis on MCC is based on a hypothesis that therapists with high levels of MCC work more effectively with all clients (Ponterotto et al., 2000). However, the mental health professions have encountered challenges in establishing empirical evidence to substantiate the hypothesis (Huey et al., 2014; Smith et al., 2016; Worthington et al., 2007). Particularly, scholars in the field of MCC have recognized the limited availability of reliable MCC measurement as a

major challenge for establishing MCC into evidenced-based treatments (Owen et al., 2011; Smith et al., 2016; Worthington et al., 2007). Specifically, the mental health professions have emphasized the necessity of developing a reliable, client-rated measure that is to assess therapists' actual MCC performance (behaviors) in therapy (Owen et al., 2011; Ridley & Shaw-Ridley, 2011; Smith et al., 2016; Tao et al., 2015; Worthington & Dillon, 2011). Therefore, this study aimed to develop a client-rated measure of therapists' multicultural competent behaviors in therapeutic processes (the *Client Assessment of Multicultural Competent Behavior* [CAMCB]) and evaluated its psychometric properties with a sample of clients.

Upon receipt of the university' IRB approval, the researcher collected data via three methods: (a) face-to-face contact and face-to-face administration, (b) face-to-face contact and self-administration, and (c) online contact and online administration. A non-probability, convenience sampling method was utilized in the present study. Data collection began on November 17<sup>th</sup>, 2017 and was completed on April 2<sup>nd</sup>, 2018. The final sample size for the present study included 563 clients who had received any type of mental health service from university-based, community-based, and private-based mental health centers across the U.S, either at time of the study or within the past four weeks. In total, 654 participants completed the survey, of which, 563 participants ( $N = 563$ ) provided usable responses (86.08% useable response rate).

Participants who consented to participate in the study were asked to complete the survey packet that included (a) CAMCB, (b) CCCI-R-7 (Drinane et al., 2016; LaFromboise et al., 1991), (c) MCSDS-X1 (Strahan & Gerbasi, 1972), (d) WAI-SR (Hatcher & Gillaspay, 2006); and (e) a demographic questionnaire. Several quantitative analyses were conducted to answer each research question in this study, including (a) EFA, (b) CFA, (c) Spearman's rho correlation, and

(d) MANOVA and ANOVA. Specifically, the researcher utilized EFA and CFA to examine the factor structure of the CAMCB and its psychometric properties. The researcher also conducted a series of Spearman's rho correlation analyses to further evaluate the convergent validity of the CAMCB. A series of MANOVAs and ANOVAs were performed to examine differences in the participants' responses to the CAMCB based on their demographic data and background information.

### Research Questions

The purpose of the present study was to examine the following research questions:

1. What is factor structure of the items on the CAMCB with a sample of clients?
2. What are psychometric properties of the CAMCB scores with a sample of clients?
  - a. What is the internal consistency reliability of the CAMCB scores with a sample of clients?
  - b. What is the relationship between the CAMCB scores with Cross-Cultural Counseling Inventory-Revised scores (examining convergent validity)?
  - c. What is the relationship between the CAMCB scores with Working Alliance Inventory Short Form-Revised scores (examining convergent validity)?
  - d. What is the relationship between the CAMCB scores and Marlowe-Crowne Social Desirability Scale scores (examining social desirability of clients' response)?
3. What is the difference between the CAMCB score and participants' demographic and background data?

### Descriptive Data Analysis

The target population of this study comprised clients who received mental health services in the U.S. The accessible population of clients were recruited from multiple therapeutic environments (community-based, university-based, and private mental health centers) in the Southern United States. Clients across the United States were also invited to participate in this study via a web-based tool (MTurk). All client participants were adults over the age of 18 ( $M = 31.65$ ,  $SD = 9.56$ ) who received any modality of mental health services and completed at least three sessions ( $M = 17.68$ ,  $SD = 32.48$ ) with their therapists. The primary demographic and background variables included in analysis of the current study included race/ethnicity, gender, sexual orientation, faith tradition, mental health service settings, and type of therapists. The present study contributed to the existing literature on the development of client-rated MCC measures, given the demographic characteristics and background information of clients that participated in this study.

In the MCC literature, three previous studies existed regarding the development of client-rated measure of therapists' MCC with a sample of clients (Cole et al., 2014; Drinane et al., 2016, Hook et al., 2013). Regarding race and/or ethnicity, two of the three previous studies included predominantly white (Caucasian) clients but a limited number of racial minority clients (Cole et al., 2014; Hook et al., 2013). For example, the proportion of white to racial/ethnic minority client participants were 82.4% to 16.8% in Cole and colleagues' (2014) study as well as 61.5% to 38.4% (the combined proportion from EFA and CFA samples) in Hook and colleagues' (2013) study. By contrast, the present study included more balanced proportion of white (55.8%) to racial/ethnic minority clients (44.2%) when developing and examining the CAMCB. Given

the underrepresentation of the racial/ethnic minority clients in the research (Sue et al., 2009) and on-going debates on the potential influence of clients' racial/ethnic status on their perception of therapist's MCC (Constantine, 2002; Owen et al., 2011), the diversity of the present study contributed to improved understanding of the role of clients' racial/ethnic status in their perception of MCC.

In addition to race and/or ethnicity, previous studies for the development of client-rate MCC measures included predominately female clients, ranging from 68.6% to 74.9% (Cole et al., 2014; Drinane et al., 2016, Hook et al., 2013). Additionally, the majority of previous MCC-related empirical studies included a disproportionately large proportion of female clients, ranging from 60% to 80% (Tao et al., 2015). Comparatively, the sample for this study included a relatively larger proportion of male respondents (41.8% to 57.1% female) than the previous studies. The inclusion of more male client participants contributed to the literature, given the similar gender distribution of clients who receive mental health service in the U.S. (National Mental Health Service Survey [N-MHSS], 2016) and limited literature involving male clients in MCC-related research.

Moreover, in terms of religion and spirituality, none of previous researchers who developed client-rated MCC measures reported information on clients' religious/spiritual identity or examined their MCC measure scores as a function of clients' religious/spiritual identity (Cole et al., 2014; Drinane et al., 2016, Hook et al., 2013). In addition, the majority of the MCC-related studies (MCC therapeutic process and outcome) did not gather religious/spiritual background on client participants (Constantine, 2007; Fuertes et al., 2006; Kim et al., 2009; Owen et al., 2010). By contrast, the present study included a sample of clients with diverse religious and spiritual

backgrounds, depicting a larger proportion of the sample identifying as Christian (50.5%). Religious values and spiritual orientations are considered important components of clients' cultural identity that influences mental health well-being (ACA, 2014; CACREP 2016; Newport, 2011). In addition, an increasing number of clients expected therapists to address their religious and spiritual concerns in therapy (Harris, Randolph, & Gordon, 2016; Sperry, 2003). Therefore, collection of data on clients' religious and spiritual identity in the present study provides data for additional analysis related to the role of religion and spiritual identity in MCC literature.

In terms of sexual orientation or identity, the self-identity of participants in the present study was consistent with previous studies, with heterosexuality being a larger portion of the participants (Drinane et al., 2016, Hook et al., 2013). The sample for this study reported an average age of 31.65 ( $SD = 9.56$ ) ranging from 18 to 69. The average age and standard deviation from the present study were relatively older than the previous studies of developing client-rated MCC measures (Driane et al., 2016; Hook et al., 2013). In addition, the average age from the present study was older than the majority of MCC-related empirical research (Constantine, 2007; Fuertes et al., 2006; Kim et al., 2009; Owen et al., 2010). However, the difference in the average age could be ascribed to the therapeutic settings where the previous researchers recruited clients; the majority of the previous MCC studies recruited student clients from university-based counseling centers (Tao et al., 2015).

In addition to clients' demographic data, another contribution from the present study was the inclusion of clients who received mental health services from diverse therapeutic environments. In previous studies of developing client-rated MCC measures, researchers recruited client participants only from a specific therapeutic environment, such as a university-

based center (Cole et al., 2014; Drinane et al., 2016, Hook et al., 2013). Additionally, the majority of the existing empirical MCC studies only included student clients who received counseling services from university-based centers (Tao et al., 2015). By contrast, clients in the present study were recruited from several therapeutic settings, including private (44.4%), community-based (43.7%), and university-based mental health counseling centers (11.9%). Therefore, the present study may include more generalizability of the results to the target population of clients in various therapeutic environments, as well as contributed to the understanding of potential contextual influence of therapeutic environments on therapists' MCC.

In reference to types of therapists that clients worked, previous researchers who developed client-rated MCC measures did not report information regarding the types of therapists, such as credential or educational background (Cole et al., 2014; Drinane et al., 2016, Hook et al., 2013). One study (Drinane et al., 2016) reported that clients worked with 40 therapists who were either predoctoral intern, postdoctoral fellows, or staff psychotherapists; however, researchers did not identify specific credentials or educational backgrounds of therapists as well as the proportion of each type of therapists. By contrast, the present study included participants who identified their therapists as professional clinical psychologists (49.5%), professional counselors (37.9%), and professional social workers (12.6%), counselors-in-training (14%), and professional marriage and family counselors (5.2%). Therefore, the present study contributed to the existing literature by including information about varying educational backgrounds of the therapists that may account for variances in the clients' perception of therapists' MCC. In sum, client participants in the present study reported more diverse demographic backgrounds than in the previous studies of developing clients-rated MCC



measures as well as MCC-related empirical studies, in terms of race/ethnicity, gender, and religion and spirituality. Relatedly, the participants for the present study were recruited from diverse therapeutic environments, as well as reported to work with various mental health professionals.

### Discussion of the Findings

#### Research Question 1

##### What is factor structure of the items on the CAMCB with a sample of clients?

EFA was performed to examine the factor structure of the CAMCB. Subsequently, CFA was conducted to cross-verify the factor structure as identified from the EFA. The final EFA using the principal axis factoring (PAF) extraction method with promax rotation resulted in a 23-item CAMCB model with three factors: (a) *Multicultural Therapeutic Relationship and Assessment* (12 items), (b) *Multicultural Intervention* (5 items), and (c) *Multicultural Conceptualization and Goal Setting* (6 items). Detailed results from the EFA were presented in Chapter Four (see Tables 14, 15, 16, 17). Following the EFA, the researcher conducted the CFA on the three-factor, 23-item CAMCB model, as identified from the EFA, to cross-verify the identified factor structure. Based on a combination of the modification indices and theoretical relevance, the researcher modified the 23-item CAMCB model by removing an additional four items and correlating two error terms. Consequently, the final CFA model resulted in the same three-factor CAMCB model with 19 items that better represented the data, which indicated an acceptable model fit (see Table 19). After the CFA, the *Multicultural Therapeutic Relationship and Assessment* factor contained 11 items, while the other two CAMCB factors included 4 items,

respectively. Detailed results from the CFA were presented in Chapter Four (see Figure 6 and Table 19).

The final three-factor, 19-item CAMCB model is consistent with the MCC literature, which supports the dimensions of therapists' multicultural competent behaviors within the context of therapeutic process. The CAMCB Factor 1, *Multicultural Therapeutic Relationship and Assessment*, represents the act of therapists to facilitate multiculturally trusting relationship with clients and to incorporate cultural data into the assessment process. The CAMCB Factor 1 is supported by dimensions of several MCC theoretical models that focus on therapists' behaviors to (a) establish multicultural relationships where clients safely explore their cultural concerns and identity with their therapists, as well as to (b) assess sociocultural factors surrounding the clients throughout the assessment process (APA, 2013; Constantine & Ladany, 2001; Collins & Arthur, 2010; Lopez, 1997; Ratts et al., 2016). Specifically, six items (i.e., items 1, 6, 11, 15, 24, 28) included in the Factor 1 represent therapists' behaviors related to facilitating the multicultural therapeutic relationship, which involves the therapists' action to discuss cultural differences (e.g. race) between clients and therapists and to demonstrate cultural humility toward the clients' cultural values and experience (APA, 2013; Day-Vines et al., 2007; Hook et al., 2013; Owen, 2013; Ratts et al., 2016). Additionally, other five items (i.e., item 3, 7, 12, 19, 21) within the Factor 1 are supported by several MCC theoretical models and studies investigating therapists' behaviors of the multicultural assessment, specifically related to the discussion of clients' cultural identity, experiences, and challenge and supports in the assessment process (APA, 2013; Dana, 2005; Grieger, 2008; Lopez, 1997; Ridley et al., 1994). Therefore, the researcher

concluded that CAMCB Factor 1 included items that presented as theoretically relevant along with strong psychometric features.

Although the CAMCB Factor 1 is supported by a large body of existing MCC literature, there was a new finding that was inconsistent with some of the MCC theoretical models. Some MCC theoretical models conceptualized that multicultural therapeutic relationship and multicultural assessment were independent dimensions of therapists' MCC in therapeutic processes (APA, 2013; Constantine & Ladany, 2001; Collins & Arthur, 2010; Lopez, 1997). Thus, when initially developing the CAMCB, the researcher treated multicultural therapeutic relationship and multicultural assessment as two separate factors. However, the current factor analysis revealed that the initial items from the two factors were clustered onto a single factor, representing one theoretical dimension of MCC behavior within the context of therapeutic process. Theoretically, it also seems sound that the two factors were combined into a factor, given that building therapeutic relationships and conducting assessments often occur concurrently at the beginning stage of the therapeutic process and require similar activities and techniques (e.g., addressing clients' cultural background). Additionally, though conceptualizing the two factors separately, the existing MCC theoretical models also indicate the dynamic nature of MCC in often-overlapping stages of the therapeutic process (Constantine & Ladany, 2001; Collins & Arthur, 2010; Lopez, 1997). Therefore, based on the findings from the factor analysis and theoretical relevance, the researcher accepted the two factors as loading into the CAMCB Factor 1, *Multicultural Therapeutic Relationship and Assessment*.

The CAMCB Factor 2, *Multicultural Intervention*, represents the act of therapists to provide interventions that are congruent with clients' cultural values and expectations; whereby

maximizing therapeutic changes at the individual and systemic levels. The CAMCB Factor 2 is consistent with dimensions of existing MCC theoretical models, such as the *skill* dimensions in the tripartite model (Sue et al., 1992) and MJSCC model (Ratts et al., 2016), the *multicultural counseling skill* dimension in alternative conceptualization of MCC model (Constantine & Landany, 2001), and the *method* dimension in the process MCC model (Lopez, 1997). All the dimensions emphasized the ability of therapists to integrate clients' cultural values and expectations into treatment interventions. Specifically, all four items (i.e., items 8, 22, 25, 31) included in the Factor 2 are further supported by MCC-related studies exploring specific behaviors of multicultural intervention, including the therapists' action to (a) provide coping strategies and interventions tailored for the clients' cultural values and expectations (Constantine et al., 2007; Dailey et al., 2015; Hodge et al., 2012) as well as to (b) use culturally appropriate techniques that fit with the clients' cultural values (Kim, 2008; Heine, 2001; Smith et al., 2011). Therefore, the researcher determined the CAMCB Factor 2 was theoretically relevant and had strong psychometric features.

The CAMCB Factor 3, *Multicultural Conceptualization and Goal Setting*, represents the act of therapists engaging clients in an exploration of their presenting concerns in relation to their sociocultural contexts and to establish therapeutic goals that reflect the clients' cultural values and expectations. Dimensions of several MCC theoretical models support the CAMCB Factor 3, such as the *skill* dimension in MJSCC model (Ratts et al., 2016), the *multicultural counseling skills* and *effective counseling working alliance* dimensions in the alternative conceptualization of MCC model (Constantine & Landany, 2001), the *theory* dimension in the process MCC model (Lopez, 1997), and the *cultural opportunity* dimension in the MCO model (Owen, 2013). In

addition, three of the four items (i.e., items 13, 23, 29) included in the Factor 3 are also consistent with the MCC theoretical models and MCC-related studies exploring therapists' behaviors for multicultural conceptualization and goal setting. Specifically, such behaviors involve discussion related to the role of the clients' sociocultural group membership and cultural values (e.g., family values) on their presenting concerns, as well as the integration of the clients' cultural perspectives, values, and expectation into therapeutic goals (Collins & Arthur, 2010; Constantine & Landay, 2001; Kim & Cardemil, 2012; Ladany et al., 1997; Lopez, 1997; Owen, 2013; Ratts et al., 2016; Sue & Sue, 2016). On the other hand, one item (i.e. item 30, "*My therapist has asked me about the influence of my family values in the development of therapeutic relationship*") was initially developed to represent therapists' behaviors related to multicultural therapeutic relationships (CAMCB Factor 1) but loaded onto the Factor 3. The researcher decided to retain item 30 on the Factor 3, based on its strong psychometric features identified from both EFA and CFA as well as a theoretical justification. Given the dynamic nature of therapists' MCC performance in therapeutic process (Constantine & Ladany, 2001; Lopez, 1997), it is possible that therapists simultaneously engage clients in a discussion about family values in relation to their presenting concerns (i.e. multicultural conceptualization), while discussing the role of the clients' family values in the development of therapeutic process. However, the researcher also acknowledge that it could be a measurement error in the item 30 (e.g., item 30 may represent more than one idea, have unclear construction, or be similar to other items in the same factor; Kline, 2005). At a future point, the researcher will revise item 30 for its clarity and relevancy and re-test its performance on Factor 3. Overall, the MCC literature and the

results from the factor analysis provided initial support for the theoretical relevance and sound psychometric features of the CAMCB Factor 3.

Existing client-rated measures of MCC tend to be developed with dimensions of therapists' MCC outside the context of the therapeutic process. In other words, the existing measures were designed to represent the internal acquisition of three dimensions of therapists' MCC (i.e., awareness, knowledge, skill), rather than how competence in the areas of the three dimensions translate into performance (behaviors) in therapeutic process. In addition, despite its attempts to measure therapists' demonstrated behaviors, the existing measures have several limitations. For example, such behaviors were measured using general items that were deficient in behavioral details and/or specific cultural factors (e.g., race, gender, family values, etc.). By contrast, the three dimensions of CAMCB were designed to capture specific behaviors that therapists perform within the context of the therapeutic process. Such behaviors were also assessed using specific items that included behavioral indicators and were specified with a certain cultural factor. Therefore, based on the behavioral specificity, contextualization of the dimensions, and initial evidence for sound psychometric properties, the CAMCB has a potential to measure the clients' perception of their therapists' multicultural behavior within the context of therapeutic processes.

In sum, the final three-factor, 19-item CAMCB model is well supported by the MCC literature and has sound psychometric properties. Three factors (dimensions) of the CAMCB include items with strong psychometric features as well as theoretical relevance. The final version of the 19-item CAMCB is included in Appendix D.

## Research Question 2

### What is psychometric properties of the CAMCB scores with a sample of clients?

To examine the psychometric properties of the CAMCB, research question 2 was divided into four sub-questions. The following sections present a summary and discussion of the results for each sub-question.

#### Research Question 2a: Internal Consistency Reliability of the CAMCB

The researcher assessed internal consistency reliability of the CAMCB total scale and each of its factors (subscale). Cronbach's alpha ( $\alpha$ ) value of .70 was utilized as a reference point for acceptable internal consistency reliability (Sternier, 2003). As a preliminary analysis, the research computed the Cronbach's alpha ( $\alpha$ ) values for the initial CAMCB 30-items with the total sample of clients ( $N = 562$ ). The initial CAMCB-30 item scale was found to have good internal consistency ( $\alpha = .931$ ). Subsequently, the researcher evaluated internal consistency reliability for CAMCB 23-item scale and its three factors with the EFA subsample ( $n = 280$ ). The CAMCB 23-item scale was also found to have good internal consistency reliability ( $\alpha = .913$ ). Acceptable to good internal consistency reliability was also found for each of the CAMCB three factors: (a) *Multicultural Therapeutic Relationship and Assessment* ( $\alpha = .919$ ); (b) *Multicultural Intervention* ( $\alpha = .752$ ); and (c) *Multicultural Conceptualization and Goal Setting* ( $\alpha = .777$ ).

Next, the researcher examined internal consistency reliability for the final CFA model; the CAMCB 19-item model and its three factors with the CFA subsample ( $n = 282$ ). The CAMCB 19-item scale was found to have good internal consistency ( $\alpha = .911$ ). In addition, the

researcher found acceptable to good internal consistency reliability for all the three factors: (a) *Multicultural Therapeutic Relationship and Assessment* ( $\alpha = .925$ ); (b) *Multicultural Intervention* ( $\alpha = .766$ ); and (c) *Multicultural Conceptualization and Goal Setting* ( $\alpha = .742$ ).

In sum, the researcher concluded that the CAMCB 19-item scale and its factors had good internal consistency reliability, based on the series of assessments on Cronbach's alpha value for the CAMCB total scale and its factors. In the present study, all Cronbach's alpha ( $\alpha$ ) values were found to be above the acceptable level of .70, which supported the good internal reliability of the CAMCB 19-item total scale and each of the three factors. Additionally, the internal consistency reliability of the CAMCB 19-item scale ( $\alpha = .911$ ) is comparable to that of existing client-rated measures of therapists' MCC or related concepts, including the 20-item CCCI-R (LaFromboise et al., 1991) that was found to have internal consistency reliability of .95; the 7-item CCCI-R-7 (Drinane et al., 2016) that indicated  $\alpha = .91$ ; the 32-item MTCI-CV (Cole et al., 2014) that had  $\alpha = .98$ ; and the 12-item the CHS (Hook et al., 2013) that demonstrated  $\alpha = .93$ .

#### Research Question 2b: Convergent Validity between the CAMCB and CCCI-R-7

The researcher conducted bivariate correlation analyses to assess evidence for convergent validity between the 19-item CAMCB and CCCI-R-7 (Drinane et al., 2016; LaFromboise et al., 1991). Specifically, the 19-item CAMCB total scale and each of the three factors were correlated to the 7-item CCCI-R-7 total scale. The CCCI-R-7 was a single-factor instrument that measured therapists' orientation toward the important elements of MCC, such as cultural knowledge, sensitivity, conceptualization, and intervention (Drinane et al., 2016), which were theoretically similar constructs to therapists' MCC performance (behaviors) in the therapeutic process.



The 19-item CAMCB total scale indicated a statistically significant and positive correlation with the CCCI-R-7 total scale ( $r = .246, p < .001$ ; 6% of the variance explained). This significantly positive correlation revealed that higher scores on the CAMCB were associated with higher total scores on the CCCI-R-7. Moreover, a correlation of .246 indicated that the CAMCB and CCCI-R-7 measured theoretically-related (similar) and yet distinct constructs (DeVellis, 2017), which supported the researcher's hypothesis. Given the lack of behavioral indicators in the CCCI-R-7 items, the CCCI-R-7 may better assess clients' perception of their therapists' disposition (orientation) toward performing the elements of MCC, rather than therapists' actual performance (behaviors) in therapy. Considering that therapists' disposition toward MCC is theoretically associated with therapists' MCC performance in practice, the positive but small correlation supported the hypothesized convergent validity between the two instruments.

Similarly, further correlational analyses between each factor of the CAMCB and CCCI-R-7 total scale revealed a significant and positive correlation between the CCCI-R-7 total scale and (a) *Multicultural Intervention* ( $r = .487, p < .001$ ; 23.71% of the variance explained) and (b) *Multicultural Conceptualization and Goal Setting* ( $r = .335, p < .001$ ; 11.22% of the variance explained). Though not statistically significant, the *Multicultural Therapeutic Relationship and Assessment* factor also indicated a positive correlation with the CCCI-R-7 total scale ( $r = .109, p = .075$ ; 1.1% of the variance explained). Therefore, collective findings from the bivariate analysis support the hypothesis that the CAMCB would have a significantly positive yet weak-to-moderate correlation with the CCCI-R-7; supporting the convergent validity between the two instruments.

### Research Question 2c: Convergent Validity between the CAMCB and WAI-SR

The researcher used bivariate correlation analyses (i.e., Spearman's correlation) to explore evidence for convergent validity between the three factors of the 19-item CAMCB and WAI-SR (Hatcher & Gillaspay, 2006). Each factor of the CAMCB was correlated with factors of the WAI-SR that were postulated to measure theoretically-related constructs, such as (a) CAMCB *Multicultural Therapeutic Relationship and Assessment* (Factor 1) and WAI-SR *Bond*; (b) CAMCB *Multicultural Intervention* (Factor 2) and WAI-SR *Task*; and (c) CAMCB *Multicultural Conceptualization and Goal Setting* (Factor 3) and WAI-SR *Goal*.

The CAMCB total scale indicated a non-significant yet positive correlation with the WAI-SR total scale ( $r = .058, p = .399$ ; less than 1% of the variance explained), suggesting that higher scores on the CAMCB were associated with somewhat higher scores on the WAI-SR. Although the strength of the correlation between the CAMCB and WAI-SR was not significant with small effect size, the positive correlation provided preliminary support for the hypothesis that CAMCB and WAI-SR may measure a related and yet distinct therapeutic construct, supporting the convergent validity.

Further investigation of correlations between CAMCB factors and corresponding factors of WAI-SR revealed a significant, positive correlations between: (a) *Multicultural Intervention* and WAI-SR *Task* ( $r = .394, p < .001$ ; 15.52% of the variance explained) and (b) *Multicultural Conceptualization and Goal Setting* and WAI-SR *Goal* ( $r = .126, p < .001$ ; 1.58% of the variance explained). However, the *Multicultural Therapeutic Relationship and Assessment* factor revealed a non-significant, small, negative correlation with the WAI-SR *Bond* ( $r = -.017, p = .776$ ; less than 1% of the variance explained). Therefore, findings from bivariate analyses

between factors of each instrument provided initial evidence for convergent validity between the CAMCB factors and each corresponding factor of WAI-SR, except for between the *Multicultural Therapeutic Relationship and Assessment* (CAMCB Factor 1) and WAI-SR *Bond*.

The non-significant, negative relationship between the CAMCB Factor 1 and WAI-SR *Bond* may be attributed to the combined nature of the Factor 1, representing both multicultural therapeutic relationship and multicultural assessment. Given that the WAI-SR *Bond* measures the emotional connection between therapists and clients, CAMCB Factor 1's inclusion of multicultural assessment may have diminished the strength of the correlation. Alternatively, unlike the theoretical position (Day-Vines et al., 2007; Hook et al., 2013; Owen, 2013), it would also be possible that therapists' behaviors that facilitate culturally safer relationships with clients may not play a significant role in the development of emotional bond with clients. Further study is warranted to better understand the relationship between therapists' behaviors that form multicultural therapeutic relationships and alliance-emotional bond.

#### Research Question 2d: Examination of Social Desirability Biases

The researcher conducted bivariate correlations between the CAMCB and MCSDS-X1 (Strahan & Gerbasi, 1979) to examine the social desirability biases in the participants' responses to the CAMCB. The social desirability biases were examined in the 19-item CAMCB for total score and for each of its three factors. Results from the bivariate correlation revealed that 19-item CAMCB total scale had a non-significant yet small, positive correlation with the MCSDS-X1 total scale ( $r = .108, p = .077$ ; 1.1% of the variance explained). The researcher conducted further bivariate correlation analyses between each factor of the CAMCB and MCSDS-X1 total scale.

The researcher found non-significant and negative correlations between the MCSDS-X1 and (a) *Multicultural Intervention* factor ( $r = -.043, p = .478$ ; less than 1% of variance explained) and (b) *Multicultural Conceptualization and Goal Setting* factor ( $r = -.083, p = .174$ ; less than 1% of variance explained). However, the *Multicultural Therapeutic Relationship and Assessment* factor was found to be significantly and positively correlated to the MCSDS-X1 ( $r = .15, p < .05$ ) with a small effect size (2.2% of the variance explained; Cohen, 1998).

Based on these findings, the researcher determined that the participants' responses to the CAMCB were *not* significantly related to social desirability. The 19-item CAMCB total scale and its two factors indicated non-significant and/or negative correlation with social desirability. Although the CAMCB Factor 1, *Multicultural Therapeutic Relationship and Assessment*, had a significantly positive correlation with the social desirability, it is important to note that the strength of correlation between Factor 1 and social desirability was very small ( $r = .15$ ; small effect size; Cohen, 1998). Therefore, overall, the researcher concluded that social desirability did not influence participants' responses to the CAMCB in the current study.

### Research Question 3

#### What is the difference between the CAMCB score and participants' demographic and background data?

The researcher investigated differences in CAMCB scores based on participants' demographic and background data. The following sections present a summary and discussion of the results for each demographic variable (i.e., race/ethnicity, gender, sexual orientation, faith tradition) and background information (mental health service setting and types of therapists).

#### Ethnicity/Race and CAMCB

The researcher conducted a series of ANOVAs and MANOVAs to examine differences in the participants' responses to the CAMCB based on their racial and/or ethnic identity. Initially, the researcher examined differences between two ethnic groups (i.e., white and non-white) to explore the potential role of racial minority status in their perception of MCC, as has been argued in the MCC literature (Constantine, 2002; Owen et al., 2011; Sue & Sue, 2012). Results from the ANOVA revealed that non-white clients reported a significantly higher CAMCB total score than their white counterpart,  $F(1,561) = 15.544, p < 0.001$ , with small effect size ( $\eta^2 = .027$ ). In other words, the non-white clients rated their therapists' multicultural behaviors significantly higher than did their white counterpart. Using MANOVA, the examination of the difference for each of the CAMCB factors showed that non-white clients reported a significantly higher score in the CAMCB Factor 1 (*Multicultural Therapeutic Relationship and Assessment*) than their white counterparts,  $F(1, 561) = 33.567, p < .001$ , with small effect size ( $\eta^2 = .056$ ). However, no significant differences were found between non-white

and white participants' responses for CAMCB Factor 2 (*Multicultural Intervention*;  $p = .706$ ) and Factor 3 (*Multicultural Conceptualization and Goal Setting*;  $p = .181$ ).

These findings are inconsistent with the previous studies that reported no differences in clients' perception of their therapists' MCC based on their racial/ethnic status (Fuertes et al., 2006; Lee & Tracy, 2008; Owen et al., 2011). On the other hand, these ethnic/racial differences from the present study provide support for the theoretical position suggesting that therapist's MCC can be more important for racial and ethnic minority clients (Sue et al., 1992; Sue & Sue, 2012), such that racial/ethnic minority status could influence clients' perception of their therapist MCC and its impact on the therapeutic process. For example, it is reported that clients' racial/ethnic minority status moderated the relationship between the perception of their therapists' MCC and counseling satisfaction (Constantin, 2002; Meyer & Zane, 2013). Given that cultural issues can be of particular concern for racial/ethnic minority clients (Owen et al. 2010; Zane et al., 2004), they may be more conscious of therapists demonstrated MCC in therapy than white clients. Alternately, these racial/ethnic difference in the CAMCB total and Factor 1 scores may be a function of varying frequency of opportunities for therapists to address cultural issues in therapeutic processes. Considering the unique, cultural-based, mental health needs of racial/ethnic minority groups (Cabral & Smith, 2011; Sue et al., 2012), the CAMCB scores of therapists who worked with racial/ethnic minority clients in the present study may have benefitted from more frequent opportunities to discuss cultural issues in therapy. Moreover, the CAMCB Factor 1 (*Multicultural Therapeutic Relationship and Assessment*) included items to measure therapists' discussion of cultural differences (e.g. race) between therapists and clients that may generate power differences in the therapeutic relationship. Given the large proportion of

white therapists in the United States, it would be possible that the racial/ethnic minority clients in the present study were more likely to work with white therapists, which may result in more opportunity for therapists to discuss cultural differences in the therapeutic process. Further investigation of the influence of clients' racial/ethnic status on their perception of therapists' MCC and therapeutic process is warranted.

Next, the researcher further examined differences in the CAMCB scores among five ethnic groups (i.e., White, Black or African American, Asian or Asian American, Latina or Latino, and Others). Asian American clients reported a significant higher score on the CAMCB total scale than all other ethnic groups,  $F(4,546) = 13.519, p < 0.001$  with small effect size ( $\eta^2 = .09$ ). In other words, Asian American clients rated their therapists' multicultural behaviors significantly higher than did other ethnic groups. None of other four ethnic groups had significant different scores to one another. Furthermore, results from the MANOVA indicated that there were significant differences among the five ethnic groups in the CAMCB Factor 1 (*Multicultural Therapeutic Relationship and Assessment*),  $F(4, 546) = 17.344, p < .001$ , with small effect size ( $\eta^2 = .113$ ), and in the CAMCB Factor 3 (*Multicultural Conceptualization and Goal Setting*),  $F(4, 546) = 5.156, p < .001$  with small effect size ( $\eta^2 = .036$ ). The follow-up post-hoc test indicated that Asian Americans rated their therapists' multicultural behaviors significantly higher on the CAMCB Factor 1 than all other ethnic groups, as well as on the CAMCB Factor 3 than Latino or Latina and Other groups.

The researcher did *not* find any previous studies or theoretical positions in the existing MCC literature that suggested variations in the perceptions of therapists' MCC among racial/ethnic minority groups. Specifically, the present study indicated that Asian Americans had

significantly different responses on the CAMCB total scale and Factors 1 and 3 than other racial/ethnic minority groups. However, no previous research was found that investigated differences in the perception of MCC between Asian Americans and other racial/ethnic minority groups. The researcher hypothesizes that Asian Americans' higher scores may be a function of Asian cultural values that emphasize interpersonal harmony (Kim & Park, 2015). In the therapeutic process, a predilection toward maintaining interpersonal harmony, may result in greater deference to therapists' guidance even when disagreement exists as a way to avoid conflict (Kim & Park, 2015). When evaluating therapists' MCC behaviors, the tendency toward interpersonal harmony may result in providing more socially desirable ratings. The researcher conducted additional correlation analyses between the factors of CAMCB and MCSDS-X1 with Asian American participants ( $n = 71$ ); however, no significant positive relationships were identified between the CAMCB total scale and its factors and social desirability for Asian American participants ( $r = -.073$  to  $.148$ ,  $p > .05$ ). Therefore, further research is warranted to explore the unique variances in the perception of MCC among racial/ethnic minority groups.

### Gender and CAMCB

Next, the researcher conducted an ANOVA and MANOVA to examine gender differences (i.e. male and female) in scores for the CAMCB total scale and each of its factors. Results from a univariate ANOVA test indicated that there was no a statistically significant difference in the CAMCB total scores between female and male clients ( $p > .05$ ). Using MANOVA, further investigation of gender differences for each of the CAMCB factors indicated that female clients reported a significantly lower score on the CAMCB Factor 1 (*Multicultural*



*Therapeutic Relationship and Assessment*) than their male counterpart,  $F(1, 544) = 7.66, p < .017$ , with small effect size ( $\eta^2 = .014$ ). In other words, female clients rated their therapists' multicultural behaviors on the CAMCB Factor 1 significantly lower than their male counterparts. In addition, female clients rated their therapists' multicultural behavior significantly higher on the CAMCB Factor 2 (*Multicultural Intervention*) than male clients,  $F(1, 544) = 6.49, p < .017$  with small effect size ( $\eta^2 = .012$ ). No difference was identified for the CAMCB Factor 3 (*Multicultural Conceptualization and Goal Setting*). Despite the identified significant difference in the Factor 1 and 2, it is important to note that these gender differences represented small effect size (1.4% to 1.7%; Cohen, 1988), with limited practical significance.

Overall, the researcher found no significant differences with medium to large effect size in the CAMCB scores between male and female clients. This finding is similar to the previous meta-analysis indicating that clients' gender status did *not* moderate the relationship between the clients' perception of their therapists' MCC and client outcomes (Griner & Smith, 2006). However, it is also important to note that despite the limited practical significance, there existed significant differences in the scores for the CAMCB two factors (Factor 1 and 2) between male and female clients. The observed gender differences in scores for the CAMCB two factors are consistent with the previous study indicating that therapists' MCC varied as a function of their clients' gender status (Owen et al., 2009). In other words, it implies that some therapists demonstrated multicultural behavior better with female clients in an aspect of therapeutic process, while others demonstrated such behavior better with male clients. This difference in therapists demonstrated MCC for male and female clients provide a preliminary support for the theoretical position that indicates the existence of gender competence (Kaslow, 2004, Owen et

al., 2009). Given the differences in how males and females interpret and cope with psychological concerns (Eaton & Bradley, 2008), therapists may need to develop gender-sensitive MCC skills or behaviors (gender competency) when working for clients of a particular gender. That is, therapists could have varying level of MCC based on their clients' gender status, as implied from the results in the present study. Since there exist a dearth of research on the role of gender in the MCC literature (Griner & Smith, 2006; Owen et al., 2009), further research is warranted to investigate potential variance in effect of therapists' MCC for male and female clients as well as the role of gender in clients' perception of therapists' MCC.

#### Sexual Orientation and CAMCB

Next, an ANOVA and MANOVA were conducted to explore differences in scores for the CAMCB total scale and each of its factors between heterosexual and non-heterosexual groups. Results from a univariate ANOVA test indicated no significant difference in the CAMCB total score between heterosexual and non-heterosexual groups,  $p > .05$  with small effect size ( $\eta^2 = .011$ ). Utilizing MANOVA, further investigation of differences for each of CAMCB factors revealed that there were no statistically significant differences between the two groups in any of the CAMCB three factors,  $p > .05$  with negligible effect size ( $\eta^2 = .008$  to  $.005$ ).

Overall, the present study identified no significant differences in scores for the CAMCB total scale and each of its factors based on the participants' sexual orientation status. In other words, these findings suggest that the clients' perception of their therapists' MCC did not vary based on their sexual orientation or identity in the current study. Additionally, these findings indicate no difference in level of demonstrated MCC between therapists for heterosexual and

non-heterosexual clients. The researcher did *not* find previous studies investigating a function of clients' sexual identity in the perception of their therapists' MCC or exploring potential variation in effect of therapists' demonstrated MCC for heterosexual and non-heterosexual clients. Further research is needed to deepen the understanding regarding the influence of clients' sexual orientation on the perception of their therapists' MCC and its influence on therapeutic processes.

### Faith Tradition and CAMCB

To examine differences in the CAMCB scores based on the participants' faith tradition, the researcher conducted an ANOVA and MANOVA. There was a statistically significant difference in the CAMCB total scores among the four faith groups (i.e., Christianity, non-Christian religion, no-affiliated group, spirituality group),  $F(3,549) = 12.851, p < 0.001$  with small effect size ( $\eta^2 = .066$ ). The follow-up post-hoc test revealed that the non-Christian religious group rated their therapists' multicultural behaviors significantly higher than all other religious groups ( $p < .005$ ). Additionally, the Christianity group rated their therapists behaviors significantly higher than did no-affiliated religious group ( $p < 0.05$ ). Subsequently, a MANOVA was conducted to further examine differences for each of the CAMCB factors. There were significant differences among the groups in the CAMCB Factor 1 (*Multicultural Therapeutic Relationship and Assessment*),  $F(3, 549) = 14.578, p < .001$  with small effect size ( $\eta^2 = .074$ ), and the CAMCB Factor 2 (*Multicultural Intervention*),  $F(3, 549) = 3.546, p < .017$  with small effect size ( $\eta^2 = .019$ ). Further post-hoc test revealed that the non-Christian religious group rated their therapists significantly higher on the CAMCB Factor 1 than all other religious groups ( $p < .05$ ). For the CAMCB Factor 2, the Christianity group rated their therapists significantly higher

than no-affiliated group ( $p < .05$ ). These religious differences in the perception of their therapists' MCC represented small effect size (6.6% to 7.4%; Cohen, 1988).

Overall, these findings indicate that the clients' perception of their therapists' MCC behaviors may vary based on their faith traditions. In addition, the results imply that some therapists demonstrated better multicultural competent behaviors for clients with non-Christian religion backgrounds than clients with other religious/spiritual groups. However, the results should also be interpreted with cautions because these religious/spiritual differences may be a function of other confounding variables (e.g., clients' race, gender, presenting concerns). In fact, a meta-review on clients' religious or spiritual needs in therapy reported that clients' magnitude of spiritual or religious belief, gender, and type of therapy served as important factors that influenced level of the clients' expectation for therapists to address religious or spiritual concerns in therapy (Harries et al., 2016). Thus, it would be possible that based on these factors, the participants in the current study may have different expectations for therapists to discuss their spiritual or religious concerns, which may, in turn, lead to varying degree to which they find their therapists' MCC behaviors important. The researcher did *not* find any previous studies exploring the role of clients' religious or spiritual identity in the client's perception of their therapists' MCC or variation in effect of therapists' MCC for various religious or spiritual groups. Therefore, further research is warranted to explore variance in clients' perception of their therapists' MCC based on clients' religious or spiritual identity as well as its role in therapeutic processes.

### Mental Health Service Settings and CAMCB

The researcher utilized an ANOVA and MANOVA to examine differences in scores for the CAMCB total scale and each of its factors among mental health service settings (i.e., private, university-based, and community-based mental health service centers). There were no significant differences in the CAMCB total scores among the mental health service settings,  $F(2,551) = 1.986, p > .05$  with negligible effect size ( $\eta^2 = .007$ ). Further inspection of difference for each of the CAMCB factors revealed that there were no significant differences in any of the CAMCB factors, except for the Factor 3 (*Multicultural Conceptualization and Goal Setting*),  $F(2, 551) = 5.196, p < .017$  with small effect size ( $\eta^2 = .019$ ). Follow-up post-hoc test showed that therapists working in private mental health centers received significantly higher scores in the CAMCB Factor 3 than therapists working in the community-based mental health centers. However, the difference between private-based and community-based mental health centers represented small effect size (1.9%; Cohen, 1988), which limited its practical significance.

Overall, the researcher failed to identify significant differences with medium to large effect size in the CAMCB scores based on where the clients received therapy. In other words, therapists' level of MCC did not differ based on where they worked. This non-difference among the mental health service settings are similar to the previous meta-analysis indicating that there were no significant differences between university-based and community-based counseling centers in clients' perception of their therapists' MCC and client outcomes (Tao et al., 2015). Therefore, findings from the meta-analysis and the present study suggest that there may be little contextual influence of the service settings on the development of therapist' MCC or in the provision of multiculturally competent services. Considering the ethical mandate for MCC

trainings across mental health service settings (Chu et al., 2012; Park-Taylor et al., 2009), each mental health service setting may have provided comparable MCC trainings for therapists or multiculturally competent services for clients. Given little literature on the topic, further investigation is needed to explore the contextual influence of the service settings on the development of therapists' demonstrated MCC or provision of multiculturally competent services.

### Type of Therapists and CAMCB

Lastly, the researcher conducted an ANOVA and MANOVA to examine differences in the CAMCB scores based on type of therapists (i.e., psychologists [PsyD], counselors [LMHC or LPC], social workers [MSW or LCSW]). The researcher found no statically significant differences in the CAMCB total scores between professional psychologists, counselors, and social workers,  $F(2,298) = 1.774, p = .171$ , with small effect size ( $\eta^2 = .012$ ). Furthermore, the researcher failed to find significant differences in any of the CAMCB factor scores based on the type of therapists at  $p > .05$  with small effect size ( $\eta^2 = .010$  to  $.019$ ). Therefore, the researcher determined that there were no significant differences in the CAMCB scores between psychologists, counselors, and social workers.

These no-difference findings seem to provide initial support for the ongoing effort across the mental health professions that integrated MCC into professional education, training, and practice (ACA, 2014; APA, 2003; NASW, 2008). Given that MCC training and education is mandate across the professions, it would be possible that therapists provide multicultural competent counseling services at similar level, regardless of their credentials and educational

backgrounds. The researcher did *not* find any previous studies comparing level of therapists' MCC based on the professionals' credentials and educational backgrounds. Despite the contribution of the initial findings from the present study, it is also important to note that information regarding therapists' credentials or educational backgrounds were collected based on clients' memory. Thus, the current finding may be susceptible to reporting biases that limits the better understanding of therapists' demonstrated MCC across mental health professions.

#### Additional Analysis for Validity Check

The researcher conducted a series of univariate (one-way) ANOVAs to examine differences in the CAMCB total score based on data collection method. It has been documented that response rates or quality of data may vary as a function of data collection method (Bowling, 2005; Dillman, Smyth, & Christian, 2009; Wolf, Converse, Airen, & Bodenhorn, 2009). However, the researcher found no statistically significant differences with negligible effect size in the CAMCB total score based on the data collection method. Therefore, the researcher determined that data collection method did *not* influence the participants' responses to the CAMCB.

#### Study Limitations

As with any study, there are several limitations that can mitigate the results of the present study. Specifically, limitations for the present study existed in (a) research design, (b) sampling method, and (c) instrumentation. Following sections present limitations related to each area.

## Research Design

The researcher made efforts to expect and diminish threats to external, internal, and test validity. However, the present study was vulnerable to limitations related to confounding variables. For example, some clients may have been more attune to and conscious of therapists' multicultural competent behaviors in therapy than other clients, based on clients' factors, including demographic backgrounds, perceived cultural identity, and type of presenting concerns. In fact, some researchers reported that these clients' factors were associated with the clients' perception of their therapists' MCC, calling for further investigations (Owen et al., 2011). Therefore, in the present study, theses clients' factors may have influenced the degree to which clients perceive their therapist' multicultural behaviors important, which may, in turn, moderate the clients' responses to the CAMCB. To mitigate the threat to validity, the researcher examined demographic backgrounds of clients (e.g., race, gender, sexual orientation, religion) that might have influenced the participants' responses to the CAMCB.

Another limitation related to research design was potential social desirability bias. The present study included self-report measures of clients' perception of their therapists. Client participants may have evaluated their therapists' multicultural competent behaviors in a socially desirable way, as they may not have wanted to report negative experience with their therapists that could endanger their therapeutic relationships. The researcher attempted to examine social desirability in the participants' responses through MCSDS-X1 (Strahan & Gerbasi, 1979). The researcher failed to identify significant influence of the social desirability on the participants' responses to the CAMCB.



## Sampling Method

Sampling method aims to obtain a diverse and appropriately large sample to improve generalizability of the findings to the large population (Tabachnick & Fidell, 2013). Though random sampling method is considered best practice for the generalizability, convenient sample method is deemed practical and satisfactory sampling method in social sciences (Gall et al., 2007). For the present study, the researcher utilized a convenient sampling method through three methods of data collection. Although the multiple data collection procedures allowed for obtaining the sufficient sample size for both EFA ( $n = 280$ ) and CFA ( $n = 282$ ), the researcher did *not* achieve an ideal sample size of 300 participants to establish 10:1 participants/item ratio for EFA.

Additionally, with the various methods of data collection, the researcher obtained a relatively diverse sample of clients in relation to geographic and demographic backgrounds (e.g., race, gender, religion), especially when comparing to the previous MCC-related studies in the literature. However, despite the efforts (e.g., multiple data collection method) to obtain a diverse sample, the convenient sampling may have caused selection biases in the sample as well. For example, only 11.9% ( $n = 66$ ) of the participants were recruited from the university-based mental health centers. Additionally, the majority of participants ( $n = 465$  [82.6%]) reported utilizing the individual counseling services than any other modality of therapy. Moreover, less than 7% of participants in the study worked with social workers or marriage and family therapists. Therefore, the results of the present study may *not* be generalizable to clients in the U.S. who utilize various therapeutic environments and modalities, or work with diverse types of mental health professionals.

In addition, there was potential influence of environmental factors across settings on the participants' response to the CAMCB (Johnson & Christensen, 2004). For example, the researcher recruited client participants from various clinical settings, each of which serves diverse population of clients with unique mental health needs. Given that community-based mental health centers have historically worked for more underrepresented cultural groups of clients (Chu et al., 2012), participants recruited from such centers might have been a unique sample of clients in the study. Additionally, data collection method might have played a role in the participants' response, as the online recruitment (MTurk) may have not fully screened for participants who did not meet the eligibility criterion. Therefore, some participants from the MTurk may have randomly responded to the survey to earn the monetary compensation. In fact, the proportion of the participants who selected incorrect responses for the screening questions and the validate item were 14.8% and 6.8% respectively, which were relatively larger than those recruited from face-to-face contact (i.e., less than 1%). Moreover, different modes of administration may have influenced the participants' responses to the CAMCB. Participants who completed the paper version of the survey in the clinic centers might have had different responses than those who completed the electronic version of the survey at their own convenience. To mitigate the environmental threats to the validity, the researcher examined differences in the CAMCB scores by clinical settings, data collection method, and different modes of administration. The researcher found *no* significant differences with medium to large effect size by any of the environmental factors above.

## Instrumentation

Limitations exist in instrumentation of the present study. First, the present study included a demographic questionnaire and four instruments, which included a total of 80 items. Given the length of the instrument packet, participants may have experienced mental fatigue, which may have led to increased rates of random-responses, non-responses, or attrition. Second, despite the thorough analysis of the MCC literature and the pilot study, the researcher may have not included items that captured the range of multicultural competent behaviors when initially developing CAMCB. Third, the researcher may have lost some of items that represented unique multicultural competent behaviors because of item-reduction process. Given the limited extant research on such behavior, the items removed may have measured important aspects of multicultural competent behavior, which could have contributed to the MCC clinical, research, and educational practice. Though, it is important to note that the item-removal process was conducted, based on the systemic procedure for obtaining strong psychometric features and theoretical relevance, in the hope to achieve reliable, simple, and inclusive instrument. Fourth, the researcher split the original sample into two subsample and used one subsample for CFA. Despite the acceptable model fit for the final CFA model, it is necessary to conduct a replication study with an independent sample to further support or improve the model fit of the CAMCB. Fifth, as addressed in the discussion section, the CAMCB Factor 3 include one item (i.e., item 30) that presented as theoretically overlapping, which may have influence a construct validity of the Factor 3. Further study is warranted to improve theoretical clarity by revising the item. Lastly, the present study provided limited evidence for convergent validity between CAMCB Factor 1 (*Multicultural Therapeutic Relationship and Assessment*) and WAI-SR *Bond* factor

(Hatcher & Gillaspy, 2006). The limited evidence for the convergent validity between the two factors could be ascribed to a measurement error (see the discussion section for details). Further research is needed to examine convergent validity between the two constructs by including an additional measure of working alliance or using advanced statistical method (CFA). Such further research will also contribute to the ongoing debate on unclear relationship between MCC and working alliance (Owen, 2013).

### Recommendation for Future Research

The present study provides an initial support for the CAMCB as a client-rated measure of therapists' multicultural competent behaviors within the context of therapeutic processes. However, further research should be conducted to address the limitations of the current study and to continue to enhance and refine the CAMCB. First, although CFA was conducted to cross-verify the factor structure of the CAMCB and strengthen the evidence of its validity, further confirmatory analyses with an independent sample are warranted to enhance model fit and to support the generalizability of the CAMCB. Second, although a strength of the present study was the geographically and demographically diverse sample of clients from multiple therapeutic settings, future replication study should include more diverse clients, and ideally higher percentage of clients using other therapeutic settings (e.g., university-based centers), modalities of therapy (e.g., family and marriage counseling), and mental health professionals (e.g., social workers and marriage and family therapists).

Third, further research should be conducted to analyze evidence of convergent validity with other instruments that measure theoretically-related constructs. Specifically, given the

limited evidence of convergent validity with working alliance (i.e., Bond subscale), it is suggested to include other measures of working alliance or utilize covariance structural analyses (e.g., CFA) to deepen the understanding of relationship between the two constructs via a theoretical frame. Particularly, the future research on the relation of multicultural behavior with working alliance could contribute to the continuing discussion regarding whether MCC is a related but distinct therapeutic factor from working alliance (Owen, 2013). Fourth, future research is needed to improve theoretical relevance for the CAMCB Factor 3 by revising or deleting the item 30. Fifth, given the potential role of diverse client's factors (e.g., client-defined cultural group membership, presenting concern, other demographic characteristics) in the clients' perception of their therapists' MCC, future research would benefit from examining mediational models with the supported three-factor, 19-item CAMCB model, attending to potential variance in model fit and psychometric properties. Sixth, relatedly, since the researcher identified different scores in either the CAMCB total or subscales by some subgroups (e.g., race, gender, religion), multiple-group CFAs need to be conducted to further assess for measurement invariance, to determine if the final CAMCB total and subscale function similarly or differently for various subgroups. Seventh, the present study utilized a cross-sectional data, which may have limited the understanding of changes in the clients' perception of therapists' MCC behavior over the course of therapy. Future research with longitudinal methods is needed to track the change in the clients' perception of therapists' such behavior in therapeutic process as well as its potential relationship with therapeutic process and client outcome. Lastly, future research is warranted to use the CAMCB to explore the influence of therapists' MCC behavior on clients as well as therapeutic process and client outcome.

### Implications

The primary purpose of this study was to develop a client-rated instrument (CAMCB) that is designed to measure therapists' multicultural competent behaviors in the context of therapeutic processes, as well as to assess the assessment utility with a sample of clients. The results identified a three-factor, 19-item instrument, the CAMCB, that the mental health profession can utilize for research, practice, and training. In research, the CAMCB can be used as an instrument to examine the effect of therapists' actual multicultural competent behaviors on the therapeutic process and outcomes. Given the dearth of existing client-rated instruments that measure the effect of therapists' MCC performance, the mental health professions have faced challenges in exploring the validity of therapists' demonstrated MCC in therapy (Owen et al., 2011; Ridley & Shaw-Ridley, 2011). As such, researchers can use the CAMCB with other measures of therapeutic process (e.g., working alliance, client outcome, or secession impact) to explore evidences for the influence of therapists' demonstrated MCC on clients' experience in therapy.

Additionally, since the CAMCB items represent specific behaviors and are contextualized in therapeutic process, the CAMCB can be used in research to clarify relationship between MCC and other similar therapeutic factors (e.g., working alliance and general counseling competencies). For example, future researchers are encouraged to use the CAMCB with other measures of working alliances or general counseling competencies and to analyze relationship between the constructs via covariance structural analyses. Such research could contribute to the ongoing debate regarding the unique nature of MCC from other therapeutic factors (e.g., whether MCC is a unique construct or can be included under an overarching

construct of working alliance or general counseling competencies; Coleman, 1998; Drinane et al., 2016; Owen et al., 2013).

In practice, the CAMCB could be used by therapists to identify specific multicultural competent behaviors or skills that are important for working with their clients with diverse backgrounds. Given the dearth of literature regarding the range of evidenced-based multicultural competent behaviors in therapy (Huey et al., 2014), having clients to complete the CAMCB with other outcome measures could provide therapists insights or information regarding specific in-session behaviors that are effective for facilitating multicultural therapeutic engagement with clients as well as helping their clients achieve therapeutic goals in culturally appropriate ways.

In the training contexts, the CAMCB has the potential to be adapted into an observer-rated format as an educational tool for therapists-in-training. It has been documented that therapist preparation programs have primarily focused on trainees developing the awareness and knowledge aspects of MCC, rather than practicing skills or behaviors (Barden & Greene, 2015; McRae & Johnson, 1991; Priester et al., 2008). Therefore, educators or supervisors could benefit from adapting the CAMCB (e.g., instructions and subjects of items) into an observer-rated format and utilize it as an educational tool to provide specific behavioral feedback to therapists-in-training in a course. For example, in multicultural courses, counselor educators are encouraged to incorporate experiential trainings (e.g., mocking session and role-play) that engage students in practicing multicultural skills/behaviors and to use the observed format of the CAMCB to provide the students behavioral feedback on the area for improvement. Additionally, in practicum or internship courses, counselor educators or supervisors could use the observed-rated format to evaluate their trainees' demonstrated MCC and establish developmentally

appropriate goals for trainees in the area of MCC. Lastly, if is psychometrically sound, the observer-version of the CAMCB can be used, with other therapists' self-report MCC measures, by educators or researchers to study how trainees develop multicultural awareness, knowledge, or self-efficacy into MCC performance in practice.

### Chapter Five Summary

In Chapter Five, the researcher presented a review of findings for each research question and discussed the findings in relation to the previous studies. In this study, the researcher developed and established initial evidence of validity for the *Client Assessment of Multicultural Competent Behavior* (CAMCB), with a sample of clients. Despite an initial support for the validity of the CAMCB, future research is warranted to further improve and validate the CAMCB based on limitations identified in the present study. The findings from this study provide implications for future researchers, mental health professionals, and educators, as well as contribute to a growing body of literature on MCC.



APPENDIX A: UNIVERSITY OF CENTRAL FLORIDA INSTITUTIONAL REVIEW  
BOARD



University of Central Florida Institutional Review Board  
Office of Research & Commercialization  
12201 Research Parkway, Suite 501  
Orlando, Florida 32826-3246  
Telephone: 407-823-2901 or 407-882-2276  
[www.research.ucf.edu/compliance/irb.html](http://www.research.ucf.edu/compliance/irb.html)

### **Determination of Exempt Human Research**

From: **UCF Institutional Review Board #1**  
**FWA00000351, IRB00001138**

To: **Seungbin Oh and Co-PI: Margaret Shillingford-Butler**

Date: **November 17, 2017**

Dear Researcher:

On 11/17/2017, the IRB reviewed the following activity as human participant research that is exempt from regulation:

Type of Review: Exempt Determination  
Project Title: Client Assessment of Multicultural Competent Behavior  
(CAMCB): Development and Initial validation  
Investigator: Seungbin Oh  
IRB Number: SBE-17-13524  
Funding Agency:  
Grant Title:  
Research ID: N/A

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether these changes affect the exempt status of the human research, please contact the IRB. When you have completed your research, please submit a Study Closure request in iRIS so that IRB records will be accurate.

In the conduct of this research, you are responsible to follow the requirements of the [Investigator Manual](#).

This letter is signed by:

A handwritten signature in black ink, appearing to read "Gillian Morien".

Signature applied by Gillian Morien on 11/17/2017 12:53:53 PM EST

Designated Reviewer

## APPENDIX B: EXPLANATION OF RESEARCH



### **EXPLANATION OF RESEARCH**

**Title of Project:** Client Assessment of Multicultural Competent Behaviors: Development and Initial Validation

**Principal Investigator:** Seungbin Oh, MS

**Other Investigators:** Ann Shillingford, Ph.D.

**Faculty Supervisor:** Ann Shillingford, Ph.D.

You are being invited to take part in a research study. Whether you take part is up to you.

- The purpose of this research is develop and examine the Client Assessment of Multicultural Competent Behavior, an instrument designed to obtain clients' experience regarding their therapists' multicultural competent behaviors in therapy. The purpose of this study is to better understand the clients' experience with their counselors' cultural sensitivity in therapy and offer useful information that assists therapists in providing a more culturally effective counseling service to clients.
- As a participant, you will be requested to complete a demographic questionnaire, along with four additional instruments that focus on inquiring your experience with your therapists' level of cultural sensitivity and relationship in therapy. The total estimated time to complete the survey should be **25 – 30 mins** and you will complete the survey in a room in your sites where confidentiality is guaranteed.
- To take part in this research, you must be (a) 18 years of age or older; (b) currently receiving mental health services or have received mental health services within the past four weeks; (c) have completed at least three sessions with your therapist; and (d) utilizes any modality of mental health services (e.g., individual, couple and family, and group counseling).
- \$3 gift card will be provided to the participants upon the completion of the survey in person. The gift card will be either **Publix, Walmart, or e-Amazon gift card** of your choice. If the participants wanted to receive a gift card via email, they will be asked to provide their email address to the principal investigator and receive e-Amazon gift card.

Thank you for agreeing to participate in our research. For those who participate via Amazaon Mturk, please note that the data you provide may be collected and used by Amazon as per its privacy agreement. This agreement shall be interpreted according to United States law.

**Study contact for questions about the study or to report a problem:** If you have questions, concerns, or complaints: Seungbin Oh, Doctoral Student, Counselor Education Program, College of Education and Human Performance, (620) 757-5719 or Dr. Shillingford, Faculty Supervisor, College of Education and Human Performance at (407) 823-4753 or by email at [soh@knights.ucf.edu](mailto:soh@knights.ucf.edu).

## APPENDIX C: GENDERAL DEMOGRPHIC AND BACKGROUND QUESTIONNAIRE

## Demographic Questionnaire

ID#: \_\_\_\_\_

Date: \_\_\_\_\_

**Direction:** Please circle an answer or fill in the blank.

---

**1. Are you currently receiving mental health service?**

A. Yes, I am currently receiving services

C. No, I never received services

B. No, but I received services within the past four weeks

---

**2. What is your age?** \_\_\_\_\_

---

**3. What is your sex?**

A. Female

C. Intersex

B. Male

D. Other (please specify) \_\_\_\_\_

---

**4. What ethnicity or race do you most closely identify with?**

A. Black or African American

D. Hispanic, Latina/Latino, or Spanish origin

B. Asian or Asian American

E. Native American

C. White or Caucasian

F. Other (please specify) \_\_\_\_\_

---

**5. What is your gender?**

A. Female

D. Genderqueer/Gender non-Confirming

B. Male

E. Other (please specify) \_\_\_\_\_

C. Transgender

## Demographic Questionnaire

---

### 6. What is your sexual orientation?

A. Heterosexual or Straight

D. Bisexual

B. Gay

E. Other (please specify) \_\_\_\_\_

C. Lesbian

---

### 7. What is the highest level of education and degree you have completed?

A. High school graduate or GED

D. Master's Degree

B. Some university or college

E. Ph.D./Doctorate

C. Bachelor's Degree

F. Other (please specify) \_\_\_\_\_

---

### 8. What is your current employment status?

A. Employed full-time

D. Retired, working part-time

B. Employed part-time

E. Full-time student

C. Unemployed

F. Part-time student

D. Retired, not working

G. Other (please specify) \_\_\_\_\_

---

### 9. What is your total annual household income (before taxes)?

A. Less than \$10,000

E. \$40,000 to less than \$50,000

B. \$10,000 to less than \$20,000

F. \$50,000 to less than \$60,000

C. \$20,000 to less than \$30,000

G. \$60,000 to less than \$70,000

D. \$30,000 to less than \$40,000

H. More than \$70,000

---

## Demographic Questionnaire

**10. What faith tradition do you most closely affiliate with?**

- |                 |                                 |
|-----------------|---------------------------------|
| A. Buddhism     | F. Atheist                      |
| B. Christianity | G. Agnostic                     |
| C. Hinduism     | H. Spiritual but not religious  |
| D. Judaism      | I. Nothing in particular        |
| E. Islam        | J. Other (please specify) _____ |

---

**11. What is your primary language (i.e., your first language)?**

- |            |                                 |
|------------|---------------------------------|
| A. English | C. Chinese                      |
| B. Spanish | D. Other (please specify) _____ |

---

**12. What type of counseling services are you currently receiving or received within the past four weeks?**

- |                                  |                                 |
|----------------------------------|---------------------------------|
| A. Individual Counseling Service | D. Group Counseling             |
| B. Family Counseling Service     | E. Career Counseling            |
| C. Couple Counseling Service     | F. Other (please specify) _____ |

---

**13. How many counseling sessions have you had so far, including today?**

\_\_\_\_\_sessions

---

**14. Are there racial or ethnic differences between you and your therapist?**

- |        |       |
|--------|-------|
| A. Yes | B. No |
|--------|-------|



## Demographic Questionnaire

**15. Are there gender differences between you and your therapist?**

A. Yes

E. No

**16. If there are racial/ethnic or gender differences between you and your therapist, how important is it to discuss the differences for you in developing a safe working relationship with your therapist?**

Not at all Important		Somewhat Important		Very Important
1	2	3	4	5

**17. What is the aspect of your cultural background that is most salient to your identity?  
(If there is more than one, please choose all that apply)**

A. Race or Ethnicity

G. Language

B. Gender

H. Socioeconomic Status

C. Sexual Orientation

I. Disability

D. Religion or Spirituality

J. Nationality

E. Family Background or Value

K. Age

F. Political Orientation

L. Other (please specify) \_\_\_\_\_

**18. How important is this aspect(s) of your cultural background?**

*\*If you chose **more than one cultural background** on #17, please identify the aspect of your cultural background that is **most central or important to you**: \_\_\_\_\_*

Not at all Important		Somewhat Important		Very Important
1	2	3	4	5

## Demographic Questionnaire

**19. How important is it for you that your therapist discusses this aspect(s) of your cultural background in therapy?**

Not at all Important		Somewhat Important		Very Important
1	2	3	4	5

---

**20. What aspect(s) of your cultural background do you think relate(s) to the issue that brought you to counseling? (Please select one)**

- |                               |                                 |
|-------------------------------|---------------------------------|
| A. Race or Ethnicity          | G. Language                     |
| B. Gender                     | H. Socioeconomic Status         |
| C. Sexual Orientation         | I. Disability                   |
| D. Religion or Spirituality   | J. Nationality                  |
| E. Family Background or Value | K. Age                          |
| F. Political Orientation      | L. Other (please specify) _____ |
|                               | M. Not relate to my concern     |

---

**21. How satisfied are you with the counseling services you received from the therapist you filled out this survey on?**

Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied
1	2	3	4	5

**Thank You For Completing The Survey.**

APPENDIX D: CLIENT ASSESSMENT OF MULTICULTURAL COMPETENT BEHAVIOR  
(CAMCB)

<p style="text-align: center;"><b>CAMCB</b>  <i>Client Assessment of Multicultural Competent Behavior</i>  © 2017 Oh, S.</p>					
<p>The purpose of this questionnaire is to understand your perception of your therapist's level of culturally sensitive behavior during your work together in therapy.</p>					
<p><b>Instruction:</b> Using the 5-point Likert scale provided below, please rate the degree to which you agree or disagree with the following statements about your therapist.</p>	<b>Strongly Disagree</b>	<b>Mildly Disagree</b>	<b>Neither Agree or Disagree</b>	<b>Mildly Agree</b>	<b>Strongly Agree</b>
	▼	▼	▼	▼	▼
<b>START HERE</b>					
1. My therapist discussed gender differences between us during therapy.	1	2	3	4	5
2. My therapist discussed with me the meaning of my issues in relation to the cultural norm of my racial group.	1	2	3	4	5
3. My therapist discussed how my racial/ethnic background influence the therapeutic relationship.	1	2	3	4	5
4. My therapist asked me if I had experienced unfair treatment because of my gender.	1	2	3	4	5

<b>Instruction:</b> Using the 5-point Likert scale provided below, please rate the degree to which you agree or disagree with the following statements about your therapist.	Strongly Disagree	Mildly Disagree	Neither Agree or Disagree	Mildly Agree	Strongly Agree
	▼	▼	▼	▼	▼
5. My therapist provided coping strategies that align with my spirituality and/or religious beliefs.	1	2	3	4	5
6. My therapist brought up racial differences between us during therapy.	1	2	3	4	5
7. My therapist asked me if there were aspects of my cultural background that made a difference in my presenting issues.	1	2	3	4	5
8. My therapist helped me consider my family culture into my therapeutic goals.	1	2	3	4	5
9. My therapist has asked me if there were power differences between us that made me feel uncomfortable.	1	2	3	4	5
10. My therapist has asked me if there were stigma against the use of mental health service within my racial group that prevented me from getting the help I need.	1	2	3	4	5
11. My therapist has asked me what role my racial/ethnic background plays in my life.	1	2	3	4	5
12. My therapist provided feedback in my preferred style (e.g., positive encouragement or objective evaluation) on my performance in achieving the therapeutic goals.	1	2	3	4	5
13. My therapist asked me how my family may perceive my presenting issues.	1	2	3	4	5

<b>Instruction:</b> Using the 5-point Likert scale provided below, please rate the degree to which you agree or disagree with the following statements about your therapist.	Strongly Disagree	Mildly Disagree	Neither Agree or Disagree	Mildly Agree	Strongly Agree
	▼	▼	▼	▼	▼
14. My therapist has asked me if I had ever experienced discrimination because of my minority status that might influence the therapeutic relationship.	1	2	3	4	5
15. My therapist helped me navigate systems (e.g., school, neighborhood, community) that impact my well-being.	1	2	3	4	5
16. My therapist asked me to teach him/her about my cultural backgrounds that are part of my identity.	1	2	3	4	5
17. My therapist discussed with me how my economic background may contribute to my presenting issues.	1	2	3	4	5
18. My therapist has asked me about the influence of my family's values in the development of the therapeutic relationship.	1	2	3	4	5
19. My therapist used my preferred processing style (i.e., talking through my problems or drawing or writing my thoughts down) to help me express my emotions.	1	2	3	4	5

## APPENDIX E: THE CROSS-CULTURAL COUNSELING INVENTORY-REVISED-7

## CROSS CULTURAL COUNSELING INVENTORY—REVISED - 7

The purpose of this inventory is to measure your perceptions about the Cross-Cultural Counseling Competence of the therapist you have worked with. We are interested in your opinion, so please make a judgment on the basis of what the statements in this inventory mean to you. In recording your response, please keep the following points in mind:

- a. Please circle the appropriate rating under each statement.
- b. Please circle only one response for each statement.
- c. Be sure you check every scale even though you may feel that you have insufficient data on which to make a judgment—please do not omit any.

---

Rating Scale:

1 = strongly disagree

4 = slightly agree

2 = disagree

5 = agree

3 = slightly disagree

6 = strongly agree

---

1. My counselor values and respects cultural differences

1      2      3      4      5      6

2. My counselor is aware of how his or her own values might affect me.

1      2      3      4      5      6

3. My counselor is comfortable with differences between us.

1      2      3      4      5      6

4. My counselor demonstrates knowledge about my culture.

1      2      3      4      5      6

5. My counselor attempts to perceive the presenting problem within the context of my cultural experience, values, and/or lifestyle.

1      2      3      4      5      6

6. My counselor is at ease talking with me.

1      2      3      4      5      6

7. My counselor acknowledges and is comfortable with cultural differences.

1      2      3      4      5      6

## APPENDIX F: THE WORKING ALLIANCE INVENTORY SHORT FORM REVISED



### Working Alliance Inventory – Short Revised (WAI–SR)

**Instructions:** Below is a list of statements and questions about experiences people might have with their therapy or therapist. Some items refer directly to your therapist with an underlined space -- as you read the sentences, mentally insert the name of your therapist in place of \_\_\_\_\_ in the text. Think about your experience in therapy, and decide which category best describes your own experience.

**Please take your time to consider each question carefully.**

1. As a result of these sessions I am clearer as to how I might be able to change.

①	②	③	④	⑤
Seldom	Sometimes	Fairly Often	Very Often	Always

2. What I am doing in therapy gives me new ways of looking at my problem.

⑤	④	③	②	①
Always	Very Often	Fairly Often	Sometimes	Seldom

3. I believe \_\_\_\_\_ likes me.

①	②	③	④	⑤
Seldom	Sometimes	Fairly Often	Very Often	Always

4. \_\_\_\_\_ and I collaborate on setting goals for my therapy.

①	②	③	④	⑤
Seldom	Sometimes	Fairly Often	Very Often	Always

5. \_\_\_\_\_ and I respect each other.

⑤	④	③	②	①
Always	Very Often	Fairly Often	Sometimes	Seldom

6. \_\_\_\_\_ and I are working towards mutually agreed upon goals.

⑤	④	③	②	①
Always	Very Often	Fairly Often	Sometimes	Seldom

7. I feel that \_\_\_\_\_ appreciates me.

①	②	③	④	⑤
Seldom	Sometimes	Fairly Often	Very Often	Always

8. \_\_\_\_\_ and I agree on what is important for me to work on.

⑤	④	③	②	①
Always	Very Often	Fairly Often	Sometimes	Seldom

9. I feel \_\_\_\_\_ cares about me even when I do things that he/she does not approve of.

①	②	③	④	⑤
Seldom	Sometimes	Fairly Often	Very Often	Always

10. I feel that the things I do in therapy will help me to accomplish the changes that I want.

⑤	④	③	②	①
Always	Very Often	Fairly Often	Sometimes	Seldom

11. \_\_\_\_\_ and I have established a good understanding of the kind of changes that would be good for me.

⑤	④	③	②	①
Always	Very Often	Fairly Often	Sometimes	Seldom

12. I believe the way we are working with my problem is correct.

①	②	③	④	⑤
Seldom	Sometimes	Fairly Often	Very Often	Always

**Thank You Very Much for Taking the Survey**

Note: Items copyright © Adam Horvath.

## APPENDIX G: MARLOWE-CROWNE SOCIAL DESIRABILITY SCALE

## Marlowe-Crowne Social Desirability Scale - X1 (MCSDS-X1)

Strahan & Gerbasi, 1972

**Direction:** Please answer true or false

**True**

**False**

1. I'm always willing to admit it when I make a mistake

T

F

2. I always try to practice what I preach

T

F

3. I never resent being asked to return a favor

T

F

4. I have never been irked when people expressed ideas very different from my own

T

F

5. I have never deliberately said something that hurt someone's feelings

T

F

6. I like to gossip at times

T

F

7. There have been occasions when I took advantages of someone

T

F

8. I sometimes try to get even rather than forgive and forget

T

F

9. At times I have really insisted on having things on my own way

T

F

10. There have been occasions when I felt like smashing things

T

F

**Thank You for Completing the Survey**

APPENDIX H: PERMISSION FOR USE OF THE WORKING ALLIANCE INVENTORY  
SHORT FORM REVISED

December 12, 2017

Seungbin Oh, MS, LPC, NCC.  
Doctoral Candidate in Counselor Education  
University of Central Florida  
Child, Family & Community Science

Dear Mr. Oh:

You have our permission to use the Working Alliance Inventory (WAI) for your dissertation project focused on the therapeutic relationship, specifically related to the multicultural competency of therapists. We require, however, you publish the following note at the end of the measure:

**Reprinted by permission of the Society for Psychotherapy Research © 2016.**

We wish you the best in your work and thank you for your interest in furthering psychotherapy research. Please consider joining the Society for Psychotherapy Research, an international, multidisciplinary scientific association devoted to research on psychotherapy. SPR also plays an important role in providing opportunities for interaction and dialogue between researchers and clinicians interested in psychotherapy.

Sincerely,



Marna S. Barrett, Ph.D.  
Executive Officer  
*sprexecutive@gmail.com*

APPENDIX I: PERMISSION FOR USE OF THE CROSS-CULTURAL COUNSELING  
INVETORY-REVISED-7



Teresa D. LaFromboise PhD <lafrom@stanford.edu>

Mon 10/30/2017, 4:01 PM

Seungbin Oh; Teresa D. LaFromboise PhD <lafrom@stanford.edu> ▾



Reply all | ▾

Inbox

You replied on 10/30/2017 9:50 PM.

Dear Seungbin Oh,

Yes, you have my permission to use the CCCI-R for your dissertation research.

Best,  
Teresa

Teresa D. LaFromboise, PhD  
Professor  
Graduate School of Education  
Stanford University  
Stanford, CA 94305-3096  
650 723-1202  
650 725-7412 fax



## APPENDIX J: COVER SHEET OF THE CAMCB

### **Introduction for the CAMCB**

- The purpose of this questionnaire is to understand your perception of your therapist's level of culturally sensitive behavior during your work together in therapy.
- Our primary goal is to understand your therapist's culturally sensitive behaviors were helpful to you.
- Culturally sensitive behavior refers to therapists' actions in therapy, addressing various cultural issues that may relate to your presenting concerns, are important to your identity, and/or are critical to developing a safe working relationship with your therapist.
- All listed statements on this questionnaire may NOT be relevant for your situations, your presenting concerns, or your relationship with your therapist(s); however, please rate the response that best describes your experience with your therapist(s).
- This questionnaire includes 30 items, and it requires approximately 5 to 7 minutes to complete.

**Please turn to the next page to begin the questionnaire.**

## APPENDIX K: INSTRUCTIONS FOR EXPERT REVIEWERS

### Expert Reviewer Directions:

---

1. Please briefly review the Blueprint Document that is attached. Information on the construct of multicultural competent behaviors and other areas comprising such behaviors as supported in the literature is provided.
2. Please open the attached word document and rate the relevance of each individual item (**High, Moderate, or Low**) to the construct of multicultural competent behaviors. If an item is identified as having low relevance, **please note reasoning and comment on any other individual items as you see fit.**
3. Please review the relevance of each subscale to the theoretical domain. Please feel free to **use track change or use note** if you found subscales not relevant to the theoretical domain or had suggestion for where the irrelevant subscales might fit in.
4. Please evaluate the items for clarity, wording, and readability. Please feel free to **use track change or use note** if you had **suggestions for me to help with the wording, clarification, and readability of the items.**

## APPENDIX L: OPEN-ENDED FEEDBACK QUESTIONNAIRE FOR PILOT TEST

## Open-ended Feedback Questionnaire

ID #: \_\_\_\_\_

Date: \_\_\_\_\_

**Direction:** Following questions are formulated to better understand your expectation from culturally sensitive counselors. Please respond to each question, reflecting back on your experience with the counselor in the current counseling session.

---

1. What kind of **cultural backgrounds** did you wish your counselor would have discussed more with you? Why?

**Your Response:**

---

2. Do you feel that your counselor was culturally sensitive to you in the development of a strong counseling relationship with you?

1) **If yes**, how did your counselor behaviorally demonstrate the cultural sensitivity to you in the counseling relationship? (e.g., asked a question about your cultural background)

2) **If not**, what did you think your counselor could have done differently to demonstrate cultural sensitivity to you in the counseling relationship?

**Your Response:**

---

3. What kind of skills, knowledge, or behaviors do you want to see in a culturally sensitive counselor?

**Your Response:**

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