

DEVELOPMENT AND INITIAL VALIDATION OF THE MULTICULTURAL
COMPETENCE CHANGE SCALE FOR PSYCHOLOGY TRAINEES

by

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Title: DEVELOPMENT AND INITIAL VALIDATION OF THE MULTICULTURAL
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The development, maintenance, and integration of multicultural competence into all aspects of psychologists' work is critical to ethical practice in an increasingly diverse society. Measurement of multicultural competency is critical to investigating the development of multicultural competence and the effectiveness of multicultural competency training. However, existing measures of multicultural competence are limited in scope and are not congruent with the conceptualization of multicultural competence as a lifelong process.

The purpose of this dissertation study was to address the limitations of existing instrumentation through development and initial validation of the Multicultural Competence Change Scale (MCCS). The MCCS assesses the development of multicultural competence from a "stages of change" perspective. The stages of change model provides a framework for assessing subtle cognitive, emotional, and behavioral

modifications indicative of change.

Participants included 221 counseling, clinical, and school psychology graduate students. An exploratory factor analysis and the generalized graded unfolding model were used to establish the M CCS factor structure. The M CCS was found to have a five factor structure, with each factor representing one of the stages of change. Internal consistency reliabilities for the M CCS subscales ranged from .64 - .74. Estimates of validity were obtained by examining relationships between the M CCS and other measures, such as the Multicultural Awareness, Knowledge, and Skills Survey, Counselor Edition, Revised (MAKSS-CE-R). The M CCS Precontemplation, Contemplation, and Preparation subscales were significantly and negatively correlated with the MAKSS-CE-R, and the Action and Maintenance subscales were significantly and positively correlated with the MAKSS-CE-R. Examination of the sensitivity of the M CCS to respondent variability revealed that psychology trainees' who participated in a greater number of diversity-related trainings, who currently participate in diversity-related research, and who are members of underrepresented groups based on ethnicity, sexual orientation, and ability were more likely to be in either the action or maintenance stage of change. The M CCS provides a novel approach to multicultural competence assessment; however, it is still in the initial stages of development and additional items are needed to strengthen the factor structure and psychometric properties of the instrument.

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CHAPTER I

INTRODUCTION

Our increasingly diverse U.S. society serves as an impetus for improving psychological services for culturally diverse populations (American Psychological Association [APA], 2003). It has become essential for psychologists to develop, maintain, and integrate cultural competence into all aspects of their work. Through conferences, literature, and training, psychologists have taken steps to promote multicultural competence in the delivery of psychological services. Inclusion of multicultural standards in the American Psychological Association's (APA's) *Accreditation Handbook* (APA, 1986), *Guidelines and Principles for Accreditation of Programs in Professional Psychology* (APA, 1996, 2008), and the development of the *Guidelines on Multicultural Education, Training, Research, Practice, and Organizational Change for Psychologists* (APA, 2003) is further evidence that development of multicultural competence is an ethical responsibility within applied psychology. Ethical principles requiring psychologists to “do no harm” (Principle A; p. 199), serve the interests of their clients (Principle B), ensure that potential biases, limitations of expertise, and boundaries of competence “do not lead to or condone unjust practices” (Principle D; p. 200), and be “aware of and respect cultural, individual, and role differences” (Principle E; p. 200; Knapp & VandeCreek, 2003), constitute the foundation

on which the APA multicultural guidelines were developed (APA, 2003). The extent to which cultural differences influence assessment validity, therapist-client rapport and alliance, and treatment effectiveness makes it necessary for psychologists to develop multicultural competence (Arredondo & Toporek, 2004; Sue, 1998).

Multicultural Training in Applied Psychology Programs

Psychology training programs play a critical role in fostering the development of multiculturally competent professionals (APA, 1986; Fouad & Arredondo, 2007). Since 1986, incorporation of diversity training has been required of accredited psychology doctoral programs (APA, 2003); this mandate is reflected in the increased number of graduate programs and internship settings that emphasize cultural diversity in their curriculum (Lee et al., 1999; Rogers, Hoffman, & Wade, 1998). However, there are challenges in translating “rhetoric into action” (p. 401; Speight, Thomas, Kennel, & Anderson, 1995) and multicultural training has not been free of criticisms. Scholars have expressed dissatisfaction with the quality, delivery, and integration of multicultural content throughout the training curriculum (e.g., Arredondo, 1999; Hays, 2008; Sue & Sue, 2003; Sue et al., 1998; Vontress & Jackson, 2004). Trainer biases make the delivery of multicultural content susceptible to reinforcing stereotypes and broad generalizations (Sue & Sue, 2003). Lack of infusion of multicultural content and inadequate coverage of multicultural concepts led Vontress & Jackson (2004) to question whether students are merely gaining a false sense of competence.

Available research suggests that training programs have not been entirely successful in training psychologists to competently work with diverse populations

(Allison, Echemendia, Crawford, & Robinson, 1996; Hansen et al., 2006). An exploratory study by Steward, Morales, Bartell, Miller, and Weeks (1998) found that taking a multicultural course did not always increase psychology trainees' cultural sensitivity. Out of 48 counseling psychology students who had taken and passed a multicultural counseling course, one-third described their experience with multicultural literature as "meaningless and unnecessary" (Discussion section, para. 1). Steward et al. (1998) note that as long as students complete their required assignments, they can receive passing grades in a multicultural course, while continuing to engage in insensitive and disrespectful expressions towards others. In a study of 266 clinical and counseling psychologists, Allison and colleagues (1996) found that therapists did not perceive themselves to be competent across a wide range of cultural groups. Some therapists even reported working with client groups with whom they did not feel competent to provide services.

Challenges faced by training programs may include overcoming faculty (D'Andrea & Daniels, 1991; Jackson, 1999) and student (Heppner & O'Brien, 1994; Jackson, 1999; Ponterotto, 1988) resistance to multicultural material, difficulty handling the challenging conversations that arise from culture-centered training (Fouad, 2006), and relying on a one-size-fits all method of training (Hansen et al., 2006). Barriers that inhibit the full infusion of multiculturalism into training curriculum may limit psychology programs effectiveness in training multiculturally competent professionals (Fouad, 2006).

Assessment of Multicultural Competence

Historically, the trend has been to *discuss* instead of *investigate* multicultural competence (Worthington, Soth-McNett, & Moreno, 2007). This trend has shifted over the past several years as scale-specific multicultural competence research has increased (Dunn, Smith, & Montoya, 2006; Worthington et al., 2007). Multicultural competency instrumentation is critical to investigating the development of multicultural competence and the effectiveness of multicultural training (Allison et al., 1996; Dunn et al., 2006; Hays, 2008). Regular assessment of psychology trainees can benefit trainees (Hays, 2008; Heppner & O'Brien, 1994) and inform training efforts and program development (Hays, 2008; Smith, Constantine, Dunn, Dinehart, & Montoya, 2006).

Recent investigations, however, have noted several limitations of existing multicultural competency instrumentation (e.g., Constantine, Gloria, & Ladany, 2002; Dunn et al., 2006; Hays, 2008; Kocarek, Talbot, Batka, & Anderson, 2001). A primary concern raised by researchers pertains to how the construct of multicultural competence has been developed and defined. Researchers have questioned whether instruments are actually measuring general counseling competence, multicultural self-efficacy, or competence working with one particular culture as opposed to trainee's overall multicultural competence (Constantine et al., 2002; Constantine & Ladany, 2000; Dunn et al., 2006; Kitaoka, 2005). The conceptualization of multicultural competence in existing instrumentation is limited and there is a need to expand the scope beyond racial/ethnic minorities to address other disenfranchised groups (Hays, 2008; Kitaoka, 2005) and to emphasize multicultural competence as a lifelong process (Hansen et al.,

2006). Additionally, multicultural competence assessment fails to attend to psychologists and other mental health practitioners' awareness of privilege and oppression (Arredondo, 1999; Hays, 2008). Refining the construct of multicultural competence requires refining the instruments designed to measure the construct (Dunn et al., 2006; Kitaoka, 2005). As Kocarek and colleagues (2001) note "effective modifications in multicultural training and education can only be made when there is a more definitive assessment of its direct impact on multicultural competency" (p. 495).

The conceptualization of multicultural competence as a developmental, aspirational, lifelong process (Sue & Sue, 2003), suggests that a definitive assessment of multicultural competence should be sensitive to changes in level of competence. Studies finding defensiveness and limited behavioral change amongst students enrolled in multicultural courses (e.g., Fouad & Arredondo, 2007; Ponterotto, 1988; Steward et al., 1998) further suggest that students may vary in their readiness for change. An instrument that assesses where psychology trainees are in their multicultural competence change readiness could inform why multicultural competence training has the potential to help some trainees further develop their level of competence while the same training may illicit defensiveness in other trainees. Readiness for change is critical to establishing motivation for change (Miller & Rollnick, 2002). Thus, examining the direct effect of multicultural training on multicultural competence necessitates an understanding of trainees' readiness for change.

The Stages of Change Model

Measuring the development of multicultural competence from a stages of change perspective (Prochaska, DiClemente, & Norcross, 1992) may provide useful information pertaining to the direct impact of multicultural training. Examining change can provide information about whether a psychology trainee wants to change, what may be hindering change, and if a multicultural training is facilitating change. The stages of change model has proved successful in facilitating change by matching treatment interventions with clients' stage of change (Prochaska et al., 1992; Prochaska & Norcross, 2001). A person's stage of change can provide information regarding what type of intervention or, in the case of this research, training experience may be most effective (Prochaska et al., 1992). Matching training interventions with trainees' stage of change could avoid the pitfall of treating all psychology trainees as if they are at the same level of competence. There is potential to facilitate multicultural competency development while also decreasing the probability of trainee defensiveness and/or resistance to multicultural material.

The stages of change model characterizes readiness for change within the following five stages: precontemplation, contemplation, preparation, action, and maintenance. In the precontemplation stage, there is no intention to change. Awareness that a problem exists, without a commitment to taking action, marks the contemplation stage. Preparation is a stage in which there is intention to change, but no action. Deliberate modification of behaviors, experiences, and/or the environment, in an attempt to change, occurs in the action stage. The final stage is maintenance, a stage in which

change and gains are continued (Prochaska et al., 1992). The stages of change model provides a framework for identifying when and how people change. It has been previously used to inform treatment interventions addressing various areas of desired change including smoking cessation (Prochaska et al., 1992), psychotherapy (Prochaska & Norcross, 2001), and weight control (Prochaska et al., 1992).

Summary

In summary, psychology training programs are allocated the great responsibility of training multiculturally competent professionals. In spite of efforts to increase multicultural training in applied psychology programs, studies suggest that practitioners are not getting the multicultural training they need to competently work with a diverse population (see Allison et al., 1996; Hansen et al, 2006). Existing multicultural competency instrumentation has been used to address questions regarding the effectiveness of multicultural training. Unfortunately, challenges in defining the construct of multicultural competence has resulted in assessments being limited in scope and susceptible to measuring generalized counseling competencies and multicultural self-efficacy instead of the intended construct. Flaws in existing multicultural competency instrumentation limit its ability to evaluate and inform current training efforts. The stages of change model provides the potential to evaluate multicultural competency development in a manner congruent with its conceptualization as a lifelong process. In addition, the stages of change model allows for examination of change in terms of psychology trainees readiness for change. Assessing psychology trainees' multicultural competence stage of change can inform whether or not a training intervention has

facilitated change, and can help trainers construct interventions that attend to trainees' readiness for change.

Purpose of the Study

The purpose of this study was to construct and provide initial validity data for a multicultural competence measure that incorporates Prochaska and DiClemente's (1992) stages of change model. The proposed measure is intended for use with students in applied psychology training programs. This measure improves upon existing multicultural competence instrumentation in several ways: (1) multicultural competence is conceptualized as a lifelong process, (2) the focus is expanded to include a range of cultural identities, (3) psychology trainees awareness of privilege and oppression in regards to various cultural identities is assessed, and finally, (4) the proposed measure assesses psychology trainees readiness for changing their level of multicultural competence. Consistent assessment of psychology trainees' multicultural competency development and readiness for change can inform the effectiveness of training interventions and provide information about how trainees develop multicultural competence (Fouad & Arredondo, 2007; Hays, 2008; Heppner & O'Brien, 1994).

Literature Review Overview

In the next chapter, I review the literature related to multicultural competence and multicultural competency assessment. I then present the stages of change model, a model capable of representing the changes a psychology trainee might experience when developing multicultural competence. Provided is a description of the stages of change model with an illustration of what the development of multicultural competence and

readiness for change might look like in terms of this model. The benefits of combining the stages of change model with multicultural competency development literature are discussed, followed by a brief description of the purpose of this study. The chapter concludes with the research questions guiding the development and validation of the proposed measure.

CHAPTER II

LITERATURE REVIEW

Multicultural Counseling Competence

A continuous challenge for researchers, practitioners, and training professionals has been defining multicultural competence (Sue, 2003). The first attempts to define multicultural competence came from Sue and colleagues' (1982) position paper presented to the American Psychological Association. Sue and colleagues (1982) challenged the notion of a universal form of practice and advocated for developing a framework for multicultural counseling competencies. The authors described multicultural counseling competence in terms of developing culture-specific awareness, knowledge, and skills. Multicultural awareness is described as awareness of self as a cultural being; self-awareness of biases, values, assumptions, and personal limitations; and comfort with the differences that exist between self and others. Multicultural knowledge includes having information about particular groups a professional is working with, understanding the sociocultural influences that impinge on clients' lives, and understanding clients' worldviews. Multicultural skills refer to the ability to develop culturally appropriate interventions, techniques, and strategies when working with culturally different clients.

While Sue and colleagues' (1982) position paper provide an initial definition and framework for multicultural counseling competence, translating multicultural competence into a measurable construct with practical implications remains difficult (Speight et al.,

1995; Sue et al., 1998). The definition of multicultural competence has continued to evolve as researchers use new language to operationalize multicultural competence and explain its process of development (Sue et al., 1998). Multicultural competence does not have an endpoint, but is an “active, developmental, and ongoing process...it is aspirational rather than achieved” (Sue & Sue, 2003, p. 18). Multicultural competence is a way of conceptualizing the therapeutic encounter and attending to the interaction of client, therapist, and context. Other elements of multicultural competence highlighted by researchers include an awareness of issues of power, privilege, and oppression (Arredondo, 1999; Arredondo et al., 1996) and engagement in social justice efforts (Sue et al., 1998; Vera & Speight, 2003). Multicultural competence involves being a change agent, challenging the status quo, and working towards social justice and equality (Vera & Speight, 2003). The ever-expanding definition of multicultural competence reflects the attempts by researchers, educators, and practitioners to understand its practical implications. However, the developmental, aspirational, and somewhat vague nature of multicultural competence has caused researchers to challenge the efficacy of multicultural competence training and the ability to measure a construct that is so difficult to define (Sue, 2003).

Multicultural Competence Training

Historically, psychologists have practiced from a monocultural perspective, taking a “one-size-fits-all” approach to research, clinical work, and training. Psychologist’s inability to adequately support clients from diverse backgrounds has led to client distrust and resistance to engage in psychological services (Katz, 1985; Prilleltensky, 1989; Sue

& Sue, 2003). Over the years, clients from culturally underrepresented backgrounds have been subject to being stereotyped, stigmatized, and pathologized for racial/cultural differences. Oppression of ethnically and culturally diverse clients has further been reinforced through victim blaming, the use of culturally biased assessment and treatment modalities, and therapist cultural insensitivity (Comas-Diaz, 2006; Fouad & Arredondo, 2007; Sue et al., 1998, Sue & Sue, 2003).

The more psychologists and other mental health practitioners are engaged in multicultural training the more apt they are to conceptualize etiology and treatment issues from a multicultural standpoint (Constantine, 2001). Additionally, culturally competent psychologists and other mental health practitioners are able to offer more choices and options for interventions to their clients, providing clients with the opportunity to determine the extent they would like to address cultural issues in therapy (Pope-Davis et al., 2002). In a qualitative examination by Pope-Davis and colleagues (2002) of clients' perceptions of multicultural counseling competence, findings supported that many clients preferred, and some demanded, multicultural counseling competence within their therapy sessions. Clients who perceived their counselors as culturally incompetent voiced feelings of frustration associated with their counselors' inability to understand their concerns. As a result, many clients attempted to educate their counselors on cultural issues, confront their counselors, or help their counselors understand cultural concerns by reframing their presenting issues. One client ceased bringing up her cultural concerns after several unsuccessful attempts to broach the subject with her counselor (Pope-Davis et al., 2002).

Psychologists and other mental health practitioners' multicultural counseling competence contribute significant variance to ethnic minority clients counseling satisfaction. In addition, multicultural counseling competence has been shown to partially mediate the relationship between general counseling competence and client satisfaction with counseling (Constantine, 2002). Studies investigating psychologists and other mental health practitioners' multicultural counseling competence and clients' satisfaction with counseling suggest that multicultural counseling competence is an essential component in the mental health practitioner-client working relationship (e.g., Constantine, 2002; Fuertes et al., 2006; Pope-Davis et al., 2002).

From a training stance, trainees from ethnically and culturally diverse backgrounds are better supported in a training program that values multicultural competence. Insufficient support for ethnic minority students in graduate education may be one of the reasons why there has been little growth between 1999 - 2003 in the number of African American, Hispanic/Latino(a), and Native American students entering into doctoral psychology programs (Maton, Kohout, Wicherski, Leary, & Vinokurov, 2006; Rogers & Monlina, 2006) and why ethnic/racial minority students continue to graduate at a lower rate than their White colleagues (APA, 2003; Maton et al., 2006; Rogers & Molina, 2006; Vasquez et al., 2006). Underrepresented within the educational environment, ethnically and culturally diverse trainees are often caught in the difficult position of having to choose between assimilating to succeed or being at-risk of experiencing loneliness, alienation, and a lack of support, because their cultural

background does not “fit in” with the White, male, middle class culture of higher education (Gloria & Pope-Davis, 1997).

Among the challenges experienced by ethnic minority students is the continuous questioning of their competence by others who dismiss their abilities with assumptions that their admittance into a graduate program is solely due to affirmative action (Ali et al., 2005; Vasquez et al., 2006). The low representation of ethnic minority students in graduate education often leaves them in a position in which faculty and students automatically deem them the “expert” on all people of color and the spokesperson for all students of color (Vasquez et al., 2006). Ethnic minority psychology trainees are also faced with the extra challenge of learning how to manage racism from clients, supervisors, and supervisees with no preparation from their program on how to deal with racism in clinical encounters (Ali et al., 2005). Psychology training programs that integrate diversity throughout the program curriculum and faculty who address issues of racism, advocate for students, and serve as mentors, help to provide support for ethnically and culturally diverse psychology trainees (Ali et al., 2005; Rogers & Molina, 2006; Vasquez & Jones, 2006; Vasquez et al., 2006).

Development of Multicultural Competence

In spite of best efforts to embrace a multicultural agenda and to train culturally competent professionals, research suggests that there continues to be a gap between knowing about multicultural competence and actually acting and intervening in a multiculturally competent manner (Hansen et al., 2006). For example, Bernal & Castro (1994) composed a 10-year follow-up study to an earlier investigation where data was

collected from 76 clinical psychology programs in 1979-1980 on the status of training future professionals to work with ethnically diverse populations. The researchers found that even though incorporation of multicultural training had improved in clinical psychology training programs over the decade, training programs still exhibited limitations in their ability to foster cultural proficiency among trainees. A later study by Hansen and colleagues (2006) supports that practicing psychologists continue to struggle in their efforts to intervene in a culturally appropriate manner. Hansen and colleagues (2006) found that even though professional psychologists could identify important multicultural interventions, few actually engaged in such activities. It appears that, despite professional psychologists growing knowledge and awareness of other cultures, there remains a disparity in their ability to competently intervene with non-majority populations. This gap between knowing and doing is particularly worrisome when considering the number of roles in which a psychologist can operate, including those of therapist, educator, researcher, and advocate.

Researchers have taken steps to define, assess, and create trainings to build multicultural competence; however, based on Hansen and colleagues' (2006) research, further understanding of psychology trainees' process of developing multicultural competence is warranted. The multicultural standards used to guide research, education, and clinical practices (APA, 2003) provide a definition for what it means to be a culturally competent professional, but do not illustrate the process to becoming multiculturally competent. Previous developmental models have examined racial identity development (see Atkinson, Morten, & Sue, 1998; Helms, 1995; Sue et al., 1998), sexual

orientation identity development (see Cass, 1979), White racial identity development in the context of cross-cultural training (see Sabnani, Ponterotto, & Borodovsky, 1991), and racial consciousness development in White counselor trainees (see Ponterotto, 1988). The development of racial/ethnic identity models and racial consciousness models are the closest attempt to understanding the development of multicultural competence.

Identity development models have been used in efforts to diminish biases, blind spots, and other attributes that impede multicultural competence development (Sue et al., 1998). Additionally, developmental models have been useful in matching psychology trainees' stage of development with appropriate training tasks. By identifying psychology trainee characteristics associated with each stage, researchers have attempted to seek out training objectives and techniques that would be most appropriate for fostering psychology trainees' ethnic identity development. Awareness of ethnic identity as a developmental process and recognition that psychology trainees vary in their stage of multicultural training readiness helped to inform the creation of stage-specific training exercises (Bennett, 1986; Carney & Kahn, 1984; Sabnani et al., 1991; Sue et al., 1998). Thus far, no model has been constructed that illustrates the process of developing multicultural competence.

The continuous, developmental process of becoming a multiculturally competent psychologist (Fouad & Arredondo, 2007; Sue & Sue, 2003) suggests that a stage model would be most appropriate for evaluating psychology trainees' multicultural competency development. Currently, a countless number of textbooks and journal articles are available to provide recommendations for training multiculturally competent

psychologists and other mental health practitioners. Likewise, there is a multitude of published and non-published instruments available to researchers and trainers for use in evaluating the effectiveness of multicultural training methods. However, the available literature is limited in its ability to detect subtle changes in psychology trainees' readiness for multicultural competency change and development. To accurately evaluate the effectiveness of training methods and materials, it is important to assess psychology trainees' stage of competence and readiness for change before and after exposure to multicultural material and interventions. Multicultural training can be effectively modified only if there is a definitive assessment of its influence on psychology trainees' multicultural competency development (Kocarek et al., 2001). A stage model of psychology trainees multicultural competence development would attend to subtle changes in trainees' development of multicultural competence, pre- and post-training readiness for change, and help to inform modifications to training interventions based on trainee characteristics within each of the various stages of development.

Summary

In summary, multicultural counseling competence refers to the awareness, knowledge, and skills needed to work competently and effectively with persons from various cultural backgrounds and identities (Sue & Sue, 2003). An important aspect of training and a significant contribution to the therapeutic relationship (Constantine, 2002; D'Andrea, 2005), multicultural competence has become a requirement for all psychologists and mental health practitioners. However, practicing psychologists continue to struggle when it comes to effectively working with diverse populations;

raising the question of whether training programs are facilitating multicultural competency development.

While the mass of multicultural competency literature available provides recommendations for training, it is limited by its failure to attend to subtle changes in psychology trainees' readiness for multicultural competency change and development. Effective evaluation of training methods is not feasible without a clear assessment of psychology trainees' pre- and post-training multicultural competency development and readiness for change. Presently, there is no established model illustrating psychology trainees' process of developing multicultural competence. A developmental stage model of multicultural competence could be useful in identifying where psychology trainees are in their multicultural competency development and readiness for change. In addition, a stage model of multicultural competency development provides the opportunity to match psychology trainees' stage of development with appropriate training interventions.

Assessment of Multicultural Competence

Historically, multicultural competency literature has tended to be conceptual versus empirical (Worthington et al., 2007). As a result, researchers are calling out for more empirically-based investigations examining the effectiveness of multicultural competence (Arredondo, Rosen, Rice, Perez, & Tovar-Gamero, 2005; Worthington et al., 2007). To meet this challenge there needs to be an effective means of measuring subtle shifts in multicultural competency development. Instrumentation is vital to any investigation and, to conduct a reliable study, instruments must be valid, reliable, and

reflective of the broad scope of multicultural competence (Dunn et al., 2006; Hays, 2008).

Multicultural Competence Measures

A number of instruments developed to measure counselors level of multicultural competence have utilized Sue and colleagues (1982) tripartite conceptualization of multicultural awareness, knowledge, and skills. Many measures utilize self-report and are specific to the counseling profession, including the Multicultural Awareness, Knowledge, and Skills Survey, Counselor Edition, Revised (MAKSS-CE-R; D'Andrea, Daniels, & Heck, 2005), Multicultural Counseling Inventory (MCI; Sadowsky, Taffe, Gutkin, & Wise, 1994), Multicultural Counseling Knowledge and Awareness Scale (MCKAS; Ponterotto, Gretchen, Utsey, Rieger, & Austin, 2002), Multicultural Counseling Competence and Training Survey (MCCTS; Holcomb-McCoy & Myers, 1999) and California Brief Multicultural Competence Scale (CBMCS; Gamst et al., 2004). Other measures such as the Cross-Cultural Counseling Inventory-Revised (CCCI-R; LaFromboise, Coleman, & Hernandez, 1991) investigate multicultural competence by asking clients to rate their counselors. Yet another method of investigating individual's multicultural competence is to measure an attribute associated with multicultural competence. The Multicultural Counseling Self-Efficacy Scale-Racial Diversity Form (MCSE-RD; Sheu & Lent, 2007), Multicultural Personality Questionnaire (MPQ, van der Zee & van Oudenhoven, 2000), and Self-Identity Inventory (SII; Sevig, Highlen, & Adams, 2000) are examples of assessments created to measure specific attributes related to working in a multiculturally competent manner.

The evaluation of multicultural competence has also extended from the individual level to the programmatic level. Instruments including the Multicultural Environmental Inventory-Revised (MEI-R; Pope-Davis, Liu, Nevitt, & Toporek, 2000), Diversity Mission Evaluation Questionnaire (DMEQ; Ducker & Tori, 2001), and the Multicultural Competency Checklist (Ponterotto, Alexander, & Greiger, 1995) investigate the degree to which multicultural issues are addressed within the graduate training program. The number of available instruments focused on measuring multicultural competence has continued to expand over the years. However, available instruments are limited in their ability to detect subtle changes in psychology trainees' development of multicultural competence and readiness for change.

Limitations of Current Multicultural Competence Measures

Limited in scope. Many instruments focus primarily on multicultural competence as it relates to working with ethnic and racial minorities (Constantine et al., 2002; Hays, 2008; Kitaoka, 2005). Only a few multicultural competency instruments include work with non-ethnic groups and, even in this case, the questions are limited in number and fail to adequately assess culturally competent work with non-ethnic groups. The primary focus of many instruments on racial/ethnic issues suggests that multicultural competence is generalizable (i.e. if you are culturally competent in working with one group then you must be culturally competent in working with all groups; Constantine et al., 2002). This assumption is far from accurate. Although learning how to work competently with one cultural group may build skills that generalize to learning how to work competently with another cultural group, this does not mean that competency with all cultural groups is

automatic. However, the majority of multicultural competency instruments focus on working with clients-of-color, and many psychologists-of-color who take these measures tend to consistently score higher than their White colleagues (Ponterotto, Fuertes, & Chen, 2000). Psychologists-of-color may tend to be more sensitive to the issues experienced by clients-of-color; however, it is important not to assume that a psychologist-of-color would be equally as competent in working with clients with disabilities, religious/spiritual differences, or even clients from an ethnic background different from the psychologist's own. Assuming that a psychologist-of-color can competently provide services to a client who identifies as gay or hearing-impaired is a disservice to both the client and the trainee (Pope-Davis, Breaux, & Liu, 1997).

Failure to address issues of power. Current multicultural competency instruments also fail to address issues of power, privilege, and oppression. Awareness of these issues is imperative to the development of multicultural competence and reflected in how various researchers (see Sue et al., 1982; Arredondo et al., 1996) have operationalized this construct. For example, Arredondo and colleagues (1996) identify culturally skilled psychologists and other mental health professionals as being able to “specifically identify, name, and discuss privileges that they personally receive in society due to their race, socioeconomic background, gender, physical abilities, sexual orientation, and so on” (Knowledge section, para. 3). Failure to assess psychologists' knowledge and awareness of power, privilege, and oppression overlooks an important aspect of multiculturalism (Arredondo, 1999; Hays, 2008). Psychologists cannot address the discrimination and prejudice experienced by historically marginalized groups without

acknowledging their own areas of privilege and the power dynamics inherent in society; otherwise, psychologists are at risk of reinforcing the status quo (Prilleltensky, 1989). Thus, evaluation of multicultural competence needs to expand its focus to include assessment of psychologists' awareness of personal privilege and oppression.

Failure to measure the intended construct. Another limitation of many multicultural competency scales is that it is not always clear whether such scales are actually measuring the construct desired. The high overlap between multicultural counseling competence and general counseling competence has left researchers questioning whether the traits measured by different instruments are synonymous to that of being a "good" counselor (Coleman, 1998; Dunn et al., 2006). Since items assessing general counseling competencies tend to be included in measures of multicultural competence, it is difficult to know to what extent multicultural competence is being measured. There is also the question of whether some assessments are measuring trainees' competence working with clients of one particular culture rather than overall multicultural competence. Measures providing respondents with little clarification of whether questions are to be answered in terms of working with one particular client versus a range of culturally diverse clients may find that test takers are responding to questions in very different manners (Kitaoka, 2005).

Scholars have also questioned whether self-report scales of multicultural competence may actually be assessing multicultural counseling self-efficacy. Self-report items often require respondents to rate their own ability to engage in certain behaviors consistent with multicultural competence, such as securing information to work with a

specific population. These items are more likely to assess beliefs about behaviors as opposed to demonstrated behaviors (Constantine et al., 2002; Constantine & Ladany, 2000) and tend to be subject to social desirability bias (Constantine et al., 2002; Dunn et al., 2006). In addition, there is concern regarding whether multicultural competence measures have adequately assessed multicultural awareness. Kitaoka (2005) notes that although multicultural competence instruments utilize client-focused multicultural awareness items, they fail to include items that measure the counselors' self-awareness. Awareness of self as a cultural being, awareness of personal biases, assumptions, power, and privilege, and awareness of how one contributes to the status quo are all important characteristics of multicultural competence (D'Andrea, Daniels, & Heck, 1991; Prilleltensky, 1989; Sue, 1998). Failure to assess psychology trainees' self-awareness overlooks an important dimension of multicultural competence development.

Limitations in scoring methods. Many instruments fail to examine multicultural competence in a manner congruent with its developmental and aspirational nature. Several measures tend to score multicultural competence on levels of "Low" to "High" or "Poor" to "Excellent." Given that multicultural competence is aspirational, it seems impossible to have "excellent" overall multicultural competence. In addition, instruments focused only on working with persons-of-color fail to measure multicultural competence in regards to non-ethnic groups (Constantine et al., 2002; Hays, 2008). A psychology trainee whose score is high on a measure of multicultural competence might be competent in working with a person-of-color; however, the same trainee could be low in competence when working with a client who is visually-impaired. Assuming that

“excellent” multicultural competence generalizes to working with all ethnic and cultural groups can be damaging to both the trainee and the client.

Instruments in which psychology trainees can score “excellent” or “high” provide little information pertaining to where they are in their multicultural competency development, where they can continue to grow, and their motivation to continue to grow and change. In addition, psychology trainees who are aware of multicultural competence development as an ongoing process and recognize that “the more [they] know, the more [they] realize how much [they] don’t know” may be susceptible to underrating themselves on such measures (p. 44; Kitaoka, 2005). These factors limit the utility of using these measures to evaluate the effectiveness of multicultural competency trainings (Kitaoka, 2005). At the same time, increases in diversity in the U.S. contribute to a heightened need for multicultural assessment that accounts for psychology trainees’ multicultural competence development (Hays, 2008).

Addressing the Limitations

No measure exists that examines psychology trainees’ readiness for multicultural competency change and subtle transitions in their process of development. Identifying where psychology trainees are in their development of multicultural competence can help faculty and supervisors to identify when and how this development occurs. An instrument that measures psychology trainees’ readiness for change can also help to inform the effectiveness of multicultural competency trainings, interventions, and materials. This dissertation study is a response to the call for the “development of novel multicultural competency instruments” (p. 473; Dunn et al., 2006). The intention is to create a measure

that is congruent with the developmental and aspirational nature of multicultural competence, extends multicultural competence to include non-ethnic groups, addresses issues of power and privilege, and is capable of measuring when change occurs.

The Stages of Change Model

According to Prochaska and colleagues (1992), behavioral change involves a process that can be characterized in stages that occur over time. The stages of change model consists of a series of intermediate stages including precontemplation, contemplation, preparation, action, and maintenance (Prochaska et al., 1992; Velicer, Prochaska, Fava, Norman, & Redding, 1998). Prochaska and colleagues (1992) describe each of the five stages of change in terms of the emotions, cognitions, and behaviors typical of that stage. Transitions from one stage to the next demonstrate the occurrence of behavioral change (Velicer et al., 1998).

The stages of change model was originally constructed to illustrate the therapeutic change and progress associated with modifying addictive behaviors; however, since the model's development, it has successfully been used to explore a variety of change processes including behavioral changes in therapy, exercise, weight control, sunscreen use, and mammography screening (Prochaska et al., 1992; Prochaska & Norcross, 2001; Prochaska et al., 1994; Velicer et al., 1998). Research has supported the reliability, validity, and generalizability of the model's core constructs: the stages, levels of change, and processes of change (Prochaska et al., 1994).

A unique characteristic of the stages of change model is that it illustrates shifts in readiness to change along a continuum (Velicer et al., 1998). Readiness to change is a

key component of motivation, which is fundamental to behavioral change and predictive of positive outcomes. Brief interventions are often insufficient for altering personality or teaching new skills; however, they are capable of affecting motivation for change (Miller & Rollnick, 2002). The stages of change model has frequently served as the foundation for developing effective interventions tailored to promote behavioral change. The conceptualization of change across five stages makes instruments based on the model more sensitive to detecting change (Prochaska et al., 1992; Velicer et al., 1998). Because of the utility of the stages of change model for demonstrating when and how change occurs, it may be ideal for illuminating the changes involved in psychology trainees' development of multicultural competence. In the next two sections, I provide a brief overview of the stages of change, followed by an illustration of how the development of multicultural competence might be reflected within each of the five stages.

Precontemplation

The first stage of change is the precontemplation stage. In this stage, many people are unaware that there is a problem with their behavior even though the problem may be noticeable to others. Thus, there is no intent to change problem behavior. Change may only be demonstrated when there is pressure from others and as soon as the pressure diminishes, problem behaviors typically return. The hallmark of the precontemplation stage is "resistance to recognizing or modifying a problem" (Prochaska et al., 1992, p. 1103).

Contemplation

Contemplation is the second stage of change. Persons in the contemplation stage are aware that there is a problem but have not yet committed to changing their behavior to address the problem. Although persons in this stage may seriously contemplate change, they often experience ambivalence around the pros and cons of change. This ambivalence impedes readiness for change and may result in remaining stuck in the contemplation stage for a long period of time. The hallmark of this stage is “knowing where you want to go but not quite ready yet” (Prochaska et al., 1992, p. 1103).

Preparation

The third stage, preparation, combines intention with behavioral action. The benefits of changing the problem behavior outweigh the cons and action is intended to take place within the near future. Often times, persons in this stage have attempted to take action in the past but have been unsuccessful in maintaining behavioral changes. Many times a plan of action is developed, but commitment to the plan is still lacking. The preparation stage has been characterized as the “early stirrings of action” (Prochaska et al., 1992, p. 1103) and was originally referenced by Prochaska and colleagues (1992) as “decision making.”

Action

Persons in the action stage engage in the most overt changes in behavior. The action stage requires commitment and a significant amount of time and energy on the part of the person to modify target behavior, experiences, and the environment. It is within the action stage that relapse (regressing to one of the earlier stages) and engaging in past

problem behaviors is the most likely. Regression can be a result of insufficient preparation for change or a lack of commitment to the identified plan of action. Engagement in the action stage is often illustrated by overt actions to change and modifying the problem behavior to an acceptable standard (Prochaska et al., 1992).

Maintenance

The maintenance stage is a continuation of change. It is not a static stage, as previously thought, but a stage in which persons must continue to work to avoid relapse. Gains attained from action are consolidated to help maintain behavioral change and, although regression is still a risk, much less effort is required to engage in the change process. Maintenance is reflected in successfully upholding behavioral change and avoiding relapse (Prochaska et al., 1992).

Spiral Pattern of Change

A unique factor of the stages of change model is that it does not assume a linear progression through the stages. Although linear progression is a possibility, Prochaska and colleagues (1992) note that it is the exception, not the rule. Most people tend to recycle through the stages, following more of a spiral pattern of change, in which they may move from action or maintenance back to contemplation. In the domain of substance abuse, this is typically known as relapse. Although movement tends to occur more naturally between specific stages, such as movement from contemplation to preparation, it is possible that people can move between any two different stages. Time spent in each stage can vary and there are specific tasks needed for progression from one stage to the next (Prochaska et al., 1992).

Applying the Stages of Change Model to Multicultural Competence Development

The five stages in the stages of change model portray change as a process, an experience that occurs over time. Other theories of change have conceptualized change as an event that happens at one point, such as the complete termination of smoking or drinking. Conceptualizing change in terms of one outcome limits the sensitivity of measures and interventions to emotional, cognitive, and behavioral changes over time. The utility of the stages of change model for understanding behavioral change, developing measures to assess change, and creating interventions to facilitate change has led to its vast use in intervention research. Initially developed to help understand and modify addictive behaviors, the stages of change model has since been applied to research and interventions focused on modifying a wide variety of behaviors including condom use for protection against HIV, organizational change, and stress management (Redding & Rossi, 1999; Velicer et al., 1998).

The stages of change model does not assume that all persons are ready for immediate change. Instead, there is the recognition that people will vary in their readiness for change and that appropriate interventions must be developed for each stage of change if the intervention is to be effective (Velicer et al., 1998). Research utilizing the stages of change model has shown that matching interventions with participants stage of change increases intervention recruitment rates, retention rates, and reinforces small steps toward progress. Measures created to assess participants' stage of change have informed effective modification of interventions and provided a more accurate means of assessing outcome (Prochaska et al., 1992; Prochaska & Norcross, 2001; Velicer et al., 1998).

Given these results, I propose to apply the stages of change model to psychology trainees' development of multicultural competence.

There is great potential for the stages of change model to help increase understanding of the change process associated with the development of multicultural competence and, by identifying trainees' readiness for change, to help develop training interventions appropriate for trainees' stage of change. The stages of change model has never before been applied to multicultural competency development. Key articles that have contributed to the understanding of multicultural competence will provide a basis for extrapolating how the stages of change model may potentially align with the development of multicultural competence (e.g., APA, 2003; Abreu, Chung, & Atkinson, 2000; Arredondo et al., 1996; Coleman, 1998; D'Andrea, 1999; D'Andrea, 2005; D'Andrea et al., 1991; Fouad & Arredondo, 2007; Hansen, Pepitone-Arreola-Rockwell, & Greene, 2000; Heppner & O'Brien, 1994; Jackson, 1999; Leonard, 1996; Ponterotto, 1988; Roysircar, 2004; Roysircar, Gard, Hubbell, & Ortega, 2005; Sadowsky, Kuo-Jackson, & Loya, 1997; Steward et al., 1998; Sue, 1997; Sue, 2001; Sue et al., 1998; Sue & Sue, 2003; Sue, 1998; Vera & Speight, 2003). Following is a brief depiction of how each of the five stages of change might look in terms of psychology trainees' development of multicultural competence.

Precontemplation Stage

A psychology trainee in the precontemplation stage may be unaware of issues of racism, prejudice, power, and privilege or, if they are aware of these issues, they may not consider them a problem. They may not understand why issues of diversity are a focus

and may feel that others are too sensitive about cultural issues. Psychology trainees in the precontemplation stage may express or demonstrate a value for multiculturalism and diversity when it is socially desirable to do so, but this value is often incongruent with their true feelings and does not indicate intent to change. It is also possible that trainees in this stage would consider themselves to already be multiculturally competent and have nothing left to work on. They may see a problem in others' behavior but are unable to see a problem in how they behave. Thus, they are resistant to recognizing personal areas in which they may not be multiculturally competent and do not work to increase their level of awareness, knowledge, and skills.

Psychology trainees in the precontemplation stage may pride themselves in treating all clients "the same" regardless of cultural background. Addressing cultural issues in therapy may seem frivolous, unnecessary, or be perceived as stereotyping. Clinical work might focus on aligning client values and biases with that of the trainees, and interventions would fail to take into account the client's cultural background. Low retention of minority clients in therapy might be blamed on the client without questioning the appropriateness of the trainees' interventions. Trainees in this stage would have no interest in or desire to build multicultural competence, and would likely only engage in multicultural competence trainings to fulfill requirements or to avoid unfavorable perceptions.

Contemplation Stage

Psychology trainees in the contemplation stage would be aware of racism, prejudice, and discrimination as a problem in society and would have some developing

awareness that their own beliefs and actions may contribute to this problem. However, in spite of this growing awareness, trainees in this stage have not yet committed to engaging in change. Psychology trainees in the contemplation stage may not be ready to challenge their beliefs or work on changing their actions. While they may be more prone to recognizing the consequences of their behaviors, they may not be mentally or emotionally ready to engage in self-exploration and the challenging of personal beliefs that is required in the development of multicultural competence. Change may be seen as too difficult or the psychology trainee may feel powerless to affect change. The trainee is likely to view other trainees and other people in general as being more responsible for problems of racism and discrimination.

When working clinically, psychology trainees in this stage may begin to experience a discomfort or anxiousness around working with culturally diverse clients. They may be aware of “accidentally” offending minority clients, but are still unsure exactly how or why the client was offended. Multiculturally competent knowledge and skill are low in working with different populations and so the psychology trainee may still struggle with retaining minority clients. However, psychology trainees in the contemplation stage may be open to considering their own responsibility in the low retention of minority clients.

Some psychology trainees in this stage may have previously considered themselves to be multiculturally competent and are developing awareness that they have more to learn and may not be competent about all cultures. For example, a psychology trainee may recycle through the contemplation stage when he or she begins to realize that

competence in working with an Asian American population does not mean he or she has competence working with a transgendered population. This realization may challenge the trainee's perception of self as multiculturally competent and bring about a new awareness of biases influencing his or her effectiveness to work with this new population. Some of the resistance experienced by psychology trainees in the contemplation stage may be a result of anxiety, fear, or shame related to learning about unconscious biases and actions that uphold oppression.

Overall, psychology trainees in the contemplation stage would begin to recognize their need to further develop multicultural competence; however, they would not yet be ready to commit to action. The contemplation stage is a stage of intent and, thus, psychology trainees in this stage may intend to work towards increasing their multicultural competence at a much later time.

Preparation Stage

The preparation stage is the first hint of action and so, while full commitment to action is still needed, plans to take action are in progress. Psychology trainees in the preparation stage have begun to accept that further development of multicultural competence is necessary and plan to take steps toward increasing their competence in the near future. It is within the preparation stage that psychology trainees may consider asking others for feedback or decide to sign up for a multicultural course or training scheduled within the next month. Small behavioral changes begin to occur, reflecting the psychology trainee's commitment to future change.

Psychology trainees in the preparation stage may begin to engage in diversity-related conversations and activities, although they may not initiate these conversations. They may refrain from sharing racially-insensitive jokes, however they may not challenge family, friends, or colleagues who engage in this manner and may continue to laugh at jokes that others share. Psychology trainees in the preparation stage may begin to experience some incongruence between their actions as they begin to negotiate subtle changes in their behaviors while trying to maintain their relationships with family, friends, and colleagues who are less culturally aware. This sense of incongruence may make it difficult for trainees in this stage to take action or maintain behavioral changes.

When working clinically, psychology trainees may look for resources to help their work with culturally different clients; however, they may struggle with authentically incorporating this new information into their clinical work. They would recognize that working with clients in a culturally sensitive manner is essential, but would have limited awareness, knowledge, and skills around how to attend to cultural issues.

Action Stage

Psychology trainees in the action stage would place a great amount of time and energy into learning more about diversity-related issues and more about themselves. They may participate in a multicultural class or training, read diversity-related books, and initiate difficult conversations about diversity. Psychology trainees in this stage would try to incorporate learned information into their clinical sessions and work on successfully attending to cultural issues with clients. Psychology trainees would become actively

involved in social justice efforts, public policy making, and outreach to marginalized communities.

The action stage may be a difficult stage for psychology trainees because they must identify their own biases, acknowledge areas of privilege, and question the status quo. Additionally, psychology trainees in the action stage may feel distanced from friends, family, and colleagues who do not support their diversity- and social justice-related efforts. They may experience a greater level of conflict in close relationships as they challenge others to build diversity-related awareness and knowledge. Likewise, psychology trainees in the action stage would be open to hearing similar feedback about multicultural growth areas from peers and faculty. Due to the personal and emotional commitment and vulnerability required in the action stage, this stage may be difficult to stay in, and psychology trainees may find themselves regressing to one of the earlier stages instead of moving into the maintenance stage.

Psychology trainees in the action stage may fail to realize that building multicultural competence is a continuous process. They may participate in a multicultural competency training but discontinue action once the training ends, sometimes erroneously thinking that completion of the training means that they are now multiculturally competent. Psychology trainees who fail to realize that multicultural competence is an ongoing process may revert back to the precontemplation stage. They may be unaware that they need to learn anything more. Some psychology trainees may become highly distressed at receiving negative feedback about their multicultural

competence, and may withdraw from active change efforts for a period of time, in which case they might regress to the preparation stage.

Maintenance Stage

Progression to the maintenance stage may not always be blatantly obvious. Psychology trainees in the maintenance stage would maintain changes in their behaviors that support multicultural competency development. They would continue to engage in multiculturally-focused trainings, classes, seminars, and discussions. When working with new client populations and cultural issues, psychology trainees would continue to consult and seek out diversity-related resources to support their clinical work. Social justice efforts, community outreach, and development of support networks for marginalized populations would continue to be an active focus for trainees. In addition, trainees would continue to recognize their own personal biases, assumptions, and limitations.

The primary difference between the action stage and the maintenance stage is that engaging in multiculturally-focused activities grows easier as it becomes more regular and natural to the psychology trainee. Instead of multicultural activities merely supplementing training and practice, they become a primary focus integrated into all of the psychology trainees' professional and non-professional activities. Psychology trainees may find themselves more aware of and considerate of power dynamics and cultural differences in personal interactions. They may regularly engage in multiculturally-focused conversations with peers and colleagues, and are able to maintain openness to feedback without becoming overwhelmed or defensive. Continued engagement in a variety of multiculturally-focused activities comes from an awareness that there is no

endpoint to multicultural competency development. Psychology trainees in the maintenance stage recognize that they have diversity-related strengths and growth areas and understand that they will always be cycling through different stages of change as they are exposed to various cultural issues. Regression to previous stages may occur if active engagement in multicultural competency development is discontinued.

Integrative Conclusions

The stages of change model provides a useful framework for understanding the development of multicultural competence. This model incorporates a developmental nature of change, and possibilities for linear and non-linear change processes. Other features of the stages of change model that are useful in conceptualizing multicultural competence development include (1) attention to readiness for change, (2) assessment of subtle changes that support progression, and (3) recognition that different processes produce change in different stages. The stages of change model conceptualizes change to include shifts in readiness for change. There are no assumptions that all persons are aware of and willing to modify problem attitudes and behaviors. Instead, the beginning stages conceptualize change to include a person's movement from not considering or desiring change to contemplating change. Progression from being unaware or unwilling to change to considering change is an important step in the change process and demonstrates a shift in motivation for change (Miller & Rollnick, 2002; Velicer et al., 1998). Likewise, the initial stages of multicultural competence development consist of a movement from being unaware to having increased awareness of diversity-related issues, sociopolitical constructs, and personal biases and assumptions (D'Andrea, 1999;

Leonard, 1996; Roysircar, 2004). This progression in awareness influences readiness and motivation for change.

Attending to psychology trainees readiness for multicultural competence development avoids an assumption that all trainees are automatically invested in becoming multiculturally competent. In addition, assessing psychology trainees' readiness for change can provide information about the effectiveness of trainings and the occurrence of resistance. For example, a multicultural course that assumes trainees are invested in multicultural competency development may not be effective for trainees in the precontemplation stage of change. Precontemplators tend to be perceived as resistant because they are being pushed towards change before they have made a commitment to change (Miller & Rollnick, 2002). Overt action, such as reading multicultural literature for a course, without insight as to why cultural-sensitivity is important is liable to only lead to temporary change (Prochaska et al., 1992; Prochaska & Norcross, 2001). Like a client mandated to treatment, a trainee who is required to take a multicultural course may be at a different stage of readiness than a trainee who chooses to participate in a multicultural course and, as a result, the course may be effective for one trainee while ineffective for the other.

As a measure of progress, the stages of change model is capable of assessing subtle shifts in behavior that are not always recognized as change (Velicer et al., 1998). The ability to assess subtle change in multicultural competence is critical to understanding what types of multicultural trainings are most effective for people at different levels of their development. For example, multicultural competence-enhancing

interventions that incorporate a high degree of emotional arousal may be effective in moving psychology trainees from precontemplation to contemplation, but not in helping trainees move from contemplation to action. The ability to assess subtle shifts in readiness provides evidence that the training intervention is effective. If change was only measured by overt behaviors then trainees shift in readiness for change would go unnoticed and the intervention may be deemed ineffective. By focusing on cognitive, behavioral, and emotional changes, the stages of change model can be used to distinguish and reinforce subtle changes that support development and progression (Miller & Rollnick, 2002; Velicer et al., 1998).

Subtle distinctions of change are important because different experiences and activities are associated with change in different stages. The stages of change model recognizes that different processes vary in their effectiveness to move persons from one stage to the next. For example, consciousness-raising techniques, in which people are provided with information about their role and the roles of others in creating and maintaining problems, have been shown to move persons from precontemplation to contemplation (Prochaska et al., 1992). As Prochaska et al. (1992) note, “efficient self-change depends on doing the right things (processes) at the right time (stages)” (p. 1110). Research supports that matching stages of change with processes of change results in increased participant retention, recruitment, and treatment outcome (Miller & Rollnick, 2002; Prochaska et al., 1992; Prochaska & Norcross, 2001; Velicer et al., 1998). Identifying the processes that facilitate multicultural competence development may help to increase the effectiveness of current multicultural trainings. For example, the students

in Steward et al.'s (1998) study who were able to pass a multicultural course in spite of a lack of cultural sensitivity may not have had exposure to the most effective processes to help move them from one stage to the next. The multicultural course might have been more action-oriented with minimal attention to building insight about problem behaviors and, thus, may have been mismatched to students' readiness for change.

The applicability of the stages of change model to the modification of different behaviors has led to the development of a variety of instruments measuring readiness for change. The assessments have ranged from examining smoking cessation, to therapeutic change, to sunscreen use (Prochaska et al., 1992; Prochaska & Norcross, 2001; Prochaska et al., 1994). Most stages of change instruments evaluate change in a format that asks people to rate the frequency of their problem behavior and their intention to stop their problem behavior within a specific period of time (e.g., 6 months, 30 days, a few weeks). Some measures assess change by looking at processes of change (e.g., Prochaska, Velicer, DiClemente, & Fava, 1988), decisional balance (e.g., Prochaska et al., 1994), or self-efficacy (e.g., Redding & Rossi, 1999). No stages of change instruments, however, have looked at changes in the development of multicultural competence.

Purpose of the Study

The purpose of this dissertation project was to construct and test a psychometrically sound measure of multicultural competency for students in applied psychology training programs. The measure differs from existing measures of multicultural competence because it incorporates Prochaska, DiClemente, and Norcross' (1992) stages of change model. Using the stages of change model attends to some of the

criticisms of existing measures; for example, it monitors the progression of self-awareness, diminishes complications in score interpretation, and can provide a more definitive assessment of the effectiveness of multicultural trainings.

Hypotheses

The following hypotheses were tested in this dissertation study:

Hypothesis 1

The Multicultural Competence Change Scale (MCCS) will have a five factor structure with each factor representing one of the stages of change.

Hypothesis 2

Total scores and subscale scores on the MCCS will be significantly and positively correlated with the MAKSS-CE-R (D'Andrea et al, 2005), a frequently used measure of multicultural competence designed for counselor trainees. The MAKSS-CE-R Knowledge, Awareness, and Skills subscales will be significantly and positively associated with scores on the MCCS Preparation, Action, and Maintenance subscales, and significantly and negatively associated with scores on the Precontemplation and Contemplation subscales.

Hypothesis 3

Scores on the Experiences with Cultural Identities Questionnaire (ECIQ) items addressing cultural identity interests, self-awareness, awareness, knowledge, skill, contact with different cultural groups, and social action/social justice efforts will be significantly and positively correlated with scores on the MCCS. Specifically, high scores on the

identified ECIQ items will be significantly and positively associated with high scores on the MCCS Action and Maintenance subscales.

Hypothesis 4

Psychology trainees who have a greater number of multicultural training experiences will score significantly higher on the Preparation, Action, and Maintenance subscales.

Hypothesis 5

Psychology trainees who are engaged in diversity-related research will score significantly higher on the Action and Maintenance subscales.

Hypothesis 6

Psychology trainees who are members of underrepresented groups in the U.S. based on ethnicity, sexual orientation, and/or ability/disability will score significantly higher on the Preparation, Action, and Maintenance subscales.

CHAPTER III

METHODS

Participants

A total of 270 participants accessed the online surveys with a total of 221 (82%) completing the full battery of questionnaires. Students enrolled in an APA-approved applied-training program in psychology during the 2008-2009 academic year were actively recruited to participate in the present study via emails directed to program training directors, the National Latina/Latino Psychological Association (NLPA) electronic mailing listserv, University of Utah's Summer Research Opportunity Program (SROP) in Psychology Facebook members, Quantitative Training for Undergraduate Groups/Society of Multivariate Experimental Psychology (QTUG/SMEP) Facebook members, and the American Psychological Association of Graduate Students (APAGS) Facebook members. Participants were 221 masters (20%) and doctoral (80%; PhD = 56%, PsyD = 24%) students in Counseling Psychology (45%), Clinical Psychology (33%), and School Psychology (18%) programs, with 4% of students identifying only as being in a professional psychology (PsyD) program. Out of the 221 participants, there were 65 (29%) first year students, 49 (22%) second year students, 38 (17%) third year students, 29 (13%) fourth year students, and 40 (18%) students who were in their fifth year or above.

Demographic data was obtained through open-ended questions requiring participants to provide qualitative responses for how they identified in terms of the following seven cultural identities: ability/disability, gender identity, nationality, sexual orientation, social class, race/ethnic background, religion, and/or any additional cultural identity not previously identified. Given the nature of the question, responses varied widely among participants and were not conducive for creating demographic categories without extensive analysis. In addition, participants were asked to identify whether they were a member of the U.S. majority culture, minority culture, or both in terms of each of the seven previously identified cultural identities. Of the 221 total participants, 196 (89%) identified as being a member of the U.S. majority in terms of ability/disability status, 94 (43%) identified as being a member of the U.S. majority in terms of gender, 172 (78%) identified as being a member of the U.S. majority in terms of nationality, 187 (85%) identified as being a member of the U.S. majority in terms of sexual orientation, 147 (67%) identified as being a member of the U.S. majority in terms of social class, 151 (68%) identified as being a member of the U.S. majority in terms of race/ethnicity, and 67 (30%) identified as being a member of the U.S. majority in terms of religion.

Measures

Training Experience Questionnaire (TEQ)

A brief questionnaire constructed for the purposes of this study. The TEQ is comprised of six forced-choice questions attending to participant's current training program and degree sought, previous degrees attained, year in program, and engagement in diversity-related research. The TEQ also consists of six open-ended questions

requesting the participant to identify their current university, years of clinical experience, participation in diversity courses, trainings, and/or research projects, and to share their current research interests. The TEQ is provided in Appendix A.

Demographic Questionnaire (DQ)

Developed by O'Neil, Caban, & McWhirter, the DQ is a 16-item demographic questionnaire constructed to help assess the validity of the M CCS. The DQ examines how participants culturally identify and whether they perceive their cultural identities to belong to U.S. majority or minority socio-cultural norms. The questionnaire is comprised of eight qualitative items and eight quantitative items. The qualitative items instruct participants to describe how they identify in terms of eight cultural identities including ability/disability status, gender identity, nationality, sexual orientation, social class/socio-economic status, racial/ethnic background, religion, and a "other cultural identity" category. The quantitative items instruct participants to consider U.S. socio-cultural norms in determining whether they identify as belonging to the majority, minority, or both majority and minority culture in terms of each cultural identity. The DQ is provided in Appendix B.

Experiences with Cultural Identities Questionnaire (ECIQ)

Developed by O'Neil, Caban, & McWhirter, the ECIQ is a 72-item questionnaire constructed to help assess the validity of the M CCS. The ECIQ is comprised of nine statements that assess participants perceived level of privilege, oppression, interest in different cultural identities, awareness, knowledge, skills, contact with different cultural groups, and participation in social action/social justice efforts. All nine statements are

addressed in terms of eight separate cultural identities including ability/disability status, gender identity, nationality, sexual orientation, social class/socio-economic status, racial/ethnic background, religion, and a “other cultural identity” category (e.g., “I am very interested in the following cultural identity topics: ‘religion’ ”). Participants rank their level of agreement with each statement on a five-point Likert scale (1 = *this statement is not at all true for me*, 3 = *this statement is moderately true for me*, 5 = *this statement is very true for me*). The ECIQ is provided in Appendix C.

Multicultural Competence Change Scale (MCCS)

Developed by O’Neil, Caban, & McWhirter, the MCCS is a 27-item measure that assesses participant’s multicultural competence development in terms of the stages of change model. Given that mistakes made early on in scale development often lead to later problems (Worthington & Whittaker, 2006), a number of careful steps were taken to develop a stages of change measure of multicultural competence. DeVellis (2003) recommended that the following eight preliminary steps guide scale construction: (1) clearly determine the construct intended for measurement, (2) generate an item pool, (3) determine the format of the measure, (4) enlist experts to review the initial item pool, (5) consider inclusion of validation items, (6) administer items to a development sample, (7) evaluate items, and (8) optimize scale length. In line with DeVellis’s (2003) recommendations, the first step taken in scale development was to review existing measures of multicultural competence and use existing theory to clearly define and describe what multicultural competency development might look like in each of the five stages of change.

Items were generated by O'Neil, Caban, and McWhirter using existing theory and literature pertaining to multicultural competence, the stages of change model, and measurement construction. During generation of scale items, it was determined that a likert scale might be the best response format for measuring participants attitudes, beliefs, and opinions about change and multicultural competence development (DeVellis, 2003). As a result, items were generated in the form of a declarative statement and consideration was given as to whether an item would support varying levels of agreement and disagreement.

A total of 52 items were selected to be reviewed by two panels of experts in the area of multicultural competence research. One panel of experts included one counseling psychology faculty and twelve counseling psychology doctoral students with an interest in and commitment to multicultural competency research. The second panel of experts was comprised of professionals working in a community- and diversity-focused organization committed to advancing cultural diversity research, organizational development, and best practices and supporting issues of equity and access. The expert panel included eight professionals who were university faculty, administrators, staff psychologists, teaching effectiveness program staff, mediators, and graduate student interns. Panelists were asked to provide feedback about generated items (e.g., clarity, conciseness, and coverage of content) and to match each item with one of the five stages of change. Items deemed unclear, poorly worded, overly redundant, or a poor match to any of the stages of change were either modified or removed from the item pool.

Regular consultation with the expert panelists helped to inform important revisions of the measure throughout scale construction. After several revisions incorporating expert panelist feedback, the measure was administered to 13 counseling psychology doctoral students and one counseling psychology faculty member. Participants provided verbal and written feedback pertaining to the wording of items, structure of measure, and conceptualization of multicultural competence. Participants also shared their experience completing the measure and identified items that caused confusion or frustration. Participant feedback informed minor revisions to the measure. Finally, expert panelists examined the measure one more time and suggested slight modifications that resulted in the final version of the MCCS.

The 27 items of the MCCS represent a range of diversity-related beliefs and activities in the form of statements constructed to correspond with each stage in the stages of change model. Participants rank their agreement with statements on a five-point Likert scale (1 = *this statement is not at all true for me*, 5 = *this statement is very true for me*). Five subscales were intended to correspond with the five stages of change: (a) Precontemplation (4 items, e.g., “I don’t notice people’s cultural background (e.g., abilities/disabilities, race/ethnicity, sexual orientation, etc.)”); (b) Contemplation (9 items, e.g., “I engage in diversity related activities and dialogues but not on a regular basis.”); (c) Preparation (6 items, e.g., “I know that I have both strengths and weaknesses when it comes to diversity work.”); (d) Action (5 items, e.g., “Though I frequently engage in activities related to diversity, I am always in need of more diversity related education and experiences.”); and (e) Maintenance (3 items, e.g., “I have distanced

myself from people I was close to or lost friends because they do not support the work that I do related to diversity efforts.”). The final item on the MCCS is a qualitative item that requests participants to briefly identify what cultural group or groups they were thinking about when completing the questionnaire. The MCCS and subscale items are provided in Appendix D.

Multicultural Awareness-Knowledge-Skills Survey: Counselor Edition – Revised (MAKSS-CE-R)

Developed by D’Andrea, Daniels, and Heck (2005), the MAKSS-CE-R is a 33-item survey measuring current level of multicultural counseling competence in the domains of awareness, knowledge, and skills. The MAKSS-CE-R is comprised of a 10-item Awareness subscale, 13-item Knowledge subscale, and 10-item Skills subscale. The following are sample items from each subscale: “The human service professions, especially counseling and clinical psychology, have failed to meet the mental health needs of ethnic minorities” (Awareness subscale); “At this point in your life, how would you rate your understanding of the impact of the way you think and act when interacting with persons from different cultural backgrounds” (Knowledge subscale); and “How well would you rate your ability to accurately assess the mental health needs of lesbian clients” (Skills subscale). All items are anchored on a 4-point, forced-choice, Likert-scale. The Awareness subscale ranges from *Strongly Disagree* to *Strongly Agree*, the Knowledge subscale ranges from *Very Limited* to *Very Good* with 3-items ranging from *Very Limited* to *Very Aware*, the Skills subscale ranges from *Very Limited* to *Very Good* (D’Andrea et al., 2005). The MAKSS-CE-R has a reliability of .81, with coefficient

alphas of .80 for the Awareness subscale, .87 for the Knowledge subscale, and .85 for the Skills subscale. Construct validity was established by correlating the MAKSS-CE-R with other measures of multicultural competence. Results indicated the measure was similar to, yet distinctive, from other measures of multicultural competence (Kim, Cartwright, Asay, & D'Andrea, 2003). The MAKSS-CE-R is provided in Appendix E.

Procedure

Approval for this study and all recruitment procedures was approved by the University of Oregon Office for the Protection of Human Subjects. Participants were recruited for the purposes of this study through three primary approaches. First, recruitment emails were directed to the training directors of APA-approved clinical, counseling, and school psychology training programs with a request to disseminate the email through their programs electronic mailing listserv. The recruitment email included the purpose of the study, eligibility criteria, approximate length of time required to participate, an explanation of the monetary incentive, a statement ensuring IRB-approval, and an online link to access the web-based survey. Second, permission was attained to send the recruitment email through the National Latina/Latino Psychological Association (NLPA) electronic mailing listserv. Third, recruitment emails were sent to Facebook groups comprised of graduate students in psychology including University of Utah's Summer Research Opportunity Program (SROP) in Psychology, Quantitative Training for Underrepresented Groups/Society of Multivariate Experimental Psychology (QTUG/SMEP) Minority Student Conference, and the American Psychological Association of Graduate Students (APAGS). Finally, I utilized snowball sampling

techniques by asking potential participants to send the invitation to participate in the study to others who are in applied psychology training programs.

A monetary incentive was used to aid in recruitment. All participants received the opportunity to enter into a drawing for four \$25 gift certificates and one \$50 gift certificate to amazon.com. Participation eligibility criteria included: (1) current enrollment in a PhD, PsyD, or Masters program in counseling psychology, clinical psychology, or school psychology and (2) ability to read and write in English.

Students choosing to participate in the study were instructed to follow a web link embedded in the recruitment email to a website hosting the informed consent statement and online survey. The informed consent statement included a brief overview of the study, steps taken to protect participant confidentiality and anonymity, potential risks to participating in the study, the right to decline or discontinue participation without any penalty, and the investigator's contact information. After reading the informed consent statement, participants were required to click the "next" button at the bottom of the webpage to access the online survey. As stated in the informed consent, participation was indicated by completion and submission of the online survey.

Confidentiality was ensured using SurveyMonkey.com (Finley, n.d.), an online data collection service, to administer the surveys. SurveyMonkey.com guarantees survey encryption, password protected access to the data, the ability to delete data upon completion of the study, and the ability to keep identifying information separate from anonymous data. Participation in the study required approximately 30 – 45 minutes to complete the battery of surveys. Upon completion of the measures, participants were

provided with the opportunity to enter into a drawing for five amazon.com gift certificates. Participants were informed that entering the drawing was optional and identifying information would be kept separate from their survey results. Participants who chose to participate in the drawing were directed to a second, separate survey where they were instructed to enter identifying information including their name, contact information, and email address. Identifying participant information was collected, stored, and maintained separately from the research data.

Analysis

The research hypotheses and psychometric properties of the MCCA were explored using exploratory factor analysis (EFA), the item response theory generalized graded unfolding model (GGUM), correlation coefficients, and analysis of variance (ANOVAs).

The EFA and GGUM are analytical procedures intended to clarify measurement structure by examining the latent processes underlying MCCA items. Because the GGUM is not a commonly used analytical procedure, a description of the procedure and rationale for its inclusion is provided.

Given the nature of the MCCA, there is reason to believe that the GGUM may characterize participant responses to MCCA items better than an EFA (Beever, 2007; Chernyshenko et al., 2007; Noel, 1999; Roberts et al., 2000). An underlying assumption of an EFA is that all items are monotonic and that the probability of a high item score will increase as the participant increases in distance above the item location (Chernyshenko et al., 2007). In other words, a participant will be more likely to respond positively to an item as his or her “ability” surpasses the item difficulty. “Ability” in the

context of this investigation would refer to participants' motivation for change. So, the assumption of monotonicity implies that participants will be more likely to positively endorse MCCA items and attain a higher total test score the greater their motivation for change. However, the MCCA is comprised of monotonic and nonmonotonic items constructed to measure change along the entire change continuum, from precontemplation to maintenance. The likelihood of attaining a high score on nonmonotonic items increases the closer the participant is to the item location. Unlike monotonic items, the further a participant increases in distance above the item location the less likely they are to score the item high (Chernyshenko et al., 2007; Croon, 2002). For example, a participant may respond negatively to the item "I engage in diversity related activities and dialogues but not on a regular basis" if they engage in diversity related activities and dialogues on a daily basis. A participant may also disagree with the item if they do not engage in diversity related activities at all. This is typical of attitude and personality assessments, which usually contain items with no right or wrong answers, and responses are designed to reflect participants "typical ability" instead of their "maximum performance" (Chernyshenko et al., 2007).

The potential limitation with using an EFA to analyze a scale with nonmonotonic items is that item-total correlations and factor loadings will assume a monotonic relationship between trait level and item score. Since participants in different stages along the change continuum can have similar item scores, many MCCA items may be seen as non-discriminating and result in lower item-total correlations and factor loadings. In addition, items that tend toward neutrality may be deemed poor when using an EFA and,

consequently, be dropped from the measure. Thus, an EFA may result in the MCCA containing only items that cluster at specific points along the change continuum and lessen the potential for the MCCA to assess change across the entire continuum (Chernyshenko et al., 2007).

In contrast to the EFA, the GGUM can scale both monotonic and nonmonotonic items. The GGUM has shown to provide a better fit with personality data (Chernyshenko et al., 2007) and has previously been used in research investigating measurement of the stages of change model (see Beever, 2007, and Noel, 1999). Since the MCCA contains non-monotonic items, the GGUM is an appropriate model for investigating how items are scaled along the change continuum.

All parameters and item fit statistics can be estimated with the GGUM using the GGUM2004 software (Roberts et al., 2000; Roberts, Fang, Cui, & Wang, 2006). GGUM2004 uses a marginal maximum likelihood approach to estimate item parameters. Item parameter estimates identify the location of items by providing the probability of observing a particular response from a randomly selected person representative of the population investigated (de Ayala, 2009; Roberts et al., 2000, 2006).

The following three item fit statistics are examined to determine item fit: standardized infit index, standardized outfit index, and the likelihood ratio for χ^2 item fit conditioned on total score ($S\chi^2$). Standardized fit statistics measure how perfectly the data fit the model. The standardized infit statistic can be described as an information-weighted or inlier-sensitive fit. The infit index is sensitive to unexpected responses close to a person's ability ($\hat{\theta}$). For example, infit identifies overfit for Guttman scale patterns and

underfit for idiosyncratic clinical groups. The standardized outfit index can be described as an unweighted or outlier-sensitive fit and is more sensitive to low-ability persons responding correctly on a difficult item and high-ability persons responding incorrectly on an easy item. As an example, the standardized outfit index identifies overfit for imputed responses and underfit for careless mistakes and lucky guesses (de Ayala, 2009; Linacre, 2002). Localized infit and outfit values help to identify the items with the poorest fit relative to the general degree of fit across all items. Infit and outfit statistics of $p \leq .05$ demonstrate a poor item fit (Roberts et al., 2000, 2006). The $S\chi^2$ is derived from grouping respondent total test scores and then comparing the observed frequencies in each response category with the marginal expected values resulting from the model. $S\chi^2$ is favored as an item fit statistic for GGUM models and has been shown to have a reasonable Type I error and power rate based on research. An $S\chi^2$ statistic of $p < .001$ demonstrates a poor item fit (Roberts et al., 2000, 2006). Overall, the GGUM2004 is utilized to identify MCCS items with a poor fit in relation to other items on the measure. Items demonstrating a poor fit might suggest poor item construction or reflect attitudes that are generally underrepresented among the population sampled (Embretson & Reise, 2000).

The GGUM2004 software is capable of estimating 8 different IRT unfolding models through constraints on different item parameters. Model 1 was selected for analysis since this model was recommended for use in similar studies investigating the stages of change (see Beever, 2007). Model 1, the constant unit version of the GGUM, holds the number of response categories constant for each item and sets the

discrimination parameters equal to 1 (Roberts et al., 2000, 2006). These constraints are implemented to avoid the tendency for extreme item location estimates (δ) that deviate from the majority of person locations (θ) to arbitrarily increase in absolute value and cause corresponding eigenvalues (λ) to become more positive so that similar response probabilities are maintained (Luo, 2000; Roberts et al., 2000, 2006).

CHAPTER IV

RESULTS

The research hypotheses and psychometric properties of the MCCA were explored using factor analysis, the item response theory generalized graded unfolding model (GGUM), correlation coefficients, and ANOVAs. In this section, I first establish the MCCA measurement structure, and then investigate validity by (a) examining correlations with other measures of multicultural competence and (b) exploring the sensitivity of MCCA scores to respondent variability.

Measurement Structure

Preliminary Analysis

A total of 270 participants accessed the online surveys, and 221 (82%) completed the full battery of questionnaires. Full participation in the study required respondents to complete all items on the MCCA and MAKSS-CE-R. Failure to complete any of the items on the MCCA or MAKSS-CE-R restricted participants' ability to continue with the remainder of the study. As a result, cases with missing data on the MCCA and MAKSS-CE-R were not analyzed because their data was 100% missing for those measures.

Multivariate outliers on the MCCA were identified using Mahalanobis distance ($df = 27, \chi^2 = 55.476$) and six outliers were revealed. Examination of outliers determined that they were legitimate and not due to data entry error, instrumentation error, or to participants being different from the rest of the sample. Given that all six outliers were

legitimate, it was determined that they should not be deleted from the sample and steps should be taken to reduce the influence of those cases (Mertler & Vannatta, 2005; Tabachnick & Fidell, 2007). Since the variables with outlying cases only had a moderate skew, square root transformations were conducted (Tabachnick & Fidell, 2007). Examination of variables after data transformation did not yield a more interpretable analysis, as neither skew nor kurtosis were improved. The marginal results attained from the square root transformation were likely due to all of the variables being skewed to approximately the same extent prior to transformation (Tabachnick & Fidell, 2007). Since square root transformations did not improve the skewness or kurtosis of variables with outlying cases, the decision was made to proceed with data analysis without deleting or transforming MCCA outliers. Normality and linearity were established by examining histograms, Q-Q normal probability plots, and scatterplot matrices (Mertler & Vannatta, 2005; Tabachnick & Fidell, 2007).

Exploratory Factor Analysis (EFA)

Construct validity of the MCCA was established using exploratory factor analysis (EFA) to identify the latent constructs underlying items. A principle-axis factor (PAF) procedure with promax rotation was utilized. PAF is the recommended analysis for the development of new scales, and an oblique rotation method was selected since, based on theory, it was assumed that factors would be correlated (Pedhazur & Schmelkin, 1991; Pett, Lackey, & Sullivan, 2003; Worthington & Whittaker, 2006).

The number of factors to extract was determined by considering the criterion recommended by Kaiser (1960), the results from a scree test (Cattell, 1966), and the

extent that a solution was able to be interpreted (Costello & Osborne, 2005; Worthington & Whittaker, 2006). Examination of the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy supported the factorability of the investigated variables. The KMO (.80) was above the recommended cut-off value of .60 (Tabachnick & Fidell, 2007). Initial analysis supported retaining up to seven factors; however, interpretability of this factor structure was limited and only four of the seven factors represented a strong factor solution (> 3 items; Costello & Osborne, 2005; Worthington & Whittaker, 2006). To optimize scale length and to avoid deleting potentially meaningful items, I decided to reduce factors until a stronger factor structure emerged, and to avoid deleting items until the last step of the EFA (Worthington & Whittaker, 2006). A 7-factor, 6-factor, 5-factor, and 4-factor structure was investigated, and results indicated that the 5-factor and 4-factor structure yielded the strongest factor solutions and had the greatest interpretability. To avoid researcher bias, the 5-factor and 4-factor EFAs were presented to a group of counseling psychology faculty ($N = 1$) and students ($N = 8$) for external interpretation (Worthington & Whittaker, 2006). Although the 5-factor EFA included one weak factor comprised of only two items, the 5-factor EFA was determined by consensus to be the most interpretable factor structure. Worthington and Whittaker (2005) concede that among factor-retention criterion, conceptual interpretability is the most definitive.

After determining the final factor solution of 5-factors, the decision was made to delete 6 of the 27 original items. Retention and deletion of items was based on item loadings, cross-loadings, and contribution to the factor solution (Costello & Osborne, 2005; Worthington & Whittaker, 2006). Four items (Items #17, #21, #22, and #26) were

deleted because of loadings $< .32$, one item (Item #27) was deleted because of a cross-loading $< .15$ on Factors 1 and 3, and one item (Item #13) was deleted with a negative loading on Factor 1. Although deleting items with negative loadings was not an initially established criterion for item deletion, this decision was made because there was only one negative loading item $> .32$ in the EFA. Researchers have warned against creating surveys with few items that are negative in valence because they can be confusing to respondents (see Kline, 2005, and DeVellis, 2003). In addition, Item #13 minimally exceeded the factor loading criterion of $.32$, and deleting the item did not diminish the strength of Factor 1. Item deletion was saved until the last step of the EFA so that the main focus of analysis was on empirical scale development and not on final scale length (Worthington & Whittaker, 2006). The EFA was rerun with the final 5-factor, 21-item solution to investigate whether the factor structure had changed due to item deletion. Results indicated that the factor structure remained the same.

The final EFA of the MCCS items resulted in a 5-factor solution with 21 items. No variance is reported because oblique rotation was utilized and factors are correlated (Tabachnick & Fidell, 2007). I examined the item groupings and independently labeled each factor based on the stages of change model. Next, to avoid researcher bias, I submitted the items grouped by factors, without labels, to a research consultation group consisting of one counseling psychology faculty member and eight counseling psychology doctoral students for external interpretation. The group was asked to review the factors, determine whether they were congruent with the stages of change model, and then independently label each factor according to the stage of change they felt it

represented. The conclusion of the external group concurred with my own, thus, the 5-factor solution was retained and each factor was labeled according to one stage of change.

The precontemplation stage (Factor 3) was comprised of 5 items that reflected no engagement in diversity-related activities, no awareness of cultural differences, and feeling that too much attention is devoted to diversity. The contemplation stage (Factor 5) was the weakest factor, comprised of two items that addressed treating others as equals regardless of culture. The preparation stage (Factor 2) was comprised of 5 items pertaining to infrequent engagement in diversity-related conversations due to discomfort and concern that learning about diversity would change relationships. The action stage (Factor 4) was comprised of 4 items addressing recent engagement in diversity-related activities and active awareness around diversity-related biases, strengths, and limitations. The maintenance stage (Factor 1) was comprised of 5 items addressing current engagement in diversity-related activities and the impact diversity-related engagements have had on relationships. MCCS items and factor loadings are presented in Table 1. In addition, the labeling of the stages was consistent with the factor correlation matrix (see Table 2). Similar to previous studies focused on validating stages of change scales (see McConaughy, Prochaska, & Velicer, 1983, and McConaughy, DiClemente, Prochaska, & Velicer, 1989), adjacent stages had higher correlations than nonadjacent stages.

Table 1

Items and Factor Loadings of the Multicultural Competence Change Scale

Item	Factor				
	1	2	3	4	5
1. Precontemplation Subscale					
I think diversity is important but it gets too much attention right now.	-.01	-.07	.76	-.06	-.13
People should focus on being individuals rather than focusing on what cultural groups they belong to.	.04	-.03	.51	-.07	.20
I'd prefer to watch a video or read a book about difficult dialogues related to diversity rather than engage in those dialogues myself.	-.05	.23	.48	.11	-.09
I don't notice people's cultural background (e.g., abilities/disabilities, race/ethnicity, sexual orientation, etc.).	.06	-.04	.43	-.05	.27
I do not presently engage in any activities related to diversity.	-.30	.04	.41	-.01	-.10
2. Contemplation Subscale					
I try to treat people the same way regardless of their culture or background.	-.07	.01	.08	.06	.81
Treating everyone as equals is one of the most important aspects of any job working with people.	-.05	.02	-.11	.02	.59
3. Preparation Subscale					
I don't usually engage people in diversity related conversations because these conversations can be uncomfortable.	.06	.80	-.04	-.12	-.06

Table 1 (continued)

Item	Factor				
	1	2	3	4	5
I don't usually engage people in diversity related conversations because it's easier to avoid these topics most of the time.	-.14	.80	-.12	.02	.06
I worry that if I learn too much about diversity I'll have to change my life and who I interact with.	.23	.47	-.01	.05	.03
When I mess up in diversity conversations I try to defend myself.	.00	.45	.11	.12	.01
I would talk about diversity more if people weren't so sensitive about it.	.09	.33	.27	.11	.02
4. Action Subscale					
I have both strengths and weaknesses when it comes to diversity work.	-.17	.00	-.07	.69	-.07
I have recently had to examine and change some of my beliefs related to cultural groups of which I am not a member.	.05	.12	.09	.64	-.03
I have recently begun engaging in more diversity related conversations and activities.	.08	-.03	-.07	.52	.14
I try hard to be aware of my own biases, racism, homophobia, and discriminatory or stereotyping thoughts and actions.	.09	.03	-.01	.43	.07
5. Maintenance Stage					
My dedication to doing diversity related work has changed my friendship circle to reflect this commitment.	.89	.05	.02	-.03	.05

Table 1 (continued)

Item	Factor				
	1	2	3	4	5
I have distanced myself from people I was close to or lost friends because they do not support the work that I do related to diversity efforts.	.69	.18	-.00	-.10	-.03
There have been costs and impacts to my everyday life because of diversity related conversations and activities that I engage in on a regular basis.	.45	.06	-.00	.07	-.12
I currently engage in difficult conversations related to diversity in work and social environments.	.41	-.23	-.08	.16	-.03
I have a community of close friends and colleagues who are all engaged in social justice and diversity efforts.	.40	-.13	.01	.09	-.17

Note. $N = 221$. Kaiser-Meyer-Olkin index = .734. Factor 1 = Maintenance; Factor 2 = Preparation; Factor 3 = Precontemplation; Factor 4 = Action; Factor 5 = Contemplation. Factor loadings were obtained using principle axis factoring with promax rotation.

Table 2

Factor Correlation Matrix for the Multicultural Competence Change Scale

Factor	1	2	3	4	5
1. Maintenance	-				
2. Preparation	-.07	-			
3. Precontemplation	-.42	.23	-		
4. Action	.39	.00	-.33	-	
5. Contemplation	-.31	-.00	.37	-.20	-

Generalized Graded Unfolding Model (GGUM)

The item response theory (IRT) generalized graded unfolding model (GGUM; Roberts, Donoghue, & Laughlin, 2000) was used to assess the developmental processes underlying participant responses. A comparison of the 27-item MCCA against a perfect-fit model demonstrated a poor fit: Likelihood Ratio $\chi^2(69, N = 221) = 1189.53, p < 0.00$. Four possible reasons for this may be because (a) the MCCA was not initially created with the intention of using the GGUM, (b) the Type I error associated with the Global Likelihood Ratio has been shown to be somewhat erratic, (c) results from any investigation rarely are a perfect fit (Roberts, et al., 2000), and (d) the 27 items selected for this study were not evenly distributed across the stages of change. The standardized infit index indicated that 5 out of the 27 items demonstrated poor fit ($p < .01$). Four of the items identified as a poor fit by the standardized infit index also demonstrated poor fit based on the standardized outfit index ($p < .01$). Specifically, these items included Item #3 (“I worry that if I learn too much about diversity I’ll have to change my life and who I interact with”), Item #6 (“There have been costs and impacts to my everyday life because of diversity related conversations and activities that I engage in on a regular basis”), Item #7 (“Treating everyone as equals is one of the most important aspects of any job working with people”), and Item #14 (“I try to treat people the same way regardless of their culture or background”). Item #19 (“I think diversity is important but it gets too much attention right now”) was the only item that demonstrated poor fit based on the standardized infit index but not the outfit index. Item #26 (“I don’t know what to do about biased, racist, homophobic, discriminatory, or stereotyping thoughts that I have

about people sometimes”) was the only item that demonstrated poor fit based on the standardized outfit index but not the infit index.

Examination of the $S\chi^2$ further supported that Items #2, #6, #7, and #14 were a poor fit with the model ($p < .01$). In addition, according to the $S\chi^2$, Item #1 (“I do not presently engage in any activities related to diversity”), Item #5 (“When I mess up in diversity conversations I try to defend myself”), Item #15 (“I have recently had to examine and change some of my beliefs related to cultural groups of which I am not a member”), Item #16 (“I have both strengths and weaknesses when it comes to diversity work”), Item #19 (“I think diversity is important but it gets too much attention right now”), Item #22 (“Though I frequently engage in activities related to diversity, I am always in need of more diversity related to education and experiences”), Item #23 (“I try hard to be aware of my own biases, racism, homophobia, and discriminatory or stereotyping thoughts and actions”), and Item #25 (“I would talk about diversity more if people weren’t so sensitive about it”) also demonstrated poor fit.

In summary, 5 out of the 27 items demonstrated poor fit based on the standardized infit index ($p < .01$), 5 out of the 27 items demonstrated poor fit based on the standardized outfit index ($p < .01$), and 12 out of the 27 items demonstrated poor fit based on the $S\chi^2$ ($p < .01$). Out of the 27 items, Items #6, #7, and #14 were the only items that demonstrated poor fit across all three fit statistics. Overall, a total of 14 items out of the 27 items demonstrated a poor fit. As previously mentioned a poor fit might suggest poor item construction, or might reflect attitudes that are generally underrepresented

among the population sampled (Embretson & Reise, 2000). Item parameter estimates and fit statistics for the 27 item MCCS are provided in Table 3.

Table 3

Item Parameter Estimates and Fit Statistics for the MCCS

Item	Location	Standardized infit	Item χ^2	<i>p</i>	Standardized outfit	Item χ^2	<i>p</i>	$S\chi^2$	<i>p</i>
3. I worry that if I learn too much about diversity I'll have to change my life and who I interact with.	-4.02	3.83	358.53	.00**	4.40	397.42	.00**	6.03	.11
2. I have distanced myself from people I was close to or lost friends because they do not support the work that I do related to diversity efforts.	-3.13	2.35	277.88	.01**	1.50	257.93	.04	24.06	.00**
6. There have been costs and impacts to my everyday life because of diversity related conversations and activities that I engage in on a regular basis.	-2.58	3.17	289.05	.00**	3.22	292.34	.00**	47.31	.00**
8. My dedication to doing diversity related work has changed my friendship circle to reflect this commitment.	-2.24	1.56	250.93	.08	1.29	245.66	.11	27.16	.03

Table 3 (continued)

Item	Location	Standardized infit	Item χ^2	<i>p</i>	Standardized outfit	Item χ^2	<i>p</i>	S χ^2	<i>p</i>
21. I put myself on the spot when I engage in conversations related to diversity issues even though this leaves me open to criticism from others.	-1.82	-2.38	180.22	.98	-2.41	179.35	.98	30.00	.15
12. I have recently begun engaging in more diversity related conversations and activities.	-1.64	.62	232.04	.28	1.16	242.53	.14	34.96	.05
20. I have a community of close friends and colleagues who are all engaged in social justice and diversity efforts.	-1.56	-.65	208.87	.69	-.81	205.71	.75	24.57	.37
15. I have recently had to examine and change some of my beliefs related to cultural groups of which I am not a member.	-1.51	1.39	246.88	.10	1.87	257.26	.04	47.39	.00*

Table 3 (continued)

Item	Location	Standardized infit	Item χ^2	<i>p</i>	Standardized outfit	Item χ^2	<i>p</i>	Sχ^2	<i>p</i>
10. I currently engage in difficult conversations related to diversity in work and social environments.	-1.36	-4.51	146.76	1.00	-4.30	148.07	1.00	32.87	.02
27. Engaging in diversity related work has changed me as a person.	-1.02	-1.31	195.51	.88	-1.94	182.64	.97	23.34	.08
22. Though I frequently engage in activities related to diversity, I am always in need of more diversity related education and experiences.	-0.90	.10	222.33	.44	-.58	208.09	.71	35.47	.00*
16. I have both strengths and weaknesses when it comes to diversity work.	-0.29	-1.81	179.75	.98	-1.87	177.51	.98	13.66	.00*

Table 3 (continued)

Item	Location	Standardized infit	Item χ^2	<i>p</i>	Standardized outfit	Item χ^2	<i>p</i>	$S\chi^2$	<i>p</i>
23. I try hard to be aware of my own biases, racism, homophobia, and discriminatory or stereotyping thoughts and actions.	-0.24	-.52	207.85	.71	-.60	205.73	.75	30.08	.00*
7. Treating everyone as equals is one of the most important aspects of any job working with people.	0.87	3.54	302.87	.00*	3.61	309.32	.00*	36.58	.00*
14. I try to treat people the same way regardless of their culture or background.	1.48	2.59	271.79	.01*	2.66	274.17	.01*	37.24	.01*
17. I engage in diversity related activities and dialogues but not on a regular basis.	1.85	-1.18	199.82	.83	-1.01	202.57	.79	37.59	.03
25. I would talk about diversity more if people weren't so sensitive about it.	2.28	1.79	255.49	.05	2.02	261.01	.03	40.24	.00*

Table 3 (continued)

Item	Location	Standardized infit	Item χ^2	<i>p</i>	Standardized outfit	Item χ^2	<i>p</i>	$S\chi^2$	<i>p</i>
24. People should focus on being individuals rather than focusing on what cultural groups they belong to.	2.50	-2.23	180.10	.98	-2.00	183.08	.97	26.72	.11
5. When I mess up in diversity conversations I try to defend myself.	2.66	.48	230.14	.31	.45	229.86	.31	31.54	.01*
13. I currently don't engage in activities related to diversity, but I would like to in the future.	2.72	1.34	248.57	.09	.94	240.62	.16	23.12	.02
11. I don't usually engage people in diversity related conversations because it's easier to avoid these topics most of the time.	2.91	-.25	215.03	.58	-.11	217.90	.53	9.68	.20

Table 3 (continued)

Item	Location	Standardized infit	Item χ^2	<i>p</i>	Standardized outfit	Item χ^2	<i>p</i>	S χ^2	<i>p</i>
18. I'd prefer to watch a video or read a book about difficult dialogues related to diversity rather than engage in those dialogues myself.	2.92	-.85	202.76	.79	-.98	199.26	.84	14.10	.05
1. I do not presently engage in any activities related to diversity.	2.95	1.48	253.36	.06	.49	231.44	.29	28.71	.00*
4. I don't usually engage people in diversity related conversations because these conversations can be uncomfortable.	3.01	1.22	247.78	.10	1.95	267.82	.02	1.92	.58
26. I don't know what to do about biased, racist, homophobic, discriminatory, or stereotyping thoughts that I have about people sometimes.	3.04	1.74	260.54	.03	2.28	277.11	.01*	3.56	.31

Table 3 (continued)

Item	Location	Standardized infit	Item χ^2	<i>p</i>	Standardized outfit	Item χ^2	<i>p</i>	$S\chi^2$	<i>p</i>
19. I think diversity is important but it gets too much attention right now.	3.25	1.91	267.70	.02	.91	243.38	.13	28.46	.00*
9. I don't notice people's cultural background (e.g., abilities/disabilities, race/ethnicity, sexual orientation, etc.).	3.43	-.04	218.97	.51	-.72	201.54	.81	2.06	.55

**p* < .01.

Comparison of EFA and GGUM Results

Comparison of the EFA and GGUM results revealed that two items previously shown to have low EFA factor loadings, Items #22 and #26, also demonstrated a poor fit when examined with the GGUM. However, 4 out of the 6 items dropped based on the EFA results did not exhibit a poor fit when examined with the GGUM. Since an EFA assumes that all items are monotonic there may be the potential that some of the MCCS nonmonotonic items were inappropriately dropped due to low EFA factor loadings (Chernyshenko et al., 2007). Out of the six items dropped based on the EFA results, only four were dropped due to low factor loadings. As aforementioned, two of the four items did demonstrate a poor fit when investigated with the GGUM; however, the remaining two items with low EFA factor loadings, Items #17 and #21, did not demonstrate poor fit. Both Items #17 (“I engage in diversity related activities and dialogues but not on a regular basis”) and #21 (“I put myself on the spot when I engage in conversations related to diversity issues even though this leaves me open to criticism from others”) may be described as nonmonotonic items. For example, a participant may positively endorse Item #17 if they irregularly engage in diversity related activities and dialogues; however, as a person increases their engagement in diversity related activities they will move farther away from where Item #17 is located on the change continuum and will become increasingly less likely to highly endorse this item. Because Item #17 is an item that would be negatively endorsed by participants low on the change continuum (persons who do not engage in diversity related activities) and participants high on the change continuum (persons who engage in diversity related activities regularly) it was probably

seen as non-discriminating by the EFA and as a result had a low factor loading. A similar case may be made with Item #21.

Although the argument might be made to retain Items #17 and #21 based on results from the GGUM, ultimately the decision was made to drop these items from the measure. The location of Items #17 and #21 on the change continuum did not provide a clear indication of what stage these items might represent. Furthermore, the MCCA demonstrated an overall poor model fit when used with the GGUM, which lessens the basis for making significant measurement changes based on the GGUM results. In addition, although the GGUM2004 program has been used in a number of studies, there remains little information about the distribution of the fit statistics, Type I error rates and power rates and, as a result, these statistics may be suspect (Roberts et al., 2000, 2006).

Since the GGUM does not clearly delineate each stage of change, the EFA five-factor solution was used to group items by stage. Mean locations for each stage were calculated to determine whether stage location on the change continuum would coincide with how each stage was labeled. For example, if the EFA and GGUM results coincide in regard to item location on the change continuum then the mean location of the precontemplation and maintenance stages should be on the opposite ends of the continuum. The mean locations for each stage of change are presented in Table 4.

Table 4

MCCS Items and Stage of Change Mean Locations

Item	EFA Stage of Change	GGUM Item Location	Mean Location	Stage of Change
9. I don't notice people's cultural background (e.g., abilities/disabilities, race/ethnicity, sexual orientation, etc.).	Precontemplation	3.43		
19. I think diversity is important but it gets too much attention right now.	Precontemplation	3.25		
1. I do not presently engage in any activities related to diversity.	Precontemplation	2.95	3.01	Precontemplation
18. I'd prefer to watch a video or read a book about difficult dialogues related to diversity rather than engage in those dialogues myself.	Precontemplation	2.92		
24. People should focus on being individuals rather than focusing on what cultural groups they belong to.	Precontemplation	2.50		

Table 4 (continued)

Item	EFA Stage of Change	GGUM Item Location	Mean Location	Stage of Change
4. I don't usually engage people in diversity related conversations because these conversations can be uncomfortable.	Preparation	3.01		
11. I don't usually engage people in diversity related conversations because it's easier to avoid these topics most of the time.	Preparation	2.91		
5. When I mess up in diversity conversations I try to defend myself.	Preparation	2.66	1.37	Preparation
25. I would talk about diversity more if people weren't so sensitive about it.	Preparation	2.28		
3. I worry that if I learn too much about diversity I'll have to change my life and who I interact with.	Preparation	-4.01		
14. I try to treat people the same way regardless of their culture or background.	Contemplation	1.48		

Table 4 (continued)

Item	EFA Stage of Change	GGUM Item Location	Mean Location	Stage of Change
7. Treating everyone as equals is one of the most important aspects of any job working with people.	Contemplation	0.87	1.17	Contemplation
23. I try hard to be aware of my own biases, racism, homophobia, and discriminatory or stereotyping thoughts and actions.	Action	-0.24		
16. I have both strengths and weaknesses when it comes to diversity work.	Action	-0.29		
15. I have recently had to examine and change some of my beliefs related to cultural groups of which I am not a member.	Action	-1.51	-.92	Action
12. I have recently begun engaging in more diversity related conversations and activities.	Action	-1.64		
10. I currently engage in difficult conversations related to diversity in work and social environments.	Maintenance	-1.36		

Table 4 (continued)

Item	EFA Stage of Change	GGUM Item Location	Mean Location	Stage of Change
20. I have a community of close friends and colleagues who are all engaged in social justice and diversity efforts.	Maintenance	-1.55		
8. My dedication to doing diversity related work has changed my friendship circle to reflect this commitment.	Maintenance	-2.24	-2.17	Maintenance
6. There have been costs and impacts to my everyday life because of diversity related conversations and activities that I engage in on a regular basis.	Maintenance	-2.58		
2. I have distanced myself from people I was close to or lost friends because they do not support the work that I do related to diversity efforts.	Maintenance	-3.13		

Results showed that the precontemplation and maintenance stage were on opposite ends of the change continuum and that the maintenance stage was preceded by the action stage. However, results suggested that the preparation and contemplation stages might be inappropriately labeled. The mean location for the contemplation stage (1.17) places it between the preparation stage (1.37) and the action stage (-.92). Inspection of item location suggests that the preparation stage is located in between the precontemplation and contemplation stages because participants endorsing precontemplation items are also endorsing preparation items. Table 5 shows item locations, stages, and fit. Three out of the five preparation items and both of the contemplation items demonstrated a poor fit. Based on the examination of item location and fit, the decision was made to not rename Factors 2 (preparation) and 5 (contemplation). Conceptually, the items in Factor 2 are a better fit with the theoretical understanding of the preparation stage. Additionally, Factor 5 (contemplation) is a weak factor and, as a weak factor with ill-fitting items, the justification for renaming Factor 5 based on the results of the unfolding model was not sufficient.

Table 5

MCCS Item Stage of Change, Location, and Fit

Item	Stage of Change	Location	Infit <i>p</i>	Outfit <i>p</i>	$S\chi^2 p$
3. I worry that if I learn too much about diversity I'll have to change my life and who I interact with.	Preparation	-4.01	.00*	.00*	.11
2. I have distanced myself from people I was close to or lost friends because they do not support the work that I do related to diversity efforts.	Maintenance	-3.13	.01*	.04	.00*
6. There have been costs and impacts to my everyday life because of diversity related conversations and activities that I engage in on a regular basis.	Maintenance	-2.58	.00*	.00*	.00*
8. My dedication to doing diversity related work has changed my friendship circle to reflect this commitment.	Maintenance	-2.24	.08	.11	.03
21. I put myself on the spot when I engage in conversations related to diversity issues even though this leaves me open to criticism from others.	--	-1.82	.98	.98	.15
12. I have recently begun engaging in more diversity related conversations and activities.	Action	-1.64	.28	.14	.05

Table 5 (continued)

Item	Stage of Change	Location	Infit <i>p</i>	Outfit <i>p</i>	$S\chi^2 p$
20. I have a community of close friends and colleagues who are all engaged in social justice and diversity efforts.	Maintenance	-1.55	.69	.75	.37
15. I have recently had to examine and change some of my beliefs related to cultural groups of which I am not a member.	Action	-1.51	.10	.04	.00*
10. I currently engage in difficult conversations related to diversity in work and social environments.	Maintenance	-1.36	1.00	1.00	.02
27. Engaging in diversity related work has changed me as a person.	--	-1.02	.88	.97	.08
22. Though I frequently engage in activities related to diversity, I am always in need of more diversity related education and experiences.	--	-0.90	.44	.71	.00*
16. I have both strengths and weaknesses when it comes to diversity work.	Action	-0.29	.98	.98	.00*
23. I try hard to be aware of my own biases, racism, homophobia, and discriminatory or stereotyping thoughts and actions.	Action	-0.24	.71	.75	.00*

Table 5 (continued)

Item	Stage of Change	Location	Infit <i>p</i>	Outfit <i>p</i>	S χ^2 <i>p</i>
7. Treating everyone as equals is one of the most important aspects of any job working with people.	Contemplation	0.87	.00*	.00*	.00*
14. I try to treat people the same way regardless of their culture or background.	Contemplation	1.48	.01*	.01*	.01*
17. I engage in diversity related activities and dialogues but not on a regular basis.	--	1.85	.83	.79	.03
25. I would talk about diversity more if people weren't so sensitive about it.	Preparation	2.28	.05	.03	.00*
24. People should focus on being individuals rather than focusing on what cultural groups they belong to.	Precontemplation	2.50	.98	.97	.11
5. When I mess up in diversity conversations I try to defend myself.	Preparation	2.66	.31	.31	.01*
13. I currently don't engage in activities related to diversity, but I would like to in the future.	--	2.72	.09	.16	.02

Table 5 (continued)

Item	Stage of Change	Location	Infit <i>p</i>	Outfit <i>p</i>	$S\chi^2 p$
11. I don't usually engage people in diversity related conversations because it's easier to avoid these topics most of the time.	Preparation	2.91	.58	.53	.20
18. I'd prefer to watch a video or read a book about difficult dialogues related to diversity rather than engage in those dialogues myself.	Precontemplation	2.92	.79	.84	.05
1. I do not presently engage in any activities related to diversity.	Precontemplation	2.95	.06	.29	.00*
4. I don't usually engage people in diversity related conversations because these conversations can be uncomfortable.	Preparation	3.01	.10	.02	.58
26. I don't know what to do about biased, racist, homophobic, discriminatory, or stereotyping thoughts that I have about people sometimes.	--	3.04	.03	.01*	.31
19. I think diversity is important but it gets too much attention right now.	Precontemplation	3.25	.02	.13	.00*
9. I don't notice people's cultural background (e.g., abilities/disabilities, race/ethnicity, sexual orientation, etc.).	Precontemplation	3.43	.51	.81	.55

Note. No stage of change is identified for MCCS items that were eliminated based on the EFA.

**p* < .01.

In summary, results of both the EFA and the GGUM were considered in determining the factor structure of the MCCS. Each statistical procedure yielded a different set of information. Based on consideration of both sets of findings, I decided to retain the measurement structure suggested by the EFA. The following hypotheses are addressed using the EFA 5-factor solution.

Hypothesis 1: MCCS Factor Structure

The first hypothesis was that the MCCS would have a five-factor structure with each factor representing one of the stages of change. The results of the EFA confirmed this hypothesis using principle axis factor analysis with an oblique rotation to determine the factor structure of the MCCS. The five factors were labeled (1) Precontemplation (5 items; e.g., “I think diversity is important but it gets too much attention right now”), (2) Contemplation (2 items; e.g., “I try to treat people the same way regardless of their cultural background”); (3) Preparation (5 items; “I don’t usually engage people in diversity related conversations because these conversations can be uncomfortable”), (4) Action (4 items; “I have both strengths and weaknesses when it comes to diversity work”), and (5) Maintenance (5 items; “My dedication to doing diversity related work has changed my friendship circle to reflect this commitment”).

The five factors resulting from the EFA provided the basis for creating MCCS subscales representing each one of the stages of change. MCCS subscale scores were calculated by averaging the scores across subscale items. The subscale with the highest score identified each participant’s stage of change. Because two participants could obtain the same numerical score while being in different stages, a “Total” MCCS score would

not be interpretable or desirable. Participant demographics and the total participants in each stage of change are located in Table 6. Cronbach's α was calculated for each stage of change subscale to establish reliability (see Table 7). Internal consistency reliabilities for the five subscales ranged from .64 to .74 with three of the subscales (Precontemplation, Contemplation, and Action) falling below the recommended .70 reliability coefficient minimum (Kline, 2005).

Table 6

Frequencies and Percentages for Participant Demographics (N = 221)

Demographics	<i>f</i>	<i>P</i>
Training Program		
Counseling Psychology	100	45.2
Clinical Psychology	72	32.6
School Psychology	39	17.6
Professional Psychology (PsyD)	10	4.5
Degree		
PhD	123	55.7
PsyD	54	24.4
Masters	44	19.9
Year in Program		
1 st	65	29.4

Table 6 (continued)

Demographics	<i>f</i>	<i>P</i>
2 nd	49	22.2
3 rd	38	17.2
4 th	29	13.1
5 th and above	40	18.1
Member of an underrepresented group based on race/ethnicity, sexual orientation, or ability/disability		
Yes	87	39.4
No	134	60.6
Currently Engaged in Diversity-Related Research		
Yes	65	29.4
No	156	70.6
Number of Multicultural Training Experiences (<i>Range = 0 to 30</i>)		
0	21	9.5
1	46	20.8
2	37	16.7
3	29	13.1
4	17	7.7
5	13	5.9
6 or more	58	26.4

Table 6 (continued)

Demographics	<i>f</i>	<i>P</i>
Stage of Change		
Precontemplation	1	.5
Contemplation	89	40.3
Preparation	2	.9
Action	116	52.5
Maintenance	13	5.9

Table 7

Descriptive Statistics and Reliability Coefficients for the MCCS and MAKSS-CE-R

Measure	<i>N</i>	<i>N</i> of Items	α	Min	Max	<i>M</i>	<i>SD</i>
MCCS							
Precontemplation	221	5	.69	1.00	4.40	1.91	.66
Contemplation	221	2	.65	1.00	5.00	3.68	1.05
Preparation	221	5	.70	1.00	4.00	1.99	.63
Action	221	4	.64	1.25	5.00	3.89	.67
Maintenance	221	5	.74	1.00	4.60	2.67	.82
MAKSS-CE-R							
Awareness	219	10	.67	19	37	27.41	3.59
Knowledge	219	13	.84	25	51	37.21	5.14
Skills	219	10	.83	15	40	28.05	4.65
Total	219	33	.84	65	120	92.68	9.59

Note. MCCS = Multicultural Competence Change Scale; MAKSS-CE-R = Multicultural Awareness, Knowledge, and Skills Survey, Counselor Edition, Revised.

In summary, results from the EFA indicated that the MCCS has a 5-factor solution with each factor representing one of the stages of change. Item scores were averaged across each factor to create total subscale scores and the highest subscale score determined participant's stage of change. Out of the five MCCS subscales, only the Preparation subscale ($\alpha = .70$) and the Maintenance subscale ($\alpha = .74$) met the recommended .70 reliability coefficient minimum.

Convergent and Discriminant Validity

Preliminary Analysis

To establish convergent and discriminant validity, the MCCS was correlated with the MAKSS-CE-R (D'Andrea et al., 2005), a frequently used measure of multicultural competence, and the ECIQ items. Data missing on the MAKSS-CE-R and MCCS was 100% missing for all items on both surveys. Examination of the MAKSS-CE-R total and subscale descriptive statistics, boxplots, and stem-and-leaf plots supported that there were no significant outliers or violations to linearity or normality. Missing data on the ECIQ items was investigated and determined not to be missing at random. Given that less than 5% of cases were missing, the decision was made not to replace missing data (Mertler & Vannatta, 2005). One significant outlier was identified after examining the ECIQ descriptive statistics, boxplots, and stem-and-leaf plots. The outlier was determined to be legitimate and not due to data entry error, instrumentation error, or to participants being different from the rest of the sample and was, therefore, not deleted from the sample (Mertler & Vannatta, 2005; Tabachnick & Fidell, 2007). Inspection of scatterplots indicated that the assumption of linearity had not been violated (Mertler & Vannatta, 2005). Descriptive statistics and reliability coefficients for the MCCS subscale scores and MAKSS-CE-R subscale and total scores are presented in Table 7.

Hypothesis 2: Relationship between the MCCS and MAKSS-CE-R

The second hypothesis was that the total scores and subscale scores on the MCCS would be significantly and positively correlated with the MAKSS-CE-R (D'Andrea et al., 2005). Specifically, it was hypothesized that the MAKSS-CE-R Knowledge, Awareness,

and Skills subscales would be significantly and positively associated with scores on the MCCA Preparation, Action, and Maintenance subscales, and significantly and negatively associated with scores on the Precontemplation and Contemplation subscales. Correlation coefficients were first calculated among the five MCCA subscales and the MAKSS-CE-R Total and subscale scores. Alpha was set as $p \leq .01$. Results showed that 14 out of the 20 correlations were statistically significant ($p < .01$). Table 8 presents a correlation matrix of the MCCA and the MAKSS-CE-R.

Table 8

Correlations between the MCCA and MAKSS-CE-R

	MAKSS-CE-R Awareness subscale	MAKSS-CE-R Knowledge subscale	MAKSS-CE-R Skills subscale	MAKSS-CE-R Total
MCCA Pre- contemplation	-.44**	-.32**	-.24**	-.45**
MCCA Contemplation	-.45**	-.09	-.08	-.26**
MCCA Preparation	.01	-.35**	-.28**	-.32**
MCCA Action	.28**	.03	.03	.14
MCCA Maintenance	.29**	.27**	.18*	.34**

Note. MCCA = Multicultural Competence Change Scale; MAKSS-CE-R = Multicultural Awareness, Knowledge, and Skills Survey, Counselor Edition, Revised. The Bonferroni approach is used to control for Type I error across correlations ($.05/20 = .002$).

* $p < .01$. ** $p < .002$.

Results associated with the MCCS and MAKSS-CE-R were partially consistent with the second hypothesis. Scores on the Precontemplation subscale were significantly and negatively associated with the MAKSS-CE-R Knowledge, Awareness, and Skills subscale and total scores. Scores on the Contemplation subscale were significantly and negatively associated with the MAKSS-CE-R total score and Awareness subscale score. Scores on the Action subscale were significantly and positively associated with the MAKSS-CE-R Awareness subscale score. Scores on the Maintenance subscale were significantly and positively associated with the MAKSS-CE-R Awareness, Knowledge, and Skills subscale scores and total score. Contrary to expectations, scores on the Preparation subscale were significantly and negatively associated with the MAKSS-CE-R Knowledge and Skills subscale scores and total score. Furthermore, neither the Contemplation subscale nor the Action subscale was significantly associated with the MAKSS-CE-R Knowledge or Skills subscales.

In summary, correlation coefficients were computed among the five MCCS subscales and the MAKSS-CE-R total score and three subscale scores. Results partially supported the hypothesis and provided evidence supporting the convergent and discriminant validity of the MCCS subscales. Significant correlations on the MCCS Precontemplation, Contemplation, and Preparation subscales were consistently negatively associated with the MAKSS-CE-R subscale scores and total score. Additionally, significant correlations on the MCCS Action and Maintenance subscales were consistently positively correlated with the MAKSS-CE-R subscale scores and total score.

Hypothesis 3: Relationship between the MCCS and ECIQ

The third hypothesis was that scores on the ECIQ items addressing cultural identity interests, self-awareness, awareness, knowledge, skill, contact with different cultural groups, and social action/social justice efforts would be significantly and positively correlated with scores on the MCCS. Specifically, high scores on the identified ECIQ items would be significantly associated with high scores on the MCCS Action and Maintenance subscales. An ECIQ subscale score was calculated for each of the seven ECIQ statements by summing the statements corresponding to the cultural identity scores. A total ECIQ score was calculated by summing all ECIQ items. Correlation coefficients were calculated for the MCCS and the ECIQ subscales. Alpha was set as $p \leq .01$. As shown in Table 9, 15 of the 40 correlations were statistically significant ($p < .01$). In particular, the Maintenance subscale was strongly correlated with frequent engagement in social justice activities ($r = .54$).

The results of the correlational analysis were partially consistent with the hypothesis that the ECIQ items would be significantly and positively correlated with the MCCS Action and Maintenance subscales. In general, the results indicate that scores on the Maintenance subscale are significantly and positively correlated with higher rated interest across cultural identities, self-awareness, awareness and knowledge of different cultural identities, skills in working with different cultural identities, more contact and engagement in social justice activities across cultural identities, and an overall higher rating across the ECIQ items. In addition, scores on the MCCS Action subscale were significantly and positively correlated with higher rated interest across cultural identities.

In contrast, high scores on the Precontemplation and Contemplation subscales were significantly and negatively correlated with engagement in social justice activities. The Precontemplation subscale was also significantly and negatively correlated with interest across cultural identities, self-awareness, knowledge of different cultural identities, and the overall total across ECIQ items.

Table 9

Correlations between the MCCS and ECIQ

	ECIQ Interest in Cultural Identity Topics	ECIQ Self- Awareness	ECIQ Awareness	ECIQ Knowledge	ECIQ Skill	ECIQ Contact with Cultural Minority Members	ECIQ Participation in Social Justice/Social Advocacy	ECIQ Total
MCCS Precontemplation	-.37**	-.20*	-.14	-.18*	-.11	-.12	-.33**	-.27**
MCCS Contemplation	-.16	.00	.00	-.03	-.02	-.02	-.24**	-.11
MCCS Preparation	-.05	-.14	-.11	-.12	-.11	-.07	-.14	-.13
MCCS Action	.24**	.05	.05	.04	-.01	.01	.12	.09
MCCS Maintenance	.44**	.22**	.31**	.33**	.24**	.33**	.54**	.48**

Note. MCCS = Multicultural Competence Change Scale; ECIQ = Experiences with Cultural Identities Questionnaire. The Bonferroni approach is used to control for Type I error across correlations ($.05/40 = .001$). *Ns* for each correlation coefficient range from 215 – 221.

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

In summary, correlation coefficients were computed among the five MCCC subscales and the ECIQ total score and seven subscale scores. Results partially supported the hypothesis and provided evidence supporting the convergent and discriminant validity of the MCCC subscales. Significant correlations on the MCCC Precontemplation and Contemplation subscales were consistently negatively associated with the ECIQ subscale scores and total score. Additionally, significant correlations on the MCCC Action and Maintenance subscales were consistently positively correlated with the ECIQ subscale scores and total score.

Sensitivity to Respondent Variability

Preliminary Analysis

The remaining hypotheses investigated relationships between the MCCC subscales and the following dependent variables: (1) Multicultural training experience, (2) Engagement in diversity related research, and (3) Member of an underrepresented group based on ethnic identity, sexual orientation, and ability. Multicultural training experience was calculated by summing the number of multicultural classes and trainings engaged in by each participant. Data were screened for outliers and to ensure that the assumptions of a one-way ANOVA were met. There were no missing data for any of the variables investigated. Examination of descriptive statistics, boxplots, and stem-and-leaf plots identified 13 extreme outliers within the multicultural training experience variable. Data transformation was utilized to reduce the effects of extreme outliers. Examination of the stem-and-leaf plot determined that cases with 14 or more training experiences would be replaced with the accepted value of 13. Analysis after data transformation showed that

both normality and linearity had been improved for the multicultural training experience variable. No significant violations to normality and linearity were found for the other investigated variables (Mertler & Vannatta, 2005; Tabachnick & Fidell, 2006).

The independent variable, the stages of change, was comprised of three levels: contemplation, action, and maintenance. The decision was made to not include the precontemplation ($N = 1$) and preparation ($N = 2$) stages in the analysis because there were too few participants in these stages for a valid analysis.

Hypothesis 4: Relationship between the MCCS and Multicultural Training Experience

The fourth hypothesis proposed that psychology trainees who had a greater number of multicultural training experiences would score higher on the Preparation, Action, and Maintenance subscales. A univariate ANOVA was conducted to investigate the relationship between the stages of change and multicultural training experience. Analysis of the Levene's test of equality for variance indicated that homogeneity of variance among groups was not supported, $F(2, 215) = 13.48, p < .001$. Since ANOVA's are not robust to violations of the assumption of homogeneity, the Kruskal-Wallis test was used as a non-parametric alternative to the ANOVA (Green & Salkind, 2008; Shavelson, 1996). Results from the Kruskal-Wallis test were significant, $X^2(2, N = 218) = 17.14, p < .001$. The proportion of variability in multicultural training experiences accounted for by the stages of change was 8%.

Pairwise differences among the stages of change were evaluated with follow-up Mann-Whitney U-tests. Results indicate a significant difference between the contemplation stage and action stage, $p < .05$, action stage and maintenance stage, $p <$

.001, and contemplation stage and maintenance stage, $p < .001$. Boxplot graphs were conducted to further examine the differences between groups. As shown in Figure 1, participants in the action and maintenance stages had significantly more multicultural training experiences than participants in the contemplation stage. Furthermore, participants in the maintenance stage had significantly more training experiences than participants in the action stage.

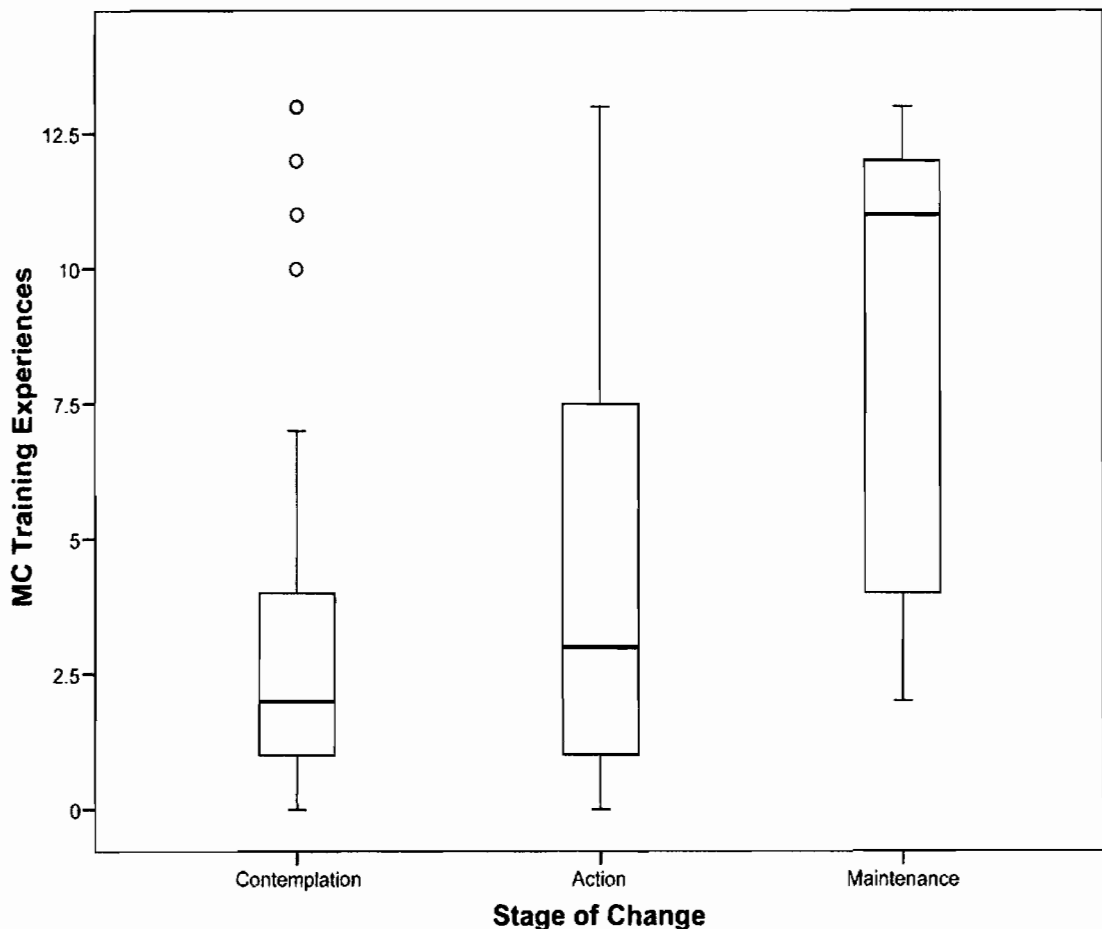


Figure 1. Distribution of the number of multicultural training experiences by psychology trainees stage of change.

In summary, results from the Kruskal-Wallis test and Mann-Whitney U-tests confirmed the hypothesis that psychology trainees with a greater number of multicultural training experiences would score higher on the Action and Maintenance subscales than on the Contemplation subscale. In particular, participants who scored the highest in the maintenance stage had a significantly greater number of multicultural training experiences than participants with high scores in the action and contemplation stage of change.

Hypothesis 5: Relationship between the MCCS and Diversity-Related Research

The fifth hypothesis proposed that psychology trainees who were currently engaged in diversity-related research at the time of completing the study would score higher on the Action and Maintenance subscales. A univariate ANOVA was conducted to investigate the relationship between the stages of change and engagement in diversity-related research. Analysis of the Levene's test of equality for variance indicated that homogeneity of variance among groups was not supported, $F(2, 215) = 24.62, p < .001$. A Kruskal-Wallis test was conducted as a non-parametric alternative to the ANOVA (Green & Salkind, 2008; Shavelson, 1996). Results from the Kruskal-Wallis test were significant $X^2(2, N = 218) = 16.07, p < .001$. The proportion of variability in engagement in diversity-related research accounted for by the stages of change was 7%.

Follow-up Mann-Whitney U-tests tests were conducted to investigate pairwise differences among the stages of change. Results showed a significant difference between the contemplation stage and action stage, $p = .003$ and contemplation and maintenance stage, $p < .001$. Examination of bar graphs indicated that participants who were currently

engaged in diversity-related research were significantly more likely to score higher in the action and maintenance stages (see Figure 2). There were no statistically significant differences between participants in the action and maintenance stages, $p = .06$ and their current engagement in diversity-related research.

In summary, results from the Kruskal-Wallis test and Mann-Whitney U-tests confirmed the hypothesis that psychology trainees currently engaged in diversity-related research would score significantly higher on the Action and Maintenance subscales than on the Contemplation subscale. No other significant differences were found between groups.

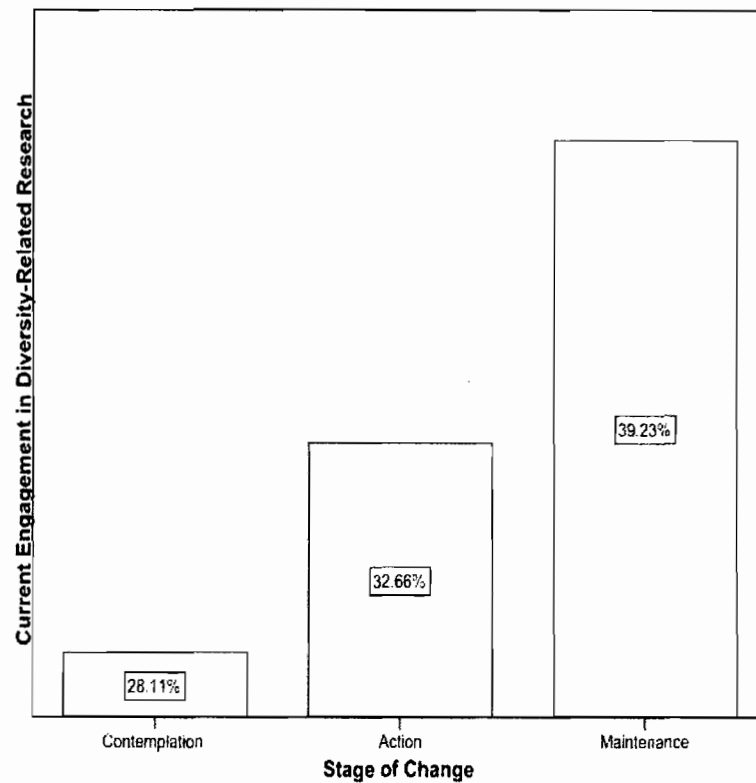


Figure 2. Distribution of psychology trainees currently engaged in diversity-related research by stage of change.

Hypothesis 6: Relationship between the MCCS and Psychology Trainees Who Are Members of Underrepresented Groups

The final hypotheses proposed that psychology trainees who are members of underrepresented groups based on ethnicity, disability/ability, and sexual orientation would score higher on the Preparation, Action, and Maintenance subscales. A univariate ANOVA was conducted to investigate the relationship between the stages of change and being a member of an underrepresented group based on ethnic identity, sexual orientation, and ability. Analysis of the Levene's test of equality for variance indicated that homogeneity of variance among groups was not supported, $F(2, 215) = 3.85, p = .023$. A Kruskal-Wallis test was conducted as a non-parametric alternative to the ANOVA (Green & Salkind, 2008; Shavelson, 1996). Results from the Kruskal-Wallis test were significant $X^2(2, N = 218) = 8.35, p = .015$. The proportion of variability in psychology trainees who are members of underrepresented groups in the U.S. based on ethnicity, sexual orientation, and ability accounted for by the stages of change was 4%.

Follow-up Mann-Whitney U-tests were conducted to evaluate pairwise differences among the stages of change. Results showed a significant difference between the contemplation and maintenance stage, $p = .005$ and the action stage and maintenance stage, $p = .006$. There was no significant difference between participants who are members of underrepresented groups and their scores in the contemplation and action stages, $p = .87$. Examination of bar graphs indicated that participants who are members of underrepresented groups based on ethnicity, sexual orientation, and ability were significantly more likely to score higher on the Maintenance subscale (see Figure 3).

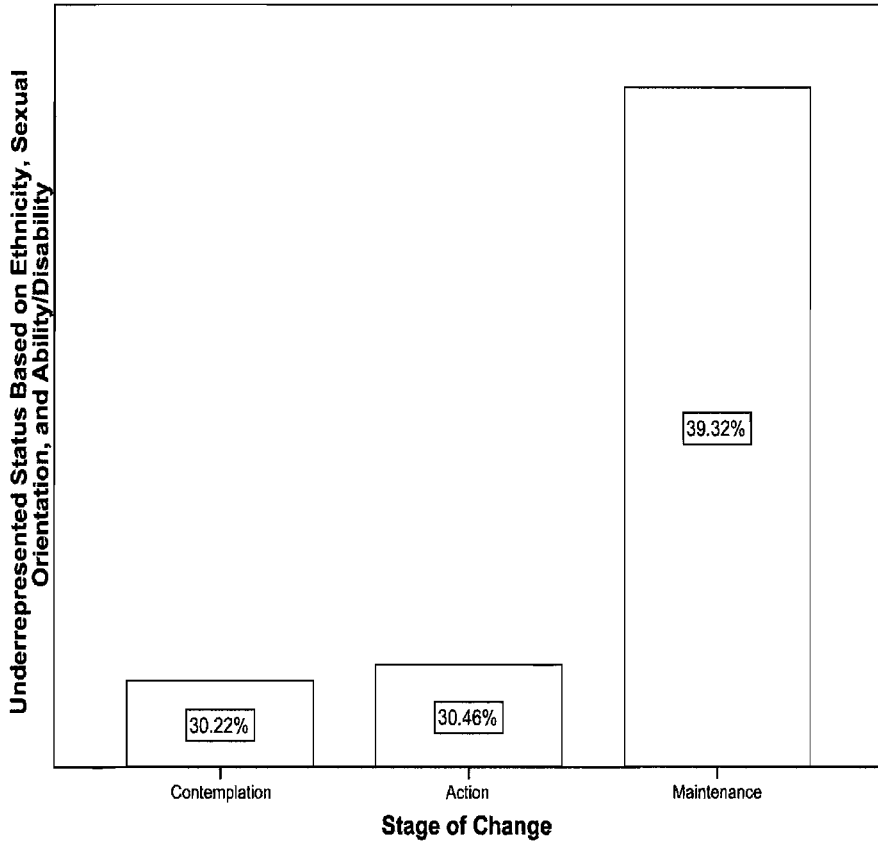


Figure 3. Distribution of psychology trainees who are members of underrepresented groups based on ethnicity, sexual orientation, and ability by stage of change.

In summary, results from the Kruskal-Wallis and Mann-Whitney U-tests were partially consistent with the final hypothesis. Participants who were members of underrepresented groups in the U.S. based on ethnicity, sexual orientation, and ability scored significantly higher on the Maintenance subscale than participants who did not identify as members of underrepresented groups based on ethnicity, sexual orientation, and ability. However, there were no significant differences in how participants scored on the Action subscale based on identification as a member of an underrepresented group in the U.S. in regards to ethnicity, sexual orientation, and ability.

CHAPTER V

DISCUSSION

The purpose of this study was to: (1) construct a measure of multicultural competence incorporating the stages of change model for use with students in applied psychology training programs, and (2) establish the validity and reliability of the Multicultural Competence Change Scale (MCCS) for assessing psychology trainees' development of multicultural competence and readiness for change. The latent variables underlying the MCCS were examined using an EFA and the item response theory (IRT) generalized graded unfolding model (GGUM). Correlational and nonparametric analyses were used to establish validity and reliability. Findings revealed the relationship between the MCCS and other measures of multicultural competence and the sensitivity of the MCCS to respondent variability. MCCS scores were expected to vary as a function of participation in multicultural trainings, participation in diversity-related research, and identification as a member of an underrepresented group in the U.S. based on ethnicity, sexual orientation, and ability.

The remainder of this chapter is organized as follows. First, the MCCS measurement structure and sensitivity to respondent variability is evaluated in relation to the hypotheses guiding this investigation. Second, results from the present investigation are examined in terms of their contribution to the current field of multicultural competence assessment. Third, the strengths and limitations of this investigation are

addressed along with implications for future research. Finally, a brief summary is provided for the purpose of synthesizing and concluding the present investigation.

Measurement Structure

Hypothesis 1: MCCS Factor Structure

The first hypothesis proposed that a five factor structure would best fit the data, both statistically and conceptually, with each factor representing one of the stages of change. The overall measurement structure of the MCCS was examined using an EFA and the GGUM. As hypothesized, the MCCS had a five factor structure and each factor represented one of the stages of change. Out of the 27 items administered in this study, 21 were retained. One factor, representing the contemplation stage of change, contained only two items and was the weakest of the five factors. It is notable that many items originally expected to be in a certain stage of change ended up being grouped and labeled as in a different stage. For example, 5 out of the 6 items intended to assess contemplation loaded onto adjacent stages of change.

The 27 MCCS items were examined using IRT's GGUM. The model achieved an overall poor fit, with 13 out of the 27 items exhibiting a poor fit. The GGUM supported the location of the precontemplation, action, and maintenance stages identified in the EFA, but did not support the location of the contemplation and preparation stages identified by the EFA. Based on item loadings and the mean location of each stage of change, the contemplation stage loaded between the stages identified as preparation and action and the preparation stage loaded between the precontemplation and contemplation

stage. In summary, the GGUM ordered the stages of change in the following manner: precontemplation, preparation, contemplation, action, and maintenance.

Inspection of item location suggested that the preparation stage was located in between the precontemplation and contemplation stages because participants endorsing precontemplation items were also endorsing preparation items. Participants endorsing precontemplation items might have been more likely to endorse preparation items than contemplation items because the precontemplation and preparation items reflect statements addressing specific behaviors associated with diversity-related activities and dialogues (e.g., “I’d prefer to watch a video or read a book about difficult dialogues related to diversity rather than engage in those dialogues myself” [precontemplation]; “I don’t usually engage people in diversity related conversations because these conversations can be uncomfortable” [preparation]). In contrast, the contemplation items addressed general statements associated with the color-blind paradigm (e.g., “I try to treat people the same way regardless of their culture or background”). Since preparation is a stage characterized by the intention to change without yet engaging in effective action (Prochaska et al., 1992; Prochaska & Norcross, 2001), it is possible that participants in the precontemplation and preparation stages of change are still engaging in very similar behaviors and, thus, endorsing some of the same behavioral statements.

MCCS stages of change. In spite of the limitations associated with the MCCS five factor structure, the factors did reflect each stage of change in a theoretically consistent manner. The stages of change model describes precontemplation as a stage in which there is no intention to change and a lack of awareness around existing problems (Prochaska et

al., 1992; Prochaska & Norcross, 2001). The five items loading onto the precontemplation factor reflected a failure to notice cultural differences, discomfort with diversity-related activities, and the belief that too much attention is devoted to diversity and cultural differences. These items support a “color-blind” perspective that is often associated with objecting multicultural and bilingual initiatives on the basis that they lead to disunification (Wolsko, Park, Judd, & Wittenbrink, 2000). There is no intention to develop multicultural competence due to the belief that cultural differences should be deemphasized.

The stage of change model describes contemplation as a stage in which there is awareness that a problem exists without a commitment to taking action (Prochaska et al., 1992; Prochaska & Norcross, 2001). The two items loading onto the contemplation factor reflected a desire to treat others as equals regardless of their cultural background. Although these statements are a continuation of the “colorblind” perspective, they indicate an awareness of cultural differences that isn’t reflected in the precontemplation items. The precontemplation items explicitly deemphasize cultural differences to the point of denying awareness of others culture or background. In contrast, the contemplation items indicate an awareness of cultural differences while implicitly deemphasizing these differences under the guise of equality. The “colorblind” perspective is a defense mechanism often used to mask feelings of anger, denial, or shame associated with learning about multicultural issues (Fouad & Arredondo, 2007; Wolsko et al., 2000). Persons professing to treat all people equally regardless of culture believe that ignoring cultural differences promotes greater equality when, in actuality,

such attitudes serve to perpetuate intergroup inequalities and minimize the importance of multicultural competency development (Fouad & Arredondo, 2007; Thompson & Neville, 1999). While the contemplation items capture awareness that equality should be promoted, they do not reflect awareness that behavior needs to be changed.

The stages of change model describes preparation as a stage in which intention to change is combined with small behavioral modifications; however, complete commitment to change is still lacking. In other studies of the stages of change model, characteristics associated with the contemplation and action stages often are found within the preparation stage (McConaughy et al., 1989; McConaughy et al., 1983; Prochaska et al., 1992; Prochaska & Norcross, 2001). For example, in the development of a stages of change measure for psychotherapy clients, McConaughy, Prochaska, and Velicer (1983) conducted cluster analysis and found that participants in the preparation stage (previously identified as the “decision making” stage) scored highly on both the contemplation and action scales. In the present study, the five items loading onto the preparation factor represented infrequent engagement in diversity-related conversations due to discomfort, and concern that learning about diversity would change relationships. The increased awareness of personal discomfort, defensiveness, and reluctance around engaging in diversity-related conversations supports the increased use of cognitive, affective, and evaluative processes associated with moving from contemplation through the preparation stage (Prochaska et al., 1992; Prochaska & Norcross, 2001). Participants scoring in the preparation stage seemed to be evaluating the energy, effort, and possible loss associated with multicultural competence development while also participating in

small behavioral changes, such as occasional engagement in diversity-related conversations.

The stage of change model describes action as a stage in which behaviors, experiences, and environment are modified in an attempt to work towards change (Prochaska et al., 1992; Prochaska & Norcross, 2001). The four items loading on the action factor described active engagement in diversity-related activities and increased awareness around diversity-related biases, strengths, and limitations. In contrast to the preparation factor, these items reflect a greater awareness of diversity-related weaknesses and a commitment to developing multicultural competence.

The stage of change model describes maintenance as a stage in which change and gains are continued (Prochaska et al., 1992; Prochaska & Norcross, 2001). The five items loading on the maintenance factor describe current engagement in diversity-related activities and the long-term effects diversity efforts have had on relationships. Multicultural competence development requires working towards individual, organizational, and societal change. This includes maintaining an ‘activist orientation’ dedicated to social justice and willingness to confront others who may knowingly or unknowingly engage in discriminatory or prejudice behaviors (Sue et al., 1998). Change is maintained through continued involvement in diversity-related efforts and gains are experienced through relationships that reflect a shared commitment to multiculturalism.

Summary. Items loading on to each of the five factors seemed logically connected to a particular stage of change. Item loadings illustrated a shift from a color-blind perspective in which diversity is neither understood nor appreciated to a period of

evaluating the pros and cons of developing diversity, to active engagement in diversity-related activities and dedication to social justice. While additional items reflecting a broader range of diversity-related thoughts, attitudes, and behaviors would help provide greater depth to stages with few items (e.g., contemplation), the current item loadings provide some understanding of a trainee's experience moving through the stages of change as they develop multicultural competence.

Hypothesis 2: Relationship between the MCCS and MAKSS-CE-R

The second hypothesis proposed that total scores and subscale scores on the MCCS would be significantly and positively correlated with the MAKSS-CE-R (D'Andrea et al, 2005), a frequently used measure of multicultural competence designed for counselor trainees. Specifically, I hypothesized that the MAKSS-CE-R Awareness, Knowledge, and Skills subscales would be significantly and positively associated with scores on the MCCS Preparation, Action, and Maintenance subscales, and significantly and negatively associated with scores on the Precontemplation and Contemplation subscales. Results from the study partially supported this hypothesis.

As predicted, higher scores on the MCCS Precontemplation subscale were significantly associated with lower scores on the MAKSS-CE-R Awareness, Knowledge, and Skills subscale and total score. However, the MCCS Contemplation subscale was significantly and negatively correlated with only the MAKSS-CE-R Awareness subscale score and total score. Thus, higher scores on the MCCS Contemplation subscale reflect lower multicultural awareness but not significantly lower multicultural knowledge or skills. This may be because the items in the contemplation stage reflect a 'color-blind'

perspective that endorses treating all persons as equals regardless of culture. Persons endorsing this color-blind perspective are not aware that treating everyone equally without attending to cultural differences reinforces societal inequalities. Instead persons who uphold the 'color-blind' paradigm often believe they are non-racist, and that equal treatment of all people will decrease disunification (Fouad & Arredondo, 2007; Utsey, Gernat, & Hammar, 2005). Thus, they may not perceive themselves as having low knowledge and skills in regards to diverse populations because they aim to treat everyone equally and, therefore, working with diverse populations may not be perceived as being any different from working with the majority population.

Contrary to expectations, higher scores on the MCCS Preparation subscale were significantly associated with lower scores on the MAKSS-CE-R Knowledge and Skills subscale and total score. Thus, movement from the contemplation stage to the preparation stage seems to be associated with some increase in awareness and a significant decrease in self-reported knowledge and skills. This may be because participants in the preparation stage are beginning to build some self-awareness and are therefore able to judge their multicultural knowledge and skills in a more accurate manner than when they are in the contemplation stage. Conceptually, it is not surprising that participants would be cognizant of limitations with their level of multicultural knowledge and skills in the stage that directly precedes action. The stages of change model identifies self-reevaluation, the process of examining how one thinks and feels about oneself regarding the problem, as a predictor of change and movement from the contemplation stage to the preparation stage (Prochaska et al., 1992).

Higher scores on the MCCS Action subscale were significantly associated with higher scores on the MAKSS-CE-R Awareness subscale. However, there were no other significant associations with the MAKSS-CE-R subscales or total score. This may be because increased awareness involves recognition of personal biases, assumptions, privileges, and limitations. This emphasis on personal limitations may decrease the likelihood that a person would self-report a significantly high level of multicultural knowledge and skills. Awareness is the catalyst for change (Pitner & Sakamoto, 2005; Roysircar, 2004) and the driving force behind action (Freire, 2000; Roysircar, 2004; Vera & Speight, 2003), thus, persons in this stage might be engaging in action to increase their multicultural knowledge and skills.

Higher scores on the MCCS Maintenance subscale were significantly associated with higher scores on the MAKSS-CE-R Awareness, Knowledge, and Skills subscales and total score. The MCCS Maintenance subscale was the only MCCS scale significantly and positively associated with higher self-reported multicultural knowledge, skills, and overall multicultural competence.

When examining each of the MCCS subscales in regards to their association with the MAKSS-CE-R, it appears that multicultural awareness is associated with the beginning of action and multicultural knowledge and skills are associated with maintaining change. Many researchers and educators consider the development of multicultural awareness to be an essential precursor to building multicultural knowledge and skills (e.g., Leonard, 1996; Pitner & Sakamoto, 2005; Roysircar, 2004; Roysircar et al., 2005). As a result, there is a tendency for educators to focus on building multicultural

awareness prior to increasing multicultural knowledge or skills (Kim et al., 2003). As noted by Kim and colleagues (2003), acknowledging a personal lack of multicultural skills may motivate a person to seek out opportunities to build those skills. Thus, in terms of this study, multicultural awareness may precipitate action, whereas significantly increased multicultural knowledge and skills may be a direct result of action and signify maintenance.

Hypothesis 3: Relationship between the MCCS and ECIQ

The third hypothesis proposed that ECIQ items addressing cultural identity interests, self-awareness, awareness, knowledge, skill, contact with different cultural groups, and social action/social justice efforts would be significantly and positively correlated with scores on the MCCS. Specifically, high scores on the identified ECIQ items would be significantly associated with high scores on the MCCS Action and Maintenance subscales. Results from the study partially supported this hypothesis.

Results showed that higher scores on the MCCS Precontemplation subscale were significantly associated with low interest in cultural identity topics, low self-awareness, low multicultural knowledge, low engagement in social justice activities, and an overall low total score across ECIQ items. This may be because items on the MCCS Precontemplation subscale represent a ‘colorblind’ perspective that minimizes cultural differences. Persons who profess that they do not see culture would be less likely to express interest in topics of cultural identity or to engage in social justice efforts. Similarly, higher scores on the MCCS Contemplation subscale were also significantly associated with low engagement in social justice activities. However, the “colorblind”

paradigm reflected in the MCCS Contemplation subscale does not explicitly deny cultural differences, which might be why the Contemplation subscale is not negatively associated with interests in cultural identities. Instead, minimization of culture is implicit and underlies the notion that all people should be treated equally regardless of culture (Fouad & Arredondo, 2007). Participation in social justice activities typically entails an awareness of inequity and oppression (Vera & Speight, 2003). Persons in the precontemplation and contemplation stages would lack this awareness and, therefore, may be less likely to engage in social justice activities.

The MCCS Preparation subscale was not associated with any of the ECIQ items. The preparation stage is characterized by small steps toward action (Prochaska et al., 1992; Prochaska & Norcross, 2001) and the ECIQ items may not adequately reflect this beginning process. The preparation stage has been described as “the early stirrings of action” where problematic behaviors are reduced but there is not yet commitment to action (Prochaska et al., 1992; Prochaska & Norcross, 2001). Likewise, items on the MCCS Preparation subscale reflect ambivalence around diversity-related interests and activities (e.g., “I worry that if I learn too much about diversity I’ll have to change my life and who I interact with”). In contrast, the ECIQ items are all positively worded and consist of strong statements such as, “I am very interested...,” “I am very knowledgeable...,” “I have a lot of contact...,” etc. The ambivalence and limited commitment to action characterized by the preparation stage may preclude consistent relationships with items addressing strong diversity-related interest, awareness, knowledge, skills, contact, or engagement in social justice activities.

As hypothesized, higher scores on the MCCS Action subscale were significantly associated with high interest in cultural identity topics. Interestingly, and contrary to the hypothesis, the MCCS Action subscale was not significantly associated with any of the other ECIQ items. The MCCS Action subscale items reflect an awareness and recent examination of diversity-related strengths, weaknesses, and cultural biases. Persons engaging in this degree of self-awareness may be less likely to strongly endorse items on the ECIQ because they are able to readily identify personal strengths and limitations that might contradict a strong endorsement. An exception to this might be the item addressing cultural identity topic interests. This item differs from the other ECIQ items because it does not require respondents to evaluate current behaviors, such as their engagement in social activism or degree of knowledge in regards to specific cultural identities. As a result, this item may be more likely to receive high endorsements from respondents in the action stage who are engaged in developing their multicultural competence. In addition, the MCCS Action subscale was positively associated with the MAKSS-CE-R Awareness subscale and, as identified by Fouad and Arredondo (2007), awareness fosters learning about others. Perhaps multicultural awareness helps move persons into and through the action stage, during which interest in different cultures increases. Continued awareness and increased knowledge then facilitate movement into the maintenance stage.

It is important to note that the MCCS Action subscale was not associated with the ECIQ awareness and self-awareness items, even though a positive association was found between the MCCS Action subscale and MAKSS-CE-R Awareness subscale. The ECIQ items differed from the MAKSS-CE-R items in the use of positively worded statements

(i.e., “I have a lot of awareness related to people who identify as minority members of the following cultural groups”) that require respondents to self-evaluate awareness and self-awareness in regards to 8 separate cultural identities. In contrast, the MAKSS-CE-R Awareness subscale is comprised of general questions associated with multicultural awareness that do not require the respondent to self-evaluate their awareness in terms of specific cultural groups. The differences between the two forms of surveying multicultural awareness likely contribute to their different relationships with the MCCS.

Results showed that higher scores on the Maintenance subscale were positively associated with a greater interest in different cultural identities, greater self-awareness, awareness and knowledge of different cultural identities, greater skills in working with different cultural identities, more contact and engagement in social justice activities across cultural identities, and an overall higher rating across the ECIQ items. These results are congruent with the theoretical understanding of the maintenance stage. Prochaska, DiClemente, and Norcross (1992) describe the maintenance stage as a “continuation of change” (p. 1104). As such, it is not surprising that the maintenance stage positively correlates with participation in activities that foster the continued development of multicultural competence. All of the items on the ECIQ address activities that have been identified as building multicultural competence and/or being a part of the multicultural movement. For example, a number of researchers have supported increasing multicultural awareness of self and others (see Fouad & Arredondo, 2007; Kaduvettoor et al., 2009; Leonard, 1996; Roysircar, 2004; Roysircar et al., 2005; Sue & Sue, 2003), knowledge (see Fouad & Arredondo, 2007; Kaduvettoor et al., 2009), skills (see Fouad &

Arredondo, 2007; Kaduvettoor et al., 2009; Rodriguez & Walls, 2000), contact with diverse populations (Allison et al., 1996; Fouad & Arredondo, 2007), and social justice activities (see Fouad & Arredondo, 2007; Vera & Speight, 2003) as a means of promoting multicultural competence development and transforming the field of psychology so that it is more culturally responsive.

MCCS Sensitivity to Respondent Variability

The remaining hypotheses attended to the sensitivity of the MCCS to respondent variability. In order to address these hypotheses, participants were divided by their MCCS subscale scores into each of the five stages of change; however, a normal distribution was not attained. Few participants were located in the precontemplation ($N = 1$) and preparation ($N = 2$) stages of change and, as a result, data analysis for these stages was limited.

Unique participant and stage characteristics might explain why the precontemplation and preparation stages of change were underrepresented in this study. Psychology trainees who chose to participate in this study may be significantly different from psychology trainees who did not choose to participate and, thus, more likely to be in the contemplation, action, or maintenance stages of change. For example, psychology trainees in the precontemplation stage of change might be less likely to participate in a diversity-related research project given that they may already feel that too much attention is devoted to diversity and cultural differences.

A study by McConaughy, Prochaska, and Velicer (1983) may further explain why few participants were identified within the preparation stage of change. In the

development of a stage of change measure for psychotherapy, McConnaughy and colleagues (1983) noticed that 9 out of 10 preparation items loaded onto the contemplation and action stages of change. Similarly, in this dissertation study, 5 out of the 6 intended preparation items loaded onto the contemplation and action stages of change. The researchers proposed two possible explanations for this result. They first suggested that movement through the preparation stage (defined as “decision making” in the study) is such a transitory experience that it is too difficult to assess. The preparation stage of change has been described as the intent to take action within the next month, with at least one unsuccessful attempt to take action in the past year (Prochaska et al., 1992; Prochaska & Norcross, 2001). Many studies investigating the stages of change have assessed preparation by using this one month timeframe as a guideline (see DiClemente et al., 1991; Laforge, Maddock, & Rossi, 1998; Nigg et al., 1999). Different from these studies, but similar to McConnaughy et al.’s (1983) investigation, the present study attempted to assess stages of change using statements reflecting attitudes and behaviors associated with each stage. It is possible that the nature of the preparation stage makes it more challenging to capture using this measurement approach.

McConnaughy and colleagues (1983) also proposed that the preparation stage may be characterized as a combination of contemplation and action. Since the majority of preparation items loaded onto adjacent stages in both the McConnaughy et al. (1983) investigation and the present dissertation study, this may suggest that the preparation stage is best represented by a combination of both contemplation and action items. In the present study, participants who might normally be in the preparation stage may have

positively endorsed items on both the Contemplation and Action subscales instead of, or in addition to, items on the Preparation subscale. Consequently, participants in the preparation stage of change may be more likely to be identified by the MCCS as located in the contemplation or action stage.

Finally, it is possible that the precontemplation and preparation stages were underrepresented in the present study because they contained fewer socially desirable statements than the other stages of change. The MCCS was developed with the intention that items would accurately reflect attitudes and behaviors associated with each stage of change. Since the stages of change represent a progression through change (Prochaska et al., 1992), some of the earlier stages are more likely to include items that may be deemed to be socially inappropriate statements in a society and a profession purporting to value diversity. For example, the Precontemplation subscale includes items that reflect a lack of interest in issues of diversity and resistance to change. Similarly, the Preparation subscale includes items that reflect ambivalence to change. In this study, the contemplation stage is comprised of items supporting a color-blind paradigm and so, while these statements deny cultural differences, they do so in a manner that appears to uphold equality and meritocracy (Utsey et al., 2005).

Research has shown that participants have a tendency to positively endorse socially desirable items on measures of multicultural competence (Constantine & Ladany, 2000; Sadowsky, Kuo-Jackson, Richardson, & Corey, 1998; Worthington, Mobley, Franks, & Tan, 2000). For example, studies of multicultural competence comparing self-report with observer-report have found that participants tend to report

anticipated behaviors and attitudes rather than their actual behaviors and attitudes (Cartwright, Daniels, Zhang, 2008; Constantine & Ladany, 2000; Worthington et al., 2000). Participants may endorse socially appropriate responses to 'save face' (Sodowsky et al., 1998), as a result of misunderstanding an item (Kitaoka, 2005; Pope-Davis, Liu, Toporek, & Brittan-Powell, 2001), or because they have had little exposure to multicultural training and, consequently, are less aware of their limited knowledge and, therefore, more likely to overestimate their competencies (Pope-Davis et al., 2001). Although some researchers maintain that social desirability measures have only a minimal effect on construct validity (Dunn et al., 2006; Smith & Ellingson, 2002) and may actually risk inappropriately lowering the predictive ability and substantive variance of instruments (Dunn et al., 2006; McCrea & Costa, 1983); other researchers note that many measures of multicultural competence are positively associated with social desirability (Constantine & Ladany, 2000; Dunn et al., 2006; Ponterotto et al., 2000; Worthington et al., 2000) and, therefore, strongly advise controlling for social desirability (Ponterotto et al., 2000; Sodowsky et al., 1998).

In summary, the precontemplation and preparation stages of change were significantly underrepresented in the present study. Possible explanations for this result include a lower likelihood that psychology trainees in the precontemplation stage would participate in a diversity-related study, challenges in identifying participants in the preparation stage due to its transitory nature and potential overlap with the contemplation and action stages, and the potential effects of participants responding to the MCCS in a socially desirable manner. Since only three respondents were identified within the

precontemplation and preparation stages of change, the decision was made to delete these cases from the analysis associated with hypotheses four, five, and six because generalization would be limited. Consequently, the following hypotheses were addressed based on analysis of the contemplation, action, and maintenance stages of change.

Hypothesis 4: Relationship between the MCCS and Multicultural Training Experiences

The fourth hypothesis proposed that psychology trainees who had a greater number of multicultural training experiences would score higher on the Preparation, Action, and Maintenance subscales. As mentioned, the preparation stage was not analyzed due to the underrepresentation of participants in this stage of change. However, analysis of the action and maintenance stages did support the hypothesis. Psychology trainees with a greater number of multicultural training experiences (i.e., multicultural trainings and courses) tended to score higher on both the Action and Maintenance subscales. In addition, psychology trainees in the maintenance stage had more multicultural training experiences than students in any other stage. This finding is congruent with the theoretical understanding of the stages of change. The action and maintenance stages both are characterized by a desire to change and maintain change through active engagement in activities. The action stage involves overt behavioral change requiring a great deal of time and energy, whereas, the maintenance stage of change is focused on continuing and maintaining changes through engagement in new activities (Prochaska et al., 1992; Prochaska & Norcross, 2001).

Multicultural trainings focus on preparing participants to function in a manner that is culturally competent (Fouad & Arredondo, 2007). Participation in multicultural

trainings and education has been positively associated with increased self-awareness (Achenbach & Arthur, 2002; Sadowsky et al., 1998), multicultural knowledge (Holcomb-McCoy & Myers, 1999; Manese, Wu, & Nepomuceno, 2001; Sadowsky et al., 1998), multicultural skills (Manese et al., 2001; Sadowsky et al., 1998), therapeutic competence (D'Andrea et al., 1991; Fouad & Arredondo, 2007), and an increased likelihood to recognize structural and external causes of poverty (Sadowsky et al., 1998; Toporek & Pope-Davis, 2005). Thus, participation in multicultural education and trainings would be an active way to engage in and maintain change. In addition, there is some evidence that multicultural competence will continue to develop even after completion of a multicultural course (Boysen & Vogel, 2008). Overall, engaging in multicultural trainings is an overt behavioral action and, although this study does not investigate causal relationships, the benefits of multicultural trainings might help a psychology trainee progress from the action stage of change to the maintenance stage of change. In the interest of maintaining change, participants in the maintenance stage may continue to seek out multicultural trainings, which could explain the significantly higher number of multicultural trainings associated with this stage of change.

Hypothesis 5: Relationship between the MCCS and Diversity-Related Research

The fifth hypothesis proposed that psychology trainees who are engaged in diversity-related research would score higher on the Action and Maintenance subscales. Results from the study were consistent with this hypothesis; psychology trainees in the action and maintenance stages were more likely to be currently engaged in diversity-related research. As previously mentioned, the action and maintenance stages both

involve action and a committed effort to engage in activities that will support new behaviors (Prochaska et al., 1992; Prochaska & Norcross, 2001). In addition, analysis of the ECIQ showed that the action and maintenance stages are both associated with a significantly greater interest in different cultural identities. Engaging in diversity-related research would be an active way to address those interests and continue working towards change (Liu, Sheu, & Williams, 2004). Likewise, Sue et al. (1998) noted that becoming multiculturally competent requires an individual to go beyond taking a diversity class and assume personal responsibility for seeking out experiences that will further their own development. Thus, participation in diversity-related research may be a form of taking responsibility to further develop one's own multicultural competence and, consequently, engage in change.

Hypothesis 6: Relationship between the MCCS and Psychology Trainees Who Are Members of Underrepresented Groups

The final hypothesis proposed that psychology trainees who are members of underrepresented groups in the U.S. based on race/ethnicity, sexual orientation, and ability/disability would score higher on the Preparation, Action, and Maintenance subscales. Results partially support this hypothesis. Findings showed that, in comparison to any other stage, psychology trainees in the maintenance stage were more likely to be members of underrepresented groups in the U.S. based on ethnicity, sexual orientation, and ability. While it cannot be assumed that all trainees who are members of underrepresented groups are going to be actively working towards maintaining cultural competence, there are some characteristics of underrepresented groups that might

contribute to being in a later stage of change. For example, psychology trainees who are members of underrepresented groups often must learn early on how to negotiate cultural differences. Persons of color are likely to have more personal experiences engaging with and participating in activities with other ethnically/racially diverse individuals and, consequently, must learn to successfully manage interracial interactions (Ponterotto et al., 2000; Pope-Davis, Reynolds, Dings, & Nielson, 1995; Sadowsky et al., 1998). Similarly, persons identifying with a physical or cognitive disability or as gay, lesbian, bisexual, or transgendered (GLBT) are also in a position in which they are engaging on a regular basis with persons identifying with identities culturally distinct from their own. In contrast, persons from the dominant U.S. culture can often avoid engaging with minority group members who are less likely to be represented in positions of power (Sadowsky et al., 1998). For this reason, members of underrepresented groups may be more aware of cultural differences and more likely to work towards changing their level of multicultural competence. This is particularly applicable for the population investigated in this study. As graduate students, the participants have already experienced a certain level of success in an educational system that reflects the values of majority culture (Maton et al., 2006; Sue et al., 1998).

In understanding this final set of results, it is also important to remember that the MCCS Maintenance subscale was comprised of statements pertaining to the impact of diversity-related commitments on personal relationships. As many studies have shown, ethnic identity development is associated with multicultural competence development (Ottavi, Pope-Davis, & Dings, 1994; Ponterotto et al., 2000; Sue et al., 1998; Utsey et al.,

2005) and White racial identity development is very different from the racial/cultural identity development of persons from oppressed cultures (Ponterotto et al., 2000; Sue et al., 1998; Sue & Sue, 2003). Thus, members of underrepresented groups might be more likely to be in the maintenance stage of change because their process of multicultural development and moving through change may be different from their dominant culture peers. For example, persons of color may internalize racism and acquiesce to stereotypes because of the benefits that come with being 'accepted' by White society (Thompson & Neville, 1999). However, as persons of color progress through the process of multicultural competence change, they may be faced with decisions to challenge racism and risk rejection and ostracism (Thompson & Neville, 1999). The dynamics of racism can create fissures in relationships as persons of color become more cognizant of racist interactions with peers and aware of personal feelings of anger (Thompson & Neville, 1999). Since persons of color often experience covert racism (Coates, 2008) and racial microaggressions on a daily basis (Fouad & Arredondo, 2007; Sue et al., 2007), once their awareness is heightened, they may move through subsequent stages of change faster than their White peers. Recognizing the discrimination around them might motivate persons of color to engage in more diversity-related activities and to end relationships that reinforce or reflect racism and inequality. Although this example has been focused on ethnic/racial differences, it may also apply to persons who identify as GLBT or who have a cognitive or physical disability. It is not uncommon for a person who identifies as GLBT to experience isolation and stigmatization when they disclose their sexual orientation identity to close family and friends (Fassinger & Richie, 1997; Sue & Sue,

2003). In addition, individuals identifying as GLBT or with a disability experience microaggressions that may also further heighten their awareness of personal discrimination (Deal, 2007; Fassinger & Richie, 1997; Sue et al., 2007).

Summary of Findings

Findings from the present study supported the factor structure and validity of the MCCS. The MCCS was comprised of five factors that each represented one of the stages of change. The MCCS Precontemplation subscale assessed failure to notice cultural differences, discomfort with diversity-related activities, and the belief that diversity and cultural differences receive too much attention. This stage was negatively associated with the MAKSS-CE-R, a frequently used measure of multicultural competence. The items in the MCCS Precontemplation subscale were associated with low multicultural awareness, knowledge, and skills, low self-awareness, a low interest in different cultural identities, and low engagement in social justice activities.

The MCCS Contemplation subscale assessed the use of color-blindness as a means to maintain equality. This stage was also negatively associated with the MAKSS-CE-R, low multicultural awareness, and low engagement in social justice activities. In addition, psychology trainees scoring in the contemplation stage had a significantly lower number of multicultural training experiences and lower engagement in diversity-related research than their peers scoring in the MCCS action and maintenance stages.

The MCCS Preparation subscale assessed infrequent engagement in diversity-related conversations due to discomfort and concern that learning about diversity would

change relationships. This stage was negatively associated with the MAKSS-CE-R and low multicultural knowledge and skills.

The MCCS Action subscale assessed active engagement in diversity-related activities and increased awareness around diversity-related biases, strengths, and limitations. This stage was associated with high multicultural awareness and greater interest in different cultural identities. In addition, psychology trainees scoring in the action stage had participated in a significantly higher number of multicultural training experiences and were more likely to be currently engaged in diversity-related research.

The MCCS Maintenance subscale assessed current engagement in diversity-related activities and the long-lasting effects diversity efforts have had on relationships. This stage was positively associated with the MAKSS-CE-R and high multicultural awareness, knowledge, and skills. The MCCS Maintenance subscale was also associated with a high interest in different cultural identities, self-reported high self-awareness, multicultural awareness, multicultural knowledge, and multicultural skills on the ECIQ, more contact with different cultural groups, and high engagement in social justice activities. In addition, psychology trainees in this stage had participated in a significantly greater number of training experiences than psychology trainees in any other stage, and they were also significantly more likely to be currently engaged in diversity-related research. Psychology trainees who are members of underrepresented groups in the U.S. based on ethnicity, sexual orientation, and ability were also more likely to score in the maintenance stage of change. A summary of the findings are displayed in Table 10.

Table 10

MCCS Stages of Change Summary of Findings

MCCS Stages of Change	Items	Findings
Precontemplation	<p>19. I think diversity is important but it gets too much attention right now.</p> <p>24. People should focus on being individuals rather than focusing on what cultural groups they belong to.</p> <p>18. I'd prefer to watch a video or read a book about difficult dialogues related to diversity rather than engage in those dialogues myself</p> <p>9. I don't notice people's cultural background (e.g., abilities/disabilities, race/ethnicity, sexual orientation, etc.).</p> <p>1. I do not presently engage in any activities related to diversity.</p>	<p>Negatively associated with MAKSS-CE-R</p> <p>Low multicultural awareness</p> <p>Low multicultural knowledge</p> <p>Low multicultural skills</p> <p>Low self-awareness</p> <p>Low interest in different cultural identities</p> <p>Low engagement in social justice activities</p>
Contemplation	<p>14. I try to treat people the same way regardless of their culture or background.</p> <p>7. Treating everyone as equals is one of the most important aspects of any job working with people.</p>	<p>Negatively associated with the MAKSS-CE-R</p> <p>Low multicultural awareness</p> <p>Low engagement in social justice activities</p>

Table 10 (continued)

MCCS Stages of Change	Items	Findings
Contemplation (continued)		Lower number of multicultural training experiences Lower engagement in diversity-related research
Preparation	<p>4. I don't usually engage people in diversity related conversations because these conversations can be uncomfortable.</p> <p>11. I don't usually engage in diversity related conversations because it's easier to avoid these topics most of the time.</p> <p>3. I worry that if I learn too much about diversity I'll have to change my life and who I interact with.</p> <p>5. When I mess up in diversity conversations I try to defend myself.</p> <p>25. I would talk about diversity more if people weren't so sensitive about it.</p>	Negatively associated with the MAKSS-CE-R Low multicultural knowledge Low multicultural skills
Action	16. I have both strengths and weaknesses when it comes to diversity work.	High multicultural awareness

Table 10 (continued)

MCCS Stages of Change	Items	Findings
Action (continued)	<p>15. I have recently had to examine and change some of my beliefs related to cultural groups of which I am not a member.</p> <p>12. I have recently begun engaging in more diversity related conversations and activities.</p> <p>23. I try hard to be aware of my own biases, racism, homophobia, and discriminatory or stereotyping thoughts and actions.</p>	<p>Greater interest in different cultural identities</p> <p>Greater number of multicultural training experiences</p> <p>Currently engaged in diversity-related research</p>
Maintenance	<p>8. My dedication to doing diversity related work has changed my friendship circle to reflect this commitment.</p> <p>2. I have distanced myself from people I was close to or lost friends because they do not support the work that I do related to diversity efforts.</p> <p>6. There have been costs and impacts to my everyday life because of diversity related conversations and activities that I engage in on a regular basis.</p> <p>10. I currently engage in difficult conversations related to diversity in work and social environments.</p> <p>20. I have a community of close friends and colleagues who are all engage in social justice and diversity efforts.</p>	<p>Positively associated with the MAKSS-CE-R</p> <p>High multicultural awareness</p> <p>High multicultural knowledge</p> <p>High multicultural skills</p> <p>High self-awareness</p>

Table 10 (continued)

MCCS Stages of Change	Items	Findings
Maintenance (continued)		High interest in different cultural identities More contact with different cultural groups High engagement in social justice activities Greater number of multicultural training experiences Currently engaged in diversity-related research Greater likelihood of being a member of an underrepresented group based on ethnicity, sexual orientation, and ability.

Contributions to Research

The M CCS offers a novel approach to multicultural competence assessment. By measuring multicultural competence from a stage of change perspective, the M CCS has the potential to assess subtle changes in psychology trainees' development of multicultural awareness, knowledge, skills, and readiness for change. As a result, the M CCS, with further validation, could be used to inform the development, appropriateness, and effectiveness of multicultural competence interventions and trainings for psychology trainees. Initial assessment of psychology trainees' readiness for change can guide the development of multicultural training interventions so that interventions are tailored to meet trainees at their developmental level or stage of change. Previous studies matching interventions or treatment to a person's stage of change have found increased participation and retention in interventions and continued progression towards maintenance even after the intervention has ended (Prochaska & Norcross, 2001; Velicer et al., 1998). In contrast, mismatching stages to treatment can result in minimal change (Prochaska et al., 1992; Prochaska & Norcross, 2001). Using the M CCS to identify psychology trainees' stage of change, for example, could help to avoid or minimize the defensiveness and resistance that might occur from implementing an action-oriented intervention with psychology trainees who are in a precontemplation stage of change.

The M CCS, with further validation, may also be used to evaluate the effectiveness of multicultural trainings and interventions. A focus on subtle cognitive, emotional, and behavioral changes allows the M CCS to provide a more definitive assessment of

multicultural competence. In addition, the M CCS moves away from using the broad, non-specific, labels of 'low, medium, and high' adopted by most instruments to identify psychology trainees level of multicultural competence. Since the development of multicultural competence is an ongoing process (Sue & Sue, 2003) identifying whether a psychology trainee is low in their multicultural competence can be less helpful than identifying where they are in their readiness for change and how they are progressing towards change. The M CCS could be administered as a pre- and post-measure to evaluate whether an intervention, training, or class has helped psychology trainees progress from one stage of change to the next. Because the M CCS is specific to psychology trainees, it provides a tool that can potentially be used for training purposes.

Limitations of the Study

In order to understand the results and implications within context, it is important to identify limitations to the present study. First, the M CCS items did not fully represent the cognitive, emotional, and behavioral characteristics of each stage of change. The initial items administered should have included a minimum of 6 items per intended subscale. As recommended by Loewenthal (2001), 6 – 15 items are appropriate for assessing an individual factor. The inclusion of an equal number of items per subscale would have also increased the likelihood that each subscale is adequately represented during factor analysis. In the final factor structure, the M CCS Contemplation subscale was weak with only two items.

The Cronbach's alpha for each subscale, except the Preparation and Maintenance subscales, fell below the recommended .70 reliability coefficient minimum. This finding

suggests the need for stronger items that can better reflect the stages of change (Kline, 2005). In addition, Kline (2005) warns against writing ‘double-barreled’ items, or items that have more than one central thought, and encouraged using clear items that avoid awkward wording. Many of the items dropped on the MCCS could be identified as ‘double-barreled’ items (e.g., [Item 17] “I engage in diversity related activities and dialogues but not on a regular basis”). Only a few participants provided feedback on the MCCS; however, those who did, noted confusion about how to respond when they agreed with only one part of a two part statement.

Both the EFA and GGUM were utilized in this dissertation to examine the MCCS measurement structure. The EFA categorized items according to a stage of change. In contrast, the GGUM located MCCS items on a continuum. Each statistical approach provided valuable information regarding the MCCS measurement structure. These approaches raise the question of which has greater utility: Is it more useful to be able to categorize psychology trainees’ by their multicultural competence stage of change, or to identify where psychology trainees are located across a stages of change continuum? In other words, it may be more useful to conceptualize the stages of change as five distinct stages, and to identify in which of those five stages a psychology trainee is located (e.g., contemplation). It is also possible that it would be more useful to conceptualize the stages of change along a continuum so that, in addition to knowing that a trainee is in the contemplation stage, it can also be determined where in the contemplation stage the trainee is located. A trainee might be described as moving from precontemplation to contemplation versus in the midst of contemplation versus moving out of the

contemplation stage and about to enter the preparation stage. Given that the GGUM had an overall poor model fit, the hypotheses in this study were examined based on the specific stage of change in which participants were located (e.g., contemplation vs. action). It is possible that results may have differed had the hypotheses been tested based on participants' location across the stage of change continuum. For example, it may be possible that participants near the end of the preparation stage may have had significantly higher awareness scores than participants in the beginning of the preparation stage.

A final limitation is that participants were not normally distributed across the stages of change. Only three participants were identified as being in the MCCA precontemplation and preparation stages of change, and therefore some of the follow-up analyses did not include these two stages. This limited the ability to examine differences between the MCCA stages of change. Furthermore, the investigation relied on volunteer participants. It is possible that psychology trainees who chose not to participate in the study may have differed in meaningful ways from psychology trainees who did participate in the study. Finally, since social desirability was not accounted for within the study, there remains the possibility that participants' responses were influenced by the desire to provide a socially appropriate response. As previously noted, respondents tend to positively endorse socially desirable items on measures of multicultural competence (Constantine & Ladany, 2000; Sadowsky et al., 1998; Worthington et al., 2000). The MCCA is a measure that is continuing to be explored and developed, and therefore, additional studies are needed to improve the psychometric properties of this instrument.

Implications for Future Research

The development and initial validation of the MCCS has provided the first step towards applying the stages of change model to the development of psychology trainees' multicultural competence. Future research can further this endeavor in a number of ways. First, the MCCS could benefit from the development of additional items identifying the cognitive, emotional, and behavioral characteristics of each stage of change and, in particular, the contemplation stage of change. Further analysis of the MCCS, with additional items that span the characteristics of each stage of change, might increase the validity and reliability of the instrument and strengthen the factor structure. Second, future research could help to determine whether it is more useful to identify psychology trainees multicultural competence stage of change (i.e., precontemplation, contemplation, preparation, action, or maintenance) versus locating where psychology trainees are in their multicultural competence development across a stage of change continuum (i.e., beginning of contemplation stage, in the contemplation stage, moving from contemplation to preparation stage, etc...).

Future research can begin to integrate the processes of change with the stages of multicultural competence change. Although the stages of change illustrate *when* change occurs, the processes of change provide information about *how* change occurs. The processes of change are the experiences and activities engaged in when a person modifies behavior (Prochaska et al., 1992; Prochaska & Norcross, 2001). Prochaska, DiClemente, and Norcross (1992) identified the following 10 processes associated with making change: consciousness raising, self-reevaluation, self-liberation, counterconditioning,

stimulus control, reinforcement management, helping relationships, dramatic relief, environmental reevaluation, and social liberation. It was beyond the scope of this project to investigate the role these change processes have in multicultural competency development; however, identifying when change occurs provides greater opportunity to investigate the mechanisms underlying such changes.

Future research could begin to identify diversity-related interventions to best match each stage of change. Previous research has found support for matching interventions to participants' stage of change (Prochaska et al., 1992; Prochaska & Norcross, 2001; Velicer et al., 1998). When interventions have been matched to participants' stage of change, participant retention is higher and change is promoted. Thus, future research could create and evaluate the effectiveness of multicultural trainings when they are matched to psychology trainees' multicultural competence stage of change. Lastly, future research could continue to explore the relationships found between diversity-related training, diversity-related research, being a member of an underrepresented group in the U.S., and the stages of change.

Conclusion

The present study was designed to develop and investigate a measure that would provide a more definitive assessment of psychology trainees' multicultural competence development. By applying the stages of change model (Prochaska et al., 1992) to the development of multicultural competence, the MCCS aims to assess subtle cognitive, emotional, and behavioral modifications indicative of change. Results of the study supported a five factor structure for the MCCS in which each of the five stages of change

is represented. Further, the stages were partially associated with the MAKSS-CE-R as expected (D'Andrea et al., 2005), a commonly used measure of multicultural competence for counselors. Analysis of the sensitivity of the M CCS to respondent variability found that psychology trainees who participated in a greater number of diversity-related trainings, who currently participate in diversity-related research, and who are members of underrepresented groups in the U.S. based on ethnicity, sexual orientation, and ability were more likely to be in either the action or maintenance stage of change.

Implications for future research endeavors include developing additional M CCS items; investigating the role change processes have in multicultural competence development; identifying diversity-related interventions to best match each stage of change; and continuing to explore the relationship between the stages of change and participation in diversity-related trainings, research, and being a member of an underrepresented group in the U.S. based on ethnicity, sexual orientation, and ability. The M CCS is still in the early stages of development. Nonetheless, the present study indicates that this novel approach to multicultural competence assessment is promising. Given the critical importance of multicultural competence among psychology trainees, further development of this measure is warranted.

APPENDIX A

TRAINING EXPERIENCE QUESTIONNAIRE

Instructions: The following questions ask general information about your training program and training experiences. Please respond to the items below by clicking next to the response that best represents you or typing in your response where indicated. The information you provide on this questionnaire is anonymous.

1. What psychology graduate program of study are you currently enrolled in?
 - Counseling Psychology
 - Clinical Psychology
 - School Psychology
 - Professional Psychology (PsyD)
2. What degree are you currently seeking? Masters PhD PsyD
3. What university are you currently attending?

4. What previous degrees have you attained? (Mark all that apply)
 - Associates
 - Bachelors
 - Masters
 - Doctorate
 - Other _____
5. What year are you in your program?
 - 1st
 - 2nd
 - 3rd
 - 4th
 - 5th
 - 6th
 - 7th or above

For questions 6 – 8, if you have not engaged in any of the activities identified, please enter 0 in the space provided.

6. How many years have you provided clinical services? _____
7. How many multicultural or diversity *courses* have you participated in? _____
8. How many multicultural or diversity *trainings* have you participated in? _____
9. Have you engaged in diversity-related research before? Yes No

(If no skip to question 12)

10. How many diversity-related research projects have you participated in? _____
11. Are you **currently** engaged in diversity-related research? Yes No
12. What are your current research interests? _____

APPENDIX B
DEMOGRAPHIC QUESTIONNAIRE

Please describe how you identify in terms of the following cultural identities:

Ability/disability status:
Gender identity:
Nationality:
Sexual orientation:
Social class/socio-economic status:
Racial/ethnic background:
Religion:
Other cultural identity _____:

For each of the following cultural identities, check whether you belong to majority or minority culture in regards to U.S. socio-cultural norms:

	Majority	Minority
Ability/disability status		
Gender identity		
Nationality		
Sexual orientation		
Social class/socio-economic status		
Racial/ethnic background		
Religion		
Other cultural identity _____		

APPENDIX C

EXPERIENCES WITH CULTURAL IDENTITIES QUESTIONNAIRE

Please rate your level of agreement with each of the following statements on the following scale:

- 1 = This statement is not at all true for me
- 2 = This statement is not very true for me
- 3 = This statement is moderately true for me
- 4 = This statement is mostly true for me
- 5 = This statement is very true for me

I am very **privileged** in terms of each of the following cultural identities:

	1: not at all true	2	3	4	5: very true
Ability/disability status					
Gender identity					
Nationality					
Sexual orientation					
Social class/socio-economic status					
Racial/ethnic background					
Religion					
Other cultural identity _____					

I am very **oppressed** in terms of each of the following cultural identities:

	1: not at all true	2	3	4	5: very true
Ability/disability status					
Gender identity					
Nationality					
Sexual orientation					
Social class/socio-economic status					
Racial/ethnic background					
Religion					
Other cultural identity _____					

I am very **interested** in the following cultural identity topics:

	1: not at all true	2	3	4	5: very true
Ability/disability status					
Gender identity					
Nationality					
Sexual orientation					
Social class/socio-economic status					
Racial/ethnic background					
Religion					
Other cultural identity _____					
The general topic of diversity					

I am very **self-aware** related to each of the following cultural identities:

	1: not at all true	2	3	4	5: very true
Ability/disability status					
Gender identity					
Nationality					
Sexual orientation					
Social class/socio-economic status					
Racial/ethnic background					
Religion					
Other cultural identity _____					

I have a lot of **awareness** related to people who identify as minority members of the following cultural groups:

	1: not at all true	2	3	4	5: very true
Ability/disability status					
Gender identity					
Nationality					
Sexual orientation					
Social class/socio-economic status					
Racial/ethnic background					
Religion					
Other cultural identity _____					

I am very **knowledgeable** about people who identify as minority members of the following cultural groups:

	1: not at all true	2	3	4	5: very true
Ability/disability status					
Gender identity					
Nationality					
Sexual orientation					
Social class/socio-economic status					
Racial/ethnic background					
Religion					
Other cultural identity _____					

I am very **skilled** in working with people who identify as minority members of the following cultural groups:

	1: not at all true	2	3	4	5: very true
Ability/disability status					
Gender identity					
Nationality					
Sexual orientation					
Social class/socio-economic status					
Racial/ethnic background					
Religion					
Other cultural identity _____					

I have a lot of **contact** with people who identify as minority members of the following cultural groups:

	1: not at all true	2	3	4	5: very true
Ability/disability status					
Gender identity					
Nationality					
Sexual orientation					
Social class/socio-economic status					
Racial/ethnic background					
Religion					
Other cultural identity _____					

I participate in a lot of **social action/social justice efforts** related to each of the following minority cultural groups:

	1: not at all true	2	3	4	5: very true
Ability/disability status					
Gender identity					
Nationality					
Sexual orientation					
Social class/socio-economic status					
Racial/ethnic background					
Religion					
Other cultural identity _____					

APPENDIX D

MULTICULTURAL COMPETENCE CHANGE SCALE
(MCCS)

Please rate your level of agreement with each of the following statements on the following scale:

1 = This statement is not at all true for me

2 = This statement is not very true for me

3 = This statement is moderately true for me

4 = This statement is mostly true for me

5 = This statement is very true for me

	1: not at all true	2	3	4	5: very true
1. I do not presently engage in any activities related to diversity.					
2. I have distanced myself from people I was close to or lost friends because they do not support the work that I do related to diversity efforts.					
3. I worry that if I learn too much about diversity I'll have to change my life and who I interact with.					
4. I don't usually engage people in diversity related conversations because these conversations can be uncomfortable.					
5. When I mess up in diversity conversations I try to defend myself.					
6. There have been costs and impacts to my everyday life because of diversity related conversations and activities that I engage in on a regular basis.					

	1: not at all true	2	3	4	5: very true
7. Treating everyone as equals is one of the most important aspects of any job working with people.					
8. My dedication to doing diversity related work has changed my friendship circle to reflect this commitment.					
9. I don't notice people's cultural background (e.g., abilities/disabilities, race/ethnicity, sexual orientation, etc.).					
10. I currently engage in difficult conversations related to diversity in work and social environments.					
11. I don't usually engage people in diversity related conversations because it's easier to avoid these topics most of the time.					
12. I have recently begun engaging in more diversity related conversations and activities.					
13. I currently don't engage in activities related to diversity, but I would like to in the future.					
14. I try to treat people the same way regardless of their culture or background.					
15. I have recently had to examine and change some of my beliefs related to cultural groups of which I am not a member.					

	1: not at all true	2	3	4	5: very true
16. I have both strengths and weaknesses when it comes to diversity work.					
17. I engage in diversity related activities and dialogues but not on a regular basis.					
18. I'd prefer to watch a video or read a book about difficult dialogues related to diversity rather than engage in those dialogues myself.					
19. I think diversity is important but it gets too much attention right now.					
20. I have a community of close friends and colleagues who are all engaged in social justice and diversity efforts.					
21. I put myself on the spot when I engage in conversations related to diversity issues even though this leaves me open to criticism from others.					
22. Though I frequently engage in activities related to diversity, I am always in need of more diversity related education and experiences.					
23. I try hard to be aware of my own biases, racism, homophobia, and discriminatory or stereotyping thoughts and actions.					
24. People should focus on being individuals rather than focusing on what cultural groups they belong to.					

	1: not at all true	2	3	4	5: very true
I would talk about diversity more if people weren't so sensitive about it.					
I don't know what to do about biased, racist, homophobic, discriminatory, or stereotyping thoughts that I have about people sometimes.					
Engaging in diversity related work has changed me as a person.					

Please briefly identify what cultural group or groups you were thinking about when completing the last 27 questions. (e.g., “*I was thinking about my work with learning disabled clients*” and/or “*I was thinking about how I don't have much knowledge or experience working with people who identify as transgender*”).

Multicultural Competence Change Scale

(MCCS): Subscales

Precontemplation subscale (4 items)

3. I worry that if I learn too much about diversity I'll have to change my life and who I interact with.
9. I don't notice people's cultural background (e. g., abilities/disabilities, race/ethnicity, sexual orientation, etc.).
19. I think diversity is important but it gets too much attention right now.
25. I would talk about diversity more if people weren't so sensitive about it.

Contemplation subscale (9 items)

1. I do not presently engage in any activities related to diversity.
5. When I mess up in diversity conversations I try to defend myself.
10. I currently engage in difficult conversations related to diversity in work and social environments. (*reverse scored for contemplation stage*)
11. I don't usually engage people in diversity related conversations because it's easier to avoid these topics most of the time.
13. I currently don't engage in activities related to diversity, but I would like to in the future.
17. I engage in diversity related activities and dialogues but not on a regular basis.
18. I'd prefer to watch a video or read a book about difficult dialogues related to diversity rather than engage in those dialogues myself.
24. People should focus on being individuals rather than focusing on what cultural groups they belong to.

26. I don't know what to do about biased, racist, homophobic, discriminatory, or stereotyping thoughts that I have about people sometimes.

Preparation subscale (6 items)

4. I don't usually engage people in diversity related conversations because these conversations can be uncomfortable.

7. Treating everyone as equals is one of the most important aspects of any job working with people.

12. I have recently begun engaging in more diversity related conversations and activities.

14. I try to treat people the same way regardless of their culture or background.

16. I know that I have both strengths and weaknesses when it comes to diversity work.

23. I try hard to be aware of my own biases, racism, homophobia, and discriminatory or stereotyping thoughts and actions.

Action subscale (5 items)

15. I have recently had to examine and change some of my beliefs related to cultural groups of which I am not a member.

20. I have a community of close friends and colleagues who are all engaged in social justice and diversity efforts.

21. I put myself on the spot when I engage in conversations related to diversity issues even though this leaves me open to criticism from others.

22. Though I frequently engage in activities related to diversity, I am always in need of more diversity related education and experiences.

27. Engaging in diversity related work has changed me as a person.

Maintenance Subscale (3 items)

2. I have distanced myself from people I was close to or lost friends because they do not support the work that I do related to diversity efforts.
6. There have been costs and impacts to my everyday life because of diversity related conversations and activities that I engage in on a regular basis.
8. My dedication to doing diversity related work has changed my friendship circle to reflect this commitment.

APPENDIX E

MULTICULTURAL AWARENESS KNOWLEDGE SKILLS SURVEY:

COUNSELOR EDITION, REVISED

The Multicultural Awareness - Knowledge - Skills Survey: Counselor Edition
(MAKSS-CE-R)

Revised Counselor Version of the MAKSS

Developed by:
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1. Promoting a client's sense of psychological independence is usually a safe goal to strive for in most counseling situations.

Strongly Disagree Disagree Agree Strongly Agree

2. Even in multicultural counseling situations, basic implicit concepts such as "fairness" and "health", are not difficult to understand.

Strongly Disagree Disagree Agree Strongly Agree

3. How would you react to the following statement? In general, counseling services should be directed toward assisting clients to adjust to stressful environmental situations.

Strongly Disagree Disagree Agree Strongly Agree

4. While a person's natural support system (i.e., family, friends, etc.) plays an important role during a period of personal crisis, formal counseling services tend to result in more constructive outcomes.

Strongly Disagree Disagree Agree Strongly Agree

5. The human service professions, especially counseling and clinical psychology, have failed to meet the mental health needs of ethnic minorities.

Strongly Disagree Disagree Agree Strongly Agree

6. The effectiveness and legitimacy of the counseling profession would be enhanced if counselors consciously supported universal definitions of normality.

Strongly Disagree Disagree Agree Strongly Agree

7. Persons in racial and ethnic minority groups are underrepresented in clinical and counseling psychology.

Strongly Disagree Disagree Agree Strongly Agree

8. In counseling, clients from different ethnic/cultural backgrounds should be given the same treatment that White mainstream clients receive.

Strongly Disagree Disagree Agree Strongly Agree

9. The criteria of self-awareness, self-fulfillment, and self-discovery are important measures in most counseling sessions.

Strongly Disagree Disagree Agree Strongly Agree

10. The difficulty with the concept of "integration" is its implicit bias in favor of the dominant culture.

Strongly Disagree Disagree Agree Strongly Agree

At the present time, how would you rate your understanding of the following terms:

11. "Culture"

Very Limited Limited Good Very Good

12. "Ethnicity"

Very Limited Limited Good Very Good

13. "Racism"

Very Limited Limited Good Very Good

14. "Prejudice"

Very Limited Limited Good Very Good

15. "Multicultural"

Very Limited Limited Good Very Good

16. "transcultural"

Very Limited Limited Good Very Good

17. "pluralism"

Very Limited Limited Good Very Good

18. "mainstreaming"

Very Limited Limited Good Very Good

19. "cultural encapsulation"

Very Limited Limited Good Very Good

20. "contact hypothesis"

Very Limited Limited Good Very Good

21. At this time in your life, how would you rate yourself in terms of understanding how your cultural background has influenced the way you think and act?

Very Limited Limited Fairly Aware Very Aware

22. At this point in your life, how would you rate your understanding of the impact of the way you think and act when interacting with persons from different cultural backgrounds?

Very Limited Limited Fairly Aware Very Aware

23. How well do you think you could distinguish “intentional” from “accidental” communication signals in a multicultural counseling situation?

Very Limited Limited Good Very Good

24. How would you rate your ability to effectively consult with another mental health professional concerning the mental health needs of a client whose cultural background is significantly different from your own?

Very Limited Limited Good Very Good

25. How would you rate your ability to effectively secure information and resources to better serve culturally different clients?

Very Limited Limited Good Very Good

26. How would you rate your ability to accurately assess the mental health needs of women?

Very Limited Limited Good Very Good

27. How would you rate your ability to accurately assess the mental health needs of men?

Very Limited Limited Good Very Good

28. How well would you rate your ability to accurately assess the mental health needs of older adults?

Very Limited Limited Good Very Good

29. How well would you rate your ability to accurately assess the mental health needs of gay men?

Very Limited Limited Good Very Good

30. How well would you rate your ability to accurately assess the mental health needs of lesbian clients?

Very Limited Limited Good Very Good

31. How well would you rate your ability to accurately assess the mental health needs of persons with disabilities?

Very Limited Limited Good Very Good

32. How well would you rate your ability to accurately assess the mental health needs of persons who come from very poor socioeconomic backgrounds?

Very Limited Limited Good Very Good

33. How would you rate your ability to identify the strengths and weaknesses of psychological tests in terms of their use with persons from different cultural/ethnic/racial backgrounds?

Very Limited Limited Good Very Good

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