Factors Impacting Student Outcomes in Multicultural Counseling Courses

Kathleen Kordesh
Loyola University Chicago, kkordesh@gmail.com

Recommended Citation
Kordesh, Kathleen, "Factors Impacting Student Outcomes in Multicultural Counseling Courses" (2015). Dissertations. 1643.
https://ecommons.luc.edu/luc_diss/1643

This Dissertation is brought to you for free and open access by the Theses and Dissertations at Loyola eCommons. It has been accepted for inclusion in Dissertations by an authorized administrator of Loyola eCommons. For more information, please contact ecommons@luc.edu.
Creative Commons License
This work is licensed under a Creative Commons Attribution-Noncommercial-No Derivative Works 3.0 License.
Copyright © 2015 Kathleen Kordesh
LOYOLA UNIVERSITY CHICAGO

FACTORS IMPACTING STUDENT OUTCOMES
IN MULTICULTURAL COUNSELING COURSES

A DISSERTATION SUBMITTED TO
THE FACULTY OF THE GRADUATE SCHOOL
IN CANDIDACY FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

PROGRAM IN COUNSELING PSYCHOLOGY

BY
KATHLEEN KORDESH
CHICAGO, IL
AUGUST, 2015
ACKNOWLEDGEMENTS

I thank my advisor and dissertation chair, Dr. Elizabeth Vera, and my other committee members, Dr. Eunju Yoon and Dr. Mengjia Wu. Thank you for your genuine interest in making my project the best possible version it could be, your time and expert input, and for supporting me through the entirety of the doctoral program. I also thank my parents, Richard and Maureen Kordesh, for developing in me a curious mind and providing me with both personal and professional support during my journey through graduate school. Finally, I thank my fiancé, Jake Emery, for supporting me from my first day of graduate school to my last. His constant validation and empathy are one of the main reasons I have reached this point.
TABLE OF CONTENTS

ACKNOWLEDGEMENTS

LIST OF TABLES

LIST OF FIGURES

ABSTRACT

CHAPTER ONE: IN WHICH THE PROBLEM IS PRESENTED

CHAPTER TWO: IN WHICH THE LITERATURE IS REVIEWED

CHAPTER THREE: IN WHICH THE METHODS ARE OUTLINED

CHAPTER FOUR: IN WHICH THE RESULTS ARE REPORTED

CHAPTER FIVE: IN WHICH THE FINDINGS ARE INTERPRETED
LIST OF TABLES

Table 1. Frequencies of Categorical Demographic Variables 43
Table 2. Descriptive Statistics of Continuous Measures 46
Table 3. Correlation Matrix of Continuous Variables 48
LIST OF FIGURES

Figure 1. Loadings and Canonical Correlations for the Significant Canonical Variate Pair 53
ABSTRACT

This study explored how complex factors related to student characteristics (e.g., demographics, levels of racism) and instructor characteristics (e.g., demographics, level of multicultural competence, teaching strategies) are related to student outcomes in multicultural counseling courses (e.g., levels of racism and levels of multicultural competence at the end of the semester). Data collection yielded a small sample of students (N = 21) and instructors (N = 6). Findings suggest that instructors are a significant factor in how much students develop with regards to gaining multicultural knowledge, but not in how much students develop with regards to gaining multicultural awareness. Multivariate analysis of student responses suggest that the student factors that shape development of multicultural competence are complex. For example, the number of diversity courses students had previously taken and their levels of colorblind racism and multicultural competence at the beginning of the semester accounted for 69% of the variance in student outcomes. Implications of the study, limitations, and directions for future research are discussed.
CHAPTER ONE
IN WHICH THE PROBLEM IS PRESENTED

Traditional mental health services in the U.S. have historically failed people from marginalized groups, especially people of color, despite the fact that such individuals are often in great need of therapeutic services. Scholars highlight the sociopolitical nature of counseling as one core reason for this phenomenon, arguing that dynamics that occur between a White therapist and a client of color do not occur in isolation from the real world, but rather reflect the strained and oppressive nature of race relations in society (Sue, Arredondo, & McDavis, 1992). Additionally, traditional therapy models were developed from a White, Eurocentric cultural framework and are rooted in White, middle-class values such as individualism and autonomy. Thus, healthy individuals are depicted as White, middle-class, and male, while racial and ethnic minorities, women, and people from lower socioeconomic statuses are disproportionately perceived as deficient and/or inferior (Arredondo, 1999). Due to these and other factors, people of color are largely mistrustful of counseling and terminate therapy after just one session at a rate far higher than their White counterparts (Kim & Lyons, 2004). Multiculturalism, which has become a major force in the field over the past four decades, has sought to make psychological services, theory, and research relevant and applicable to people from oppressed and/or non-Western backgrounds.
Multiculturalism also works to highlight dominant cultural forces, such as White and male privilege, which both in the past and present have been oppressive and invisible. A critical step toward changing mental health services in this respect was integrating mandatory multicultural training into master’s and doctoral-level psychology degree programs. Reflecting this shift, a landmark policy from the American Psychological Association (2003) states that it is unethical and potentially harmful to provide counseling and therapy services without having proper training required to be competent to work with people of color, LGBT individuals, and people from other marginalized groups.

**Background and Rationale**

Given the shift in the field of psychology that is described above, various issues related to effective multicultural education and training have become a major area of focus in the multicultural counseling literature. Early scholarship on this subject was concerned with defining multicultural competence and operationalizing specific multicultural competencies, as well as creating a solid overarching theoretical framework for the construct (Arredondo, 1999; Sue et al. 1982). Sue and colleagues (1982) articulated the most widely-utilized framework for multicultural competence, arguing that it is comprised of awareness/beliefs, knowledge, and skills regarding cultural diversity. Specific competencies have since been operationalized and organized across these three broad categories (Arrendondo, Toporek, Brown, Jones, Locke, Sanchez, & Stadler, 1996). For example, a counselor who is multiculturally competent in the realm of awareness/beliefs would endorse this statement: “being aware of my own cultural values
is essential for ethical practice” (Arredondo et al., 1999). Scholars recommend that training programs continually assess students on their multicultural competence across the realms of awareness, knowledge, and skills (Ridley, Mendoza, & Kanitz, 1994; Tori & Ducker, 2004).

Following the specification of the multicultural counseling competencies and theoretical framework, scholars began to focus on the difficult task of identifying effective approaches to teaching multicultural competence in coursework. A number of different instructional models were identified, including the traditional program (i.e., no multicultural training), the workshop design, separate course model, interdisciplinary cognate, subspecialty cognate, and the integrated program (Ridley et al., 1994). Aside from the traditional model, all of these approaches are considered to have both strengths and weaknesses. However it is now agreed on in the field that the integrated program is ideal, partly because it is related to the strongest multicultural competency outcomes (Dickson, Jepsen, & Barbee, 2008). In addition, the integrated program model is also considered the only program that fully embodies multiculturalism as a core value.

Scholars have also focused a great deal on what types of instructional strategies are effective, with findings suggesting that a combination of traditional didactic, participatory/experiential, and activities that expose students to people who are culturally different from themselves is ideal (Kim & Lyons, 2004). Experiential activities are emphasized as being particularly important for White students and students of color (Coleman, 2006) because they tap into both cognitive and affective reactions to
multicultural issues and require students to engage in self-reflection (Vazquez & Garcia-Vazquez, 2003).

A large number of studies have explored student progress on multicultural competencies after taking a single multicultural counseling course. These studies generally find support for positive changes in cross-cultural awareness, knowledge, and skills (Rogers & O’Bryon, 2014; Smith, Constantine, Dunn, Dinehart, & Montoya, 2006) and suggest that these gains are maintained over time (Neville, Heppner, Louie, Thompson, Brooks, & Baker, 1996; Santos, 2012). There are mixed findings related to how student race and gender are related to different levels of change as a result of multicultural training (Chao, 2012; Sammons & Speight, 2008). A limitation of this research is that it is entirely based on students’ perceptions of their own multicultural competence, which may be influenced by social desirability (Dickson et al., 2008; Vazquez & Garcia-Vazquez, 2003).

The increased emphasis on multiculturalism in psychology programs, which has included efforts to increase the diversity of faculty and students, also introduced systemic barriers for faculty of color in obtaining tenure. This issue is intricately related to multicultural training and has received little empirical attention. For example, faculty of color and women are disproportionately relied on to teach courses which focus on issues related to diversity (Gloria & Pope-Davis, 1997). It is recognized in the field that, in many instances, instructors receive poor teaching evaluations that are fueled by the students’ biases and prejudices toward the material and the messenger of the material rather than the instructor’s skill and expertise in the material (Greene et al., 2011). These
negative evaluations become part of the tenure decision process. Thus, an important area of exploration is to analyze if an instructor’s race and/or gender has a significant and independent relationship with student outcomes in multicultural courses.

Linking the notion of a counseling program’s overall environment regarding diversity and multiculturalism with the research on student outcomes in multicultural coursework leads us to the construct of “cultural ambience” (Gloria & Pope-Davis, 1997). Cultural ambience refers to the explicit and implicit messages a graduate program or department communicates about how much it values cultural diversity. In some cases, the explicit message is that multiculturalism is highly valued while implicit messages suggest that diversity need not be respected (Gloria & Pope-Davis, 1997). Another conflict might arise between explicit messages that multicultural competence must be infused throughout all aspects of training and implicit messages that it is an ancillary skill that is not central to clinical work in general. A scale was developed to measure this construct, also termed “multicultural environment” of a program (Pope-Davis, Liu, Nevitt, & Toporek, 2000).

One study found that a culturally sensitive program was the only significant predictor of positive attitudes toward issues of racial diversity, even when the types of multicultural instructional strategies were also measured (Dickson et al., 2008). Given the likely important role of cultural ambience for facilitating student multicultural competence, closer exploration of this construct is warranted. Similar to the single-course outcome studies, program cultural ambience has been measured using students’ perceptions of the program’s multicultural environment. Student perception of the
cultural ambience in their program seems to be another variable among an array of important factors needed for understanding student outcomes in any multicultural counseling course. In summary, the existing literature on multicultural training and the infusion of cultural diversity throughout graduate programs highlight some important issues that remain unexplored.

**Statement of the Problem**

Despite the large body of scholarship that has built up around this topic, with most research highlighting the efficacy of multicultural coursework for producing positive competency outcomes (e.g., Smith et al., 2006), it is not yet time to let go of a critical focus on multicultural training. First, some graduate programs maintain a “silent resistance” to institutional change around infusing multiculturalism throughout coursework (Ridley et al., 1994). Based on anecdotal experience in clinical training settings, the investigator is aware that some students still pass through graduate programs while continuing to express prejudicial attitudes toward marginalized groups and without developing an appropriate degree of multicultural competence to work ethically with those individuals. Given this issue, it is possible that discrepancies exist between various programs’ explicit, stated commitment to diversity and the implicit messages and attitudes they express. Similar to how programs should regularly assess their students’ multicultural competence, it is appropriate for research to explore the current state of multicultural training environments in the field. Along the same lines, given the recommendations that instructors make use of multiple instructional strategies (e.g., didactic, experiential, exposure) it is worth evaluating how instructors’ approaches to
teaching are related to student outcomes in any multicultural course. The above questions may assist in identifying what factor(s) contribute to the continued lack of multicultural competence for some students by exploring whether instructors and departments are following the best practice recommendations made by experts.

Another issue linked to both student outcomes and systemic barriers is that of how an instructor’s identities (e.g., race and/or gender) may be related to how students react to course material and the degree to which they develop multicultural competence. Though almost no research has explored this issue, leading scholars in the field have argued that student reactions to their instructors play a role in how they evaluate those instructors (Greene et al., 2011) and the extent to which they experience positive, neutral, or negative changes in multicultural competence (Castillo, Brossart, Reyes, Conoley, & Phoumarath, 2007; Sammons & Speight, 2008). The amount of experience an instructor has teaching this type of material has also been identified as impacting students’ attributions of what helped or hindered them in gaining multicultural competence (Sammons & Speight, 2008). Additionally, it is possible that instructors themselves vary on levels of multicultural competence and it is worth asking whether variations on multicultural competence, which would surely impact teaching style, is linked to students’ developing multicultural competence. Empirically exploring whether there are any differences on student multicultural competence outcomes related to these various instructor-level characteristics represents an important question within this area of study.
Purpose and Research Questions

An integration of prior research leads the author to conclude that many complex factors impact how students change on levels of multicultural competence and racial attitudes through multicultural training. Despite all the research that has been done, very little has looked into how instructor characteristics are related to student outcomes. By combining previous findings with this unexplored dimension of multicultural competence, the present study hopes to contribute new understanding of how various factors impact student changes in multicultural competence and racial attitudes relative to one another.

One purpose of undertaking such a study is to continue the conversation on and improve the quality of multicultural training provided within graduate counseling programs, where room for growth remains. A second purpose of the study is to integrate and extend previous research on the subject by exploring how a number of important factors impact outcomes in multicultural coursework. One possible implication of looking into a relatively unexplored variable, instructors’ racial and gender identities, may be to call attention to systemic barriers that continue to prevent faculty of color from being promoted within academia. If the findings suggest that faculty’s identities do impact students’ experiences in these courses, it has important implications for how student evaluations of their instructors should be used in critical decisions such as the tenure process. The continuing lack of racially diverse faculty and a pattern in which young faculty of color struggle to persist in academia both reveal and perpetuate racist
underlying messages regarding the importance of multiculturalism in counseling and psychotherapy.

Based on the issues outlined above, the research questions proposed for this study are as follows:

1. Are there significant relationships between student characteristics (X) and cultural competence (Y) at the end of a semester-long course?

2. Does “instructor” explain a significant amount of the variance in any of the cultural competence outcomes?
CHAPTER TWO
IN WHICH THE LITERATURE IS REVIEWED

A thorough review of the literature on multicultural training for students in counseling and psychology reveals a number of important themes that define the discourse on the subject. These themes, each of which is outlined here, present the historical development of the conversation around multicultural training. In order to understand where the field should be headed in the future, it is important to know where we started. The topics that will be covered include a) defining and operationalizing multicultural competence, b) multicultural teaching approaches and techniques, and c) single multicultural course outcome studies, including contextual factors that influence students’ multicultural competency outcomes. A review of the existing literature highlights both what is known about the unique issues related to teaching multicultural competence to counseling students and also identifies important issues that are yet unaddressed or have received inadequate scholarly attention. The chapter will conclude with an outline of the research questions that the present study will attempt to address, based on what remains unexplored on this topic.

Defining and Operationalizing Multicultural Competence

The modern scholarship on multicultural competency training arguably originated with Sue and colleagues (1982) paper, which defined cross-cultural counseling and proposed the earliest theoretical framework for organizing various multicultural
counseling competencies. The body of work that grew out of this paper provides the underlying rationale for the importance of multiculturalism and cross-cultural competence in psychology. Though the discussion of multiculturalism in psychology had been ongoing for approximately two decades at this time, disagreements between groups that differed in their valuing of multiculturalism had resulted in little progress toward an agreement in the field on what cross-cultural counseling was or what multicultural competence looked like in practice.

Sue and colleagues (1982) defined cross-cultural counseling as any therapeutic relationship in which the therapist and client differ along some cultural dimension, which could include race, gender, socioeconomic status, sexual orientation, disability, religion, or a number of other areas. In most cases, the therapist represents a dominant cultural group while the client represents a marginalized cultural group. The authors argued that, using this definition, all counseling is cross-cultural in some way (Sue et al., 1982). This position has been reiterated by other leading scholars (e.g., Sue, Arredondo, & McDavis, 1992). If all counseling is cross-cultural, then requiring that counselors and therapists possess multicultural competence is of critical importance in training programs.

Sue and colleagues (1982) presented the tripartite model of multicultural competence, which remains the most widely-used model for multicultural training to date (Smith et al., 2006). They posited that multicultural competence is comprised of achieving satisfactory awareness and beliefs, knowledge, and skills related to the cultural diversity that exists in U.S. society and how to interact professionally with clients who are from different cultural backgrounds. Included in this definition is the need for
counselors to understand how society is structured along lines of privilege and oppression based on membership in different social groups, including their own. This paper provided the first list of specific competencies, divided into the categories of awareness, knowledge, and skills. For example, cultural competence in the area of awareness includes that “a culturally skilled counseling psychologist is aware of his/her own cultural values and biases and how they may affect minority clients.” In the area of knowledge, “a culturally skilled counseling psychologist will have a good understanding of the sociopolitical system’s operation in the United States with respect to its treatment of minorities.” And in the area of skills, “the culturally skilled counseling psychologist must be able to send and receive both verbal and nonverbal messages accurately and ‘appropriately’” (Sue et al., 1982, p. 49). These competencies are built on and expanded in later publications, some of which are discussed below.

Sue’s tripartite model was later expanded into an overarching conceptual framework for training in which the original awareness, knowledge, and skills are crossed with three dimensions of the “culturally competent counselor”: counselor self-awareness, understanding the worldview of the culturally different client, and development of appropriate interventions for the culturally different client (Sue et al., 1992). The authors re-emphasized the need to define these competencies so that it is possible to objectively assess whether or not students have achieved multicultural competency in the realms of awareness, knowledge, and skills. The arguments and proposed training model outlined in this paper were considered so important to the field that it was published at the same time in two different journals (Sue et al., 1992).
Building on the works described above, the next step in further operationalizing the multicultural counseling competencies was taken by Arredondo and colleagues (1996). This important publication provided extensive, specific examples of behaviors and attitudes that exemplify multicultural counseling competence for each of the nine categories outlined in Sue and colleagues’ (1992) three-by-three model. For example, for the intersection of counselor awareness of own culture and attitudes/beliefs, a counselor who is multiculturally competent would believe that being aware of his/her own cultural values is essential for ethical practice. In addition to reiterating much of the ethical reasoning for multiculturalism in counseling, the authors of this paper also highlighted that all people are racial and are thus affected by the racial issues in the U.S. The authors supported the use of an identity model that recognizes how all individual people have complex, intersecting social identities that lead them to be affected by forces and events in the world and to have experiences of privilege and/or oppression (Arredondo, Toporek, Jones, Locke, Sanchez, & Stadler, 1996). Perhaps one purpose of emphasizing these perspectives was to illuminate how the benefits of multiculturalism extend beyond minority clients in therapy, to therapists and to society in general.

The next major event in the realm of multicultural counseling training occurred in 2003 when the American Psychological Association passed the multicultural guidelines, which had long been in development by an APA task force comprised of many of the scholars who are mentioned above. The implementation of these guidelines marked a significant event for APA and for the profession of psychology as a whole (Arredondo & Perez, 2006). The document addresses how psychologists should approach teaching,
research, clinical practice, and administrative work in order to avoid perpetuating the oppressive status quo and demonstrate respect for all cultural groups (American Psychological Association, 2003). There is an emphasis on how culturally competent psychologists are in a unique position to affect institutional change when they hold administrative titles, and how it is their responsibility to do so. The guidelines also identify many resources that professionals can use to improve on their own multicultural awareness, knowledge, and skills. The multicultural guidelines have been both praised for representing a “transformation” within APA (Arredondo & Perez, 2006) and criticized for allowing too much flexibility in how psychologists can implement multicultural competence training within programs (Rogers & O’Bryon, 2014). And by the nature of this document being guidelines rather than APA standards, the recommendations made in the document are merely suggestions for psychologists, not requirements for ethical practice (American Psychological Association, 2003). It is possible that this document was labeled “guidelines” because APA itself is not fully committed to multicultural competence as envisioned by its proponents, or because guidelines were a compromise between factions at odds within APA. Regardless, promoting these suggestions to the status of “standards” would mark another shift in the direction of multiculturalism as a core value in psychology training. For example, if there existed multicultural standards within APA, training programs would have stronger ground on which to base student multicultural competence as a criterion for gatekeeping, which at present is a difficult case to make.
Another piece of the conversation on defining multicultural competence emerged more recently from scholars who argue that social justice must be included in any true conceptualization of multicultural competence (Vera & Speight, 2003). Social justice is concerned with the unequal distribution of resources and opportunities to particular groups in society. Proponents of this perspective perceive that the field has been overly focused on doing counseling with individuals from marginalized groups, largely defined within the specified “competencies” mentioned above (Vera & Speight, 2003). However, multiculturalism will not be able to achieve its goal of eliminating oppression without moving beyond the narrow focus of psychotherapy and focusing also on issues of social justice and social justice work (e.g., outreach, prevention, consultation).

Recommendations for effective teaching of social justice issues include sharing the responsibility for learning with students and interweaving information about alternative professional work, such as outreach, into courses such as multicultural counseling (Vera & Speight, 2003). One study found that counseling students who took ownership of their own learning demonstrated deeper understanding of social justice issues (D’Andrea & Daniels, 1999).

An informed understanding of the rationale for multicultural competence training in psychology graduate programs requires that one be well-read in the material reviewed here. It is worth noting that the large body of scholarly writing and research that has emerged on this topic over the past 30 years would not have been needed if professionals in the field had openly and willingly adapted to the shift toward multiculturalism. Thus, the research reviewed here can be viewed as an ongoing response to the resistance by
many researchers and practitioners to integrate multicultural competence into their work. In response to this resistance, scholars have continually demonstrated the dangers associated with lack of cultural competence and the importance of adopting true, rather than superficial, valuing of cultural diversity. The scholars that worked to develop clear definitions of cultural competencies laid the foundation for other research, which has sought to identify effective approaches and strategies to teaching, when and how multicultural graduate training is successful or unsuccessful, and various factors that contribute to or hinder students becoming multiculturally competent practitioners.

Multicultural Teaching Models, Approaches, and Techniques

During the period in which the focus was on defining multicultural competencies, scholars began to criticize the lack of specific recommendations for implementing multicultural training into psychology graduate programs (Kim & Lyons, 2004; Kiselica & Maben, 1999). There was also criticism around the lack of empirical research demonstrating what types of multicultural education and training were most effective. The subsequent section will review the scholarship that emerged in response to such critique, with special attention to the models used in multicultural training and specific teaching approaches, techniques and activities. The literature discussed below informs the research questions undertaken by the present study regarding what instructional styles and types of course assignments have a significant impact on student outcomes (e.g., multicultural competence) when considered together with other important personal and contextual variables. Given the continuing presence of students in graduate psychology
programs who do not exemplify multicultural competence it is worth exploring how
graduate programs are teaching this material.

**Multicultural Training Models**

Experts on multicultural training note that graduate psychology programs use one
of a number of models in providing MCT to their students. Ridley and colleagues (1992;
1994) described the six predominant training models in use by counseling programs at
the time, with special emphasis on the model considered ideal by most in the field. The
first and oldest model is the traditional model, in which no special attention is paid to
cultural diversity and culture is conceptualized from a universalist perspective (Ridley,
Mendoza, & Kanitz, 1992). Such programs deny the need to focus on different values and
experiences of various cultural groups and, conversely, refute that students from
privileged cultural backgrounds need to explore their own cultural value systems.
Although no counseling programs openly support this model currently, the authors point
out that all programs employed this model at one time and that remnants of this manner
of thinking about cultural diversity likely remain in some places (Ridley, Mendoza, &
Kanitz, 1994).

Another model employed by some institutions where there is little or resistant
commitment to multiculturalism is the workshop model. This model makes use of extra
multicultural and/or diversity workshops as the primary means of educating students
about multicultural issues. Such an approach indicates inadequate valuing of cultural
diversity because it sends the message to students that multiculturalism is an ancillary
issue that is not necessarily central to the clinical work they will do (Ridley et al., 1994).
Additionally, this approach requires little to no effort or change on the part of an overall counseling program. Although an improvement over the workshop model, the separate course model also includes multicultural training into a counseling program in a way that sends the message that it is an ancillary, rather than core subject. A separate course model is characterized by a training program that offers at least one (Copeland, 1982) and as many as three (Ridley et al., 1992) courses in which the focus is on educating students about multicultural issues and perhaps multicultural counseling. These courses may or may not be required, though a more positive message about the importance of multicultural training is sent when the courses are required. A major risk inherent in the single-course design includes providing too little in-depth information about cultural diversity. This potentially leads to students to continue to approach individuals from marginalized groups in stereotyped ways and possibly fuels anxiety about working with such individuals when knowledge without enough skills, or too little knowledge about many different groups, is taught to students.

Other counseling programs make use of the interdisciplinary cognate model, in which cultural diversity education is encouraged through other university departments (Ridley et al., 1994) such as social work, sociology, or education. Scholars argue that this model is also embedded with numerous shortcomings. Relying on other departments to provide education on cultural diversity sends conflicting messages to students about its importance (Ridley et al., 1992). And while cultural diversity courses in sociology or education may provide quality information about relevant issues, such courses would not provide the necessary counseling training that an in-house multicultural counseling
course would. Finally, similar to the workshop model, the interdisciplinary model requires no programmatic change on the part of the counseling department.

A more promising model, labeled the area of concentration or subspecialty model, indicates a strong commitment to multiculturalism on the part of a training program (Copeland, 1982; Ridley et al., 1994). In this design, interested students elect to enter into the multicultural training track where they take a specific series of courses with emphases on multicultural and systemic issues in counseling. Drawbacks to this model include that it requires a great deal of effortful planning and students who do not choose the multicultural area of concentration may move through the program without getting the necessary training (Ridley et al., 1994). All students, including those who lack an explicit interest in multiculturalism at the outset of their graduate education, should receive in-depth multicultural counseling instruction.

The ideal model for multicultural training is the integration model, which is currently regarded as the ultimate goal for multicultural training across all graduate programs by leading multicultural scholars (e.g., Fouad, 2006; Rogers & O’Bryon, 2014) and the American Psychological Association (2003). The integrated program model is characterized by an emphasis on multiculturalism that is infused throughout coursework, and an overall, overt valuing of cultural diversity by faculty and administrators (Ridley et al., 1994). The integrated model coursework should include a separate multicultural counseling course as well as a major focus on cultural diversity and social justice issues in core subjects such as theories of counseling, assessment, research methods, and ethics (Gloria & Pope-Davis; Vazquez & Garcia-Vazquez, 2003). The integrated model requires
a great deal of effort and expertise to implement, and scholars note that it may not be entirely unique from other models described above. For instance, it would be useful to include aspects of the other training models (e.g., workshop, interdisciplinary) within the integrated model to provide well-rounded and consistent multicultural training (Ridley et al., 1994), and to decrease the overall burden on counseling programs to provide the training. Subsequent research, discussed in the next section, supports the notion of drawing from multiple approaches in multicultural counseling training. Some studies have found that using a variety of teaching techniques leads to the most effective multicultural learning and growth for students (Dickson et al., 2008; Heppner & O’Brien, 1994).

**Teaching Approaches and Techniques**

Research divides various activities and assignments in multicultural education and training into four distinct categories: traditional, exposure, experiential/participatory, and clinical. These can be considered approaches to helping students learn about their own and others’ identities and experiences in society that are based on membership in various societal groups. The approaches differentially target cognitive and affective attitudes as pathways to learning about topics that are both cognitive and affectively loaded for most people in our society. The traditional approach involves common didactic activities such as reading assignments, lectures, and quizzes. Such activities provide students with knowledge about systems of privilege and oppression as well as information about varying cultural groups’ worldviews and value systems (Dickson et al., 2008). While this knowledge provides a critical foundation for building multicultural competence, research
suggests that didactic teaching is not enough by itself. Unlike many academic subjects, there are important cognitive and affective components to learning about multiculturalism (Arredondo, 1999). Traditional didactic techniques alone may be inadequate in multicultural training for addressing the strong emotional reactions students have to course material and discussion (Kim & Lyons, 2004). One study found that traditional teaching was related to a decrease in prejudicial attitudes but did not lead to less prejudicial affect (e.g., fear of people of color) for students (Toporek, 2001).

Exposure strategies provide students with opportunities for interpersonal contact with people from different marginalized cultural groups (Dickson et al., 2008). Exposure activities include guest speakers representing various cultural groups (Heppner & O’Brien, 1994) and course assignments that require students to go somewhere that they will be in the minority group in a way they have never experienced before (e.g., attend a church service at a Black or Latino church, spend time in a bar or restaurant in an LGBT neighborhood). Somewhat differently, experiential or participatory teaching strategies are activities carried out in class that intend to pull on and directly challenge students’ stereotypes, assumptions, and emotional reactions around issues of racism, homophobia, classism, etc. (Dickson et al., 2008). Such activities often include watching thought-provoking videos (e.g., The Color of Fear) or documentaries (e.g., Tough Guise), playing games (e.g., Bafa Bafa, multicultural bingo), privilege walks, and clinical role plays (Kim & Lyons, 2004; Rogers & O’Bryon, 2014). Experiential activities aim to open discussion among students and the instructor as well as promote critical thinking and openness toward issues of cultural diversity. Multicultural clinical training experiences
(e.g., work with diverse clients, multicultural supervision) are considered an approach to multicultural education as well, but are not immediately relevant for the present literature review and thus will not be discussed here.

A number of studies have sought to identify which of the above teaching approaches are best or most important for facilitating the development of multicultural competence. Some research has utilized the concept of critical incidents to explore this question (Coleman, 2006; Heppner & O’Brien, 1994; Sammons & Speight, 2008). Critical incidents are defined as “meaningful emotional or behavioral interpersonal experiences that make an impact” on awareness, knowledge, and skills (Fukuyama, 1994, p. 143). Researchers have asked students which course activities and/or assignments they perceived to be most important for increasing their multicultural competence. Students across several studies have highlighted diverse guest speakers and experiential activities (Heppner & O’Brien, 1994), experiential activities and the opportunity to self-reflect on them (Coleman, 2006), guest speakers, exposure, and didactic activities (Neville, Heppner, Louie, Thompson, Brooks, & Baker, 1996), and a combination of didactic (e.g., articles, videos) and interactive (e.g., discussions, immersion experiences) activities (Sammons & Speight, 2008) as most important for helping them improve their own multicultural competence.

Because multicultural courses have been criticized for being too focused on educating White students, some scholars have made a point of exploring and comparing the experiences of White students and students of color in the course. In one study, researchers found that interpersonal interactions with culturally different others were
rated as most important by White students, while didactic experiences and, to a somewhat lesser degree, experiential activities were rated most important by student of color (Coleman, 2006). Another study found that there were not significant differences between the activities rated as most critical in developing greater multicultural competence by White students vs. students of color (Sammons & Speight, 2008). It is an important reminder that White students and students of color may have different needs, particularly at lower levels of multicultural training, so that these courses do not primarily cater to White students (Chao, 2012). And in a national sample of diverse counseling trainees, one study found that process-focused, experiential instructional activities and a program’s overall valuing of multiculturalism were the strongest significant predictors of higher scores on measures of cognitive racial attitudes (Dickson et al., 2008). If it is assumed that didactic activities are an inherent ingredient for learning this material, then it can be inferred that using a combination of approaches to teaching multicultural competence is ideal and that experiential approaches are a critical ingredient in this process. In fact, this recommendation can be considered a “best practice guideline” for teaching multicultural courses.

The literature on the subject of teaching multicultural counseling offers both broad and specific recommendations to instructors regarding how to best approach this difficult subject. However, questions remain regarding how much of a role various teaching strategies play in student development of multicultural competence in comparison with other factors that also likely influence these changes.
Single-Course Outcome Studies

Though some research supports the argument that a program in which multicultural training is infused or integrated throughout is ideal, a great deal of what is known about teaching multicultural counseling competencies comes from a body of literature on outcomes from single multicultural counseling courses. In addition to indicating what types of outcomes such courses are related to (e.g., lower levels of modern racism), the authors of these studies offer important and expert suggestions regarding what questions remain unaddressed in the literature.

Effectiveness of Single Multicultural Counseling Courses

Overall, research indicates that multicultural counseling courses lead to clear, positive outcomes for students’ multicultural competencies (Rogers & O’Bryon, 2014; Smith et al., 2006). The greatest focus across studies is on general multicultural competence, prejudice reduction, and racial identity development for students (Rogers & O’Bryon, 2014). In the first review of the outcomes literature on early multicultural counseling courses, Kiselica and Maben (1999) noted that students’ attitudes regarding culturally different people and groups improved across all of the studies included in their review. Though the reviewed research had methodological problems, even these early courses were linked to positive outcomes. Subsequent studies largely support these early findings. For example, students who complete multicultural counseling courses generally perceive themselves to be stronger on multicultural competence than those who have not completed such a course (Kitchens-Stephens, 2005). Additionally, multicultural
counseling courses appear to facilitate progress in racial identity development for White students (Kiselica & Maben, 1999; Neville et al., 1996).

One study found that, when comparing students in a multicultural counseling course with students in a foundations of counseling course, those in the multicultural course showed a significantly greater decrease in implicit racial prejudice at the end of the course (Castillo et al., 2007). For these students, the change was moderate. Students enrolled in the two types of courses both showed some improvement on multicultural knowledge and skills, but those in the multicultural course had a significant improvement in cultural self-awareness specifically, while the counseling foundations students did not (Castillo et al., 2007). Thus the authors conclude that it is positive to have a multicultural focus in all courses, but that multicultural counseling courses may be particularly important for accessing more difficult-to-address realms of multicultural competence such as implicit racial attitudes and self-awareness.

Beyond simply assessing for students’ multicultural competence immediately following a multicultural course, some research has focused on whether these gains are sustained or lost over time. For example, one study found that students’ significant gains in multicultural awareness, knowledge, and skills following completion of a multicultural course were retained one year following the completion of the course (Neville et al., 1996). Gains in racial identity development were similarly maintained. Another study revealed that students at the point of completing their graduate program endorsed similar levels of multicultural competence as those beginning students who had just completed
the multicultural course, with a gap of two years between taking the course and graduation (Santos, 2012).

Addressing what factors did not help students increase their multicultural counseling competence is as important as understanding the positive changes that occur in these courses. Students themselves reported that personal biases, having a lack of time to process course material and their reactions to it, general insensitivity toward others, and certain course materials impeded some students’ improving their multicultural awareness, knowledge, and skills (Heppner & O’Brien, 1994). Conversely they reported that interpersonal exchanges, formally presented course information, and the presence of a supportive and challenging atmosphere facilitated changes in level of multicultural competence (Heppner & O’Brien, 1994).

In the only two meta-analyses completed on these single-course outcome studies, Smith and colleagues (2006) uncovered similar positive effects of multicultural counseling courses as those described above. Their meta-analysis revealed that students who took a multicultural course or workshop showed moderate to large improvements on self-reported, and occasional observer-rated multicultural competence. Though effect sizes ranged across the studies included in this project, no negative effects were found in any study (Smith et al., 2006). Importantly, results indicated that courses which were taught using a theoretical framework were nearly twice as effective as courses that did not rely on theory, emphasizing the importance of using theory (e.g., the tripartite model) in teaching this material.
Smith and colleagues’ meta-analyses put them in the position to offer important suggestions for future research directions. They concluded that there is no longer a need for any further single-course outcome studies of this nature given the fairly consistent results across research (Smith et al., 2006). Other scholars similarly argued that future research on these courses be designed in a manner that makes the findings generalizable beyond a single course (Sammons & Speight, 2008). Instead, Smith and colleagues suggest that future research ask what percentage of students do not experience any change through multicultural courses and what the characteristics of these students are. Along with other scholars (Castillo et al., 2007; Dickson et al., 2008), they also note that the fact that all of this research is based on student self-report data is problematic because assessments of students’ own attitudes toward oppressions are susceptible to social desirability effects. One paper questioning whether these courses improve multicultural awareness, knowledge, and skills or rather teach students’ socially acceptable responses to dealing with issues related to race, gender, and sexual orientation, etc. (Vazquez & Garcia-Vazquez, 2003). Incorporating data from instructors rather than exclusively from students may yield a more comprehensive depiction of how change occurs within multicultural counseling courses. However, research of this nature has likely not been completed due to the difficult nature of data collection.

**Racial affect.** Some studies distinguished between students’ racial attitudes/knowledge and their race-related affect, noting a difference in how these entities are influenced by multicultural coursework. Affective reactions to course material are regarded as critically important for instructors to attend to, as affect plays an important
role in students’ developing multicultural competence (Coleman, 2006). In one study, researchers found that various facets of White racial affect were related to types of multicultural counseling competency in trainees. In this study, affective dimensions of White fear, guilt, and empathy mediated the relationship between multicultural training and overall multicultural competence (Spanierman, Poteat, Wang, & Oh, 2008). Additionally, the study found that higher levels of White guilt predicted stronger demonstrated multicultural competence on case conceptualization and higher White empathy scores predicted stronger ratings of multicultural competence by the students’ supervisors.

Important findings have also emerged from single-course outcome studies regarding the distinction between cognitive attitudes and affect in multicultural education. For example, Seto and colleagues (2006) found that a multicultural counseling course that emphasized experiential training activities was linked to significant change in students’ multicultural counseling competencies, in terms of awareness, knowledge, and skills. But the course did not shift students’ levels of counselor empathy or intolerance for ambiguity. Similarly, Dickson and colleagues (2008) found that participatory and exposure activities in a multicultural course were related to significant, positive changes in affective reactions for a racially diverse group of students. Conversely, in a predominantly Hispanic group of students, a course that included experiential and self-reflective activities did not lead to positive changes for students, perhaps because they did not have the opportunity to be exposed to racially-different people in the context of the course (Dickson, Argus-Calvo, & Tafoya, 2010).
**Student characteristics.** According to research findings, student outcomes differ somewhat on the basis of a number of group-level variables. When looking at student race, research suggests that White students and students of color experience multicultural counseling courses differently and may have different needs in such courses (Dickson et al., 2010). As mentioned previously, one study found that students of color rated didactic and experiential activities as critical incidents for their development of multicultural competence, while White students tended to highlight interpersonal experiences with culturally different people as critical in their development (Coleman, 2006). In terms of levels of multicultural competence, students of color have been found to have higher levels of multicultural competence than their White counterparts at lower levels of multicultural training (Chao, 2012). But at higher levels of training, these differences generally disappear. Supporting this finding, another study found that the relationship between student race and level of multicultural competence was moderated by level of multicultural training, and this moderating relationship was mediated by the students’ level of racial/ethnic identity development (Chao, 2012). Similarly, White students and students of color who had already completed multicultural coursework reported similar changes on dimensions of multicultural competence, including increased knowledge and increased self-awareness (Sammons & Speight, 2008). Both groups of students also reported significantly less change on behavioral and skill-related competencies. Finally, in a graduate program in which an intentional effort was undertaken to infuse multiculturalism throughout the curriculum, White students reported at first feeling coerced into learning about and placing a high value on cultural diversity while students
of color reported feeling skeptical about the motivation and authenticity behind program’s efforts (Tori & Ducker, 2004).

**Program characteristics.** The atmosphere regarding cultural diversity in a graduate training program is another group-level variable that has been demonstrated to have a significant impact on student outcomes in their multicultural counseling courses (Dickson et al., 2008). The term “cultural ambience” has been used to refer to a program, department, or university’s overall atmosphere regarding cultural diversity, which includes the attitudes and values it explicitly and implicitly expresses through policies and procedures (Gloria & Pope-Davis, 1997). It has been argued that, if a program does not genuinely place a high value on diversity, it sends underlying messages to students that diversity is not important and that students will not gain what they need from multicultural courses (Gloria & Pope-Davis, 1997). The handful of studies that exist on the topic support this notion. For example, the findings outlined above (Tori & Ducker, 2004) suggest that White students and students of color might be affected differently by the interaction of program attitude toward diversity and multicultural coursework.

In another study, which explored how students’ perceptions of their program’s cultural sensitivity and multicultural instructional strategies were related to student competency outcomes, the only factor that significantly predicted multicultural competence was program cultural sensitivity (Dickson et al., 2008). Compared to other research which emphasized the importance of exposure and participatory strategies in instruction, this study suggests that such efforts might be insufficient when a graduate program is not perceived as truly valuing multiculturalism. Similarly, a study examining
critical incidents in development of multicultural competence found that student reactions to critical incidents were significantly more positive when they perceived their program as highly valuing cultural diversity (Coleman, 2006). It should be noted that in most of the studies which have looked at cultural ambience, students reported mostly positive perceptions of the atmosphere toward cultural diversity (e.g., Dickson et al., 2008).

**Course and instructor characteristics.** Two other group-level variables are found to be related to student outcomes in multicultural coursework, namely theory-based instruction and instructor identities (e.g., race and gender). First, a meta-analytic study concluded that courses based on multicultural theory are twice as effective as courses taught not based on theory (Smith et al., 2006). Second, though it has barely been addressed in the literature, preliminary findings suggest that the course instructor’s own identities, particularly race and gender, may also impact students’ self-perceived competency outcomes, irrespective of the instructor’s approach to or expertise in teaching the course material (Grier, 2006). In this investigation, some students perceived that having an instructor who was African American and female facilitated their developing multicultural competence, while others perceived that the instructor’s race impeded their learning because they feared being judged (Grier, 2006). Another study found that students reported that a range of positive, neutral, and negative reactions elicited by their instructors’ personality and/or teaching style impacted their relative change or lack of change on multicultural competence domains (Sammons & Speight, 2008).

Other scholars have noted that, in multicultural counseling courses, students have strong reactions not only to the course material but also to the messenger of the material
(Castillo et al., 2007). For example, scholars in the field anecdotally believe that students often react differently to course material about systemic racism and White privilege depending on whether the instructor is a White person or African American (Greene et al., 2011). Though students in the qualitative study mentioned above (Sammons & Speight, 2008) attributed some reactions to their instructors’ personality, style, and level of experience, perhaps these reactions were partly fueled by the instructors’ race and/or gender. This particular question has not been subjected to empirical research. This is an especially important issue that deserves more attention, partly due to systemic issues in academia which place faculty of color at a disadvantage in the tenure process based not on their skills and expertise in teaching multicultural counseling courses, but rather based on the reactions students have to them which are rooted in the students’ own racism (Greene et al., 2011).

The Present Study

Despite having received a great deal of scholarly attention, important questions remain unexplored regarding what contributes to graduate counseling students’ developing or not developing multicultural competence. The present study will attempt to integrate and extend previous findings by exploring the extent to which a number of student-level variables (e.g., race, gender, levels of modern racism, perceptions of program cultural ambience) and instructor-level variables (race, gender, level of multicultural counseling competence, types of instructional strategies used) explain the changes observed on levels of multicultural competence following a semester-long course. These questions will fulfill the goals of generating findings that are generalizable
beyond a single course and explore the yet unaddressed question of how instructors’
identities may shape student outcomes. The study hopes to make a contribution to the
existing literature on multicultural instruction and training, in order to shed light on how
to better work with students who are not meeting satisfactory levels of multicultural
competence within their graduate programs
CHAPTER THREE

IN WHICH THE METHODS ARE OUTLINED

Participants

Participants were undergraduate and graduate students and their instructors recruited from approximately 15 different universities around the country, mostly in the midwest. Requirements for the statistical method used to analyze student data requires that there be 10 participants per variable used in the analysis to have sufficient power. However that ratio can be smaller if the reliability coefficients for the scales used is greater than .80, and the scales used in this study do have reliability coefficients greater than .80.

The author sought out graduate programs that she and/or colleagues had some prior relationship with in order to increase the likelihood of instructor and student participation in the study. It was important for the design of the study for there to be demographic diversity in both student and instructor samples. Given the anticipated challenges involved in successfully collecting the data needed for this study (i.e., soliciting participation from a specific population, multiple data-collection points), the goal in recruiting participants at this time largely focused on getting as many instructors and students to participate as possible rather than ensuring there was great enough diversity in the sample. However, it should be noted that certain programs were targeted for their reputation for recruiting diverse students and faculty. Additionally, it was
more important for the design of the study that there be racial and gender diversity of instructors than diversity in the students sampled.

**Measures**

**Demographics**

All participants, both instructors and students, were asked to provide demographic information. Students were asked to provide information regarding self-identified race, gender, socioeconomic status, and sexual orientation. They were also asked to indicate the type of degree program they are enrolled in (e.g., M.A., Psy.D.), and the number of multicultural-focused courses they have taken. Instructors were asked to indicate their self-identified race, gender, SES of origin, and sexual orientation, as well as how many semester-long multicultural courses they have taught.

**Characteristics of Course**

Instructors were asked to indicate what types of teaching methods they utilize or do not utilize. The investigator created three Yes/No items for instructors to respond to, which ask if the instructor used didactic, experiential/participatory, and exposure techniques. Each of these three items also requested that the instructor provide an example of the method if they responded “Yes” to the item, so that the researcher could separately determine if the instructor utilized didactic, experiential/participatory, and exposure techniques in teaching multicultural counseling. The investigator included an example of each technique in the question to ensure instructors understand.
Multicultural Competence

The Multicultural Knowledge and Awareness Scale (MCKAS; Ponterotto, Gretchen, Utsey, Riger, & Austin, 2002) is a 32-item self-report measure designed to assess for the degree to which an individual is aware and knowledgeable of various societal and cultural issues related to diversity. Items are rated on a seven-point, Likert-type scale (1-7) with responses ranging from “not at all true” to “totally true”. The scale is comprised of two subscales, a) Multicultural Awareness (12 items; e.g., “I am aware that being born a minority in this society brings with it certain challenges that White people don’t have to face.”), and b) Multicultural Knowledge (20 items; e.g., “I am knowledgeable of acculturation models for various ethnic minority groups.’”). Reported alpha coefficients for the awareness subscale range from .75 to .85, and for the knowledge subscale alphas range from .85 to .95. Scale scores were not influenced by social desirability (Ponterotto et al., 2002). Graduate students and instructors completed the MCKAS, but undergraduate students and instructors did not; graduate students completed it at the beginning and end of the semester, and instructors only completed it once at the end of the semester.

Racial Attitudes

The Colorblind Racial Attitudes Scale (CoBRAS; Neville, Lily et al., 2000) is a 20-item self-report measure designed to assess for the degree to which individuals deny the existence of racism and its impact on people’s experiences. Otherwise known as color-blind racism, this construct is considered a form of modern racism. Items are rated on a five-point, Likert-type scale (1-5), with responses ranging from “not at all apparent
or clear” to “very apparent or clear”. An example item includes “Social policies, such as affirmative action, discriminate unfairly against White people.” Reported alpha coefficients for the total scale range from .86 to .91. CoBRAS scores demonstrated construct validity with other measures of racial attitudes but were not related to scores on social desirability (Neville et al., 2000). Students completed the CoBRAS at the beginning and end of the semester, and instructors also completed the measure.

Program Cultural Ambience

The Multicultural Environment Inventory – Revised (MEI-R; Pope-Davis, Liu, Nevitt, & Toporek, 2000) is a 27-item self-report measure designed to assess the perceived focus on and inclusion of multicultural issues in a graduate program. Items are rated on a five-point, Likert-type response scale (1-5), with responses ranging from “not at all” to “a lot”. The measure is comprised of four subscales: a) Curriculum and Supervision (11 items) assesses how multiculturalism is integrated into coursework and instruction, b) Climate and Comfort (11 items) assesses how comfortable the individual is expressing ideas and concerns related to multicultural issues, c) Honesty in Recruitment (3 items) assesses how comfortable the respondent would be in honestly sharing about the multicultural environment to potential future students, and d) Multicultural Research (2 items) assesses perceptions of overall faculty interest in researching multicultural issues and constructs. Reported alpha coefficients for the respective scales are .94, .92, .92, and .85 (Pope-Davis et al., 2000). Only students completed the MEI-R, and they completed it at the end of the semester.
Procedure

The investigator developed three forms of the survey, one for the first round of data collection from students, one for the second round of data collection from students, and one for the data to be collected from instructors. All data was collected online using the online data software Opinio. The investigator contacted course instructors, whom she also connected with regarding participating in this study, to pass along her request for their students’ participation. In the email to instructors she included a recruitment letter requesting their participation and describing the study, along with a link for students to participate in the study. The link in each email to instructors was unique to the specific section of students, such that the student data was initially collected in separate groups. She followed up with three reminder emails for the students to complete the survey by a certain date. The grouping of student responses in this manner was necessary for the purposes of linking each student to his/her instructor. The survey itself asked that the students provide the last four digits of their phone number, which served as an anonymous identification number allowing their responses at time-1 and time-2 to be linked. The researcher collected no identifying information about any of the participants. The investigator stated that participation in the study was voluntary and that each student who completed both rounds of data collection would be eligible to win one of two $50 gift cards. During this first round of data collection, students completed the demographic information, MCKAS, and CoBRAS.

At the end of the semester, the investigator again distributed a recruitment email and unique online link to each instructor to pass along to their students. Only students
who completed both rounds of data collection had their data included in the final analysis. She also contacted the course instructors to solicit their participation and then sent a unique link for each instructor via email. The instructor survey was matched to their students’ responses through the use of a common ID number, and the researcher collected no identifying information about the instructor. Instructors were informed that participation is voluntary and that they were eligible to win a monetary prize in the amount of $50 if they participate.

Up to three reminder emails were sent during the second round of data collection, both to students and to instructors, in order to maximize response rates from potential study participants. During this second round of data collection students completed the MCKAS, CoBRAS, and MEI-R. Instructors completed the demographic information, MCKAS, indicate their teaching experience, and responded to items about teaching methods. Using the code number (e.g., 1234) assigned to link each group of students to their instructors, the data collected separately from each instructor and their students was combined.

Data Analysis

An ideal data analysis method for the present study is hierarchical linear modeling (HLM). According to other scholars, future research exploring outcomes in multicultural counseling courses will be most useful if the research design allows for findings to be generalized beyond a single course, implying that assessing multiple courses/instructors is ideal (Sammons & Speight, 2008). An empirical investigation of student outcomes in multicultural counseling courses is hierarchical in nature because students are nested
within classrooms, or in this study, instructors. The investigator is interested in exploring statistical variations in the outcome variables of interest (i.e., multicultural competence and racial awareness) as they differ by individual-level (i.e., student) characteristics as well as group-level (i.e., instructor) characteristics.

Due to small sample size and lack of variability in certain variables of interest (e.g., instructor race), the use of HLM was not possible. However, given that the researcher is interested in multiple outcome measures, a multivariate technique is still most appropriate. Canonical correlation is a method that is most appropriate for use when a study aims to understand the relationship between two sets of variables where one is categorical (Sherry & Hensen, 2005). For the student-level data in this study, a set of independent demographic and cultural diversity variables is used to predict groups of dependent variables comprised of student attitudes regarding diversity topics (i.e., change in colorblind racial attitudes and change in multicultural knowledge, colorblind racial attitudes (time 2) and multicultural knowledge (time 2)).

The study used data collected from students enrolled in a multicultural counseling course at several different universities, as well as their instructors. Student attitudes regarding a wide range of diversity topics could have potentially been measured as outcomes of the course, in addition to multicultural competence. But for the purposes of keeping the scope of the study manageable and focused, only student racial attitudes were measured. It should be noted that the investigator collected data on numerous demographic variables and attitudes that ultimately were eliminated from data analysis
due to range restriction and/or small sample size. This process is explained in the
upcoming chapter.

Instructor data was analyzed using simple linear regression to explore whether
any between-groups differences in student outcomes existed based on instructor. Rather
than using any combination of instructor demographic or teaching variables as the
predictor, students were grouped by the single variable “instructor” for this analysis.
CHAPTER FOUR

IN WHICH THE RESULTS ARE REPORTED

This chapter is comprised of a thorough examination of the study’s findings, beginning with a description of the sample obtained through data collection efforts, followed by intercorrelation analysis and demonstration of convergent validity in this data. The chapter concludes with separate analysis of student and instructor data, using canonical correlation to analyze student data and simple linear regression to analyze instructor data.

Description of the Sample

Table 1 provides a detailed overview of the demographic makeup of the students and instructors who participated in this study. Of the approximately 250 students and 18 instructors solicited for participation, 38 students and six instructors participated in the first round of data collection. After the second round of data collection, the final sample yielded a small sample size of 21 students and six instructors. The student participants self-identified as 85.7% female, 71.4% White, and 85.7% heterosexual. Although there was further racial diversity amongst the students (e.g., African American, Latino, Asian American, Biracial), for the purposes of detecting differences between groups on outcome measures, the data was coded as White/Other. The range of socioeconomic diversity in their families of origin included 4.8% upper-class, 28.6% upper middle-class,
33.3% middle-class, 23.8% lower middle-class, and 9.5% lower class. Approximately 23.8% of the students were working toward a bachelor’s degree, 52.3% toward a master’s, and 23.5% toward a doctorate. Thirty-three percent of the students indicated this was the first course on cultural diversity they had ever taken, while 57.1% reported they had taken between two and four such courses and 9.5% reported they had taken five or more courses.

Table 1. Frequencies of Categorical Demographic Variables

<table>
<thead>
<tr>
<th>Measures</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Student Demographics</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>18</td>
<td>85.7</td>
</tr>
<tr>
<td>Male</td>
<td>3</td>
<td>14.3</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>15</td>
<td>71.4</td>
</tr>
<tr>
<td>African American</td>
<td>2</td>
<td>9.5</td>
</tr>
<tr>
<td>Latino/a</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Asian American</td>
<td>2</td>
<td>9.5</td>
</tr>
<tr>
<td>Biracial</td>
<td>1</td>
<td>4.8</td>
</tr>
<tr>
<td>Multiracial</td>
<td>1</td>
<td>4.8</td>
</tr>
<tr>
<td>Socioeconomic Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper</td>
<td>1</td>
<td>4.8</td>
</tr>
<tr>
<td>Upper Middle</td>
<td>6</td>
<td>28.6</td>
</tr>
<tr>
<td>Middle</td>
<td>7</td>
<td>33.3</td>
</tr>
<tr>
<td>Lower Middle</td>
<td>5</td>
<td>23.8</td>
</tr>
<tr>
<td>Working</td>
<td>2</td>
<td>9.5</td>
</tr>
<tr>
<td>Lower</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Sexual Orientation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heterosexual</td>
<td>18</td>
<td>85.7</td>
</tr>
<tr>
<td>Gay/Lesbian</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Bisexual</td>
<td>3</td>
<td>14.3</td>
</tr>
<tr>
<td>Degree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor’s</td>
<td>5</td>
<td>23.8</td>
</tr>
<tr>
<td>Master’s</td>
<td>11</td>
<td>52.3</td>
</tr>
<tr>
<td>Doctorate</td>
<td>5</td>
<td>23.8</td>
</tr>
<tr>
<td>Measures</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>----</td>
<td>--------</td>
</tr>
<tr>
<td>Instructor Demographics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>4</td>
<td>66.7</td>
</tr>
<tr>
<td>Male</td>
<td>2</td>
<td>33.3</td>
</tr>
<tr>
<td>Sexual Orientation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heterosexual</td>
<td>6</td>
<td>100.0</td>
</tr>
<tr>
<td>Gay/Lesbian</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Bisexual</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td># Diversity Courses Taught</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 (first time)</td>
<td>1</td>
<td>16.7</td>
</tr>
<tr>
<td>2 – 4</td>
<td>2</td>
<td>33.3</td>
</tr>
<tr>
<td>5 or more</td>
<td>3</td>
<td>50.0</td>
</tr>
<tr>
<td>Didactic Activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>5</td>
<td>83.3</td>
</tr>
<tr>
<td>No</td>
<td>1</td>
<td>16.7</td>
</tr>
<tr>
<td>Experiential Activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>6</td>
<td>100.0</td>
</tr>
<tr>
<td>No</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Exposure Activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>5</td>
<td>83.3</td>
</tr>
<tr>
<td>No</td>
<td>1</td>
<td>16.7</td>
</tr>
</tbody>
</table>

With regards to instructor characteristics, 66.7% self-identified as female, and 100% as people of color and heterosexual. Several White instructors were solicited for participation in the study but did not respond. Range of socioeconomic diversity in their families of origin was comprised of 16.7% upper middle-class, 16.7% middle-class, 16.7% lower middle-class, 33.3% working class, and 16.7% lower-class. None of the instructors grew up in families considered upper class. In terms of experience teaching courses on cultural diversity issues, 16.7% indicated this was their first time teaching such a course, 33.3% reported they had taught between two and four courses, and 50% of the sample reported they had taught a course five or more times. Almost all of the
instructors indicated they used a combination of didactic activities (83.3%), experiential activities (100%), and exposure activities (83.3%) as teaching tools.

Table 2 provides the sample size, mean, standard deviation, minimum, maximum, and range for the continuous variables used in the study. On average, there was effectively no change in students’ colorblind racial attitudes ($M = -1.1$) and multicultural awareness ($M = -.02$) over the course of the semester. However, multicultural knowledge ($M = 19.3$) increased more than a full standard deviation on average. The minimum and maximum scores reported for change in colorblind racism and multicultural competence indicate that some students' colorblind racism decreased, while other students’ reported notably higher levels of racism at the end of the semester. Similarly, some students' reported levels of multicultural competence increased while others reported lower levels at the end of the semester. This combination suggests that positive changes for some participants were cancelled out by undesired changes for others.

Standard deviation and range ($SD = 9.7$; range = 37.0) for multicultural environment was small, meaning most participants responded similarly, which made it difficult to detect significant relationships involving this variable. Instructor scores on the continuous measures were restricted in terms of range, which could be a result of small sample size or a pattern among this particular subset of instructors indicating similarly low levels of colorblind racism and high multicultural competence.
### Table 2. Descriptive Statistics of Continuous Measures

<table>
<thead>
<tr>
<th>Measures</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>Range</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student CoBRAS (T1)</td>
<td>20</td>
<td>46.0</td>
<td>13.7</td>
<td>80.0</td>
<td>27.0</td>
<td>80.0</td>
</tr>
<tr>
<td>Student Multicultural Competence (T1)</td>
<td>15</td>
<td>168.3</td>
<td>24.8</td>
<td>82.0</td>
<td>122.0</td>
<td>204.0</td>
</tr>
<tr>
<td>Multicultural Environment</td>
<td>15</td>
<td>114.3</td>
<td>9.7</td>
<td>37.0</td>
<td>91.0</td>
<td>128.0</td>
</tr>
<tr>
<td>Student CoBRAS (T2)</td>
<td>20</td>
<td>45.9</td>
<td>17.8</td>
<td>61.0</td>
<td>26.0</td>
<td>87.0</td>
</tr>
<tr>
<td>Student Multicultural Competence (T2)</td>
<td>13</td>
<td>184.4</td>
<td>25.4</td>
<td>94.0</td>
<td>120.0</td>
<td>214.0</td>
</tr>
<tr>
<td>Student Multicultural Awareness (T2)</td>
<td>14</td>
<td>69.3</td>
<td>13.9</td>
<td>49.0</td>
<td>33.0</td>
<td>82.0</td>
</tr>
<tr>
<td>Student Multicultural Knowledge (T2)</td>
<td>14</td>
<td>113.8</td>
<td>13.1</td>
<td>46.0</td>
<td>87.0</td>
<td>133.0</td>
</tr>
<tr>
<td>Student Change in CoBRAS</td>
<td>19</td>
<td>-1.1</td>
<td>15.1</td>
<td>66.0</td>
<td>-29.0</td>
<td>37.0</td>
</tr>
<tr>
<td>Student Change in Multicultural Awareness</td>
<td>13</td>
<td>-0.2</td>
<td>11.4</td>
<td>45.0</td>
<td>-30.0</td>
<td>15.0</td>
</tr>
<tr>
<td>Student Change in Multicultural Knowledge</td>
<td>13</td>
<td>19.3</td>
<td>16.3</td>
<td>61.0</td>
<td>-5.0</td>
<td>56.0</td>
</tr>
<tr>
<td>Student Change in Multicultural Competence</td>
<td>13</td>
<td>19.2</td>
<td>22.4</td>
<td>79.0</td>
<td>-10.0</td>
<td>69.0</td>
</tr>
<tr>
<td>Instructor CoBRAS</td>
<td>6</td>
<td>34.1</td>
<td>2.7</td>
<td>8.0</td>
<td>30.0</td>
<td>38.0</td>
</tr>
<tr>
<td>Instructor Multicultural Competence</td>
<td>3</td>
<td>207.7</td>
<td>3.6</td>
<td>9.0</td>
<td>206.0</td>
<td>215.0</td>
</tr>
</tbody>
</table>

**Intercorrelations and Convergent Validity**

Table 3 provides the bivariate correlations between relevant continuous variables in the study. Analysis of bivariate correlations between continuous study variables is suggestive of convergent validity. It should be noted that the sample size obtained during data collection made it difficult to detect significant relationships that might be
present and that would be detectable in a larger sample. Although there is a relative absence of statistically significant relationships between the variables, the direction of the relationships generally indicates that the theoretically similar constructs are represented as such in participant responses. For instance, the negative correlations between colorblind racial attitudes and levels of multicultural competence indicates that participants with lower levels of colorblind racism had higher levels of multicultural competence and vice versa. For example, students who began the semester with lower levels of colorblind racism also started with reportedly higher levels of multicultural competence. In addition, the statistically significant correlation between instructors levels of colorblind racial attitudes and levels of multicultural competence \((r = -.71, p < .01)\) indicates a strong relationship in which instructors with lower levels of colorblind racism tended to have much higher levels of multicultural competence.

Analysis of intercorrelations offers some further insight into patterns among student-level variables in this study. The relationship between reported levels of multicultural competence at the beginning versus the end of the semester was significant \((r = .60, p < .05)\), suggesting that students who began the semester with higher levels of multicultural competence also ended the semester with higher levels than their peers. There were not significant relationships between the independent variables and dependent variables that measured how much students changed on diversity attitudes, but there were significant relationships between the independent variables and levels of colorblind racism and multicultural competence at the end of the semester. The scores from the end of the semester will be used as the dependent variables in further analysis.
Table 3. Correlation Matrix of Continuous Variables

<table>
<thead>
<tr>
<th>Measures</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student CoBRAS (T1)</td>
<td>-</td>
<td>.45</td>
<td>.25</td>
<td>.37</td>
<td>-.52</td>
<td>-.44</td>
<td>-.31</td>
<td>-.23</td>
<td>-.10</td>
<td>-.22</td>
<td>.01</td>
<td>-.33</td>
<td>.01</td>
</tr>
<tr>
<td>Student MCC (T1)</td>
<td>-</td>
<td>-</td>
<td>-.23</td>
<td>-.46</td>
<td>.60*</td>
<td>.53</td>
<td>.58*</td>
<td>-.10</td>
<td>-.42</td>
<td>.05</td>
<td>-.61*</td>
<td>-.05</td>
<td>-.25</td>
</tr>
<tr>
<td>MC Environment</td>
<td>-</td>
<td>-</td>
<td>-.07</td>
<td>.00</td>
<td>.11</td>
<td>.18</td>
<td>-.36</td>
<td>.25</td>
<td>.11</td>
<td>.26</td>
<td>.16</td>
<td>.01</td>
<td></td>
</tr>
<tr>
<td>Student CoBRAS (T2)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-.81**</td>
<td>-.92**</td>
<td>-.58*</td>
<td>.66**</td>
<td>-.36</td>
<td>-.69**</td>
<td>-.01</td>
<td>.25</td>
<td>.46</td>
<td></td>
</tr>
<tr>
<td>Student MCC (T2)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>.93**</td>
<td>.92**</td>
<td>-.52</td>
<td>.47</td>
<td>.67*</td>
<td>.17</td>
<td>-.07</td>
<td>.08</td>
<td></td>
</tr>
<tr>
<td>Student MCA (T2)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>.70**</td>
<td>-.61*</td>
<td>.46</td>
<td>.79**</td>
<td>.09</td>
<td>-.42</td>
<td>.38</td>
<td></td>
</tr>
<tr>
<td>Student MCK (T2)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-.34</td>
<td>.41</td>
<td>.46</td>
<td>.24</td>
<td>.19</td>
<td>-.18</td>
<td></td>
</tr>
<tr>
<td>Student Change CoBRAS</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-.41</td>
<td>-.75**</td>
<td>-.03</td>
<td>-.16</td>
<td>.01</td>
<td></td>
</tr>
<tr>
<td>Student Change in MCC</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>.72**</td>
<td>.87**</td>
<td>.09</td>
<td>.18</td>
<td></td>
</tr>
<tr>
<td>Student Change in MCA</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>.29</td>
<td>-.28</td>
<td>.17</td>
<td></td>
</tr>
<tr>
<td>Student Change in MCK</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>.45</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td>Instructor CoBRAS</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-.71*</td>
<td></td>
</tr>
<tr>
<td>Instructor MCC</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

Note. CoBRAS = Colorblind Racial Attitudes, MC = Multicultural; MCC = Multicultural Competence, MCA = Multicultural Awareness, MCK = Multicultural Knowledge. Negative correlations between any two measures titled “CoBRAS” and “MC” indicate that participants with lower levels of colorblind racism tended to also have higher levels of multicultural competence.

*p < .05, **p < .01.
Furthermore, the significant relationship between the two outcome variables of interest at the end of the semester, colorblind racism and multicultural competence ($r = -0.81^{**}, p < .01$), was very high and also suggests that there is multicollinearity between these two constructs (Abu-Bader, 2010). By examining the two subscales that comprise this measure separately, it appears that there is a problematic degree of conceptual overlap between multicultural awareness and colorblind racial attitudes ($r = -0.92^{**}, p < .01$) but not between multicultural knowledge and colorblind racial attitudes ($r = -0.58^*, p < .05$). Therefore it is appropriate to use the multicultural knowledge subscale together with the measure of colorblind racial attitudes, eliminating the multicultural awareness subscale, in subsequent analyses.

**Analysis of Student Data**

Given that the researcher is interested in multiple outcome measures, the multivariate technique canonical correlation is appropriate for this study. Using this method as a framework for understanding statistically significant patterns in the data, the research question regarding how student factors are implicated in developing cultural competence can be stated as:

1. Are there significant relationships between student characteristics (X) and cultural competence (Y) at the end of a semester-long course?

Canonical correlation requires a number of assumptions from the data in order to be effectively used: sample representativeness, levels of measurement, sample size, linear relationships, normality, homoscedasticity, and multicollinearity (Abu-Bader, 2010). Sample representativeness requires that the sample be representative of the population of
interest. Though there is no way to test this for the study sample, there is no reason to believe these students are not representative of students who complete such courses. Levels of measurement requires that dependent variables be continuous and independent variables either be continuous or categorical, but if categorical they must be dummy-coded. All demographic variables were dummy coded to fit this requirement, and all other variables used in the analysis were continuous.

The sample size requirement for canonical correlation is that there be 10 subjects for every variable included in the analysis, but the ratio can be smaller if reliability coefficients for the measures are greater than .80 (Abu-Bader, 2010). All of the measures used in this study had reliability coefficients higher than .80, thus the smaller ratio of subjects to variable might be acceptable. To increase power, three variables with very little variability in responses once dummy coded (gender, SES, and sexual orientation) were left out of the analysis. Further steps taken to fit the data for canonical correlation also eliminated multicultural environment and degree level, which will be explained in subsequent sections. Six variables remained in the analysis, creating a subject to variable ratio of approximately 3.5:1.

Canonical correlation also requires that all continuous variables have linear relationships and be normally distributed. Almost all relationships between the study variables were linear, based on examination of scatterplot matrices. However, multicultural environment did not have a linear relationship with several variables, including the two outcome variables that will be used in the analysis. Multicultural environment will be excluded from the analysis.
Analysis of skewness and kurtosis for all continuous variables of interest revealed that almost all variables were normally distributed, except colorblind racial attitudes at the beginning of the semester was severely positively skewed and colorblind attitudes at the end of the semester were positively skewed. These patterns indicate that student responses were skewed toward reporting lower levels of colorblind racism. After inspecting the shape of the distributions using a histogram, the researcher chose to conduct a square root transformation on these variables to distribute them normally (Abu-Bader, 2010). The transformed variables will be used in the canonical correlation analysis.

The final requirements to use canonical correlation are homoscedasticity and multicollinearity. Homoscedasticity exists when dependent variables are normally distributed along each independent variable. By plotting residual scores onto the predicted scores for each dependent variable (Abu-Bader, 2010), it appears that the dependent variables are homoscedastic because they are equally distributed around the line. Multicollinearity exists when the correlation between any variable in the study is higher than .80. As described above, there was multicollinearity between the two dependent measures, colorblind racial attitudes and multicultural competence, particularly when data was collected at the end of the semester. Further exploration revealed a notable difference between the two subscales of the multicultural competence measure, awareness and knowledge. It appeared there was a very high degree of multicollinearity between colorblind racial attitudes and multicultural awareness, but not multicultural knowledge. To address the problem of multicollinearity in this dataset, the
set of dependent variables will include colorblind racial attitudes and only the subscale scores for multicultural knowledge.

**Canonical Correlation Results**

For the canonical correlation analysis, the predictor variable set is comprised of student characteristics (i.e., demographics and diversity attitudes). The outcome variable set is comprised of the two measures of level of diversity attitudes at the end of a semester-long course designed to increase awareness and knowledge of diversity issues. As a reminder, the process of fitting the data for this type of analysis eliminated certain variables, which is unsurprising given the small sample. It should be noted that degree level (undergraduate vs. graduate) was eliminated because, after dummy-coding and excluding missing data listwise, the variable was unidimensional. Set-1 of the analysis included student race, number of diversity courses taken, colorblind racism at the beginning of the semester, and multicultural competence at the beginning of the semester. Set-2 included level of colorblind racism and multicultural knowledge at the end of the semester.

Output from the canonical correlation analysis indicates that the relationship between the first function, or the first canonical variates pair (i.e., student characteristics and cultural attitudes at end of the semester) was significant ($\lambda = .15$, $\chi^2 = 16.24$, $df = 8$, $p < .05$). The canonical correlation for this first function ($r = .83$) suggests that the first pair of canonical variates overlap 69.0% in variance ($R^2 = .69$). This is considered a large effect-size (Hensen, 2006). The canonical correlation for the second function ($r = .73$) suggests that the pair of canonical variates overlap 53% in residual variance after the first
pair has been removed, but this relationship was not statistically significant ($\lambda = .47$, $\chi^2 = 6.36$, df = 3, p = .10). Thus, only the first function will be interpreted.

Canonical loadings, also referred to as structure coefficients, are used to interpret which individual variables contributed significantly to each of their respective canonical variates (Sherry & Henson, 2005). Only canonical loadings greater than .30 should be considered as contributing significantly to their variate (Tabachnick & Fidell, 2013). Number of diversity courses a student had taken ($r_s = .47$), as well as colorblind racial attitudes ($r_s = .97$) and multicultural competence at the beginning of the semester ($r_s = -.62$) contributed significantly to the first canonical variate $X$, though student race ($r_s = -.13$) did not. Both colorblind racial attitudes ($r_s = 1.0$) and multicultural knowledge at the end of the semester ($r_s = -.55$) contributed to the first canonical variate $Y$. See Figure 1 for the full model.

**Figure 1. Loadings and Canonical Correlations for the Significant Canonical Variate Pair**

Canonical loadings also offer information about the direction of the relationships between variables that contributed significantly to the relationship (Tabachnick & Fidell,
2013), which is different than simply looking at bivariate correlations. The output from this dataset demonstrates two primary findings. First, participants with high levels of colorblind racism at the beginning of the semester also ended the semester with high levels of colorblind racism and low levels of multicultural knowledge. Similarly, students who began the semester with low multicultural competence ended the semester with low levels of multicultural knowledge and high colorblind racism. The second finding was that participants who had taken more than one diversity course tended to have higher levels of colorblind racism and lower levels of multicultural knowledge at the end of the semester. This finding is unexpected and is possibly a result of Type I error or the way in which the categorical variable was dummy coded was not appropriate for measurement.

An important aspect of interpreting canonical correlation involves analyzing the proportion of the variance in each set of variables explained by its own canonical variate and by the other canonical variate. CV1-1 indicates that 38.8% of the variance in student characteristics is extracted by its own first canonical variate X, while 65.1% of the variance in diversity attitudes at the end of the semester is extracted by its own first canonical variate Y. In addition, the redundancy variance demonstrates that the first canonical variate for outcomes extracts 26.7% of the variance in student characteristics. This number is considered one of the most important pieces of information because it shows the strength of the relationship between the independent variables and dependent variables (Abu-Bader, 2010).
Analysis of Instructor Data

Simple linear regression was used to explore whether any between-groups differences in student outcomes existed based on instructor. Rather than using any combination of instructor demographic or teaching variables as the predictor, students were grouped by the single variable “instructor” for this analysis. Sample size for instructors was too small to include more than one predictor variable in the regression.

Using this method as a framework for understanding statistically significant patterns in the data, the research question regarding how group-level differences between instructors are implicated in students developing cultural competence can be stated as:

2. Does “instructor” explain a significant amount of the variance in any of the cultural competence outcomes?

Four simple linear regression models were run, with “instructor” as the predictor variable in all models and four separate outcome variables of change in colorblind racism, colorblind racism at end of the semester, change in multicultural knowledge, and multicultural knowledge at the end of the semester. The only outcome variable that differed significantly by instructor was students’ change in levels of multicultural knowledge ($F (1, 12) = 8.9, p<.05$). Change in levels of multicultural knowledge was generally in the positive direction, but some instructors’ students changed more than others and these differences were statistically significant from zero. Change in colorblind racism ($F(1, 18) = .03, p>.05$) and levels of colorblind racism at the end of the semester ($F (1, 19) = .73, p>.05$) did not differ significantly between instructors. Instructor
differences had no impact on how students’ awareness of diversity issues changed over the course of the semester.
CHAPTER FIVE

IN WHICH THE FINDINGS ARE INTERPRETED

This chapter will offer interpretation of the significant findings, followed by a discussion of limitations and unique challenges posed by implementing this study, practical implications, and directions for future research. Preliminary results from this study make an important contribution to the literature on multicultural education regarding what factors impact students’ development of cultural competence. Though the original intent of the study shifted during the process of collecting data, useful information is gleaned from the analysis carried out.

**Significant Findings**

A significant finding of the study is that there were instructor-level differences in how much students’ multicultural knowledge changed over the course of the semester. This finding supports the original hypothesis that instructors of multicultural courses are an important variable to consider when attempting to understand how students develop multicultural competence in these courses. Some scholars argue that specific subgroup differences between instructors, such as race and gender, are important factors to explore in understanding the unique challenges of multicultural education (Sammons & Speight, 2008; Greene et al., 2011). Limitations of the sample, including small sample size and heterogeneity in the sense that all instructors who participated identified as people of color, made it impossible to examine these differences.
It is equally important to highlight that instructors themselves seemed to have no significant relationship with how much students’ cultural and racial awareness changed by the end of the course. Within the tri-partite model of multicultural competence, multicultural awareness and multicultural knowledge are distinguished as conceptually different constructs (Sue, Arredondo, & McDavis, 1992; Arredondo et al., 1996). Knowledge refers to information about different cultural groups that one can learn by reading a textbook or listening to lectures, such as learning about models of acculturation (Ponterotto et al., 2003) or the concept of racial microaggressions. Awareness refers to a more personal process of becoming aware of one’s own experiences of privilege and oppression (Arredondo, 1999) and also understanding how society unfairly and systematically disadvantages or privileges others based solely on identity markers such as race and gender. Other researchers argue that teaching multicultural awareness is qualitatively different and more difficult than teaching pure content or knowledge (Yoon, Jeremie-Brink, & Kordesh, 2014). This makes multicultural counseling courses different than most other university courses where the primary objective for the instructor is to impart content or knowledge of the subject to students.

Results from the present study support this notion that teaching cultural awareness and cultural knowledge might occur via different processes, given that instructors in this study had differential impacts on their students’ development of a multicultural knowledge base but not their cultural awareness. Descriptive statistics from the sample show that the average amount of change on levels of cultural awareness was essentially zero, while levels of cultural knowledge notably increased. A closer examination of
individual student responses indicated that some students’ made sizeable gains in understanding colorblind racism and other aspects of cultural awareness, while others did not change at all, and some even developed increased levels of colorblind racism by the end of the semester. The group-level effect of these differences evened out to a mean change of zero for the full sample. These findings suggest that instructors might have less control over their students’ developing multicultural awareness than we would like.

Another noteworthy finding from this study is that the factors that impact how much students change in their levels of multicultural awareness and knowledge are complex. Previous research in this area has tended to assess student outcomes in single multicultural counseling courses, looking at a handful of student characteristics such as racial identity or implicit prejudice (Castillo et al., 2007; Neville et al., 1996). While useful, these single studies likely do not reflect the complicated and multi-layered nature of students developing cultural competence in reality. A comprehensive review of the literature on this subject does reflect this complexity, with numerous factors related to the students (Chao, 2012; Spanierman et al., 2008), the instructors (Castillo et al., 2007; Sammons & Speight, 2008), and the overall environment of the training program (Dickson et al., 2008; Gloria & Pope-Davis, 1997) highlighted as significant in prior research.

The present study detected significant relationships with student cultural competence outcomes at both the student-level and instructor-level. As discussed above, instructor differences had a significant impact on how much their students’ multicultural knowledge changed over the course of the semester. The analysis of student variables
indicated that the number of cultural diversity courses students had previously taken, and their levels of colorblind racism and multicultural competence at the beginning of the semester accounted for approximately 69% of the variance in their levels of colorblind racism and multicultural knowledge at the end of the semester. This effect size was large and statistically significant. Even in this small sample of students and instructors, where only a fraction of the variables of interest were able to be included in the final analysis, the findings paint a picture of complex relationships between multiple variables that impact how students develop multicultural competence.

Implications

The findings from this study have important practical implications for teaching, clinical practice, and instructor evaluations. First, it could be useful for instructors to know that it is more of a challenge to teach multicultural awareness and sometimes, with certain students, they might not have the power to do so. If teaching awareness is different than teaching knowledge, then one teaching implication of this study could be to reemphasize the importance of experiential and exposure teaching strategies in addition to traditional didactic instruction, a notion that is supported by existing research (Coleman, 2006; Neville et al., 1996). Additionally, scholars note that one unique challenge of teaching cultural diversity courses is the emotional toll teaching can take on the instructor due to the personal nature of the material and difficult conversations in the classroom (Yoon, Jeremie-Brink, & Kordesh, 2014). If instructors are aware that they cannot always be expected to change the awareness level of certain students, perhaps this could alleviate or depersonalize some of the impact of teaching. Regardless, this study
adds empirical support to the notion that instructors may not always have the power to facilitate cultural awareness for all students.

This study also has implications for how instructors are evaluated by their students and how those evaluations are used in making decisions about promotion and tenure. Leading scholars in this field have expressed significant concern that negative teaching evaluations are unfairly used to penalize faculty who teach multicultural courses, particularly faculty of color and women (Greene et al., 2011). The findings from this study cannot address the latter part of this concern. However it is worth emphasizing that the results do suggest that there are instructor-level differences that impact how much their students gain multicultural knowledge that may be linked to teaching skills and expertise, but this was not the case for how much students changed in awareness. And if students with higher levels of racism and lower cultural competence do not change much on these dimensions during the course, their evaluations of their instructor might be fueled by their personal bias and reaction to the material rather than a true reflection of the instructor’s skills.

A final implication of the study’s findings addresses the issue of students passing multicultural counseling courses without developing an adequate level of competence to work effectively with culturally different clients. The findings suggest that students can learn the content taught in the course without showing a similar increase in cultural awareness. This pattern raises a question of whether this, multicultural knowledge without awareness, can be considered true multicultural competence. The prevailing tripartite model of multicultural competence argues that competence begins within a
foundation of self-awareness (Sue, Arredondo, & McDavis, 1992), implying that students who gain knowledge without awareness do not possess cultural competence.

This pattern also raises concern about the students’ multicultural skills, the third component of the cultural competence model and the piece that determines the quality of clinical work students are actually practicing with clients. If some students are not truly developing cultural competence because they lack awareness, multicultural scholars would argue that they cannot have culturally competent clinical skills. This is an important ethical issue. Training programs should take seriously students who do not demonstrate adequate growth in multicultural training and use this information as a tool for gatekeeping.

An additional implication for training programs is related to the findings that some students demonstrate little change and that their pre-existing multicultural awareness and knowledge is a strong predictor for how much they develop cultural competence. If programs truly value multicultural competence, they could consider using information about applicants’ multicultural awareness and knowledge to carefully and thoughtfully screen students that they admit to their program. Such information could be gathered from interviews or application materials that ask applicants to describe their perspective on cultural diversity.

**Limitations**

Limitations of the present study include small sample size and possible response bias. The size of the sample presents a number of challenges that are worth mentioning here. First, as is true of all studies with small samples, the generalizability of the results
beyond the participants in this study is limited. Second, the preferred method of data analysis was not possible with this sample size. Hierarchical linear modeling (HLM) is an advanced statistical technique that allows examination of data in complex relationships. However it also requires large sample sizes at multiple levels and the data must be very clean, which makes collecting data of this nature difficult. It would have been ideal for the original research questions to use HLM.

Finally, there is risk of Type I and Type II errors due to low power in this small sample. If Type I error is present, the analysis would indicate significant relationships between variables where there are none, which is possible in this small sample. The researcher attempted to remove the risk of Type I error as much as possible by eliminating variables from the analysis that were not a good fit and running as few analyses as possible, especially using canonical correlation for the student data (Sherry & Henson, 2005).

There is a stronger likelihood of Type II error in this study, whereby there are significant relationships between variables that were not detected in the analysis. For example, prior research suggests that the cultural ambience of a department or program is a significant predictor of students developing cultural competence (Dickson et al., 2008). In this study, the measure of cultural ambience was not included in the final analysis because it did not have even linear relationships with relevant variables, let alone relationships approaching statistical significance. Additionally, there were significant group-level differences in student outcomes by instructor, but none of the numerous instructor variables measured were implicated in these differences, despite strong
conceptual rationale for looking to factors such as amount of teaching experience, teaching strategies, and instructor race and gender (Heppner & O’Brien, 1994; Sammons & Speight, 2008). It is probable that there is Type II error in this study, and it is likely related to the small sample size.

Other limitations of this study are connected to a presumed response bias from both instructors and students. The instructors who participated might be more committed to multicultural education or have stronger self-efficacy in their teaching skills. The researcher’s experience was that it was quite difficult to obtain participation from instructors. The study design may be anxiety-provoking for faculty because asking them to participate in order to understand their students’ outcomes introduces an evaluative component in the study.

Interestingly, no White instructors opted to participate and it was not possible to test whether there were any differences in student outcomes for White instructors versus instructors of color. If the instructors who did participate were more invested in understanding multicultural competence, then this pattern of only instructors of color participating might reflect the trend in the field of faculty of color being expected to carry a disproportionate amount of the responsibility around issues of diversity, including allocating their time to assisting students such as the researcher (Gloria & Pope-Davis, 1997). In other words, faculty of color might be more invested in these issues than White faculty, even when White faculty teach multicultural courses.

A self-selection bias is presumed for student participants too. Given the opportunity to win money and the number of reminders to complete the survey (i.e., three
reminders at each data collection point), it is surprising that the sample size was ultimately only 21 out of the approximately 225 students who were contacted. The study design would have better lent itself to in-person data collection. Results corroborate the notion that students with more socially desirable levels of racism elected to participate, as the time 1 and time 2 distributions of colorblind racial attitudes were significantly skewed toward lower scores. Despite these limitations, findings from the study support continuing this line of inquiry.

**Directions for Future Research**

Several additional directions of research emerged from the findings of the present study. The preliminary findings indicate that it would be worthwhile to continue the present line of inquiry in order to carry out the original research plan, which would require additional data collection. Such a study would address the issues of generalizability and Type I and II error mentioned above. Additional useful information about how much student factors versus instructor factors contribute to student outcomes in cultural diversity courses could emerge from such a study and make an important contribution to the field.

Qualitative methods offer researchers the opportunity to gather data from a different perspective by yielding rich, thick description of the phenomena of interest. Regarding students’ development of multicultural competence, qualitative data from student interviews, focus groups, or responses to open-ended questions could explore how students perceive instructor characteristics to impact their development. Similar approaches with course instructors would offer insight into how instructors perceive
student characteristics as well as their own identities shaping the growth that occurs for their students over the course of a semester. Leading experts could also be interviewed for their views on this issue, a topic that is discussed in the field but has received little attention in the literature (Greene et al., 2011). Given the inherent challenges in collecting as much quantitative data as the ideal version of the present study would require, qualitative methods’ use of a smaller sample sizes might lend itself to this area of inquiry.

The researcher recommends several strategies for overcoming the challenges of recruiting participants for these types of studies. One approach is to collect data directly, in-person, using paper surveys. Other strategies include obtaining direct access to students for data collection, as opposed to reaching them through their instructors, and framing or disguising the intent of the study in a way that would make it seem more welcoming for a wider range of students and instructors to participate. These latter two strategies could be built into the Institutional Review Board request to ensure they are carried out ethically, in a way that respects the rights of participants.

Findings from this study also highlight the importance of assessing counseling students’ multicultural skills, given that some students develop incomplete multicultural competence by gaining knowledge but not awareness. Collecting data on skills is challenging in implementation. Perhaps by collaborating with a graduate program to administer regular assessments of multicultural competence to all students, as recommended by scholars (Ridley, Mendoza, & Kanitz, 1994; Tori & Ducker, 2004), a study of this nature would be more feasible.
Results of the study also direct researchers toward exploring multicultural course instructors in more depth. This is a group about which little to no empirical research exists, which means the field has no baseline for understanding who these individuals are and if they are generally the folks who are considered desirable to teach such courses. Research questions could focus on how the field of diversity course instructors are different and/or similar from one another, whether these folks truly are mostly people from marginalized groups, and to what extent they possess the levels of multicultural competence that is hoped for from such instructors.

**Conclusion**

Multicultural competence is as important as ever during this time when the general population is becoming significantly more diverse, and mental health service providers must be culturally competent in order to provide ethical services (American Psychological Association, 2003). Preliminary results from the present study reflect the author’s own experiences that some students complete the multicultural course requirements in their programs of study without experiencing the kind of change in cultural awareness that is desired and that the factors impacting this process are complex in a way that has been left relatively unexplored in the field. After having made major progress in the field to infuse multicultural competence into psychology training (Rogers & O’Bryon, 2014), it is not yet time to turn away from a critical examination of multicultural education because room for growth and improvement remains, with important implications for teaching, clinical practice, and academia.
REFERENCE LIST


VITA

Dr. Kordesh grew up in Oak Park, IL. Before attending Loyola University Chicago, Dr. Kordesh earned a Bachelor of Science in Psychology, with a minor in History, from the University of Illinois at Urbana-Champaign in 2008. From 2009 to 2011 Dr. Kordesh attended the University of Illinois at Urbana-Champaign and earned a Masters of Science in Educational Psychology.

During her time at Loyola, Dr. Kordesh served as a Teaching Assistant and Research Assistant in the School of Education. She also completed two clinical externships at hospitals in the Chicago area.

Currently, Dr. Kordesh is completing her clinical training at the Counseling Center at the University of Illinois at Urbana-Champaign.