

THE EFFECT OF TWO REFLECTIVE STRATEGIES
ON THE DEVELOPMENT OF MULTICULTURAL
COMPETENCIES AMONG STUDENTS IN AN ONLINE
MULTICULTURAL COURSE

By

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Abstract: Changing agricultural workforce demographics have heightened the importance of multicultural competencies needed to be successful in the industry and a multicultural society. The purpose of this study is to determine the effect of two different reflective strategies (online reflective discussion with peers as compared to individual reflection worksheets) on the development of multicultural competencies among undergraduate students completing an online multicultural course. An experimental pretest-posttest design ($N = 111$) assessed changes in multicultural competencies using the Everyday Multicultural Competencies/Revised Scale of Ethnocultural Empathy instrument. Completion of the online multicultural course positively effected undergraduate students' development of multicultural competencies. However, there was no difference in the development of multicultural competencies between undergraduate students who completed individual reflection worksheets and students who completed online reflective discussion with peers in the online multicultural course. Pre-test multicultural competencies scores and multicultural personality scores did predict post-test multicultural competencies scores. When considering the six constructs of Everyday Multicultural Competencies individually, completion of the online multicultural course, regardless of reflection strategy or gender, did not effect the development of Anxiety and Lack of Multicultural Self-Efficacy among undergraduate students. The constructs of Resentment and Cultural Dominance and Empathic Feeling and Acting as an Ally were also not effected by completion of the online multicultural course among male students. Implications and recommendations for practice and further research related to online multicultural courses in undergraduate agricultural leadership curriculum are discussed.

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CHAPTER I

INTRODUCTION

Background

The American Association for Agricultural Education's 2016-2020 National Research Agenda prioritizes research efforts toward the development of a workforce to address 21st Century challenges and to support vibrant, resilient communities (Roberts, Harder, & Brashears, 2016). As a result of globalization and to meet the growing worldwide food security challenges, the agricultural workforce has increased in diversity during the 21st century (Handelsman & Stulberg, 2016). Changing agricultural workforce demographics have heightened the importance of multicultural competencies needed to be successful in the industry and multicultural society.

AGLE 2403: Agricultural Leadership in a Multicultural Society (hereafter referred to as "online multicultural course") is a three-credit hour asynchronous, online undergraduate course taught through the agricultural leadership major at Oklahoma State University. The course exposes students to cultural changes in the agricultural workforce

and strives to develop their skills to lead and manage teams in a diverse workplace.

Objectives for the online multicultural course are framed by Bucher's (2015) model for diversity consciousness and indicate students will:

- recognize cultural changes in the agricultural workplace and future impact on the industry;
- evaluate personal barriers related to women and minorities to fulfilling leadership roles in the agricultural sciences and natural resources;
- develop knowledge related to managing teams in a diverse workplace specifically related to differences in gender, race, and ethnicity; and,
- critically analyze contemporary issues related to gender, race, and ethnicity. (AGLE, n.d., para. 1)

The online multicultural course has historically used asynchronous online discussion (AOD) as the reflection strategy to facilitate students' consideration of the future impact cultural changes will have on the agricultural industry. Through online discussion students engage in *discourse* (i.e., the process of establishing understanding, or consensus, through rational written or spoken communication; Habermas, 1990) on topics related to differences in gender, race, and ethnicity to strengthen their diversity consciousness (Bucher, 2015). Other strategies for reflection in online courses have been suggested (Allen & Hartan, 2009; Brookfield, 2013, 2016; Hatton & Smith, 1995; Herrington & Oliver, 2002; Knights, 1985; Piburn & Middleton, 1997; Seale & Cann, 2000), such as descriptive writing, descriptive reflection, dialogic reflection, critical reflection, collaborative work, and listservs, but not previously utilized in this particular online multicultural course.

Although the development of global competencies, defined as the knowledge, skills, and attitudes to understand evolving global challenges and opportunities as a global citizen (Grudzinski-Hall, 2007; Moriba & Edwards, 2013), has been studied in diversity courses within agricultural education and leadership (Rice et al., 2014), the specific impact of online multicultural courses within the context of agriculture on students' development of multicultural competencies is limited. Additionally, evidence-based instructional methods and reflective strategies in online multicultural courses within the context of agriculture has not been a research focus. This study aims to understand the effect two different reflective strategies have on the development of multicultural competencies (Mallinckrodt et al., 2014) among undergraduate students in an online multicultural course. Findings may suggest whether the online multicultural course is *moving the needle* towards developing the multicultural competencies of undergraduate students to be successful in the agricultural workforce of the 21st century. Additionally, the examination of evidence-based instructional methods in the online classroom environment may ultimately improve student learning.

With different strategies recommended for online learning environments, this study sought to determine if the same learning goals of an online multicultural course (i.e., the development of multicultural competencies) can be achieved when students engage in a different reflection strategy other than online reflective discussion with peers. The online multicultural course has only used online reflective discussion with peers to formatively assess student learning. While supported by research in the literature, this strategy also requires a significant time commitment by the instructors and graders. If learning goals can be achieved with a more time-conducive reflection strategy while maintaining the rigor and outcomes of the course, exploration is justified. Permission to conduct this research study

was provided by the Oklahoma State University Institutional Review Board in Spring 2019 (Appendix A).

Purpose of the Study

The purpose of this study was to determine the effect of two different reflective strategies (online reflective discussion with peers as compared to individual reflection worksheets) on the development of multicultural competencies among undergraduate students completing an online multicultural course. The following research questions guided the study:

- RQ 1. Does completion of an online multicultural course, requiring either online reflective discussion with peers or individual reflection worksheets as the reflection strategy, have a significant effect on undergraduate students' development of multicultural competencies?
- RQ 2. Are changes in multicultural competencies significantly different for undergraduate students in an online multicultural course who complete online reflective discussions with peers as compared to those who complete individual reflection worksheets?
- RQ 3. Do demographic differences of undergraduate students, such as multicultural personality score, age, ethnicity, gender and religion (while considering pre-test multicultural competencies) predict the development of multicultural competencies in an online multicultural course?
- RQ 4. Does completion of an online multicultural course have a significant effect on undergraduate students' development in each of the six constructs of the

EMC/RSEE instrument, and are those changes significant when considering the students' study treatment group or gender?

Summary of Research Design

A quantitative methodological approach guided this study (Privitera, 2017) to investigate how reflective strategies contributed to the development of multicultural competencies among undergraduate students enrolled in an online multicultural course. An experimental pretest-posttest design (Privitera, 2017) was used for this study. Students enrolled in the first eight-week section of the course ($N = 111$) during the fall 2019 term were randomly assigned to either: (a) the treatment group with the reflection strategy to complete individual reflection worksheets or (b) the control group with the reflection strategy to complete online reflective discussions with peers. Multicultural competencies were assessed through pretest-posttest administration of the Everyday Multicultural Competencies/Revised Scale of Ethnocultural Empathy (EMC/RSEE) (Mallinckrodt et al., 2014a) instrument. Multicultural personality, using the Multicultural Personality Inventory-Short Form (MPI-SF) (Ponterotto et al., 2014), and demographic pre-test data were also collected.

The change in participants' post-test multicultural competencies construct scores (Post-EMC Score) is identified as the continuous dependent variable and reported on an interval scale. The treatment, or independent variable, is the use of two different reflective strategies in the online course. The categorical independent variable has two levels: (a) online reflective discussion with peers and (b) individual reflection worksheets. Based on recommendations from the literature pertaining to multicultural competencies and/or personality the following variables were identified as potential confounding variables: age,

gender, ethnicity, religious affiliation, participants' pre-test multicultural competencies construct scores (Pre-EMC Score) and participants' multicultural personality (MPI Score).

The target population for this study are students completing the online multicultural course, AGLE 2403: Agricultural Leadership in a Multicultural Society, at Oklahoma State University (OSU), which is approximately 500 students per academic year. A *time and place* sample was used from the accessible population of students enrolled in the course during the first eight-week term of the fall 2019 semester. Two sections with 61 student seats each were offered during the fall 2019 first eight-week semester, with a randomly assigned group of about half receiving the study treatment ($n = 58$). Groups were randomly assigned by the Office of the Registrar the week prior to the start of the fall 2019 first eight-week session. The final population for this study consisted of 111 participants ($N = 111$) randomly assigned to either the control online reflective discussion with peers group ($n = 53$) or the treatment individual reflection worksheets group ($n = 58$).

Two instruments were utilized for this study that paralleled the course learning outcomes related to diversity consciousness and multiculturalism. The pre-test instrument, administered as the first assignment in the online multicultural course during the first week of the term, consisted of the Everyday Multicultural Competencies/Revised Scale of Ethnocultural Empathy (EMC/RSEE) (Mallinckrodt et al., 2014a), the Multicultural Personality Inventory-Short Form (MPI-SF) (Ponterotto et al., 2014), and demographic questions to gather age, gender, ethnicity, and religious affiliation data. The EMC/RSEE instrument was administered as the post-test after completion of all activities and assignments during the eighth and final week of the course. Data were analyzed using SPSS Version 23 software. Paired samples *t*-tests were calculated to analyze research questions 1

and 4. Repeated measures analysis of variance (RM-ANOVA) and repeated measures analysis of covariance (RM-ANCOVA), and one-way analysis of covariance (ANCOVA) were calculated to analyze research question 2. Research question 3 was analyzed using bivariate correlation and multiple linear regression. A significance level of .05 is determined *a priori*.

Significance of the Study

As undergraduate agricultural programs strive to build an educated and prepared agricultural workforce in communities that are becoming ever-more multicultural, research to understand the development of multicultural competencies among undergraduate students through effective pedagogy is crucial. The results of the study will provide important results and findings related to: (a) the impact an online three-credit hour multicultural course has on the development of multicultural competencies, and in turn diversity consciousness, among undergraduate students; and (b) the effect two reflective strategies have on the development of multicultural competencies, diversity consciousness, and learning for undergraduate students in an online multicultural course. Additionally, the consideration of multicultural personality as a predictor of/confounding variable for multicultural competency development fills a gap identified in multicultural education literature. Recommendations based on the results of this study may impact future curricular and instructional strategies for online multicultural courses in the context of agriculture.

Limitations and Controlling Threats to the Validity of the Study

As with any social science research involving human subjects, limitations may potentially impact the quality of findings and the ability to answer the research questions (Privitera, 2017). The following threats are acknowledged as potential limitations to the

external and internal validity of this study, with rationale for decisions in the study design explained in attempt to control and/or address limitations/error.

Regarding the generalizability of the study, a main limitation noted is the lack of probability sampling for the experimental design (population threat to external validity). The target population, which was identified as undergraduate students completing the online multicultural course, was inaccessible and difficult to randomly sample. Therefore, a *time and place sample* of undergraduate students completing the multicultural course during the first eight weeks of the fall 2019 semester produced enough respondents that through random assignment to the control and treatment groups improved generalizability, reduced the potential of selection bias among participants, and allowed for the use of inferential statistical analyses. Additionally, the experimental design of the study lends itself as an ecological threat to external validity. To address this concern, the pre- and post-tests were administered in the online multicultural course as a part of normal course activities in which students received a grade, perhaps masking the experimental nature of the assignments and treatments.

Another limitation that may impact the generalizability of this study is the effect of the university's transition to a new learning management system (LMS) platform between the field and pilot studies and the experimental study. Oklahoma State University (OSU) announced in spring 2019, during the semester the field test was conducted, the adoption and transition from the Brightspace LMS platform to the Canvas LMS platform beginning fall 2019. As a result, the first semester the online multicultural course was transitioned to Canvas was also the semester in which the experiment was conducted. Since field and pilot data had been conducted, and due to other extenuating circumstances, it was determined

necessary to proceed with data collection during the fall 2019 semester. It is acknowledged students' engagement and participation in the course, as well as completion of the pre- and post-tests for the study, may have been impacted by the transition to a new LMS platform and the potential user learning-curve associated.

Regarding the design of the experimental study, the following threats to internal validity are mentioned as limitations. While every effort was made to follow the three criteria necessary for experimental design in social science research (i.e., randomization, control, and manipulation of the independent variable) (Privitera, 2017), the study was not conducted in a clinical setting. Therefore, interpretations of cause-and-effect should be determined cautiously depending on the level confounding and nuisance variables were statistically accounted for and controlled. However, because the collection of data was conducted as a normal part of classroom activities, the generalizability of findings to the standard online multicultural course was improved and considered more of a benefit to this study than controlling extraneous variables in a clinical environment.

It is also noted the limit of historical and maturation effects on internal validity. Participants in this study were students who completed the online multicultural course. Given the nature of the online learning environment, I was unable to account and control for several extraneous and potentially confounding variables. External events and circumstances to the course (i.e., news stories, media, social networking, other enrolled courses, campus events, and relationships students are exposed to during the fall semester), as well as the students' personal development and change in college, may have impacted the students' development of multicultural competencies beyond the content of the online multicultural course. Although attrition was low (one student in the control group and two in the treatment group

dropped the course; seven students in the control group and one in the treatment group did not complete the post-test assessment and were removed), it was not homogenous between groups. Therefore, the threat of heterogeneous attrition to internal validity serves as a limitation to this study. However, examination of the groups' demographics shows there is no systemic difference between the participants after attrition.

Potential limitations to this study also exist as a result of the following measurement threats to internal validity: (a) testing effects and (b) regression to the mean. The EMC/RSEE instrument was administered as a component of the pre-test with the MPI-SF during the first week of the online multicultural course as the first assignment and was re-administered as the post-test during the eighth week after all course assignments and activities were completed. It could not be determined whether students were familiar with the EMC/RSEE instrument with only eight weeks between the pre- and post-test administrations, resulting in potential testing bias and possible regression to the mean due to the repeated testing occasions.

It is also noted that confirmatory factor analysis was not conducted for the study instruments due to small participant per item ratio. Exploratory and confirmatory factor analysis with the population of this study is recommended for future students to validate the structure and subscales of the instruments. Additionally, item response theory recommends the standardization of subscale scores before data analysis to control for psychometric changes as result of multiple instrument administrations. This study did not use standardized scores since administrations were only eight weeks apart; students were not expected to experience abnormal maturation during this period. Finally, development of the EMC/RSEE instrument only included White students from a Predominately White Institution (PWI), as there were not a large enough sample of underrepresented ethnicity groups in their study to

generalize results. Understanding that racial and ethnic identities should be critically considered in quantitative research, this study included underrepresented student populations in the analysis, as the population in the course was small. Further analysis and replication of this study should incorporate data analysis procedures influenced by critical race theory to improve generalizability.

Assumptions

The following assumptions underlie the planning, implementation, and analysis of the study:

1. Students completed the pre- and post-test instruments with sincerity and answered the self-referent questions honestly;
2. Students were not aware of the experimental-design of the study, nor that a study was being conducted (i.e., different sections completing different reflection activities for study purposes), when completing the pre- and post-test instruments;
3. Multicultural competence and multicultural personality of the students could be measured using the instruments chosen; and,
4. Motivation for enrolling and completing the online multicultural course would not impact students' development of multicultural competencies.

Definition of Terms

AGLE 2403: Agricultural Leadership in a Multicultural Society: referred to as an “online multicultural course”; an undergraduate agricultural leadership course offered by the Department of Agricultural Education, Communications and Leadership at Oklahoma State University (OSU). AGLE 2403 is an approved course by the State Regents to

meet OSU's diversity (D) and social and behavior sciences (S) undergraduate general education requirements (OSU, 2019). The course

serves as an opportunity for students to study agricultural leadership as it relates to a multicultural society. Specific course objectives include: (a) recognizing cultural changes in the agricultural workplace and future impact on the industry; (b) evaluating personal barriers related to women and minorities to fulfilling leadership roles in the agricultural sciences and natural resources; (c) developing knowledge related to managing team in a diverse workplace specifically related to differences in gender, race, and ethnicity; and, (d) critically analyzing contemporary issues related to gender, race, and ethnicity. (Oklahoma State University [OSU], 2018, para. 3)

Agricultural Leadership: operationalized as the study of leadership theory and its application in agricultural contexts. The Oklahoma State University undergraduate major in agricultural leadership is centered around five core values: commitment to agriculture, authentic leadership, diversity, critical thinking, and professionalism.

Brightspace: the online learning management system (LMS) adopted and utilized by Oklahoma State University from 2005 to summer 2019 to provide an online classroom environment for university courses. The Brightspace LMS platform, provided by the Desire2Learn Corporation, was referred to as D2L until a major update was adopted in the summer 2015. The AGLE 2403 course was housed and facilitated in the Brightspace LMS platform through summer 2019.

Canvas: the online learning management system (LMS) adopted and utilized by Oklahoma State University (OSU) beginning fall 2019. The Canvas LMS platform, provided by

Instructure, Inc., was piloted with selected OSU courses during the spring 2019 and summer 2019 terms. The AGLE 2403 course transitioned to the Canvas LMS platform in fall 2019.

Critical Reflection: Operationalized as the process of reflection (i.e., the process of thinking better or the analyses of experiences) that seeks to question power relationships within systems. In order for reflection to be critical, Brookfield (2016) states
it must have as its explicit focus the uncovering, and challenging of power dynamics that frame our decisions and actions . . . [and] attempt to challenge hegemonic assumptions; those assumptions we embrace as being in our best interests when in fact they are working against us. (p. 3)

Cultural Competence: operationalized as the ability of an individual, based on developed attitudes and skills, to acknowledge and incorporate cultural differences when working with people from multiple cultures (Bucher, 2015).

Cultural Intelligence: the ability to “function and manage effectively in culturally diverse settings” (Earley & Ang, 2003, p. 336); referred to as *CQ* and a component of cultural intelligence theory.

Culture: operationalized as a way of life for individuals and groups of individuals. Anything that can be learned, shared, and transmitted between people, such as language, values, rules, beliefs, and material artifacts compromise and help define an individual’s culture (Bucher, 2015).

Discourse: the process of establishing understanding, or consensus, through rational written or spoken communication (Habermas, 1990); often referred to as communicative

learning by Habermas (1984). Mezirow (2003) further defines discourse as “dialogue involving the assessment of beliefs, feelings, and values” (p. 59).

Diversity: “all the ways in which people are different” (Bucher, 2015, p. 2) at individual, group, and cultural levels. The following dimensions of diversity are often referenced when describing differences between individuals: race, ethnicity, gender, social class, sexual orientation, religion, personality type, learning style, communication style, family background, age, education, and ability status (Bucher, 2015).

Diversity Consciousness: “understanding, awareness, and skills in the area of diversity,” (Bucher, 2015, p. 26).

Diversity Education: a lifelong cognitive and affective process involving “strategies that enable [people] to develop awareness, understanding, and a variety of skills in the area of diversity” (Bucher, 2015, p. 27).

Diversity Skills: skills developed as a result of diversity and multicultural education, including, but not limited to, “flexible thinking, communication, teamwork, leadership, social networking, and the ability to overcome personal and social barriers” (Bucher, 2015, p. 27).

Ethnicity: the “consciousness of a cultural heritage shared with other people” (Bucher, 2015, p. 20).

Ethnocultural empathy: “empathy for others whose racial/ethnic background differs from one’s own” (Mallinckrodt et al., 2014, p. 133) that involves the comprehension of another’s cultural perspective, the ability to feel affect similar to another’s experience, and the capacity to show and demonstrate understanding empathically to another.

Everyday Multicultural Competencies: a set of multicultural competencies measured to assess the outcomes and/or effectiveness of undergraduate multicultural programming theoretically framed by the development of multicultural knowledge, skills, and attitudes/awareness (Mallinckrodt et al., 2014). Instrumentation measuring everyday multicultural competency (EMC) identifies six subscales/competencies: (a) cultural openness and desire to learn; (b) resentment and cultural dominance; (c) anxiety and lack of multicultural self-efficacy; (d) empathic perspective-taking; (e) awareness of contemporary racism and privilege; and (f) empathic feeling and acting as an ally (Mallinckrodt et al., 2014).

Global Competencies: operationalized as the knowledge, skills, and attitudes to understand evolving global challenges and opportunities as a global citizen (Grudzinski-Hall, 2007; Moriba & Edwards, 2013). Globally competent citizens have the ability to identify the differences between cultures, participate effectively in a variety of settings (e.g., professional, social, or diplomatic) across the globe, and engage in cross-cultural learning (Hunter, 2004).

Internationalism: “international character, principles, interests or outlook; a policy of cooperation among nations; an attitude or belief favoring such a policy” (Merriam-Webster.com, 2020). This also includes the awareness and understanding of international issues (Moriba et al., 2012).

Multicultural Competence: operationalized by the domains of knowledge, skills, and attitudes/beliefs (Banks, 1995; Sue et al., 1982; Sue et al., 1992) a person may develop to better acknowledge, understand, and appreciate difference, in order to maximize the most development of individuals or systems (Sue & Sue, 2008). The

three domains are further defined by Howard-Hamilton et al. (2011): (a) knowledge of one's own cultural identity and the cultures of others; (b) skills in self-reflection, perspective taking, and intergroup communication; and (c) positive attitudes/beliefs toward one's own culture and the benefit of diversity and inclusion within a society.

Multicultural Education: operationalized as formal courses and efforts to infuse multicultural content into existing courses at the secondary and post-secondary level (Adams, Bell, & Griffin, 2007)

Multicultural Personality: “the synthesis and amalgamation of the resources learned from different people and cultures to create multicultural coping styles, thinking styles, perceptions of the world, and identities” (Ramirez, 1999, p. 30). Ponterotto's (2010) Multicultural Personality Theory describes multicultural personality as “a definable set of narrow personality traits that predict cultural adaptability and multicultural effectiveness” (Ponterotto et al., 2014). These multicultural personality traits are anchored in the following ten theoretical building blocks: (a) Mestizo Model of Multicultural Personality Development; (b) Expatriate Multicultural Personality; (c) Tolerant Personality; (d) Racial Identity; (e) Ethnic Identity; (f) Gay/Lesbian Identity; (g) Expansionist Gender Roles; (h) Universal Diverse Orientation; (i) Coping with Cultural Diversity; and, (j) Indigenous Psychologies and Spiritualities (Ponterotto, 2010). Ponterotto's (2010) specific components of multicultural personality are theoretically related to, but explain statistically significant variance from, positive psychology (Lopez & Edwards, 2008) and broad personality models such as the Big Five (Ponterotto et al., 2014). The Multicultural Personality Inventory-Short Form (Ponterotto, 2007) is a self-report measure of the following seven factors of

multicultural personality: (a) racial and ethnic identity development; (b) social justice and activism; (c) psychological health; (d) connectedness and spirituality; (e) humor; (f) opposite gender connection; and, (g) culturally diverse friendships.

Multicultural Programming: university and college activities targeting campus audiences through workshops and training to increase awareness of diversity and equity issues (Mallinckrodt et al., 2014).

Multiculturalism: cultural pluralism or diversity within a state, society, organization, community, or an educational institution (Calhoun, 2002; Merriam-Webster.com, 2020).

Race: socially-created categories for individuals based on physically distinctive traits, such as skin color and body features (Bucher, 2015).

Reflective Discourse: operationalized as dialogue or exchanges (verbal or written) through group interaction which challenges individuals to self-reflect on their own assumptions, engage in the perspective taking of others, and employ reflective judgement, demonstrating metacognitive reasoning reflective of transformative learning (Habermas, 1984; Mezirow, 2003).

CHAPTER II

REVIEW OF LITERATURE

This study investigated the effect of two different reflective strategies (online reflective discussion with peers as compared to individual reflection worksheets) on the development of multicultural competencies among undergraduate students completing an online multicultural course. The theoretical framework of Transformative Learning Theory (Mezirow, 1991, 2000) is first presented to establish the lens through which learning, and teaching, is approached in this study. To understand the context and need for this study, literature relevant to the following areas were reviewed: online learning, multiculturalism, multicultural education and programming, and multiculturalism in agricultural and leadership education. Additionally, background about the online multicultural course involved in this study, AGL 2403: Agricultural Leadership in a Multicultural Society, is provided.

Theoretical Framework

Mezirow's (1991, 2000) Transformative Learning Theory served as the theoretical framework to guide the design and lens through which learning was

approached in this study. As essential components to Mezirow's (1991, 2000) Transformative Learning Theory, the concepts of reflection, critical reflection, discourse, reflective discourse, and meaning-making are outlined.

Transformative Learning Theory

Mezirow's (1991, 2000) transformative learning provides the theoretical framework for investigating the difference in student development of multicultural competencies dependent on two reflective strategies (online reflective discussions with peers or individual reflection worksheets) completed in an online multicultural course. Transformative Learning Theory explains how critical educational moments may challenge and change the perspectives of students (Kitchenham, 2008; Merriam et al., 2007; Mezirow, 2000). Rooted in adult education, Mezirow's (2000) goal for transformative learning is to foster adult educators and learners as autonomous thinkers. Transformative learning occurs at the epistemic cognitive processing level (i.e., reflection on the limit, certainty, and criteria of knowledge) and develops in late adolescence (Kitchener, 1983; Mezirow, 2000).

According to Transformative Learning Theory, learning occurs in four ways: (a) by elaborating existing frames of reference; (b) by learning new frames of reference; (c) by transforming points of view; or, (d) by transforming habits of mind (Mezirow, 2000). A person's frame of reference, or perspective, entails their set of assumptions and points of view. These points of view, called habits of mind, filter a person's impressions, establish their values, and determine their sense of self (Mezirow, 2000). The intertwine of values, sense of self, and impression causes an individual to defend their points of view and use them as the standard in which to judge all other perspectives.

Therefore, frames of reference different from one's own are often viewed as deceptive, crazy, distorting, or wrong (Mezirow, 2000). "Transformative learning, especially when it involves reframing, is often an intensely threatening emotional experience in which we have to become aware of both the assumptions undergirding our ideas and those supporting our emotional responses to the need to change" (Mezirow, 2000, p. 6-7). A potentially transformative learning experience is characterized by sudden, dramatic, or reorienting events that cause an individual to consider new perspectives and construct a new habit of mind. Mezirow (2000) describes transformative learning as

the process by which we transform our taken-for-granted frames of references (meaning perspectives, habits of mind, mind-sets) to make them more inclusive, discriminating, open, emotionally capable of change, and reflective so that they may generate beliefs and opinions that will prove more true or justified to guide action. [It] involves participation in constructive discourse to use the experience of others to assess reasons justifying these assumptions, and making an action decision based on the resulting insight. (p. 7-8)

Brookfield (2000) supports this theory by distinguishing learning as transformative only if it "involves a fundamental questioning and reordering of how one thinks or acts" (p. 139)

It is important to note the influence of Habermas' (1984) communicative domain of learning on the development of Transformative Learning Theory. Communicative learning is defined by Habermas (1984) as a process of understanding the meaning of others through the communication of feelings, intentions, values, and moral issues

(Mezirow, 2000). Habermas (1984) stressed the requirements of rational discourse and reflection in communicative learning in order to arrive at a best judgment, rather than dependence on tradition, authority, or force to justify a belief or decision (Mezirow, 2000). The principle of communicative learning within Transformative Learning Theory reorients a learner to focus on how they learn to “negotiate and act on [their] purposes, values, feelings, and meanings rather than those [they] uncritically assimilate from others” (Mezirow, 2000, p. 8).

Transformative Learning Theory is characterized by four stages: (a) experience, (b) critical reflection, (c) action, and (d) reflective discourse, with the latter being essential to the arrival of transformed judgements and perspectives (Merriam et al., 2007; Mezirow, 2000). Two stages, critical reflection and reflective discourse, are essential to the purpose and design of this study. Critical reflection fosters meaning-making of lived experiences, while reflective discourse is “a dialogue devoted to searching for common understanding and assessment of the justification of an interpretation or belief” (pp. 10-11) that helps learners develop more empathetic understanding of others (Mezirow, 2000). Meaning-making in relation to Transformative Learning Theory are discussed in further detail.

Meaning-making

The process of learning, according to transformative theory, can be understood as an attempt to make meaning and order out of one’s experiences (Mezirow, 2000). Learning requires one to resolve the tension that arises when conflicting meanings meet. Adult learners develop meaning, or understanding, beliefs, and awareness of, by understanding the broader contexts of their experiences, critically reflecting on their

assumptions, and assessing reason (Mezirow, 2000). Meaning-making is the process in which learners develop a more dependable set of beliefs, interpretations, and understanding of their experiences. Meaning-making, according to Bruner (1996), involves four modes: (a) establishing, shaping, and maintaining intersubjectivity; (b) relating events, utterances, and behavior to action; (c) construing of particulars within the limits of normative contexts; and, (d) making propositions in symbolic, syntactic, and conceptual systems to decontextualize meanings. “Transformative theory adds a fifth and crucial mode of making meaning: becoming critically aware of one’s own tacit assumptions and expectations and those of others and assessing their relevance for making an interpretation” (Mezirow, 2000, p. 4).

Another significant consideration during the meaning-making process and relevant to Transformative Learning Theory is the experience of cognitive dissonance among learners. Cognitive dissonance, defined as the tension that occurs when a learner is exposed to new information about a subject that is counter to their old understandings (Festinger, 1957), is a common experience in multicultural courses. “When new information collides with old prejudices - when new truths battle established beliefs for space in our consciousness - we tend to respond with all manner of defense mechanisms” (Gorski, 2009, p. 54). The challenge multicultural instructors face is creating a context where “new relationships in the interaction of cultural understandings, the influences of the information environment, familiar stories, idiosyncratic ways of making meaning, and schooling” (Kincheloe, 2005, p. 115) can be constructed. Mezirow’s (2000) theory suggests the resolution of cognitive dissonance is achieved through the four stages of

transformative learning and meaning-making, and particularly, critical reflection and reflective discourse.

Critical Reflection

John Dewey is often attributed with the statement: We do not learn from experience . . . we learn from reflecting on experience. In *Democracy and Education*, Dewey (1916) described reflection as an engaged, active process:

The material of thinking is not thoughts, but actions, facts, events, and the relations of things. In other words, to think effectively one must have had, or now have experiences which will furnish . . . resources for coping with the difficulty at hand. (pp. 156-157).

Hatton (1995) expands on this view by defining reflection as deliberative thinking with the purpose of improving an action. Reflection can also be viewed as both a social and individual process (Herrington & Oliver, 2002). Schön (1987) differentiated reflection between two types of pedagogical activities: (a) reflection *in* action (i.e., on the spot, in-time reflection), and (b) reflection *on* action (i.e., sustained and extended reflection).

The purpose and use of reflection are approached from multiple philosophical perspectives. The analytic philosophy views reflection as a process of learning to think better. “This tradition holds that the more able you are to recognize logical fallacies, think laterally and detect weak rungs on a ladder of inference, the better place you are to make good decisions” (Brookfield, 2016, para. 6). Another tradition, American Pragmatism, approaches reflection as the ability to analyze an experience, which involves “seek[ing] out new information, new understandings of existing practices, and new perspectives, so that [they] can identify [their] blind spots” (Brookfield, 2016, para. 6). Brookfield’s

(2016) critique of pragmatic reflection emphasizes the necessity of incorporating criticality in the reflection process in order for learning to result.

It is quite possible to practice reflectively while focusing solely on the nuts and bolts of process and leaving unquestioned the criteria, power dynamics and wider structures that frame a field of practice. Reflection is useful and necessary in the terms it sets itself; that is, to make a set of practices work more smoothly and achieve the consequences intended for them. But this is not *critical* reflection.

(para. 7)

The elaboration of reflection as *critical* is founded in the tradition of critical theory. Critical theory emerged from thinkers at the Frankfurt School of Critical Social Theory in Germany and describes “the process by which people learn to recognize how unjust dominant ideologies are embedded in everyday situations and practice” (Brookfield, 2016, para. 20). It is important to understand that critical reflection, when viewed through the lens of critical theory, “involves the experience of questioning, and then replacing or reframing, a hegemonic assumption that is unquestioningly accepted as representing dominant commonsense by a majority” (Brookfield, 2016, para. 21).

While reflection is the process in which assumptions are identified, questioned, and viewed from different perspectives, *critical reflection* is different in that it involves analysis of the use of power in a learning situation or context (Brookfield, 2000). Additionally, people engaged in critical reflection “try to identify assumptions they hold dear that are actually destroying their sense of well-being and serving the interests of others: that is, hegemonic assumptions” (Brookfield, 2000, p. 126).

Hegemony, a term first coined by Antonio Gramsci (1978), describes the process where ideas, structures, and actions come to be seen by the majority of people as common sense, when in reality they were constructed by a powerful minority to serve their self-interest. “The subtlety of hegemony is that over time it becomes deeply embedded, part of the cultural air we breathe . . . the conspiracy of normal” (Brookfield, 2000, p. 138). Critical reflection allows learners to reveal and analyze implicitly held beliefs (Brookfield, 2000).

Transformative learning occurs through the stage of critical reflection either through objective or subjective reframing (Mezirow, 2000). Objective reframing involves the critical reflection on the assumptions of others, while subjective reframing is a more critical self-reflection of one’s own assumptions. In the four-stage process of transformative learning, Brookfield (2000) suggests critical reflection as a precursor to reflective discourse because it establishes the base assessment of assumptions. More so, it is believed that “transformative learning cannot happen without critical reflection being involved at every stage” (Brookfield, 2000, p. 142).

Pedagogical Strategies for Reflection

Strategies to encourage reflection and student learning in educational environments has been widely studied (e.g., Allen & Hartman, 2009; Brookfield, 2013, 2016; Hatton & Smith, 1995; Herrington & Oliver, 2002; Knights, 1985; Piburn & Middleton, 1997; Seale & Cann, 2000). Hatton and Smith (1995) conducted a robust review of pedagogical practices related to reflection and described activities as either *individually-mediated*, reflection conducted by a single person, or *socially-mediated*, reflection requiring social interaction.

Four types of individually-mediated reflection activities were identified by Hatton and Smith (1995): (a) descriptive writing, which emphasizes the reporting of reading or events; (b) descriptive reflection, which uses personal judgment or the support of literature to provide reason; (c) dialogic reflection, which is a form of individual discourse and analysis of opinions or judgments; and, (d) critical reflection, which integrates historical, social, and/or political contexts with individual reasons for opinions and judgments. On the other hand, socially-mediated reflection involves reflective strategies that are collaborative and involve more than one person. Socially-mediated reflective strategies are based on the notion that “without an appropriate reflector, [reflection] cannot occur at all” (Knights, 1985, p. 85).

When considering individually versus socially-mediated reflection, Brookfield (2000) posits, “Critical reflection must be a collaborative project . . . I am unable to see how it can be anything other than an irreducibly social process” (p. 146). Group discussion, collaborative work, listservs, and online discussion boards have been identified as effective means for socially-mediated reflection (Herrington & Oliver, 2002; Piburn & Middleton, 1997). Discussion boards, particularly in online courses, were found to be useful in helping students connect new learning with prior learning experiences and to see topics through different lenses (Seale & Cann, 2000).

A group of undergraduate business students and attendees at a student leadership conference, when considering the sources of learning leadership, preferred small group discussion about concepts more than reflective discussions in small groups or reflective journaling (Allen & Hartman, 2009). When studying critical reflection as an outcome of online discussion, Hawkes (2006) found asynchronous electronic communication to be

significantly more reflective than face-to-face discourse. To facilitate well-rounded reflection in a course (i.e., the inclusion of individually-mediated, socially-mediated, *in* action, and *on* action reflective strategies), Herrington and Oliver (2002) suggest the implementation of authentic and complex tasks, continuous access to an online reflective journal, the use of discussion boards and or listservs, and the requirement of a written reflective article.

Reflective Discourse

Another essential piece of the transformative learning process involves reflective discourse. The importance of discourse in the learning process was established by social learning theorists such as Vygotsky (1978) and Habermas' (1984) principle of communicative learning. Discourse allows a person to find their own voice and differs from basic communication in that it is a "specialized use of dialogue devoted to searching for a common understanding and assessment of the justification of an interpretation or belief. [Discourse] involves assessing reasons advanced by weighing the supporting evidence and arguments and by examining alternative perspectives" (Mezirow, 2000, p. 10-11). To more freely and fully participate in discourse, participants must have the following:

- more accurate and complete information,
- freedom from coercion and distorting self-deception,
- openness to alternative points of view: empathy and concern about how others think and feel,
- the ability to weigh evidence and assess arguments objectively,

- greater awareness of the context of ideas and, more critically, reflectiveness of assumptions, including their own,
 - an equal opportunity to participate in the various roles of discourse, and,
 - willingness to seek understanding and agreement and to accept a resulting best judgment as a test of validity until new perspectives, evidence, or arguments are encountered and validated through discourse as yielding a better judgment,
- (Mezirow, 2000, p. 13-14)

Dissension has to be allowed in discourse to spur consensus building. “Discourse requires only that participants have the will and readiness to seek understanding and to reach some reasonable agreement” (Mezirow, 2000, p. 12). This process of reaching a consensus through discourse is where “meaning – and subsequent knowledge – is formed” (Hawkes, 2006, p. 234). Therefore, critical discourse “involves rich and meaningful conversations with peers and experts within a community to reach a common understanding . . . in tandem with individual reflection” (Ryman et al., 2009, p. 48).

Transformative Learning Theory further connects individual reflection and critical discourse through the process of *reflective discourse*. Mezirow (2000) describes reflective discourse as the active dialogue with others to develop a better understanding of an experience’s meaning. “Reflective discourse involves a critical assessment of assumptions. It leads toward a clearer understanding by tapping collective experience to arrive at a tentative best judgment” (Mezirow, 2000, p. 11). The conditions required for reflective discourse are “the establishment of a climate of safety in which people feel free to speak their truth, where blaming and judging are minimal, where full participation is encouraged, where a premium is placed on mutual understanding, but also where

evidence and arguments may be assessed objectively and assumptions surfaced openly” (Daloz, 2000, p. 114). Moreover, transformative learning and reflective discourse requires emotional maturity, defined by awareness, empathy, and control (Mezirow, 2000), as outlined by Goleman’s (1998) emotional intelligence model.

Online Learning

Online learning takes place partly or entirely over the Internet (Means et al., 2010) and dates back to early correspondence courses and distance education. Due to the flexibility provided to students and faculty, higher education quickly adopted online learning (Means et al., 2010). Online learning provides convenience and autonomy for learners (Tallent-Runnels et al., 2006) and is increasingly prevalent among students at both the graduate and undergraduate level. The popularity of online courses, even in agricultural colleges, was supported by an eastern land-grant university which found 90% of its enrolled students had completed online classes at some point during their college experience (Jayarante & Moore, 2017).

Two models of online learning are most common: asynchronous and synchronous. Asynchronous online learning allows learners to access materials at different times and locations. Tools used in asynchronous online learning, such as e-mail, newsgroups, and threaded discussion boards, allow learners to engage and contribute to the course at different times (Means et al., 2010). In contrast, synchronous online learning, which requires learners to engage at the same time, attempts to replicate the experience of face-to-face teaching strategies through webcasting, chat rooms, and desktop audio/video technology (Means et al., 2010).

A review of literature related to the effectiveness of online education suggests learning to be “as effective as that in traditional classrooms” (Tallent-Runnels et al., 2006, p. 116). Several studies found no significant difference in learning outcomes between online, hybrid, and face-to-face course formats (Bata-Jones & Avery, 2004; Brown & Kulikowich, 2004; Brown & Liedholm, 2002; Davidson-Shivers et al., 2000; Dellana et al., 2000; Hiltz, 1993; Means et al., 2010; Smith et al., 2000; Trinidad & Pearson, 2004; Wang & Baker, 2015). However, Keefe (2003) found students were more satisfied and performed better in face-to-face courses than in online courses. In contrast, more content knowledge was found to be acquired by learners in online courses than traditional courses (Maki et al., 2000). In relation to the perceived quality of online learning, asynchronous online courses seemed to facilitate in-depth communication as much as traditional classes, students liked to move at their own pace, learning outcomes were similar in online and traditional courses, and students were typically satisfied with online courses (Tallent-Runnels et al., 2006). Additionally, transformative learning has been found possible in online courses when students develop an online community through critical discourse and parallel leadership (Ryman et al., 2009).

Muilenberg and Berge (2005) identified eight student barriers to online learning: (a) administrative issues, (b) social interaction, (c) academic skills, (d) technical skills, (e) learner motivation, (f) time and support for studies, (g) cost and access to the Internet, and (h) technical problems. While online education opens the door for learners enrolled to represent multiple cultures, this presents several unique challenges (beyond the already identified range of issues with online facilitation) to facilitators of courses with cross-

cultural learners: questioning, participation, interpersonal and group dynamics, facilitator expectations, and anxieties (Williams et al., 2001).

Other studies suggest different findings associated with online learning. In a computer literacy course, researchers investigated the effects of face-to-face collaboration as compared to virtual, online collaboration among student pairs. Students who collaborated online showed more questioning behaviors and better project performance. However, students who collaborated face-to-face performed better on the post-test used in Tutty and Klein's (2008) study. Another study found face-to-face courses resulted in more improvement from pre- to post-test as compared to online courses (Faux & Black-Hughes, 2000; Keefe, 2003). These findings require instructors to seek evidence-based instructional methods to promote effective online learning environments.

Evidence-based Instructional Methods for Online Learning

Critical reflection and reflective discourse in an online environment require more than just the possibility for collaboration and interaction (Kimball, 2001; Krejens, 2003; Pawan et al., 2003). Instructors of online courses requiring discourse through asynchronous online discussion (AOD) must align course learning activities, learning activities, and assessment tasks so that resolution in the discourse process can be achieved (Ryman et al., 2009). Ryman et al. (2009) proposes parallel leadership as a model for the facilitation of online courses. "Parallel leadership is a style of leadership that is able to effectively nurture constructive controversy where the leader will facilitate individual contributions and integrate individual autonomy in the collective creation of tacit knowledge" (Ryman et al., 2009, p. 52). Furthermore, parallel leadership provides an avenue to encourage critical reflection and reflective discourse in online classes

because it establishes mutualism and trust, inspires a sense of shared purpose, and allows for individual expression among the learners (Crowther et al., 2002).

Similarly, findings from studies related to online learning have established the importance of instructor participation (Radziszewska & Rogoff, 1991) and presence (Blignaut & Trollip, 2003) to student success (Tallent-Runnels et al., 2006). Without structure imposed in online learning environments by the instructor, students will fail to ask deeper questions and critical thinking, along with learning, will suffer (Yang, 2008). When learners are given “social scripts,” or guidance for how to interact with each other online, performance on knowledge-based tests improves (Weinberger et al., 2005). Online discussions, in order to result in effective learning and knowledge construction, should be mediated, controlled, and facilitated by the instructor (Loncar et al., 2014). In addition to simple structural features of the course such as organization, collaboration, and flexibility, instructors recognizing student feelings, reactions, and responses were also found important to the quality of students’ online discussions (Knupfer et al., 1997).

Reflection as an instructional method has also been shown to support online learning. Several studies have confirmed learning outcomes were improved when students were prompted to reflect on their learning (Bixler, 2008; Chang, 2007; Chung et al., 1999; Crippen & Earl, 2007; Nelson, 2007; Saito & Miwa, 2007; Shen et al., 2007; Wang et al., 2006). Additional reflective elements improved students’ online learning as well (Bixler, 2008; Chang, 2007; Crippen & Earl, 2007; Nelson, 2007; Saito & Miwa, 2007). Activities requiring self-reflection, self-regulation, and self-monitoring in online

courses led to greater levels of achievement and understanding for students (Means et al., 2010).

Another evidence-based instructional strategy suggested for implementation in online courses involved student autonomy. Learners with more control over their learning environment produced larger learning gains in online courses (Cavus et al., 2007; Dinov et al., 2008; Gao & Lehman, 2003; Zhang, 2005). Other studies, however, found opposite results (Cook et al., 2007; Evans, 2007; Smith, 2006). It is also recommended that online instructors create tension in the learning environment and expect a number of online interactions to motivate more student participation in online courses (Wilson & Whitelock, 1998). Regarding online instructional methods, students in an agricultural college preferred instructional videos, PowerPoint with recorded narrative, quizzes, video recordings of live classes, case studies, instructional audios, reading materials, and hands-on projects to help them learn online (Jayaratne & Moore, 2017). An investigation of student cognitive presence (i.e., a construct representing critical discourse) in online discussion, it was found contributions from Webquest and debate activities were more advantageous than nominal group technique, invited expert, or reflective deliberation (written reflection) (Kanuka et al., 2007).

Online Discussion

Online discussions are defined as “activities in which learners explore course readings and topics as a group rather than highly designed and specific activities such as debate, collaborative writing, or peer critiques” (Dennen, 2008, p. 206). To facilitate a collaborative online learning environment, online discussion forums are often integral to online course design. Discussion, pedagogically, engages learners in “rational discourse

of respectful open discussion” (Brookfield, 2013, p. 64). Discussion also serves as a form of reflection, an integral component to the student learning process (Gao et al., 2013; Herrington & Oliver, 2002; Piburn & Middleton, 1997). Asynchronous discourse, discussion online that allows learners to engage and contribute to the conversation at their convenience, is inherently self-reflective and results in more depth of learning (Gao et al., 2013; Harlen & Doubler, 2004; Hawkes, 2006; Hiltz & Goldman, 2005; Jaffee et al., 2006). In comparing asynchronous online discussion (AOD) with that of a similar face-to-face course, AOD allowed students to explore topics more thoroughly and enhanced the collective understanding of a given topic (Salter et al., 2017). Peer-facilitation of AOD has been found to be more effective for fostering critical thinking and collaborative discourse than instructor-facilitation based on student cognitive presence and interaction dynamics (Oh et al., 2018).

There is, however, debate on the merit of online discussion forums in multicultural education. Students have perceived a lack of social interaction as the most severe barrier to online learning (Muilenberg & Berge, 2005). While it is noted that online discussion forums are an alternative for traditional classroom dialogue and reflective discourse (Gorski et al., 2000), there is concern that the lack of face-to-face social interaction typical of a tradition classroom may underestimate the entrenched personal ideologies and positionality at play among students enrolled in an online multicultural education course (Munoz, 2002).

Still, online discussions are commonplace in distance education. Dennen (2008) stated:

Discussion is frequently considered a necessary component of online classes if for no other reason than to provide a sense of connection among participants, and is a broad term used to address any situation in which words are exchanged between different parties. (p. 206)

Palmer, Holt, and Bray (2008) found students' final course grades were affected nearly three times as much by each new post they contributed to a formally assessed online discussion versus the number of postings passively read in the forum. AOD promoted dialogue, reflection, knowledge construction, and self-assessment (Gerosa et al., 2010; Kayler & Weller, 2007). AOD has been shown to mimic the dynamics of real-time discussions between multiple students (Ahern & El Hindi, 2000). Although students have shown greater numbers of responding and reacting statements in synchronous discussions online, they preferred threaded discussions in asynchronous online learning environments for its convenience (Davidson-Shivers et al., 2001). AOD was also perceived as more purposeful and focused than synchronized chats because students had more time to think and submitted responses with more depth and quality (Davidson-Shivers et al., 2000).

Critics of online discussion environments state they lack the collaborative and interactive processes of a conversational model of learning (Thomas, 2002), lack focus and understanding (Knowlton, 2001), do not reflect meaningful interaction and limited response to the ideas of others (Hara et al., 2000; Larson & Keiper, 2002), do not involve deeper levels of understanding and knowing (Gunawardena et al., 1997), and do not have the rhetorical, analytical, and argumentation skills to fully engage in AOD. Although many studies related to online learning pedagogy and evidence-based instructional methods encouraged reflective discourse, discussion boards and forums have been the

least preferred instructional strategies students among students (Jayaratne & Moore, 2017). It was also suggested that student posts in AOD lacked fluidity and conversational language (Kanuka & Anderson, 1998). When online discussions were not moderated by the instructor, student interactions occurred at lower levels of communications, which involved sharing information and experiencing dissonance, but rarely achieved negotiation, co-construction, integration, or agreement (Christopher et al., 2004; Kanuka & Anderson, 1998; Tallent-Runnels et al., 2006; Thomas, 2002).

Pedagogical lurking is a term to describe the act of reading and reflecting on discussion board dialogue without active participation. It was found students who only participated in online discussion boards as a course requirement and did not read and reflect on posted messages had a less positive impression of the discussion's impact on learning. Active discussion participation did not guarantee learning outcomes were achieved any more so than those students displaying pedagogical lurking behavior (Dennen, 2008). Along the same lines, Goggins and Xing (2016) found the time dimension of participation to be more influential in predicting student learning through online discussion boards than posting and reading actions. However, unlike Dennen's (2008) findings, Palmer et al. (2008) found no correlation between the number of posts read and the final course grade, suggesting lurking in the online discussion did not contribute to student learning.

An important consideration of online discussions, however, is the ability to create a more vulnerable space for students to engage in tense conversations (Althaus, 1997). Female students valued anonymity in online courses and online discussion (Sullivan, 2002). Anonymity encouraged more highly structured and quality communication and

interaction between students (Ahern & Durrington, 1995). A study exploring the experiences of online bloggers found that higher levels of discursive anonymity (i.e., refraining from giving identifying information) were correlated with more self-disclosure (Qian & Scott, 2007). Students believed sharing experiences online enhanced learning, promoted mentoring, improved critical thinking, and facilitated socialization (Daroszewski, 2004).

AOD has been found to influence small differences in learning between AOD and non-AOD student groups in health care education (Cain & Smith, 2009; Markewitz, 2007; Pulford, 2011). It has also shown an effect on improving student critical thinking and reflective skills (Curtis, 2006; De Wever et al., 2008; Plack et al., 2008). Curtis (2006) found that reflective thinking was increased when students were asked simply to pose or answer questions related to the course subject in online discussion boards. Another study comparing the effects of providing online scaffoldings for question generation to peers during online discussion found it increased the number, but not the quality, of questions asked or learner outcomes (Choi et al., 2005).

Massive open online courses (MOOCs), which typically have enrollments ranging from hundreds to thousands of students, that use forums are correlated with better grades and higher retention (Coetzee et al., 2014). In recent years, audio/video discussion has been increasingly used in online courses to enhance online communication. A small study conducted by Ching and Hsu (2015) found the use of audio/video discussion to be more effective and perceived more positively by female students than male students.

In order for online discussion to produce learning, students must embrace four dispositions, as proposed by Gao, Wang, and Sun's (2009) Productive Online Discussion

Model: (a) discuss to comprehend (i.e., actively engage in such cognitive processes as interpretation, elaboration, making connections to prior knowledge); (b) discuss to critique (i.e., carefully examine other people's views, and be sensitive and analytical to conflicting views); (c) discuss to construct knowledge (i.e., actively negotiate meanings, and be ready to reconsider, refine and sometimes revise their thinking); and, (d) discuss to share (i.e., actively encourage and support each other's thinking and share improved understanding based on previous discussion).

Multiculturalism

Multiculturalism is the existence of cultural pluralism in a state, society, and community, and "is associated with the belief that racial, ethnic, and other groups should maintain their distinctive cultures within society yet live together with mutual tolerance and respect" (Calhoun, 2002). The first institution to require a diversity course in its core general education curriculum related to themes of multiculturalism was Denison University in 1979 (Fitzgerald & Lauter, 2004). The emphasis on multicultural education across university campuses has increased in the past half-century (Banks & Banks, 2001). This section reviews multicultural education and programming and the two main schools of thought related to an individual's level of multiculturalism, multicultural competence (Banks, 1995; Mallinckrodt et al., 2014; Sue et al., 1992) and multicultural personality (Ponterotto, 2010). Additionally, a model outlining students' experience in multicultural courses and background related to online multicultural instruction is discussed.

Multicultural Education and Programming

Multicultural education is described by Banks and Banks (2001) as:

an idea, an educational reform movement, and a process whose major goal is to change the structure of educational institutions so that . . . students who are members of diverse racial, ethnic, language, and cultural groups will have an equal chance to achieve academically in school. (p. 1)

Multicultural education is said to be fully realized once the five dimensions conceptualized by Banks (2004) are addressed: (a) content integration; (b) knowledge construction, (c) prejudice reduction, (d) equity pedagogy, and, (e) an empowering school culture and social structure. It is also a field of study, as there is

(a) a stable community of scholars who devote their professional time primarily, if not exclusively, to it; (b) a growing body of scholarship exists on philosophies and methodologists for incorporating ethnic diversity and cultural pluralism into the educational enterprise; (c) undergraduate and graduate programs at colleges and universities are preparing schoolteachers, administrators, and counselors to implement multicultural education; and, (d) there is a considerable degree of continuity and longevity among the cadre of scholars who are leading voices in the field. (Gay, 2004, p. 34)

As college campuses have increased in diversity, researchers have tried to understand the experiences of students as they engage in a multicultural environment and participate in educational multicultural programming through coursework and campus initiatives. Undergraduate multicultural education and programming learning goals were synthesized into three clusters by Howard-Hamilton and colleagues (2011): (a) knowledge of one's own cultural identity and the culture of others; (b) multicultural skills evident through self-reflection, perspective-taking, and intergroup communication; and,

(c) attitudes related to diversity, justice, discrimination, and intergroup interactions.

While positive outcomes such as personal awareness, understanding, critical thinking, political involvement, communication skills, and student engagement were associated with multicultural programming, the most frequent goal was to “increase [students’] empathy for others who are culturally different” (Mallinckrodt et al., 2014, p. 133).

Certain personality traits, such as openness to diversity and challenge, can impact how students react to unfamiliar cultures during their college experience (Pascarella et al., 1996). Similarly, major personality traits based on the HEXACO personality framework [honesty-humility, emotionality, eXtraversion, agreeableness, conscientiousness, and openness to experience (Ashton & Lee, 2007)] have been shown to predict individual differences in a person’s curiosity and hospitality toward cross-cultural contact and exploration (Stürmer et al., 2013). Undergraduate students’ perceptions of diversity and inclusion on campus also showed that change in multicultural perspectives have been slow, even with intentional multicultural programming offered through the university (Drape et al., 2017). Age, number of completed college courses related to global issues, and prior overseas experiences were not related to global perspectives or cultural diversity (Bettis et al., 2015). Albeit, some factors of cultural diversity awareness have been shown to be impacted by enrollment in a stand-alone multicultural course (Brown, 2004).

The stimulation of thinking and consideration of important issues such as race, class, culture, sexuality, and gender can be fostered through AOD in multicultural education (Wassell & Crouch, 2008). In an online multicultural education course, students revealed deep-seated beliefs that could be seen as marginalizing to others, giving

the opportunity for deeper discussion, were cautious and tense as a result of fearing making “politically incorrect” statements, and demonstrated an increased intent to transform as learners from multicultural awareness to educational praxis (Licona & Gurung, 2013).

Within the discipline of multicultural education, many terms exist to describe the learning goals and outcomes of programming, such as cultural competence (Bucher, 2015), cultural intelligence (Earley & Ang, 2003), diversity (Bucher, 2015), diversity consciousness (Bucher, 2015), diversity skills (Bucher, 2015), global competencies (Grudzinski-Hall, 2007; Hunter, 2004; Moriba & Edwards, 2013), internationalism (Moriba et al., 2012), multicultural competence (Banks, 1995; Howard-Hamilton et al., 2011; Sue et al., 1992), and multicultural personality (Ponterotto, 2010; Ramirez, 1999) (see definitions of terms in Chapter I). For this study, the use of the terms multicultural competence and multicultural personality are most frequent in relation to multicultural education at OSU and in the agricultural leadership program.

Multicultural Competence

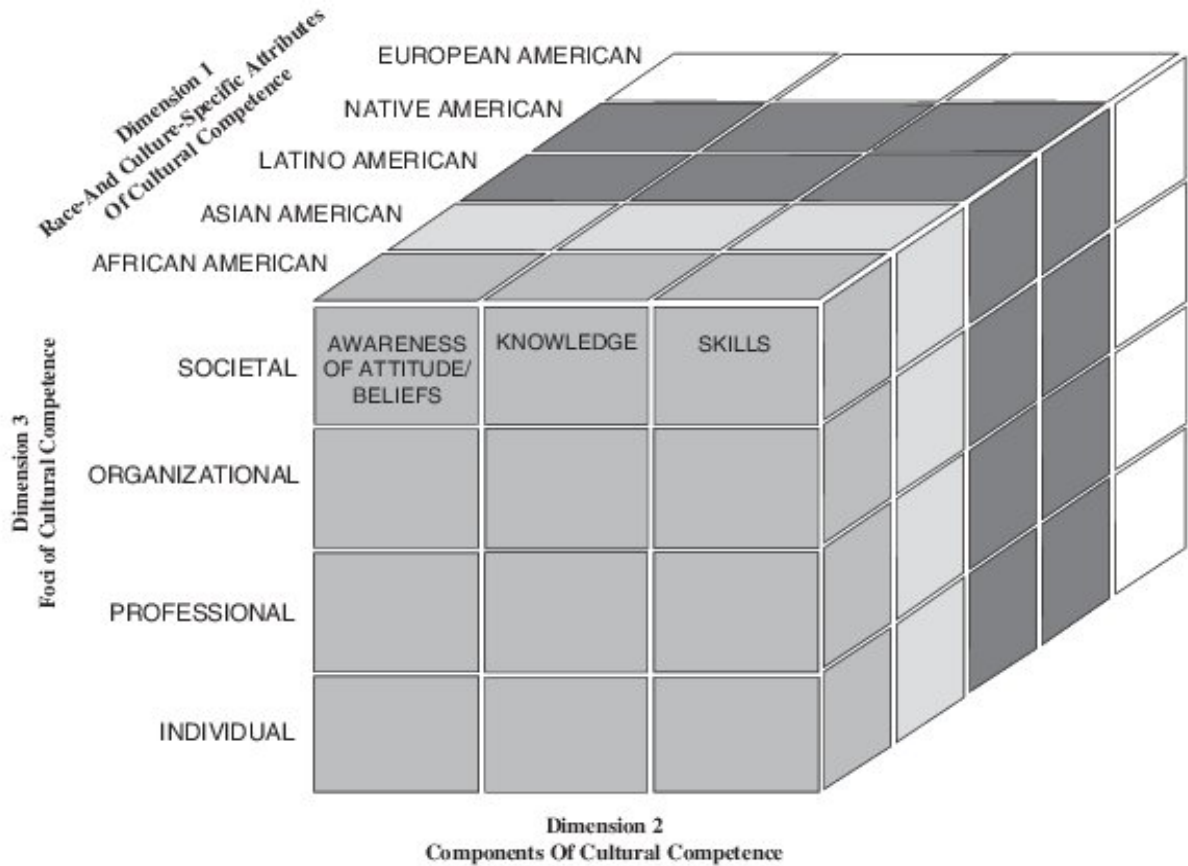
Ethnocultural empathy, or the demonstration of empathy for those different from one’s own identity background, is a goal of multicultural programming (Mallinckrodt et al., 2014). Wang et al. (2003) identified three components of ethnocultural empathy: (a) intellectual empathy (i.e., the cognitive comprehension of various cultural perspectives); (b) emotional empathy (i.e., to feel and relate to the emotional experience of another’s); and (c) communicative empathy (i.e., the ability to communicate empathic understanding to others). The Scale of Ethnocultural Empathy (SEE) was developed by Wang et al. (2003) to assess ethnocultural empathy and the effectiveness of multicultural

programming and initiatives. The 31-item SEE instrument measures the sole construct of ethnocultural empathy and has been found both reliable and valid with undergraduate student samples (Phillips, 2012; Rasool et al., 2009; Wang et al., 2003).

Although increased empathy is often a main goal of multicultural programming, it has been noted that other outcomes related to multiculturalism are to be expected in undergraduate student populations, and therefore, should be assessed. In 2001, Derald Wing Sue proposed a multidimensional model of cultural competence (MDCC) to systematically identify cultural competence. As shown in Figure 2.1, the MDCC is composed of three competency dimensions: (a) specific racial/cultural group perspectives; (b) components of cultural competence (awareness, knowledge, and skill); and, (c) foci of cultural competence ranging from individual to societal (Sue, 2001). Based on the theoretical framework of three domains of multicultural competence (Sue et al., 1992; Sue et al., 1982), Mallinckrodt et al. (2014) developed a new instrument to measure a more complete range of multicultural programming outcomes called the Everyday Multicultural Competencies/Revised Scale of Ethnocultural Empathy (EMC/RSEE).

Figure 2.1

A Multidimensional Model for Developing Cultural Competence.



Note. From “Multidimensional Facets of Cultural Competence” by D. W. Sue, 2001, *The Counseling Psychologist*, 29(6), p. 790-821. Reprinted with permission from SAGE Publishing (Appendix A).

Expanding on the Scale of Ethnocultural Empathy (Wang et al., 2003) the EMC/RSEE was developed by researchers at the University of Tennessee to specifically “assess the effectiveness of campus ethnic/racial diversity and multicultural programming efforts” (Mallinckrodt et al., 2014, p. 134) among the undergraduate student population. The 48-item EMC/RSEE instrument (Appendix B) considers the cultural knowledge, multicultural skills, and diversity-related attitudes of participants

(Howard-Hamilton et al., 2011) by measuring six individual constructs of everyday multicultural competencies using a 6-point Likert-type scale ranging from 1 (strongly disagree) to 6 (strongly agree): (a) cultural openness and desire to learn; (b) resentment and cultural dominance; (c) anxiety and lack of multicultural self-efficacy; (d) empathetic perspective-taking; (e) awareness of contemporary racism and privilege; and (f) empathetic feeling and acting as an ally. Descriptions of the EMC/RSEE constructs and the domains of multicultural competence assessed for each construct (Mallinckrodt et al., 2014) are provided in Table 2.1. In a study to assess change in everyday multicultural competencies after multicultural training with resident advisors at a university, Chery (2017) found one significant change among group mean scores of the third factor, Anxiety and Lack of Multicultural Self-Efficacy (AMS). When considering all subscales together, the change in overall everyday multicultural competencies group mean scores as a result of the training was not statistically significant (Chery, 2017).

Table 2.1*Everyday Multicultural Competencies/Revised Scale of Ethnocultural Empathy**Constructs*

Construct	Domain of multicultural competence assessed and construction description
Cultural openness and desire to learn	<i>Attitudes</i> - interest in other cultures and breaking out of one's cultural encapsulation
Resentment and cultural dominance	<i>Attitudes</i> - negative, prejudicial, and/or color-blind attitudes toward cultural diversity
Anxiety and lack of multicultural self-efficacy	<i>Skills</i> - level of discomfort and perception of being ill-equipped to handle social situations
Empathic perspective-taking	<i>Attitudes</i> - empathic feeling and cognitive ability
Awareness of contemporary racism and privilege	<i>Knowledge</i> - awareness of of issues related to racial privilege, institutional discrimination, and blatant racial issues
Empathic feeling and acting as an ally	<i>Skills</i> - concrete behavioral and affective reactions to racism and privilege

The EMC/RSEE measure was designed specifically for use with college students and assessed multicultural competencies related to racial or ethnic diversity for White undergraduate students; therefore, the validity for students of color and assessment of other dimensions of diversity is unknown (Mallinckrodt et al., 2014). Although concern exists for paradigmatic and methodological issues with the EMC/RSEE scale, the EMC/RSEE is a positive step forward in work to promote and better understand multicultural competencies and ethnocultural empathy within college student populations (Wang et al., 2016). Other measures related to multicultural competencies include the Miville-Guzman Universality Diversity Scale-Short Form (MGUDS-S; Fuertes et al., 2000) and the Openness to Diversity/Challenge Scale (ODSC; Pascarella et al., 1996).

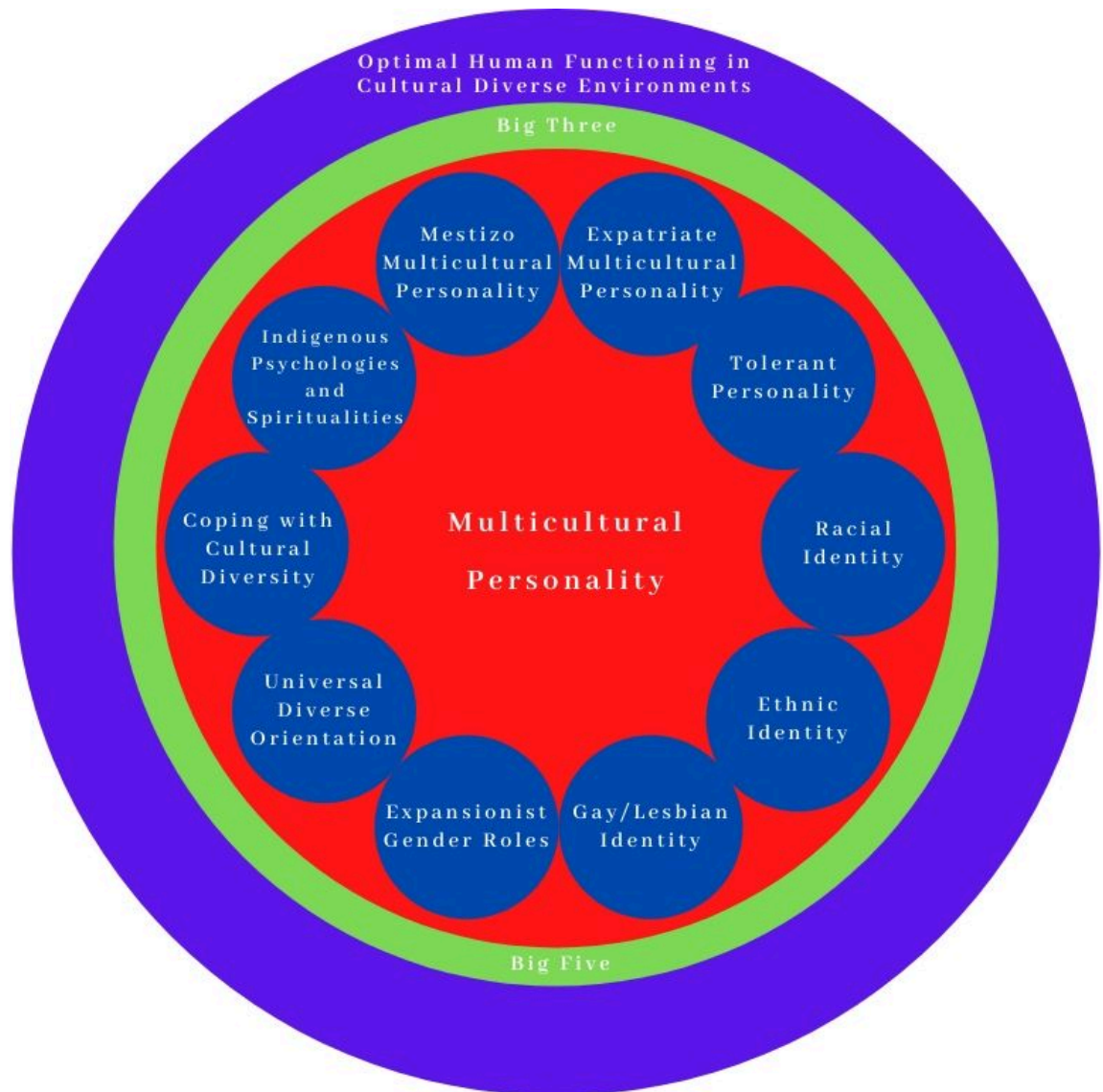
The EMC/RSEE (Mallinckrodt et al., 2014) was chosen as a measure of multicultural competence for this study because of its design specifically for measuring outcomes of multicultural programming among White undergraduate college students.

Multicultural Personality

Multicultural Personality Theory (Ponterotto, 2010) describes a set of personality traits or dispositions that can be used to determine how well people will adapt in multicultural societies. Multicultural personality (MP) explains why individuals may adapt to new or different environments uniquely and why people differ in their desire to improve disadvantaged groups within a society (Fietzer et al., 2016). Multicultural Personality Theory, originating from the counseling and psychology disciplines, is based on ten theoretical anchors from theory and quantitative research related to multiculturalism, positive psychology, and broad models of personality (see Figure 2.2; Ponterotto, 2010). Table 2.2 provides a brief summary of the ten components of Multicultural Personality Theory by “defining the relevant MP variables integrated into the model . . . and the relevant construct measurement tools that have yielded quantitative research findings integrated into the current MP conceptualization” (Ponterotto, 2010, p. 731-732).

Figure 2.2

Ten Theoretical Anchors of Multicultural Personality



Note. Ten Theoretical Anchors of Multicultural Personality related to positive psychology and broad personality models. Adapted from “Multicultural Personality: An Evolving Theory of Optimal Functioning in Culturally Heterogeneous Societies” by J. G. Ponterotto, 2010, *The Counseling Psychologist*, 38(5), p. 714-758. Reprinted with permission from SAGE Publications (Appendix A).

Table 2.2*Ten Theoretical Anchors of Multicultural Personality Theory (Ponterotto, 2010)*

Theoretical Anchor	MP Variables	Sample Research Instruments
Mestizo multicultural personality	Multicultural orientation to life; culturally flexible and active in cross-cultural interactions; cognitively flexible; assumes leadership roles; active in social justice efforts Empathic,	Bicognitive Orientation to Life Scale, Traditionalism-Modernism Inventory, and Multicultural/ Multiracial Experience Inventory (Ramirez, 1999)
Expatriate multicultural personality construct	Empathic, open-minded, emotionally stable, exhibits social initiative, and is cognitively and behaviorally flexible	Multicultural Personality Questionnaire (Van der Zee & Van Oudenhoven, 2001)
Tolerant personality	Empathy skills with a broad spectrum of people (Menschenkenner); self-aware, introspective, and self-analytic; cognitively sophisticated; sense of humor	Quick Discrimination Index (Ponterotto, Potere, & Johansen, 2002)
Racial identity (highest stages)	Connectedness to one's own racial/ethnic heritage; openness to people of other cultural groups; cognitively flexible; seeks opportunities to interact across cultures; aware of possible internalized racism and unearned privilege; commitment to social justice for all oppressed groups	Cross Racial Identity Scale (Cross & Vandiver, 2001); Helms's (1990) Black and White Racial Identity Attitude Scales
Ethnic identity (higher levels)	Individual has explored ethnic identity and has reached resolution, affirmation, and commitment to one's ethnic identity in relation to overall personal identity	Multigroup Ethnic Identity Measure-Revised (Phinney & Ong, 2007); Ethnic Identity Scale (Umaña-Taylor, Yazedjian, & Bamaca-Gomez, 2004)

Table 2.2 Continued

Gay and lesbian identity (highest stage)	Deep self-acceptance of emotional and physical attraction for same-sex persons and integration of this acceptance into overall personal identity; inner peace and fulfillment; maintain integrated identity across diverse contexts; social advocacy	Gay Identity Scale; Lesbian Identity Scale; Lesbian and Gay Identity Scale (Mohr & Fassinger, 2000)
Expansionist theory of gender roles	Transcends multiple roles, thus enhancing social support and interpersonal anchoring; increased self-complexity; multiple roles promote similarity of experiences and enhanced empathy skills	Feminist Identity Composite (Fischer et al., 2000)
Universal-diverse orientation	Appreciative of both similarities and differences between self and others; sense of connectedness and shared experience with all people	Miville–Guzman Universality Diversity Scale (Miville et al., 1999) and Short Form version (Fuertes, Miville, Mohr, Sedlacek, & Gretchen, 2000)
Coping with cultural diversity (integration strategy; balance biculturalism)	Balancing multiple roles; having bicultural and multicultural interaction and coping skills; exhibits bicultural self-efficacy	Coping with Cultural Diversity Scale (H. Coleman, Casali, & Wampold, 2001); Bicultural Self-Efficacy Scale (David, Okazaki, & Saw, 2009)
Indigenous psychologies and spiritualities	Collectivistic and spiritual essence to human interaction and self-growth; sense of connectedness to others, to nature, to a higher being(s) or power, and to past, present, and future	Afrocentrism Scale (Grills & Longshore, 1996); TRIOS Scale (Jones, 2003); African Self Consciousness Scale (Baldwin & Bell, 1985)

Further, an individual characterized as high in MP is

emotionally stable; secure in her/his racial/ethnic (and other) identities; embraces diversity in her/his personal life and makes active attempts to learn about other cultures and interact with culturally different people; has a spiritual essence with some sense of connectedness to all persons; has wide reaching empathic ability in multiple contexts; is self-reflective and cognitively flexible; has a sense of humor; effectively negotiates and copes within multiple roles and cultural contexts; possesses the ability to live and work effectively among different groups and types of people; understands the biases inherent in his/her own worldview and actively learns about alternate worldviews; understands the impact of internalized racism (and homophobia) and/or unearned privilege in her or his personal life; and is a social activist, empowered to speak out against all forms of social injustice. (Ponterotto et al., 2006, p. 130)

The following propositions and predictions of Multicultural Personality Theory were presented by Ponterotto (2010):

1. MP can be conceptualized as a personality construct.
2. The MP constitutes a narrow matrix of personality traits that can be subsumed under broader conceptions of human personality, such as the Big Three (Positive Emotionality, Negative Emotionality, and Constraint) and the Big Five (Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness; Costa & McCrae, 1992).
3. MP factors will correlate moderately with one another as some shared conceptual overlap is expected.

4. MP factors will map on broad models of personality traits but will not be redundant with these traits, accounting for only minimal levels of shared variance with these personality models.
5. MP traits will predict highly significant variance (large effect size) in proximal multiculturally related criterion variables such as racial and ethnic identity levels, valuing of intercultural contact, levels of prejudice, multicultural counseling competence, and attraction to international careers.
6. MP traits will predict significant variance (medium effect size) in medial criterion variables such as psychological hardiness, general self-efficacy, resiliency, cognitive flexibility, empathy, humor, expanded social networks, and coping ability.
7. MP traits will predict significant variance (small effect size) in distal criterion variables such as quality of life, academic achievement, career success and satisfaction, overall life satisfaction, psychological well-being, and physical health.
8. MP traits will predict (through hierarchical modeling) variance in proximal, medial, and distal criterion variables above and beyond the variance accounted for by broader models of personality.
9. Levels of MP are both genetically and environmentally influenced.
10. Select MP trait dispositions will be observed in early childhood and will correlate to varying degrees with personality and behavior in young adulthood. During emerging adulthood, MP trait levels will be further developed and stabilized. The

individual's full matrix of MP traits will stabilize and predominate in middle adulthood around the ages of 50 to 60. (p. 717-719)

With MP traits incorporated under broad personality traits (Ponterotto, 2010), the theory provides a basis to predict why students may develop multicultural competence at different levels during an online multicultural course. Additionally, understanding the MP of students enrolled in a multicultural society course may allow instructors to predict how students may respond to course material and adjust teaching approaches as needed to expose students to multicultural curricula.

The Multicultural Personality Inventory (MPI) was developed by Ponterotto et al. (2014) to measure the construct of MP, or a "set of narrow personality traits that predict cultural adaptability and multicultural effectiveness" (p. 544). Initial development of the MPI resulted in a 70-item self-rated scale measuring seven subscales: (a) racial and ethnic identity; (b) social justice and activism; (c) psychological health; (d) connectedness and spirituality; (e) humor; (f) opposite-gender/sexual orientation connection; and (g) culturally diverse friendships (Ponterotto, 2014). A short-form version of the inventory (MPI-SF) was developed, which reduced the original MPI to 42 items and maintained the seven factors (Fietzer et al., 2019) (Appendix C).

An exploratory study established a relationship between the MP dispositions of Culture Empathy and Social Initiative (Van der Zee & Van Oudenhoven, 2001) with trait emotional intelligence (Schutte et al., 1998) (Ponterotto et al., 2011). Another study looked at altruistic behavior and found subscales of the MPI predicted giving behavior above and beyond the variance accounted for by broad personality traits and attitudes toward social justice (Fietzer et al., 2016). The MP subscale of racial and ethnic identity

development predicted the knowledge multicultural counseling competency, and the MP social justice activism subscale predicted both knowledge and awareness competencies (Fietzer et al., 2017). A separate study found that individuals high in MP were more likely to hold positive attitudes toward Asian Americans and that the quality, rather than quantity, of contact between individuals was more likely to generate these positive attitudes (Korol et al., 2018).

Model of Student Entry and Movement Through a Cultural Diversity Course

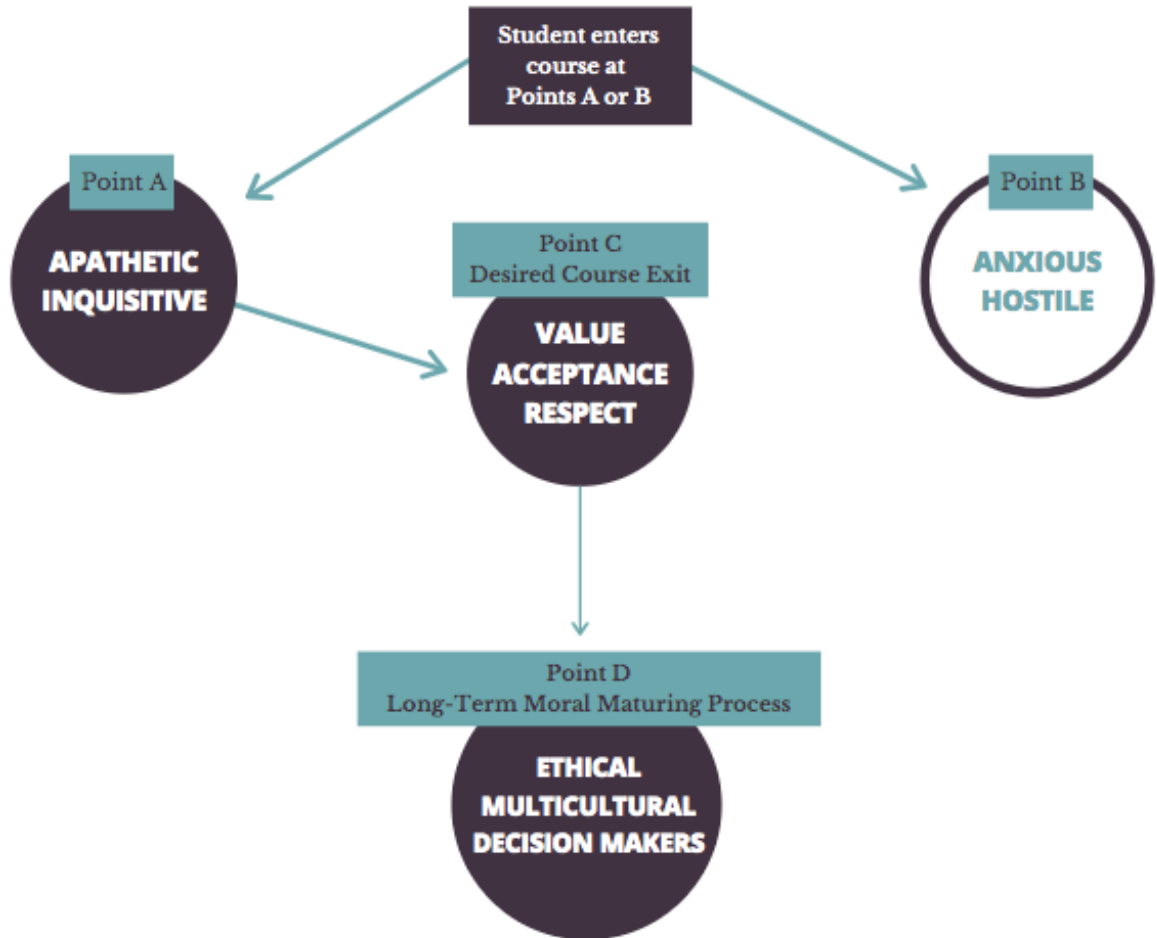
Brown (1998) developed a conceptual model to depict student engagement through cultural diversity courses. Previous studies in multicultural education (Ahlquist, 1992; Banks, 1994; Irvine, 1992) agree students are often resistant to the content and teaching practices experienced in multicultural and ethnic studies classes. Lehman (1992) explained this type of resistance to multicultural education through seven confrontational stages: (a) shock; (b) denial; (c) anger; (d) rejection; (e) examination; (f) understanding; and, (g) acceptance. Furthermore, a four-phase process to influence multicultural ethical decision-making (Brown, 1998) influenced by Ryan and Lickona's (1992) model for ethical education (i.e., self-esteem and social community building; cooperative learning and helping relationships; moral reflection; and, participatory decision making) suggested educators guide students in developing more multicultural perspectives through (a) self-examination, (b) cultural-awareness, (c) ethical reflection, and (d) classroom strategy.

Building on Lehman's (1992) stages of confrontation and the process of influencing multicultural ethical decision-making, Brown (1998) conceptualized a model to show a connection between the process (Ryan & Lickona, 1992) and how students

(i.e., primarily Caucasian) move through the stages of confrontation in a multicultural education course (Figure 2.3). The conceptual model recognizes that students enter diversity courses with either an attitude of apathetic curiosity or anxious hostility to learn about other cultures (Ahlquist, 1992; Banks, 1994; Irvine, 1992; Lehman, 1992). According to the model (Brown, 1998, 2004) instructional methodologies used in diversity courses may motivate students to “raise their cross-cultural cognizance, sensitivity, and commitment to social justice” (Brown, 2004, p. 327). In a study examining the influence of instructional methodology on cultural diversity awareness, Brown (2004) found that upon exiting a junior-level cultural diversity course, some students refined their values and deepened their respect and acceptance of other cultures, while others only shifted between the initial entry-level attitudes (i.e., confrontational stages) according to the Cultural Diversity Awareness Inventory (CDAI; Henry, 1995). Brown’s (2004) model for student entry and movement through a cultural diversity course provides a conceptual understanding to the realistic growth and development of multicultural competencies a student may experience after the completion of an undergraduate multicultural course.

Figure 2.3

Conceptual Model for Student Entry and Movement Through a Cultural Diversity Course



Note. Adapted from “What Precipitates Change in Cultural Diversity Awareness during a Multicultural Course” by E. L. Brown, 2004, *Journal of Teacher Education*, 55(4), p. 328.

Differences in cultural demographics were also found to impact students’ experiences and reactions to multicultural education (Lehman, 1992; Vontress, 1986, 1988). Educators must recognize White students, coming from a place of privilege, have very different social and emotional experiences related to race and racism than those from marginalized identity groups (Spanierman & Hepner, 2004). Miles and Kivlighan

(2012) found students from privileged social groups did have a different experience in a multicultural intervention than students from a marginalized group. Other cultural categories beyond race and ethnicity, such as gender, sexual orientation, religion, socioeconomic status, and ecological culture (location of residence) also demonstrated a significant effect on the social attitudes and functioning of an individual (Miville et al., 1999; Vontress, 1986, 1988).

Online Multicultural Instruction

As multicultural programming has expanded on college campuses, so too has distance education. Little research has been related to multicultural education in the online environment; however, a few researchers have begun to look at some aspects of multiculturalism in online curriculum (Brown, 2013). Smith and Ayers (2006) suggested online courses with multicultural curriculum should require a collaborative online learning environment to be successful. Collaboration was encouraged in the online environment through interpersonal communications between students where knowledge, thoughts, and fears were shared (Motteram & Forrester, 2005; Offir, Lev, & Bezalel, 2008). One researcher, in sharing their pedagogy in converting a traditional multicultural course to the asynchronous online environment, identified the following paradox: while students were more likely to interact openly in a frank manner, show curiosity, and treat each other equitably, they felt the online environment prevented them from developing the necessary relationships with each other that may have influenced their own rethinking of diversity and social justice (Merryfield, 2001). Distance-learning has also been suggested as a tool to engage students from culturally diverse institutions (Gibson et al., 2014).

In comparing face-to-face instruction and online instruction delivery modes, Moriba and Edwards (2013) determined both modes of learning improved students' international awareness and global knowledge in international-designated general education courses. These courses also favorably changed students' attitudes regarding their development of awareness related to international issues and globalization in the agricultural sector (Moriba et al., 2012).

Multiculturalism in Agricultural and Leadership Education

The American agricultural industry has started to recognize the value of a multicultural workforce and need for diversity education over the past decade. "No longer is there a typical employee in agriculture" (Sproul, 2018, p. 22); yet, employers identified a lack of diverse applicants as a prevalent challenge (Sproul, 2018). Although the American agricultural workforce has begun to diversify as a result of globalization in the industry, the demographics of recent undergraduate students with agricultural degrees has remained mainly homogeneous (Data USA, n.d.). Related to diversity skills, employers in agriculture ranked the ability to work within teams to make decisions and work with persons of diverse backgrounds as some of the most important leadership skills for future employees (Andelt et al., 1997). Out of seven soft skill clusters (i.e., communication, decision making/problem solving, experiences, leadership, professionalism, self-management, and teamwork) Crawford and colleagues (2011) found teamwork was ranked as the fourth most important cluster employers in agriculture are looking for in new graduates. Seven skill characteristics comprised this teamwork soft skill cluster (i.e., aware and sensitive to diversity, maintains accountability to the team, positive and encouraging attitude, productive as a team member, punctual and meets

deadlines, share ideas to multiple audiences, and work with multiple approaches). Basic skills and manners required for working in a team were ranked as more important than awareness and sensitivity to diversity, establishing a need for further diversity education among future graduates in agriculture.

A commitment to diversity and inclusion in the workplace is valuable to all organizations. Randolph-Seng and colleagues (2016) found racial stereotypes may influence the relationship between supervisors and employees and influence employee performance. Although a panel of agricultural leadership university faculty identified team building skills, an understanding of personality types and learning styles, and the ability to empower and enable others as objectives for agricultural leadership programs, skills in diversity and inclusion were not agreed upon in a Delphi study (Morgan et al., 2013).

In agricultural education, multiculturalism and diversity have been studied in a variety of contexts, but with much emphasis placed on secondary programs or the preparation of pre-service teachers, rather than the integration or delivery of multicultural curriculum. Issues related to diversity and inclusion within secondary agricultural education have been documented (Elliott & Lambert, 2018; Wakefield & Talbert, 2003) and focus mainly on racial diversity and students with disabilities. Inclusiveness and diversity awareness of school-based agricultural education teachers (LaVergne, Jones, Larke, & Elbert, 2012) revealed limited experience in multicultural education. This finding is supported by studies focused on developing the multicultural competencies and addressing teaching concerns of pre-service agricultural education students (Rice et al., 2014; Vincent, Killingsworth, & Torres, 2012; Vincent, Kirby, Deeds, & Faulkner, 2014;

Vincent & Torres, 2015). Vincent and Torres (2015) assessed the multicultural competency of secondary agriculture teachers in schools with at least 30% minority student enrollment and found those in an agricultural education program with a diverse FFA chapter student membership had a higher multicultural competence level. Similarly, insufficient cultural diversity education in universities may result in agricultural graduates unprepared to work in a diverse workforce and inaccurate perceptions of diversity and inclusion (Bell et al., 2009).

At the postsecondary level for agricultural education, the multiculturalism of extension educators and programming did not completely meet the needs of agricultural labor supervisors (Morera et al., 2014). While study abroad and global experiences have been deemed influential in the socio-cultural development of graduate students in agricultural education (Hains, Tubbs, & Vincent, 2013), these experiences may not be related to the development of a global perspective or attitude toward cultural diversity among undergraduate forestry students (Bettis et al., 2015). The role of culture in agriculture (Tubbs, 2015) and agricultural ideologies of university agricultural students (Martin & Enns, 2017; Martin & Wesolowski, 2018) helped to understand students' initial reaction to multicultural education efforts. Undergraduate agricultural students with a *colorblind racial attitude* (i.e., the belief that racial categories do not matter and should not be considered) were found to have less desirable attitudes toward immigrants, demonstrating a need for further integrating of cultural diversity education in colleges of agriculture and natural resources (Rodriguez & Lamm, 2016). This is of concern, as colorblindness adversely affects teams and organizational success (Ely & Thomas, 2001). Regarding university agricultural faculty, competencies related to teaching in

multicultural classroom were perceived as less relevant to their overall teaching responsibilities (Harder et al., 2009).

Much of the undergraduate population in colleges of agriculture and natural resources are racially and ethnically homogenous (Data USA, n.d.) and assumed to come from a segregated precollege environment, meaning they were “less likely to live in diverse communities or attend diverse schools, curtailing their opportunities for meaningful diversity experiences prior to college” (Saenz, 2010, p. 4). Data USA (n.d.) reported for the year 2017, 75.9% of graduates with a degree in agriculture were White. Beyond gender, race and ethnicity, agricultural ideology (i.e., perceptions of agricultural values) was also identified as a diversity issue unique to colleges of agriculture. How students and faculty conceptualized agriculture impacted the retention of students in undergraduate non-conventional agriculture majors (Martin & Wesolowski, 2018). In exploring how students’ precollege racial environments shaped their collegiate diversity experiences, Saenz’s (2010) found a structurally diverse university environment with more opportunities for diverse experiences enhanced students’ quality of interactions with diverse peers.

As a result, some universities have begun to incorporate multicultural education into their agricultural curriculum (Wangberg, 2006). Many agricultural leadership degree programs include a multicultural component or required coursework. The need to improve the multicultural competencies of undergraduate students is necessary for graduates to engage more successfully in the agricultural industry. A review of leadership theories emphasized by agricultural leadership education programs revealed correlation with many of the literature-based global leadership competence models (Muenich &

Williams, 2013), including multiculturalism. However, limited research in online multicultural courses within the context of agriculture exists related to effective instructional methods, discussion/reflection structures, and student learning.

Online Multicultural Course in Agricultural Leadership at Oklahoma State University

With coursework in leadership dating back to 1959, agricultural leadership was established as undergraduate major at Oklahoma State University (OSU) in 2005 (Pennington & Weeks, 2006). Five core values guide the curriculum of the agricultural leadership program: (a) authentic leadership, (b) commitment to agriculture, (c) critical thinking, (d) diversity, and (e) professionalism (Pennington & Weeks, 2006). Included in the curriculum for the undergraduate degree in agricultural leadership is AGLE 2403: Agricultural Leadership in a Multicultural Society, an online course focused on multiculturalism in the agricultural context.

About the Course

AGLE 2403 is a three-credit hour course offered through the Agricultural Leadership program in the Ferguson College of Agriculture's Department of Agricultural Education, Communications, and Leadership (AECL). AGLE 2403 is an approved course fulfilling two undergraduate general education requirements at OSU: (a) diversity and (b) social and behavioral sciences. General education courses approved for the diversity requirement "prepare students for engaged citizenship in the diverse, multicultural society of the United States" (OSU, 2018, para. 10). Courses approved for the diversity general education designation (OSU, 2019) at OSU

emphasize one or more socially constructed groups (e.g. racial, ethnic, religious, gender, age, disability, sexual orientation) in the United States. Goals of ‘D’ courses are to prepare students to critically analyze historical and contemporary examples of socially constructed groups in American society or culture and the distribution of political, economic, and/or cultural benefits and opportunities afforded to these groups; to understand how these groups relate to the student’s academic discipline and American culture; and demonstrate their understanding through written work that provides them the opportunity to enhance their writing skills. (OSU, 2018, para. 10)

According to the published course description, AGLE 2403 is

[t]he study of leadership as it relates to a multicultural society. Cultural changes in the agricultural workplace and future impact on the industry. Personal barriers to fulfilling leadership roles in the agricultural sciences and natural resources. Skills related to managing teams in a diverse workplace specifically related to differences in gender, race and ethnicity. (OSU, 2018).

AGLE 2403 is taught in an online, asynchronous, computer-based format through the university’s designated learning management system (LMS), Canvas, and utilizes a variety of instructional methods to deliver course content (see Appendix D for the course syllabus). Diversity consciousness (Bucher, 2015) serves as the framework for the AGLE 2403 course learning objectives.

Summary

Snodgrass and colleagues (2018) assessed the intercultural sensitivity of students in an agriculture diversity and social justice course, finding that participants slightly

increased their scores. However, the study was unable to determine the impact of specific instructional methods and recommended future research employ an experimental design to compare and analyze the differences in development for students based on treatment and demographic characteristics (Snodgrass et al., 2018). Brown's (2004) study found a significant relationship between instructional methodology and changes in pre- and post-test scores on the CDAI. A connection between instructional methodology and changes in test scores has yet to be investigated for the EMC/RSEE instrument. Future research was recommended to understand the relationship between specific online instructional methods in multicultural education and cultural diversity courses and the development of diversity consciousness (Bucher, 2015) and multicultural competence (Brown, 2004; Kanuka, Rourke, & Laflamme, 2007). Therefore, this study aims to fill the gap in research by examining the effect of two reflective strategies on student multicultural competencies development after completing a multicultural course.

“More research is necessary to identify the effects of delivery environments on learning performance” (Tallent-Runnels et al., 2006). Future research studies have been guided to focus on instruction and learning online to determine what format provides the highest level of interaction and most effective learning experience, and how the kinds of instructor and student roles in online interactions that enhance class discussions and encourage critical thinking and construction of knowledge (Tallent-Runnels et al., 2006). “Another strand of research that would most likely bear fruit is improved design and management of online discussions . . . Future research is needed to better understand the way in which online interactions enhance [] thinking and learning” (Tallent-Runnels et al., 2006, p. 118). With many studies lacking experimental design, researchers suggested

the addition of a control or comparison group to the single-sample pre-test and post-test design to strengthen future studies in this area (Tallent-Runnels et al., 2006). It was also noted that “research on online discussion has had relatively little focus on measures of actual learning . . . [and] *how* the interaction is contributing to learning” (Dennen, 2008, p. 213). Connections between technology, particularly online learning, and multicultural education in the context of agricultural leadership in higher education is also limited (Damarin, 1998; Sleeter & Tettegah, 2002; Wassell & Crouch, 2008). Often when someone talks about technology, no link is made between it and multicultural education. Therefore, this study fills another gap in the research literature by connecting the needs for further research in online learning, online discussion, and online multicultural education into a single, experimental study.

There is also a need for improved methods and research design in studying online discussions within the online learning environment. “Though the prevalence of online discussion is well-established, clear empirical evidence of how online discussion affects student learning is not” (Goggins & Xing, 2016, p. 241). From a transformative learning perspective, students completing individual reflection assignments in an online multicultural course may experience meaning-making through the critical reflection process. Online discussions as an instructional method in a multicultural course, however, may facilitate the reflective discourse (Mezirow, 2003) necessary for students to foster more transformative learning as new frames of references are developed. Researchers were invited to better understand how transformative learning could best be facilitated in the online environment (Baumgartner, 2001; Merriam et al, 2007), which was another aim of this study.

Lastly, both Ponterotto (2010) and Mallinckrodt (2014) have posited a possible relationship between the development of multicultural competence, sociocultural empathy and individual differences, such as multicultural personality. They have suggested perhaps changes in multicultural competencies are influenced by personality traits.

Additional research using the EMC/RSEE is needed to illuminate the relationships between individual differences such as these, and the development of multicultural competencies and sociocultural empathy, thereby allowing educators and administrators to refine multicultural programming to fit the needs of individual students. (Mallinckrodt, 2014, p. 143)

Related to the measure of multicultural competencies, “the validity of the EMC/RSEE for students of color is unknown” (Mallinckrodt, 2014, p.143) and further field testing was recognized. Additionally, literature in the area of counselor training suggested that self-reports of skill competencies correlated poorly with observer ratings (Worthington et al., 2000). Undergraduate self-report ratings are limited and should include external and observed behavior measures in the future (Mallinckrodt, 2014). This experiment addresses another research need by examining the relationship of multicultural competence and multicultural personality among student participants in the study.

CHAPTER III

METHODOLOGY

Purpose of the Study

The purpose of this study was to determine the effect of two different reflective strategies (online reflective discussion with peers as compared to individual reflection worksheets) on the development of multicultural competencies among undergraduate students completing an online multicultural course. Four research questions and the corresponding null hypotheses were investigated:

RQ 1. Does completion of an online multicultural course, requiring either online reflective discussion with peers or individual reflection worksheets as the reflection strategy, have a significant effect on undergraduate students' development of multicultural competencies?

H₀1a: Completion of an online multicultural course does not result in a statistically significant ($p < .05$) effect on undergraduate students' development of multicultural competencies. (H₀: μ_1 everyday

multicultural competencies, pre-test = μ_2 everyday multicultural competencies, post-test)

H₀1b: Completion of an online multicultural course in which students participate in online reflective discussion with peers does not result in a statistically significant ($p < .05$) effect on undergraduate students' development of multicultural competencies.

H₀1c: Completion of an online multicultural course in which students complete individual reflection worksheets does not result in a statistically significant ($p < .05$) effect on undergraduate students' development of multicultural competencies.

RQ 2. Are changes in multicultural competencies significantly different for undergraduate students in an online multicultural course who complete online reflective discussions with peers as compared to those who complete individual reflection worksheets?

H₀2a: The changes in multicultural competencies for students completing online reflective discussions or individual reflection worksheets are not statistically significant ($p < .05$) from the beginning of the course to the end of the course for undergraduate students in an online multicultural course. (H₀: μ_1 change in everyday multicultural competencies, discussion = μ_2 change in everyday multicultural competencies, worksheet)

H₀2b: The changes in multicultural competencies for students completing online reflective discussions or individual reflection worksheets

are not statistically significant ($p < .05$) from the beginning of the course to the end of the course for undergraduate students in an online multicultural course when controlling for multicultural personality scores. (H_0 : μ_1 change in everyday multicultural competencies, discussion = μ_2 change in everyday multicultural competencies, worksheet)

H_{02c} : Differences in post-test multicultural competencies are not statistically significant between students completing online reflective discussions with peers and individual reflection worksheets when controlling for multicultural personality score and pre-test multicultural competencies. (H_0 : μ_1 post-test everyday multicultural competencies, discussion = μ_2 post-test everyday multicultural competencies, worksheet)

RQ 3. Do demographic differences of undergraduate students, such as multicultural personality score, age, ethnicity, gender and religion (while considering pre-test multicultural competencies) predict the development of multicultural competencies in an online multicultural course?

H_{03a} : Demographic differences of undergraduate students in an online multicultural course do not predict the development of multicultural competencies at a statistically significant ($p < .05$) level.

RQ 4. Does completion of an online multicultural course have a significant effect on undergraduate students' development in each of the six constructs of

the EMC/RSEE instrument, and are those changes significant when considering the students' study treatment group or gender?

H₀4a: Completion of an online multicultural course does not result in a statistically significant ($p < .05$) effect on undergraduate students' development in each of the six constructs of the EMC/RSEE instrument (H₀: μ_1 EMC/RSEE six constructs, pre-test = μ_2 eEMC/RSEE six constructs, post-test)

H₀4b: When considering the study treatment groups separately (control group: online reflective discussion with peers; treatment group: individual reflection worksheets), there is no statistically significant ($p < .05$) difference in students' development in each of the six constructs of the EMC/RSEE instrument in an online multicultural course. (H₀: μ_1 EMC/RSEE six constructs, pre-test = μ_2 EMC/RSEE six constructs, post-test)

H₀4c: When considering the gender of students separately (male and female), there is no statistically significant ($p < .05$) difference in students' development in each of the six constructs of the EMC/RSEE instrument in an online multicultural course. (H₀: μ_1 EMC/RSEE six constructs, pre-test = μ_2 EMC/RSEE six constructs, post-test)

Survey Instruments

Two instruments were utilized for this study that paralleled the course learning outcomes related to diversity consciousness and multiculturalism. The pre-test instrument

consisted of the Everyday Multicultural Competencies/Revised Scale of Ethnocultural Empathy (EMC/RSEE) (Mallinckrodt et al., 2014a), the Multicultural Personality Inventory-Short Form (MPI-SF) (Ponterotto et al., 2014), and demographic questions to gather age, gender, ethnicity, and religious affiliation data. The EMC/RSEE was administered as the post-test at the end of the course as well.

Everyday Multicultural Competencies/Revised Scale of Ethnocultural Empathy

Ethnocultural empathy, or the demonstration of empathy for those different from one's own identity background, is a goal of multicultural programming (Mallinckrodt et al., 2014). Wang et al. (2003) identified three components of ethnocultural empathy: (a) intellectual empathy (i.e., the cognitive comprehension of various cultural perspectives); (b) emotional empathy (i.e., to feel and relate to the emotional experience of another's); and (c) communicative empathy (i.e., the ability to communicate empathic understanding to others). The Scale of Ethnocultural Empathy (SEE) was developed by Wang et al. (2003) to assess ethnocultural empathy and the effectiveness of multicultural programming and initiatives. The 31-item SEE instrument measures the sole construct of ethnocultural empathy and has been found both reliable and valid with undergraduate student samples (Phillips, 2012; Rasool et al., 2009; Wang et al., 2003).

Although increased empathy is often a main goal of multicultural programming, it has been noted that other outcomes related to multiculturalism are to be expected in undergraduate student populations, and therefore, should be assessed. Based on the theoretical framework of three domains of multicultural competence (Sue et al., 1992; Sue et al., 1982), Mallinckrodt and colleagues (2014) developed a new instrument to measure a more complete range of multicultural programming outcomes called the

Everyday Multicultural Competencies/Revised Scale of Ethnocultural Empathy (EMC/RSEE).

Expanding on the Scale of Ethnocultural Empathy (Wang et al., 2003) the EMC/RSEE was developed by the University of Tennessee to specifically “assess the effectiveness of campus ethnic/racial diversity and multicultural programming efforts” (Mallinckrodt et al., 2014, p. 134) among undergraduate student population. The 48-item EMC/RSEE instrument (Appendix B) considers the cultural knowledge, multicultural skills, and diversity-related attitudes of participants (Howard-Hamilton et al., 2011) by measuring six individual constructs of everyday multicultural competencies using a 6-point Likert-type scale ranging from 1 (strongly disagree) to 6 (strongly agree): (a) cultural openness and desire to learn; (b) resentment and cultural dominance; (c) anxiety and lack of multicultural self-efficacy; (d) empathetic perspective-taking; (e) awareness of contemporary racism and privilege; and (f) empathetic feeling and acting as an ally. Exploratory and confirmatory factor analysis verified the six constructs of the instrument, while score convergent validity and internal consistency were established (Mallinckrodt et al., 2014). Original internal reliability coefficient alphas for the six constructs, descriptions of the constructs and the domains of multicultural competence assessed, and number of items for each construct (Mallinckrodt et al., 2014) are provided in Table 3.1.

Table 3.1*Everyday Multicultural Competencies/Revised Scale of Ethnocultural Empathy**Constructs and Internal Reliability Coefficients*

Construct	Domain of multicultural competence assessed and construct description	# Items	α
Cultural openness and desire to learn	<i>Attitudes</i> - interest in other cultures and breaking out of one's cultural encapsulation	10	.92
Resentment and cultural dominance	<i>Attitudes</i> - negative, prejudicial, and/or color-blind attitudes toward cultural diversity	10	.85
Anxiety and lack of multicultural self-efficacy	<i>Skills</i> - level of discomfort and perception of being ill-equipped to handle social situations	7	.77
Empathic perspective-taking	<i>Attitudes</i> - empathic feeling and cognitive ability	5	.69
Awareness of contemporary racism and privilege	<i>Knowledge</i> - awareness of of issues related to racial privilege, institutional discrimination, and blatant racial issues	8	.79
Empathic feeling and acting as an ally	<i>Skills</i> - concrete behavioral and affective reactions to racism and privilege	8	.81

The EMC/RSEE measure was designed specifically for use with college students and assessed multicultural competencies related to racial or ethnic diversity for White undergraduate students; therefore, the validity for students of color and assessment of other dimensions of diversity is unknown (Mallinckrodt et al., 2014). Although concern exists for paradigmatic and methodological issues with the EMC/RSEE scale, the EMC/RSEE is a positive step forward in work to promote and better understand

multicultural competencies and ethnocultural empathy within college student populations (Wang, Hogge, & Sahai, 2016).

Multicultural Personality Inventory-Short Form

The Multicultural Personality Inventory (MPI) was developed by Ponterotto et al. (2014) to measure the construct of multicultural personality (MP), or a “set of narrow personality traits that predict cultural adaptability and multicultural effectiveness” (p. 544). Initial development of the MPI resulted in a 70-item self-rated scale with a 5-point Likert-type format (1 = disagree strongly; 2 = disagree; 3 = unsure; 4 = agree; 5 = strongly agree) measuring seven subscales: (a) racial and ethnic identity; (b) social justice and activism; (c) psychological health; (d) connectedness and spirituality; (e) humor; (f) opposite-gender/sexual orientation connection; and (g) culturally diverse friendships (Ponterotto et al., 2014). Exploratory and confirmatory factor analysis verified the seven sub-scale structure of the instrument, while score convergent validity and internal consistency were established (Ponterotto et al., 2014). Coefficient alphas of the subscales in a recent study ranged from .90 to .73 (Fietzer et al., 2016). A short-form version of the inventory (MPI-SF) was developed, which reduced the original MPI to 42 items (Appendix C) and maintained the seven factors (Fietzer et al., 2019). Coefficient alphas of the MPI-SF subscales have ranged in previous studies from .88 to .61 (Fietzer et al., 2017; Fietzer et al., 2018; Korol, Fietzer, & Ponterotto, 2018), and are compared to the reliability coefficients of the MPI in Table 3.2.

Table 3.2*Multicultural Personality Inventory Subscales and Comparison of Internal Reliability**Coefficients*

Subscale	<u>MPI (70 items)</u>			<u>MPI-SF (42 items)</u>		
	Ponterotto et al., 2014 - Study 1 ^a α	Ponterotto et al., 2014 - Study 2 ^b α	Fietzer et al., 2016 ^c α	Fietzer et al., 2019 ^d α	Fietzer et al., 2018 ^e α	Korol et al., 2018 ^f α
Racial and ethnic identity development	.89	.87	.84	.83	.81	.80
Social justice and activism	.86	.85	.88	.81	.82	.84
Psychological health	.88	.88	.90	.88	.84	.88
Connectedness and spirituality	.86	.87	.75	.82	.85	.76
Humor	.70	.78	.75	.75	.80	.80
Opposite gender/sexual orientation connection	.70	.68	.73	.72	.68	.61
Culturally diverse friendships	.74	.72	.74	.70	.80	.70

^a $n = 415$; ^b $n = 576$; ^c $n = 153$; ^d $n = 336$; ^e $n = 180$; ^f $n = 876$

Instrument Field Test

The study pre-test instrument was field tested with an online multicultural course (AGLE 2403) sections ($N = 108$) during the spring 2019 semester to determine instrument validity and reliability with the targeted population. Seventy-eight students voluntarily agreed to complete the instrument. A criticism of self-reported measures

related to diversity and multiculturalism is the likelihood participants could overestimate their competence or portray themselves in a more positive light than what would be observed in reality. Therefore, the Scale of Social Desirability (SSD) (Crowne & Marlowe, 1960) was included in the field test instrument to determine if students had the tendency to respond to questions in what is considered a socially-desirable manner (Appendix E). A lack of significant correlation between the instrument constructs and social desirability score indicated truthful responses and supported the discriminant validity of the instrument for this study (Table 3.3).

Scale of Social Desirability

The Crowne-Marlowe (1960) SSD was used to measure the integrity of participant responses on self-reported instruments. The measure is comprised of 33 true-false questions and has demonstrated internal consistency and test-retest reliability (Crowne & Marlowe, 1960; Lambert et al., 2016; Miville et al., 1999; Ponterotto et al., 2014). The instrument is keyed with 18 items as true and 15 as false (Crowne & Marlowe, 1960), with the number of matched responses summed for an individual scale score; the higher an individual's score on the SSD, the more likely they are responding in a socially-desirable manner rather than truthfully.

Instrument Pilot Test

Further validity and reliability of the study instruments were established by a pilot test administered with students ($N = 38$) enrolled in an online multicultural course during the summer 2019 semester. Students were randomly assigned to one of the two reflection strategy groups for the duration of the course, either the online reflective discussion with peers control group ($n = 19$) or the individual reflection worksheets treatment group ($n =$

19). Two students dropped the course and two students did not complete the post-test; a total of four students were removed from the study, resulting in 16 students in the online reflective discussion group and 18 students in the individual reflection worksheets group ($N = 34$). Questions posed to the students for reflection, whether through online discussion or individual worksheets, were the same for consistency. Established rubrics and grading criteria were utilized by the course instructor and graders to ensure consistent feedback on reflective activities was provided to both student groups.

The EMC/RSEE and MPI-SF pre-test was administered as a Qualtrics instrument through the course learning management system (LMS) during the first week of class (Appendix F). During the last week of class, the EMC/RSEE post-test was administered as a Qualtrics instrument through the course LMS (Appendix G). Completion of the instruments during both data collection points were considered a part of normal classroom activities and worth a small portion (less than 5%) of the course participation grade. Students were informed of the pilot study at the end of the course and provided the opportunity to withdraw their implied consent to participate if desired (Appendix H). Data were analyzed to confirm the validity and reliability of the study instruments and test hypotheses for the full study. Reliability coefficients of .82 (Cultural Openness and Desire to Learn), .73 (Resentment and Cultural Dominance), .51 (Anxiety and Lack of Multicultural Self-Efficacy), .52 (Empathic Perspective-Taking), .78 (Awareness of Contemporary Racism and Privilege), and .70 (Empathic Feeling and Acting as an Ally) were found for the EMC/RSEE constructs. Reliability coefficients of

Table 3.3

Correlations, descriptive statistics, and reliability coefficients for the Everyday Multicultural Competencies/Revised Scale of Ethnocultural Empathy constructs, Multicultural Personality Inventory-Short Form subscales and Scale of Social Desirability field test (N = 78)

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	M	SD	α
1. COD	-														4.70	.61	.86
2. RCD	-.51**	-													3.18	.86	.86
3. AMS	-.55**	.47**	-												2.23	.61	.58
4. EPT	.16	-.01	-.17	-											3.62	.85	.64
5. ARP	.38**	-.70**	-.15	.50	-										3.85	.95	.88
6. EFA	.73**	-.57**	-.61**	.11	.40**	-									4.57	.66	.73
7. RID	.24**	.10	-.06	.32**	.02	.03	-								3.63	.67	.86
8. SJA	.57**	-.57**	-.33**	-.08	.42**	.63**	-.03	-							3.44	.68	.86
9. PH	.08	.09	-.22	-.02	-.23*	.11	.19	-.01	-						4.05	.63	.85
10. CS	.17	.09	-.00	.03	-.01	.05	.17	.07	-.13	-					3.25	.81	.83
11. HUM	.14	-.14	-.25*	.17	.01	.10	.35**	.15	.45**	-.10	-				4.24	.47	.79
12. OGC	.30**	-.24*	-.17	.11	.09	.32**	.08	.59**	.09	-.08	.36	-			3.37	.56	.58
13. CDF	.37**	-.20	-.26*	.40**	.09	.35**	.02	.21	-.27**	.04	-.01	.42**	-		2.59	.60	.72
14. SSD	.12	.05	-.01	.07	.05	.09	-.03	.12	.16	.34**	-.05	.06	.16	-	18.04	4.73	.76

.71 (Racial and Ethnic Development), .86 (Social Justice and Activism), .88 (Psychological Health), .65 (Connectedness and Spirituality), .73 (Humor), .53 (Opposite gender and sexual orientation connection), and .80 (Culturally Diverse Friendships) were found for the subscales of the MPI-SF. Results of the pilot study informed minor adjustments to the study's research questions and data collection procedures to ensure an experimental design was followed.

Population

The target population for this study were students who complete AGLE 2403: Agricultural Leadership in a Multicultural Society course at Oklahoma State University (OSU), which was approximately 500 students per academic year. A *time and place sample* was used from the accessible population of students enrolled in an online multicultural course (AGLE 2403) during the first eight-week term of the fall 2019 semester. The online multicultural course has been taught as an eight-week online course each fall and spring for the past several years, with student enrollment doubling since 2016. Two sections with 61 student seats each were offered during the fall 2019 first eight-week semester, with a randomly assigned group of about half receiving the study treatment ($n = 58$). Groups were randomly assigned by the Office of the Registrar the week prior to the start of the fall 2019 first eight-week session. Demographic data for the students is provided in Table 3.4.

Table 3.4*Student Demographic Data by Group (N = 111)*

	Discussion (<i>n</i> = 53)		Worksheet (<i>n</i> = 58)	
	<i>f</i>	%	<i>f</i>	%
Gender				
Male	28	52.8	21	36.2
Female	25	47.2	37	63.8
Ethnicity				
American Indian/Alaska Native	10	18.9	7	12.1
Asian	0	0.0	4	6.9
Black/African American	6	11.3	4	6.9
Native Hawaiian/Pacific Islander	0	0.0	0	0.0
White	43	81.1	50	86.2
Other	3	5.7	3	5.2
Multiracial ^a	9	17.0	10	17.2
Religion ^b				
Agnostic	0	0.0	1	1.7
Atheist	1	1.9	0	0.0
Buddhist	0	0.0	1	1.7
Protestant	31	58.5	29	50.0
Roman Catholic	5	9.4	9	15.5
None	15	28.3	18	31.0
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Age	20.7	4.68	20.3	2.26

Note. ^aStudents self-identified as one or more ethnicities and were secondarily categorized as multiracial ($n = 19$), resulting in a frequency total above the sample population for the ethnicity demographic. ^b $n = 110$.

About the Course

AGLE 2403 is three-credit hour course offered through the Agricultural Leadership program in the Ferguson College of Agriculture's Department of Agricultural Education, Communications, and Leadership (AECL). AGLE 2403 is an approved course fulfilling two undergraduate general education requirements at OSU: (1) diversity and (2) social and behavioral sciences (OSU, 2019). According to the published course description, AGLE 2403 is

[t]he study of leadership as it relates to a multicultural society. Cultural changes in the agricultural workplace and future impact on the industry. Personal barriers to fulfilling leadership roles in the agricultural sciences and natural resources. Skills related to managing teams in a diverse workplace specifically related to differences in gender, race and ethnicity. (OSU, 2018).

AGLE 2403 is taught in an online, asynchronous, computer-based format through the university's designated LMS, Canvas, and utilizes a variety of instructional methods to deliver course content. Diversity consciousness (Bucher, 2015) serves as the framework for course learning objectives (see Appendix D for the course syllabi).

Research Design

A quantitative methodological approach guided this study (Privitera, 2017) to investigate how two reflective strategies (Hatcher & Bringle, 1996; Sloan, 2020) effected the development of multicultural competencies among undergraduate students enrolled in

an online multicultural course. Quantitative research provided an objective analysis of observations in the social and behavioral sciences using the scientific method to investigate hypotheses (Privitera, 2017). This study was applied in nature, as it aimed to “answer questions concerning practical problems with potential practical solutions” (Privitera, 2017, p. 21). Multicultural competencies were assessed through pretest-posttest administration of the Everyday Multicultural Competencies/Revised Scale of Ethnocultural Empathy (EMC/RSEE) (Mallinckrodt et al., 2014a) instrument. Multicultural personality traits, using the Multicultural Personality Inventory-Short Form (MPI-SF) (Ponterotto et al., 2014), and demographic pre-test data were also collected.

Methods

An experimental pretest-posttest design (Privitera, 2017) was used for this study. Students enrolled in the first eight-week section of an online multicultural course ($N = 111$) during the fall 2019 term were randomly assigned to either: (a) the treatment group with the reflection strategy to complete individual reflection worksheets or (b) the control group with the reflection strategy to complete online reflective discussions with peers, as typical for previous semesters of the course.

Treatment Group

Students assigned to the treatment group completed individual reflection worksheets. Reflection questions were posted every week to the course LMS. Responses to the reflection questions were completed by each individual student and submitted as an individual assignment by the last day of the week. Feedback was given by the course instructor and/or graders based on prior determined criteria and rubrics that were the same for both student groups (Appendix I). Discourse, defined as the process of

establishing understanding through rational written or spoken communication (Habermas, 1990), with peers about the reflection questions was not available through the course LMS for the treatment group.

Control Group

Students assigned to the control group completed online reflective discussions with peers in their course section. Each week, reflection questions were posted in the course LMS as a discussion forum. Students were required to post one original response to the forum before gaining access to view the post of their peers. To encourage interaction with their peers, students were required to reply to a minimum of 15 peer posts each week in the online discussion forum and received a grade based on the level of participation. All posts were completed by the end of the week. Feedback was given by the course instructor and/or graders based on prior determined criteria and rubrics that were the same for both student groups (Appendix I).

Fidelity of Treatment

To account for as much of the variance between groups to the treatment itself, it was ensured that the same syllabus, course schedule, assignments (except for the reflective strategies) and reflection questions (Appendix J) were utilized for both groups. Figure 3.1 compares the control and treatment group specifications. To mitigate the influence of possible implicit bias from the instructor and teaching assistants, norms and expectations for learning in the online course environment were established through detailed rubrics, consistent teaching assistants/graders, and set feedback criteria.

Dependent Variables

The change in participants' post-test multicultural competencies construct scores (Post-EMC Score) was identified as the continuous dependent variable and reported on an interval scale.

Figure 3.1

Comparison of Group Specifications and Online Multicultural Course Elements

COURSE ELEMENTS	S A M E	D I F F E R E N T
Instructor	✓	
Graders	✓	
Syllabus*	✓	
Learning objectives and outcomes	✓	
Required textbook	✓	
Course policies	✓	
Course schedule	✓	
Grading scheme	✓	
Evaluation	✓	
Discussion questions	✓	
Individual reflection worksheets		✓
Online reflective discussion		✓
Duration for completion each week	✓	
Feedback	✓	
Other assignments	✓	

*Syllabi for the control and treatment groups were identical with the exception of text related to the reflection strategy assignment.

Note. Comparison of group specifications and online multicultural course elements for the control (online reflective discussion with peers) and treatment (individual reflection worksheets) groups.

Independent Variables

The treatment, or independent variable, was the use of two different reflective strategies in the online course. The categorical independent variable had two levels: (a) online reflective discussion with peers and (b) individual reflection worksheets.

Confounding Variables

Based on recommendations from the literature pertaining to multicultural competencies and/or personality the following were identified as potential confounding variables: age, gender, ethnicity, religious affiliation, participants' pre-test multicultural competencies construct scores (Pre-EMC Score) and participants' multicultural personality (MPI Score) (Miville et al., 1999; Ponterotto, et al., 2014; Vontress, 1986, 1988). Analysis of correlation coefficients between the variables (Table 3.5), however, revealed statistically significant ($p < .01$) relationships between Post-EMC Scores, Pre-EMC Scores, and MPI Scores. Therefore, the variables controlled for during analysis to reduce error were Pre-EMC Scores and MPI Scores. The relationships with the dependent variable did not reveal the need to control for age, gender, ethnicity, or religious affiliation in this study.

Table 3.5*Correlations between Demographics Variables and Post-test Multicultural Competency**Scores (N = 111)*

	1	2	3	4	5	6	7
1. Post-EMC Score	-						
2. Pre-EMC Score	.635**	-					
3. MPI Score	.368**	.410**	-				
4. Gender	.147	.104	-.010	-			
5. Age	.115	.137	-.004	-.124	-		
6. Ethnicity	.065	.059	.096	-.102	.159	-	
7. Religion ^a	.122	.160	-.117	-.086	-.165	-.115	-

^a*n* = 110.**Data Collection**

Data were collected from enrolled students in the first eight-week sections of AGLE 2403 during the fall 2019 semester (*N* = 122) through pre-test and post-test instrument administrations. Students were randomly assigned to one of two course sections prior to the start of the semester by the Office of the Registrar. After students were randomly assigned, one course section was identified as the control online reflective discussion with peers group (*n* = 61) and one course section was identified as the treatment individual reflection worksheets group (*n* = 61). Following the add/drop period for the university academic calendar, three students (one in the control group and two in the treatment group) dropped the course. Eight students did not complete the post-test instrument and were removed from the study (seven in the control group and one in the treatment group). The final population for this study consisted of 111 participants (*N* =

111) randomly assigned to either the control online reflective discussion with peers group ($n = 53$) or the treatment individual reflection worksheets group ($n = 58$).

Questions posed to the students for reflection, whether through online discussion or individual worksheets, were the same for consistency. Established rubrics and grading criteria were utilized by the course instructor and graders to ensure consistent feedback on reflective activities was provided to both student groups (Appendix I).

The EMC/RSEE and MPI-SF pre-test was administered as a Qualtrics instrument through the course LMS during the first week of class (week 1). During the last week of class, the EMC/RSEE post-test were administered as a Qualtrics instrument through the course LMS (week 8). Completion of the instruments during both data collection points were considered a part of normal classroom activities and worth a small portion (less than 5%) of the course participation grade. Students were informed of the research study at the end of the course and provided the opportunity to withdraw their implied consent to participate if desired (Appendix H).

Analysis

Data were analyzed using SPSS Version 23 software. It was determined *a priori* that participants with missing data for more than 10% of the items on the pre-test or post-test would be excluded from the analysis (Bennett, 2001). Although individual item responses were missing among 30 of the cases, no student had more than 10% of the total instrument data missing and the items with missing data were randomly scattered. After examination it was decided the missing data were important to the study and because no other information was available, inserting the mean value was determined to be the best estimate for missing values on the variables (Mertler & Vannatta, 2013). Means were

calculated using the available data for each variable with missing data. The missing data were then replaced with the mean value calculated for each variable.

Instrument Validation

Cronbach's (1971) Alpha was calculated to determine the internal consistency of the study's instrument constructs. Internal consistency results for the field test, pilot test, and experimental study administrations of the instruments are provided in Table 3.6. Although it is not suggested for the overall EMC/RSEE score to be reported to due to low internal consistency during instrument development (Mallinckrodt et al., 2014), this study uses the overall EMC/RSEE score for exploratory and theoretical purposes based on research questions recommended in the literature.

Preliminary analysis tested for differences in overall measurement and individual scores of the post-test EMC/RSEE between groups based on collected demographic data to determine whether potential confounding variables should be controlled (Table 3.6). Although this study was conducted as a *time and place sample* of students enrolled in the AGLE 2403 first eight-week course during fall 2019, inferential statistics were used to analyze data. When considering the appropriate statistical procedure to use when probability sampling is not involved, Oliver and Hinkle (1982) suggests researchers determine if the study participants are representative of all potential participants over time; this principle is often referred to as the *principle of time and place*. When characteristics of a population or participant pool do not differ significantly across multiple periods of time and place, then inferential statistics are permitted to generalize the results of the participant group to the target population (Oliver & Hinkle, 1982). Demographic data (i.e., student classification, race/ethnicity, gender, and age) of enrolled

students in AGLE 2403 from fall 2017 to fall 2019 is provided in Table 3.7 to support the use of inferential statistics based on the time and place principle (Oliver & Hinkle, 1982). Data were compared from this determined time frame, as fall 2017 was the last time the AGLE 2403 course was changed significantly and was first offered as meeting both the diversity and social sciences general education course requirements at Oklahoma State University.

Table 3.6*Summary of Internal Consistency Results for MPI-SF Subscales and EMC/RSEE**Constructs by Study Administration*

	No. items	Field Test ^a α	Pilot Test ^b α	Current Study ^c α
MPI-SF Subscales				
Racial and Ethnic Identity Development (RID)	6	.86	.71	.76
Social Justice and Activism (SJA)	6	.86	.86	.79
Psychological Health (PH)	6	.85	.88	.89
Connectedness and Spirituality (CS)	6	.83	.65	.77
Humor (HUM)	6	.79	.73	.78
Opposite Gender Connection (OGC)	6	.58	.53	.70
Culturally Diverse Friendships (CDF)	6	.72	.80	.74
Overall MPI-SF Score	42	.81	.81	.78
EMC/RSEE Constructs				
Cultural Openness and Desire to Learn (OCD)	10	.86	.82	.89
Resentment and Cultural Dominance (RCD)	10	.86	.73	.88
Anxiety and Lack of Multicultural Self-Efficacy (AMS)	7	.58	.51	.67
Empathic Perspective-Taking (EPT)	5	.64	.52	.71
Awareness of Contemporary Racism and Privilege (ARP)	8	.88	.78	.88
Empathic Feeling and Acting as an Ally (EFA)	8	.73	.70	.82
Overall EMC/RSEE Score	48	.48	.51	.63

^a*n* = 78. ^b*n* = 34. ^c*n* = 111.

Table 3.7*Demographic Characteristics of Enrolled Students in AGLE 2403 from Fall 2017 to Fall**2019*

	Fall 2017 ^a		Spring 2018 ^b		Fall 2018 ^c		Spring 2019 ^d		Fall 2019 ^e	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Student Classification										
Freshman	29	21.0	37	23.9	25	22.0	41	20.0	54	21.7
Sophomore	41	29.7	45	29.0	62	30.2	66	32.2	79	31.7
Junior	34	24.6	32	20.6	53	25.9	54	26.3	57	22.9
Senior	34	24.6	41	26.5	45	22.0	44	21.5	58	23.3
Graduate	0	0.0	0	0.0	0	0.0	0	0.0	1	0.4
Race/Ethnicity										
American Indian or Alaska Native	6	4.3	10	6.5	7	3.4	12	5.9	13	5.2
Asian	0	0.0	0	0.0	0	0.0	1	0.5	2	0.8
Black or African American	6	4.3	6	3.9	17	8.3	4	2.0	10	4.0
Hispanic	3	2.2	6	3.9	7	3.4	14	6.8	10	4.0
Multiracial	12	8.7	16	10.3	17	8.3	19	9.3	29	11.6
Native Hawaiian or other Pacific Islander	0	0.0	0	0.0	2	1.0	0	0.0	1	0.4
Nonresident White	4	2.9	0	0.0	1	0.5	4	2.0	2	0.8
Unknown	107	77.5	117	75.5	154	75.1	151	73.7	182	73.1
	-	-	-	-	-	-	-	-	-	-
Gender										
Male	71	51.4	80	51.6	116	56.6	82	40.0	107	43.0
Female	67	48.6	75	48.4	89	43.4	123	60.0	142	57.0
Age Group										
17 - 22	127	92.0	126	81.3	180	87.8	179	87.3	220	88.4
23 - 28	9	6.5	24	15.5	15	7.3	24	11.7	19	7.6
29 - 34	1	0.7	4	2.6	6	2.9	1	0.5	6	2.4
35 and older	1	0.7	1	0.6	4	2.0	1	0.5	4	1.6

^a*n* = 138. ^b*n* = 155. ^c*n* = 199. ^d*n* = 205. ^e*n* = 249.

A one-way analysis of variance was calculated for each of the demographic characteristics to determine if there were mean group differences between the semesters. Mean group differences in gender (see Table 3.8) existed between semesters ($F(4, 947) = 3.87, p = .004$). Tukey HSD post-hoc analysis showed statistically significant group mean differences in gender between the fall 2018 and spring 2019, and fall 2018 and fall 2019 semesters (Table 3.9). Although differences existed in gender between the semesters, the principle of time and place was still considered met for two reasons: (a) the change in enrollment of the course by gender paralleled enrollment changes for the university at-large (OSU IRIM, n.d.), and (b) gender is considered an important consideration in multicultural competence and personality research.

Table 3.8

Analysis of Variance for Mean Group Differences in Gender Between Semesters

Gender	SS	<i>df</i>	MS	<i>F</i>	Sig.
Between Groups	3.82	4	.96	3.87	.004
Within Groups	233.76	947	.25		
Total	229.09	951			

Table 3.9*Post-hoc Tukey HSD Multiple Comparisons Analysis to Determine Statistically**Significant Group Differences in Gender by Semester*

Term (I)	Term (J)	MD	SE	Sig.	95 % Confidence Interval	
					Lower	Upper
Fall 2017 ^a	Spring 2018	.002	.058	1.000	-.16	.16
	Fall 2018	.051	.055	.882	-.10	.20
	Spring 2019	-.114	.055	.224	-.26	.04
	Fall 2019	-.085	.053	.493	-.23	.06
Spring 2018 ^b	Fall 2017	-.002	.058	1.000	-.16	.16
	Fall 2018	.050	.053	.881	-.09	.19
	Spring 2019	-.116	.053	.182	-.26	.03
	Fall 2019	-.086	.051	.434	-.23	.05
Fall 2018 ^c	Fall 2017	-.051	.055	.882	-.20	.10
	Spring 2018	-.050	.053	.881	-.19	.09
	Spring 2019	-.166*	.049	.007	-.30	-.03
	Fall 2019	-.136*	.047	.031	-.26	-.01
Spring 2019 ^d	Fall 2017	.114	.055	.224	-.04	.26
	Spring 2018	.116	.053	.182	-.03	.26
	Fall 2018	.166*	.049	.007	.03	.30
	Fall 2019	.030	.047	.969	-.10	.16
Fall 2019 ^e	Fall 2017	.085	.053	.493	-.06	.23
	Spring 2018	.086	.051	.434	-.05	.23
	Fall 2018	.136*	.047	.031	.01	.26
	Spring 2019	-.030	.046	.969	-.16	.10

Note. The mean difference is significant at the .05 level.

^a*n* = 138. ^b*n* = 155. ^c*n* = 205. ^d*n* = 205. ^e*n* = 249.

Paired samples *t*-tests were calculated to analyze research questions 1 and 4. Repeated measures analysis of variance (RM-ANOVA) and repeated measures analysis of covariance (RM-ANCOVA), and one-way analysis of covariance (ANCOVA) were calculated to analyze research question 2. Research question 3 was analyzed using bivariate correlation and multiple linear regression. A significance level of .05 was determined *a priori*.

CHAPTER IV

FINDINGS

Purpose of the Study

The purpose of this study was to determine the effect of two different reflective strategies (online reflective discussion with peers as compared to individual reflection worksheets) on the development of multicultural competencies among undergraduate students completing an online multicultural course. The following research questions and null hypotheses guided the study:

RQ 1. Does completion of an online multicultural course, requiring either online reflective discussion with peers or individual reflection worksheets as the reflection strategy, have a significant effect on undergraduate students' development of multicultural competencies?

H₀1a: Completion of an online multicultural course does not result in a statistically significant ($p < .05$) effect on undergraduate students' development of multicultural competencies. ($H_0: \mu_1 \text{ everyday}$

multicultural competencies, pre-test = μ_2 everyday multicultural competencies, post-test)

H₀1b: Completion of an online multicultural course in which students participate in online reflective discussion with peers does not result in a statistically significant ($p < .05$) effect on undergraduate students' development of multicultural competencies.

H₀1c: Completion of an online multicultural course in which students complete individual reflection worksheets does not result in a statistically significant ($p < .05$) effect on undergraduate students' development of multicultural competencies.

RQ 2. Are changes in multicultural competencies significantly different for undergraduate students in an online multicultural course who complete online reflective discussions with peers as compared to those who complete individual reflection worksheets?

H₀2a: The changes in multicultural competencies for students completing online reflective discussions with peers or individual reflection worksheets are not statistically significant ($p < .05$) from the beginning of the course to the end of the course for undergraduate students in an online multicultural course. (H₀: μ_1 change in everyday multicultural competencies, discussion = μ_2 change in everyday multicultural competencies, worksheet)

H₀2b: The changes in multicultural competencies for students completing online reflective discussions with peers or individual reflection

worksheets are not statistically significant ($p < .05$) from the beginning of the course to the end of the course for undergraduate students in an online multicultural course when controlling for multicultural personality scores. ($H_0: \mu_1$ change in everyday multicultural competencies, discussion = μ_2 change in everyday multicultural competencies, worksheet)

H₀2c: Differences in post-test multicultural competencies are not statistically significant between students completing online reflective discussions with peers and individual reflection worksheets when controlling for multicultural personality score and pre-test multicultural competencies. ($H_0: \mu_1$ post-test everyday multicultural competencies, discussion = μ_2 post-test everyday multicultural competencies, worksheet)

RQ 3. Do demographic differences of undergraduate students, such as multicultural personality score, age, ethnicity, gender and religion (while considering pre-test multicultural competencies) predict the development of multicultural competencies in an online multicultural course?

H₀3: Demographic differences of undergraduate students in an online multicultural course do not predict the development of multicultural competencies at a statistically significant ($p < .05$) level.

RQ 4. Does completion of an online multicultural course have a significant effect on undergraduate students' development in each of the six constructs of

the EMC/RSEE instrument, and are those changes significant when considering the students' study treatment group or gender?

H₀4a: Completion of an online multicultural course does not result in a statistically significant ($p < .05$) effect on undergraduate students' development in each of the six constructs of the EMC/RSEE instrument (H₀: μ_1 EMC/RSEE six constructs, pre-test = μ_2 eEMC/RSEE six constructs, post-test)

H₀4b: When considering the study treatment groups separately (control group: online reflective discussion with peers; treatment group: individual reflection worksheets), there is no statistically significant ($p < .05$) difference in students' development in each of the six constructs of the EMC/RSEE instrument in an online multicultural course. (H₀: μ_1 EMC/RSEE six constructs, pre-test = μ_2 EMC/RSEE six constructs, post-test)

H₀4c: When considering the gender of students separately (male and female), there is no statistically significant ($p < .05$) difference in students' development in each of the six constructs of the EMC/RSEE instrument in an online multicultural course. (H₀: μ_1 EMC/RSEE six constructs, pre-test = μ_2 EMC/RSEE six constructs, post-test)

Research Question 1

Research question 1 sought to determine if the completion of the online multicultural course, requiring either online reflective discussion with peers or individual

reflection worksheets as the reflection strategy, had a significant effect on undergraduate students' development of multicultural competencies. The null hypotheses were:

H₀1a: Completion of an online multicultural course does not result in a statistically significant ($p < .05$) effect on undergraduate students' development of multicultural competencies. ($H_0: \mu_1$ everyday multicultural competencies, pre-test = μ_2 everyday multicultural competencies, post-test)

H₀1b: Completion of an online multicultural course in which students participate in online reflective discussion with peers does not result in a statistically significant ($p < .05$) effect on undergraduate students' development of multicultural competencies.

H₀1c: Completion of an online multicultural course in which students complete individual reflection worksheets does not result in a statistically significant ($p < .05$) effect on undergraduate students' development of multicultural competencies.

A paired-samples t test was conducted to determine if a statistically significant ($p < .05$) difference existed between students' pre- and post-test multicultural competencies after completion of an online multicultural course. The *mean difference* in multicultural competencies was .144 with a 95% confidence interval ranging from .097 to .191. The t -test results showed a statistically significant difference in students' multicultural competencies from the pre-test ($M = 3.62$; $SD = .311$) to post-test ($M = 3.77$; $SD = .264$), $t(110) = 6.08$, $p < .01$ (two-tailed). The *eta squared* statistic (.58) indicated a medium effect size (Cohen, 1988) (see Table 4.1). The H₀1a null hypothesis was rejected.

Completion of an online multicultural course did significantly affect undergraduate students' development of multicultural competencies.

Table 4.1

Paired Samples t-Test and Descriptive Statistics for Multicultural Competencies

Development

Pair 1	Pre-test		Post-test		<i>n</i>	95% CI for Mean Difference	<i>r</i>	<i>t</i>	df
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>					
	3.62	.311	3.77	.264	111	.097, .191	.635**	6.08**	110

** $p < .01$.

Paired-samples *t* tests were conducted to determine if a statistically significant ($p < .05$) difference in the development of multicultural competencies existed for students who participated in online reflective discussions with peers and students who completed individual reflection worksheets after completion of an online multicultural course.

The *mean difference* in multicultural competencies for students who participated in online reflective discussion with peers was .136 with a 95% confidence interval ranging from .075 to .197. The *t*-test results showed a statistically significant difference in students' multicultural competencies from the pre-test ($M = 3.64$; $SD = .313$) to post-test ($M = 3.78$; $SD = .279$), $t(52) = 4.45$, $p < .01$ (two-tailed). The *eta squared* statistic (.61) indicated a medium effect size (Cohen, 1988) (see Table X). The H_{01b} null hypothesis was rejected. Completion of an online multicultural course did significantly affect the development of multicultural competencies for students participating in online reflective discussion with peers. .

The mean difference in multicultural competencies for students who completed individual reflection worksheets was .151 with a 95% confidence interval ranging from

.079 to .223. The *t*-test results showed a statistically significant difference in students' multicultural competencies from the pre-test ($M = 3.60$; $SD = .309$) to post-test ($M = 3.75$; $SD = .251$), $t(57) = 4.20$, $p < .01$ (two-tailed). The *eta* squared statistic (.55) indicated a medium effect size (Cohen, 1988) (see Table 4.2). The H_0 null hypothesis was rejected. Completion of an online multicultural course did significantly affect the development of multicultural competencies for students completing individual reflection worksheets.

Table 4.2

Paired Samples t-Test and Descriptive Statistics for Multicultural Competencies Development for Students in the Online Reflective Discussion Group (Control) and the Individual Reflection Worksheet Group (Treatment)

Outcome	Pre-test		Post-test		<i>n</i>	95% CI for Mean Difference	<i>r</i>	<i>t</i>	df
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>					
Discussion (Control)	3.65	.313	3.78	.279	53	.074, .0197	.725**	4.45**	52
Worksheet (Treatment)	3.60	.309	3.75	.251	58	.019, .223	.540**	4.20**	57

** $p < .01$.

Research Question 2

Research question 2 sought to determine if differences in changes of multicultural competencies between undergraduate students in an online reflective discussion with peers as compared to those who complete individual reflection worksheets were statistically significant. The null hypotheses were:

H₀2a: The changes in multicultural competencies for students completing online reflective discussions with peers or individual reflection worksheets are not statistically significant ($p < .05$) from the beginning of the course to the end of the course for undergraduate students in an online multicultural course. (H₀: μ_1 change in everyday multicultural competencies, discussion = μ_2 change in everyday multicultural competencies, worksheet)

H₀2b: The changes in multicultural competencies for students completing online reflective discussions with peers or individual reflection worksheets are not statistically significant ($p < .05$) from the beginning of the course to the end of the course for undergraduate students in an online multicultural course when controlling for multicultural personality scores. (H₀: μ_1 change in everyday multicultural competencies, discussion = μ_2 change in everyday multicultural competencies, worksheet)

H₀2c: Differences in post-test multicultural competencies are not statistically significant between students completing online reflective discussions with peers and individual reflection worksheets when controlling for multicultural personality score and pre-test multicultural competencies. (H₀: μ_1 post-test everyday multicultural competencies, discussion = μ_2 post-test everyday multicultural competencies, worksheet)

A repeated measures analysis of variance (RM-ANOVA) was conducted to determine if a statistically significant ($p < .05$) difference in the development of multicultural competencies existed between students who participated in online reflective discussions with peers as compared to students who completed individual reflection worksheets in an online multicultural course. The assumptions of independent and identically distributed variables, normality, and sphericity (Mauchley's $W = 1.0$) were met. The assumption of equal variances was also met for both the pre-test multicultural competencies scores ($F(1, 109) = .043, p = .836$) and the post-test multicultural competencies scores ($F(1, 109) = 1.517, p = .221$). Findings from the RM-ANOVA are presented in Table 4.3. There were no statistically significant differences between changes in multicultural competencies for the two treatments, $F(1, 109) = .765, p = .384$, partial eta squared = .007. As such, the H_{02a} null hypothesis was retained, which determined there was no statistically significant difference between changes in multicultural competencies for students in an online multicultural course completing online reflective discussion peers as compared to students completing individual reflection worksheets.

Table 4.3

Repeated Measures Analysis of Variance Comparing the Change in the Development of Multicultural Competencies for Students in the Online Reflective Discussion Group (Control) as Compared to the Individual Reflection Worksheet Group (Treatment)

Source of Variance	<i>SS</i>	<i>MS</i>	<i>df</i>	<i>F</i>	<i>p</i>	Partial Eta Squared	Observed Power
Repeated Measure Effects							
PrePost	1.139	1.139	1	36.365	.000	.250	1.000
PrePost* Group	.003	.003	1	.101	.751	.001	.061
Error	3.415	.031	109				
Between Subjects Effects							
Intercept	3025.152	3025.251	1	22306.103	.000	.995	1.000
Group	.104	.104	1	.765	.384	.007	.140
Error	14.783	.136	109				

Descriptive analysis of the study variables, as reported in Chapter III, indicated statistically significant relationships between pre-test multicultural competencies, post-test multicultural competencies, and multicultural personality scores (see Table 4.4). As a result of the lack of statistically significant difference between the control and treatment groups' development of multicultural competencies, attention turned to analysis of the difference when controlling for multicultural personality scores as suggested by theory cited in Chapter II (Mallinckrodt et al., 2014; Ponterotto, 2010).

Table 4.4

Correlations between Pre-test Multicultural Competencies, Post-test Multicultural Competencies, and Multicultural Personality Scores (N = 111)

	1	2	3	<i>M</i>	<i>SD</i>
1. Pre-EMC Score	-			3.62	.311
2. Post-EMC Score	.635**	-		3.77	.264
3. MPI Score	.410**	.368**	-	3.47	.305

Note. **Significant at the 0.01 level (2-tailed).

A repeated measures analysis of covariance (RM-ANCOVA) was conducted to determine if a statistically significant ($p < .05$) difference in the development of multicultural competencies existed between students who participated in online reflective discussions with peers as compared to students who completed individual reflection worksheets in an online multicultural course when controlling for multicultural personality scores. The assumptions of independent and identically distributed variables, normality, and sphericity (Mauchley's $W = 1.0$) were met. The assumption of equal variances was also met for both the pre-test multicultural competencies scores ($F(1, 109) = .307, p = .580$) and the post-test multicultural competencies scores ($F(1, 109) = .711, p = .401$). Findings from the RM-ANCOVA are presented in Table 4.5. There were no statistically significant differences between changes in multicultural competencies for the two treatments, $F(1, 109) = .1589, p = .210$, partial eta squared = .014. As such, the H_0 null hypothesis was retained, which determined there was no statistically significant difference between changes in multicultural competencies for students in an online multicultural course completing online reflective discussion peers as compared to

students completing individual reflection worksheets when controlling for multicultural personality scores.

Table 4.5

Repeated Measures Analysis of Covariance of the Change in Multicultural Competencies for Students in the Online Reflective Discussion Group (Control) as Compared to the Individual Reflection Worksheet Group (Treatment) while Controlling for Multicultural Personality Scores

Source of Variance	<i>SS</i>	<i>MS</i>	<i>df</i>	<i>F</i>	<i>p</i>	Partial Eta Squared	Observed Power
Repeated Measure Effects							
PrePost	.099	.099	1	3.175	.078	.029	.423
PrePost*Group	.049	.002	1	.065	.799	.001	.057
PrePost*MPI Score	.002	.049	1	1.589	.210	.014	.239
Error	3.365	.031	108				
Between Subjects Effects							
Intercept	9.874	9.874	1	88.455	.000	.450	1.000
MPI Score	2.727	2.272	1	24.434	.000	.184	.998
Group	.057	.057	1	.511	.476	.005	.109
Error	12.055	.112	108				

Attention then turned to determining whether differences in post-test multicultural competencies were statistically significant between students completing online reflective discussions with peers and individual reflection worksheets when controlling for multicultural personality score and pre-test multicultural competencies. A one-way

ANCOVA was conducted to determine if a statistically significant difference existed between students completing online reflective discussions with peers and individual reflection worksheets on the post-test multicultural competency score controlling for multicultural personality score and pre-test multicultural competency score. Levene's test confirmed equal variance of the dependent variable across groups ($F(1, 109) = .000, p = .994$). There was not a statistically significant difference in post-test multicultural competency scores ($F(1, 107) = .034, p = .853$) between groups when controlling for multicultural personality scores and pre-test multicultural competencies (see Table 4.6). The H_{0c} null hypothesis was retained, which determined there was no statistically significant difference between post-test multicultural competencies for students in an online multicultural course completing online reflective discussion peers as compared to students completing individual reflection worksheets when controlling for multicultural personality scores and pre-test multicultural competencies.

Table 4.6

One-way Analysis of Covariance of Post-test Multicultural Competencies between Students in the Online Reflective Discussion Group (Control) as Compared to the Individual Reflection Worksheet Group (Treatment) while Controlling for Multicultural Personality Score and Pre-test Multicultural Competencies

Effect	SS	MS	df	F	p	Partial Eta Squared	Observed Power
MPI Score	.106	.106	1	2.538	.114	.023	.352
Pre-test EMC/RSEE	2.144	2.144	1	51.313	.000	.324	1.000
Group	.001	.001	1	.034	.853	.000	.054
Error	4.471	.042	107				

Research Question 3

Research question 3 sought to determine if demographic differences of undergraduate students, such as multicultural personality score, age, ethnicity, gender and religion (while considering pre-test multicultural competencies scores) predicted the development of multicultural competencies in an online multicultural course. The null hypothesis was:

H₀3: Demographic differences and pre-test multicultural competencies scores of undergraduate students in an online multicultural course do not predict the development of multicultural competencies at a statistically significant ($p < .05$) level.

Before conducting the regression analysis, correlations between the potential predictor variables (student demographic characteristics) and post-test multicultural competencies were evaluated. Correlations of the variables, previously reported in Chapter 3, indicated statistically significant relationships between pre-test multicultural competencies (Pre-EMC Scores), post-test multicultural competencies (Post-EMC Scores), and multicultural personality scores (MPI Scores) (see Table 3.3). Ethnicity, gender, age, and religion did not have statistically significant correlations with post-test multicultural competencies (Table 4.7). Therefore, these variables were not included as predictors in the regression analysis.

Table 4.7

Correlations between Potential Predictor Variables and Post-test Multicultural Competencies as Criterion Variable (N = 111)

	1	2	3	4	5	<i>M</i>	<i>SD</i>
1. Ethnicity	-					-	-
2. Gender	-.102	-				-	-
3. Age	.159	-.124	-			20.48	3.618
4. Religion*	-.115	.086	-.165	-		-	-
5. Post-EMC	.065	.147	.115	.122	-	3.77	.264

Note. N = 110.

Ordinary least squares multiple regression analysis was conducted to determine if students' pre-test multicultural competencies and multicultural personality scores (predictor variables) predicted their post-test multicultural competencies (criterion) at a statistically significant level. Data were tested for, and met, the assumptions underlying the use of regression. Independent variables were fixed, as determined by the research design which ensured data were collected the same across time. The reliability coefficients of the EMC/RSEE and MPI-SF instruments ensured the variables were measured without error. The criterion and predictor variables had a linear relationship as evident in the correlation matrix (Table 4.8) and scatterplot graph (Figure 4.1). Multicollinearity between predictors was also assumed to be small, as the relationships among predictors were above .60. The residuals were independent, (Figure 4.2), had constant variance and met the assumption of homoscedasticity of the residuals, and were normally distributed (Figure 4.3).

Results of multiple regression suggest pre-test multicultural competencies and multicultural personality scores are statistically significant predictors of post-test multicultural competencies, therefore rejecting the H_03 null hypothesis. About 41.7% of the variability in post-test multicultural competencies was accounted for by the predictors, a statistically significant amount ($F(2, 108) = 38.626, p = .000$). The standardized estimated regression model produced, Predicted Post-EMC Score = $.589(\text{Pre-EMC Score}) + .129(\text{MPI Score})$, has predictive power in determining post-test multicultural competencies for undergraduate students completing an online multicultural course based on the predictor variables studied. The adjusted R^2 value, .406, when compared to the initial R^2 value of .417, demonstrates stability in the regression coefficients. Although the prediction equation is statistically significant overall, when evaluating the relative importance of the predictor variables individually, the only predictor to achieve statistical significance was pre-test multicultural competencies (Pre-EMC Scores), $t(1) = 7.225, p = .000$ [multicultural personality scores (MPI Scores), $t(110) = 1.604, p = .112$].

Figure 4.1

Scatterplot Graph to Display the Linear Relationship Between the Predictor and Criterion Variables

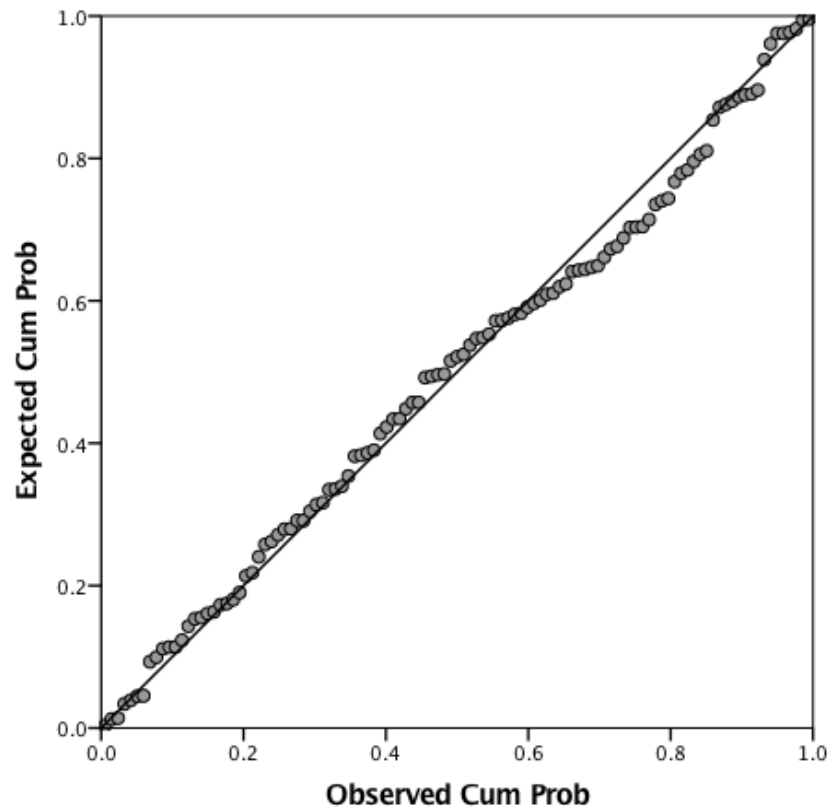


Figure 4.2.

Residual Scatterplot Graph to Confirm Assumption of Constant Variance Among and Independence Between Residuals

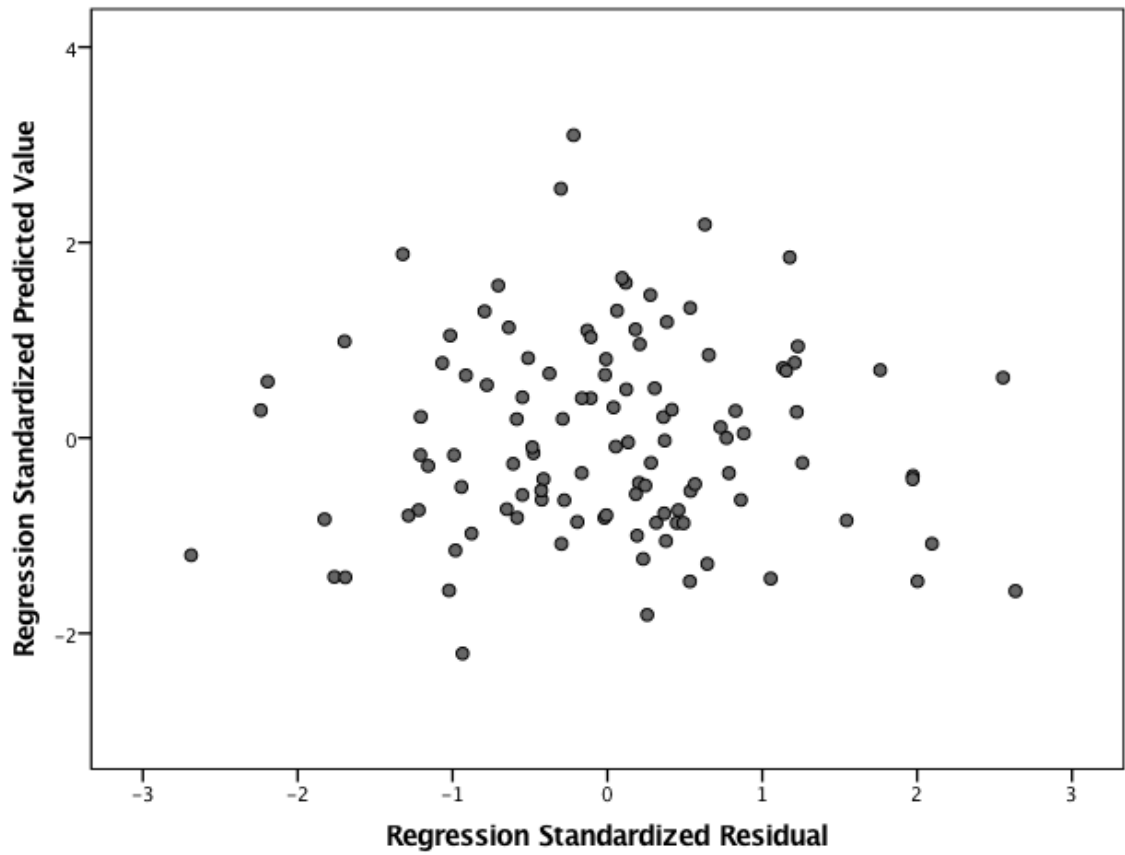


Figure 4.3

Histogram Confirming the Normal Distribution of Residuals

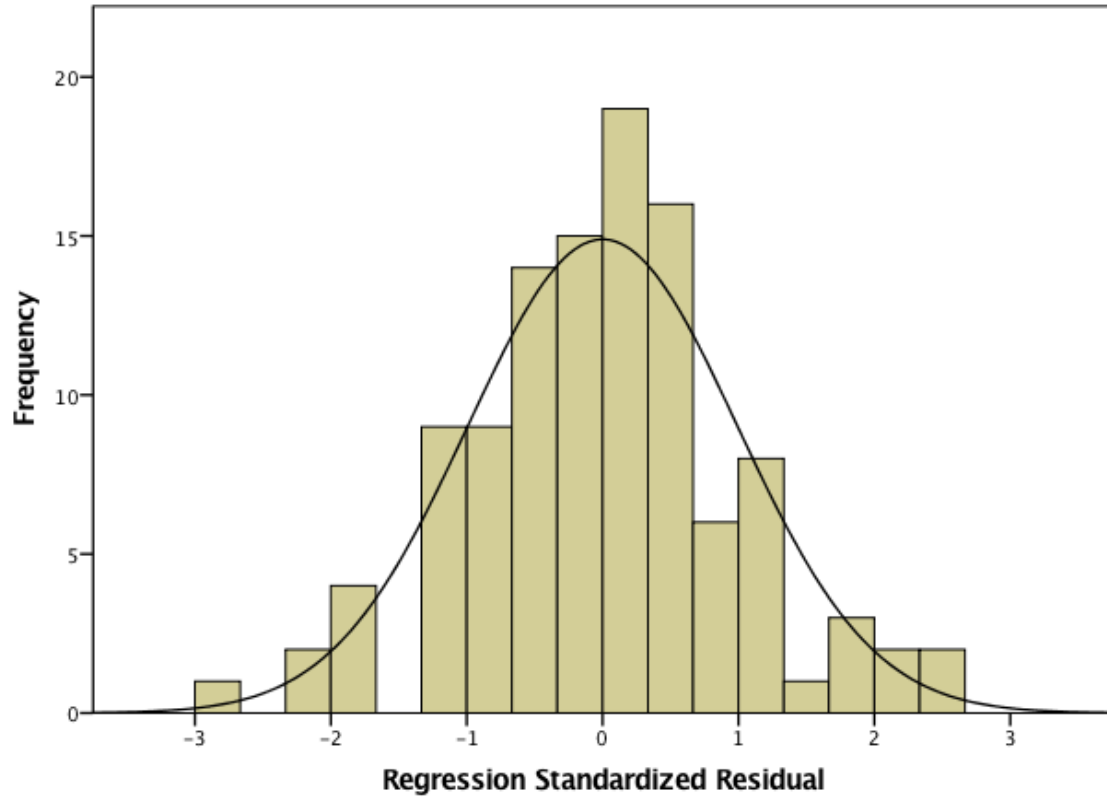


Table 4.8

Regression Results using Post-test Multicultural Competencies as the Criterion and Pre-test Multicultural Competencies and Multicultural Personality Scores as Predictors

Predictors	<i>B</i>	Standard Error	<i>Beta</i>	<i>t</i>	<i>p</i>
Constant	1.587	.267	.129	5.946	.000
Pre-EMC	.494	.068	.582	7.225	.000
MPI Score	.112	.070	.129	1.604	.112

Note. Post-test multicultural competencies (Post-EMC Scores) as criterion variable.

Research Question 4

Research question 4 sought to determine if completion of an online multicultural course had a significant effect on undergraduate students' development in each of the six constructs of the EMC/RSEE instrument, and if those changes were significant when considering the students' study treatment group or gender. The null hypotheses were:

H₀4a: Completion of an online multicultural course does not result in a statistically significant ($p < .05$) effect on undergraduate students' development in each of the six constructs of the EMC/RSEE instrument (H₀: μ_1 EMC/RSEE six constructs, pre-test = μ_2 EMC/RSEE six constructs, post-test)

H₀4b: When considering the study treatment groups separately (control group: online reflective discussion with peers; treatment group: individual reflection worksheets), there is no statistically significant ($p < .05$) difference in students' development in each of the six constructs of the EMC/RSEE instrument in an online multicultural course. (H₀: μ_1 EMC/RSEE six constructs, pre-test = μ_2 EMC/RSEE six constructs, post-test)

H₀4c: When considering the gender of students separately (male and female), there is no statistically significant ($p < .05$) difference in students' development in each of the six constructs of the EMC/RSEE instrument in an online multicultural course. (H₀: μ_1 EMC/RSEE six constructs, pre-test = μ_2 EMC/RSEE six constructs, post-test)

Paired-samples *t* tests were first conducted to determine if completion of an online multicultural course significantly affected undergraduate students' development in each of the six constructs of the EMC/RSEE instrument. Descriptive statistics for the pre-test and post-test multicultural competencies are provided in Table 4.9. Outcomes of the paired-samples *t*-tests are provided in Table 4.10. The H₀4a null hypothesis failed to be rejected for the EMC/RSEE construct of Anxiety and Lack of Multicultural Self-Efficacy (AMS), $t(110) = .036, p > .05$. The H₀4a null hypothesis was rejected for the remaining five constructs of the EMC/RSEE instrument (Table 4.10). Completion of an online multicultural course does not result in a statistically significant ($p < .05$) effect on undergraduate students' development in the AMS construct of the EMC/RSEE instrument. However, completion of an online multicultural course did result in a statistically significant ($p < .05$) effect on undergraduate students' development the remaining five EMC/RSEE instrument constructs: Cultural Openness and Desire to Learn (COD), Resentment and Cultural Dominance (RCD), Empathic Perspective-Taking (EPT), Awareness of Contemporary Racism and Privilege (ARP), and Empathic Feeling and Acting as an Ally (EFA).

Table 4.9

Descriptive Statistics for Multicultural Competencies Development in Each of the Six Constructs of the Everyday Multicultural Competencies/Revised Scale of Ethnocultural Empathy Instrument

	Pre-test		Post-test		<i>n</i>	Mean Difference	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			<i>SD</i>
Constructs							
COD	4.67	.720	4.85	.682	111	.174	.489
RCD	3.15	.847	2.90	.857	111	-.257	.538
AMS	2.23	.681	3.15	.683	111	.002	.601
EPT	3.41	.900	3.79	.807	111	.380	.767
ARP	3.94	.949	4.31	.820	111	.364	.619
EFA	4.33	.754	4.53	.686	111	.199	.551

Note. COD = Cultural Openness and Desire to Learn construct of the Everyday

Multicultural Competencies/Revised Scale of Ethnocultural Empathy (EMC/RSEE)

instrument; RCD = EMC/RSEE Resentment and Cultural Dominance construct; AMS =

EMC/RSEE Anxiety and Lack of Multicultural Self-Efficacy construct; EPT =

EMC/RSEE Empathic Perspective-Taking construct; ARP = EMC/RSEE Awareness of

Contemporary Racism and Privilege construct; EFA = EMC/RSEE Empathic Feeling and

Acting as an Ally construct.

Table 4.10

Paired Samples t-Test and Descriptive Statistics for Development in Each of the Six Constructs of the Everyday Multicultural Competencies/Revised Scale of Ethnocultural Empathy Instrument

	<i>Mean Difference</i>	<i>SD</i>	<i>df</i>	95% CI for Mean Difference	<i>r</i>	<i>t</i>	Eta Squared
Control Group: Discussion							
COD	.174	.489	110	.083, .266	.758	3.76**	.356
RCD	-.257	.538	110	-.359, -.156	.800	-5.03**	.478
AMS	.002	.601	110	-.111, .115	.613	.04	.003
EPT	.380	.767	110	.236, .525	.600	5.22**	.495
ARP	.364	.619	110	.248, .481	.764	6.20**	.588
EFA	.199	.551	110	.095, .302	.710	3.80**	.361

Note. COD = Cultural Openness and Desire to Learn construct of the Everyday

Multicultural Competencies/Revised Scale of Ethnocultural Empathy (EMC/RSEE)

instrument; RCD = EMC/RSEE Resentment and Cultural Dominance construct; AMS =

EMC/RSEE Anxiety and Lack of Multicultural Self-Efficacy construct; EPT =

EMC/RSEE Empathic Perspective-Taking construct; ARP = EMC/RSEE Awareness of

Contemporary Racism and Privilege construct; EFA = EMC/RSEE Empathic Feeling and

Acting as an Ally construct.

** $p < .01$.

Next, paired-samples *t* tests were conducted to determine if completion of an online multicultural course significantly affected undergraduate students' development in each of the six constructs of the EMC/RSEE instrument for both study treatment groups (control: online reflective discussion with peers; treatment: individual reflection

worksheets). Descriptive statistics for the pre-test and post-test multicultural competencies by treatment group are provided in Table 4.11. Outcomes of the paired-samples *t*-tests are provided in Table 4.12.

When considering the students in the control group (online reflective discussions with peers), the H₀4b null hypothesis failed to be rejected for the AMS EMC/RSEE construct, $t(52) = -.597, p > .05$. The H₀4b null hypothesis was rejected for the remaining five constructs of the EMC/RSEE instrument (Table 4.12). For students in the treatment group (individual reflection worksheets), the H₀4b null hypothesis also failed to be rejected for the EMC/RSEE construct AMS $t(57) = .683, p > .05$. The H₀4b null hypothesis was rejected for the remaining five constructs of the EMC/RSEE instrument as well. Completion of an online multicultural course does not result in a statistically significant ($p < .05$) effect on undergraduate students' development in the AMS construct of the EMC/RSEE instrument for either reflective strategy group. However, completion of an online multicultural course among both reflective strategy groups did result in a statistically significant ($p < .05$) effect on undergraduate students' development in the remaining five EMC/RSEE instrument constructs: Cultural Openness and Desire to Learn (COD), Resentment and Cultural Dominance (RCD), Empathic Perspective-Taking (EPT), Awareness of Contemporary Racism and Privilege (ARP), and Empathic Feeling and Acting as an Ally (EFA).

Table 4.11

Descriptive Statistics for Multicultural Competencies Development in Each of the Six Constructs of the Everyday Multicultural Competencies/Revised Scale of Ethnocultural Empathy Instrument by Group (Control: Online Reflective Discussion with Peers; Treatment: Individual Reflection Worksheets)

	Pre-test		Post-test		<i>n</i>	<i>Mean Difference</i>	<i>SD</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Control Group: Discussion							
COD	4.66	.730	4.88	.745	53	.138	.461
RCD	3.14	.822	2.88	.894	53	-.292	.512
AMS	2.29	.730	2.23	.731	53	-.052	.631
EPT	3.46	.903	3.81	.876	53	.353	.781
ARP	4.00	.938	4.43	.737	53	.426	.484
EFA	4.35	.777	4.56	.799	53	.211	.498
Treatment Group: Worksheet							
COD	4.68	.716	4.89	.622	58	.207	.515
RCD	3.17	.876	2.91	.829	58	-.253	.566
AMS	2.18	.636	2.23	.643	58	.051	.572
EPT	3.36	.901	3.76	.746	58	.405	.760
ARP	3.89	.964	4.20	.881	58	.308	.721
EFA	4.31	.738	4.50	.568	58	.187	.600

Note. COD = Cultural Openness and Desire to Learn construct of the Everyday Multicultural Competencies/Revised Scale of Ethnocultural Empathy (EMC/RSEE) instrument; RCD = EMC/RSEE Resentment and Cultural Dominance construct; AMS = EMC/RSEE Anxiety and Lack of Multicultural Self-Efficacy construct; EPT = EMC/RSEE Empathic Perspective-Taking construct; ARP = EMC/RSEE Awareness of

Contemporary Racism and Privilege construct; EFA = EMC/RSEE Empathic Feeling and Acting as an Ally construct.

Table 4.12

Paired Samples t-Test for Multicultural Competencies Development in Each of the Six Constructs of the Everyday Multicultural Competencies/Revised Scale of Ethnocultural Empathy Instrument by Group (Control: Online Reflective Discussion with Peers; Treatment: Individual Reflection Worksheets)

	<i>Mean Difference</i>	<i>SD</i>	<i>df</i>	95% CI for Mean Difference	<i>r</i>	<i>t</i>	Eta Squared
Control Group: Discussion							
COD	.138	.461	52	.011, .265	.805	2.184*	.299
RCD	-.292	.512	52	-.403, -.121	.825	-3.728**	.512
AMS	-.052	.631	52	-.226, .122	.626	-.597	.082
EPT	.353	.781	52	.138, .568	.615	3.289**	.452
ARP	.426	.484	52	.293, .560	.860	6.413**	.880
EFA	.211	.498	52	.074, .349	.801	3.087**	.424
Treatment Group: Worksheet							
COD	.207	.515	57	.072, .343	.712	3.066**	.402
RCD	-.253	.566	57	-.402, -.104	.780	-3.403**	.447
AMS	.051	.572	57	-.099, .202	.600	.683	.089
EPT	.405	.760	57	.206, .605	.588	4.063**	.533
ARP	.308	.721	57	.118, .497	.698	3.251**	.427
EFA	.187	.600	57	.029, .345	.605	2.377*	.312

Note. COD = Cultural Openness and Desire to Learn construct of the Everyday

Multicultural Competencies/Revised Scale of Ethnocultural Empathy (EMC/RSEE)

instrument; RCD = EMC/RSEE Resentment and Cultural Dominance construct; AMS = EMC/RSEE Anxiety and Lack of Multicultural Self-Efficacy construct; EPT = EMC/RSEE Empathic Perspective-Taking construct; ARP = EMC/RSEE Awareness of Contemporary Racism and Privilege construct; EFA = EMC/RSEE Empathic Feeling and Acting as an Ally construct.

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

Finally, paired-samples t tests were conducted to determine if completion of an online multicultural course significantly affected undergraduate students' development in each of the six constructs of the EMC/RSEE instrument across genders (male and female). Descriptive statistics for the pre-test and post-test multicultural competencies by gender are provided in Table 4.13. Outcomes of the paired-samples t -tests are provided in Table 4.14.

When considering the male students, the H_04c null hypothesis failed to be rejected for three EMC/RSEE constructs: Resentment and Cultural Dominance (RCD) ($t(48) = -1.577, p > .05$), Anxiety and Lack of Multicultural Self-Efficacy (AMS) ($t(48) = .722, p > .05$), and Empathic Feeling and Acting as an Ally (EFA) ($t(48) = 1.133, p > .05$). The H_04c null hypothesis was rejected for the remaining three constructs of the EMC/RSEE instrument (Table 4.14). Completion of an online multicultural course does not result in a statistically significant ($p < .05$) effect on male undergraduate students' development in the RCD, AMS, and EFA constructs of the EMC/RSEE instrument. However, completion of an online multicultural course did result in a statistically significant ($p < .05$) effect on male undergraduate students' development the remaining three EMC/RSEE instrument

constructs: Cultural Openness and Desire to Learn (COD), Empathic Perspective-Taking (EPT), and Awareness of Contemporary Racism and Privilege (ARP).

Evaluation of female student scores results in the H_{04c} null hypothesis retained for the EMC/RSEE construct of Anxiety and Lack of Multicultural Self-Efficacy (AMS) ($t(61) = -.926, p > .05$). The H_{04c} null hypothesis was rejected for the remaining five constructs of the EMC/RSEE instrument (Table 4.14). Completion of an online multicultural course does not result in a statistically significant ($p < .05$) effect on female undergraduate students' development in the AMS construct of the EMC/RSEE instrument. However, completion of an online multicultural course did result in a statistically significant ($p < .05$) effect on female undergraduate students' development the remaining five EMC/RSEE instrument constructs: Cultural Openness and Desire to Learn (COD), Resentment and Cultural Dominance (RCD), Empathic Perspective-Taking (EPT), Awareness of Contemporary Racism and Privilege (ARP), and Empathic Feeling and Acting as an Ally (EFA).

Table 4.13

Descriptive Statistics for Multicultural Competencies Development in Each of the Six Constructs of the Everyday Multicultural Competencies/Revised Scale of Ethnocultural Empathy Instrument by Gender

	Pre-test		Post-test		<i>n</i>	<i>Mean Difference</i>	<i>SD</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Male							
COD	4.47	.727	4.65	.740	49	.176*	.582
RCD	3.24	.893	3.10	.930	49	-.138	.598
AMS	2.26	.680	2.33	.768	49	.075	.729
EPT	3.48	.919	3.73	.756	49	.248*	.708
ARP	3.83	1.045	4.18	.951	49	.356**	.631
EFA	4.24	.709	4.33	.688	49	.096	.596
Female							
COD	4.83	.678	5.00	.592	62	.173**	.405
RCD	3.09	.810	2.73	.762	62	-.354**	.469
AMS	2.21	.687	2.15	.602	62	-.056	.474
EPT	3.35	.886	3.83	.848	62	.487**	.801
ARP	4.03	.864	4.41	.692	62	.371**	.615
EFA	4.40	.786	4.68	.651	62	.280**	.504

Note. COD = Cultural Openness and Desire to Learn construct of the Everyday Multicultural Competencies/Revised Scale of Ethnocultural Empathy (EMC/RSEE) instrument; RCD = EMC/RSEE Resentment and Cultural Dominance construct; AMS = EMC/RSEE Anxiety and Lack of Multicultural Self-Efficacy construct; EPT = EMC/RSEE Empathic Perspective-Taking construct; ARP = EMC/RSEE Awareness of

Contemporary Racism and Privilege construct; EFA = EMC/RSEE Empathic Feeling and Acting as an Ally construct.

Table 4.14

Paired Samples t-Test for Multicultural Competencies Development in Each of the Six Constructs of the Everyday Multicultural Competencies/Revised Scale of Ethnocultural Empathy Instrument by Gender

	<i>Mean Difference</i>	<i>SD</i>	<i>df</i>	95% CI for Mean Difference	<i>r</i>	<i>t</i>	Eta Squared
Male							
COD	.176	.582	48	.008, .343	.685	2.112*	.302
RCD	-.138	.598	48	-.306, .037	.785	-1.577	.226
AMS	.075	.729	48	-.134, .285	.498	.722	.103
EPT	.248	.708	48	.045, .452	.659	2.457*	.350
ARP	.356	.631	48	-.075, .268	.804	3.954**	.564
EFA	.096	.596	48	-.075, .268	.636	1.133	.161
Female							
COD	.173	.405	61	.070, .276	.805	3.368**	.427
RCD	-.354	.469	61	-.473, -.235	.824	-5.948**	.747
AMS	-.056	.474	61	-.176, .065	.738	-.926	.118
EPT	.487	.801	61	.281, .688	.574	4.763**	.605
ARP	.371	.615	61	.214, .527	.708	4.746**	.602
EFA	.280	.504	61	.152, .408	.770	4.369**	.556

Note. COD = Cultural Openness and Desire to Learn construct of the Everyday

Multicultural Competencies/Revised Scale of Ethnocultural Empathy (EMC/RSEE)

instrument; RCD = EMC/RSEE Resentment and Cultural Dominance construct; AMS =

EMC/RSEE Anxiety and Lack of Multicultural Self-Efficacy construct; EPT = EMC/RSEE Empathic Perspective-Taking construct; ARP = EMC/RSEE Awareness of Contemporary Racism and Privilege construct; EFA = EMC/RSEE Empathic Feeling and Acting as an Ally constructs.

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

Summary of Findings

Table 4.15 presents a concise summary of the findings for each research question and subsequent null hypotheses.

Table 4.15

Summary of the Findings for Research Questions by Null Hypotheses

Research Question 1:		
<i>Does completion of an online multicultural course, requiring either online reflective discussion with peers or individual reflection worksheets as the reflection strategy, have a significant effect on undergraduate students' development of multicultural competencies?</i>		
H₀1a:	Completion of an online multicultural course does not result in an effect on undergraduate students' development of multicultural competencies.	Rejected
H₀1b:	Completion of an online multicultural course in which students participate in online reflective discussion with peers does not result in an effect on undergraduate students' development of multicultural competencies.	Rejected
H₀1c:	Completion of an online multicultural course in which students participate in individual reflection worksheets does not result in an effect on undergraduate students' development of multicultural competencies.	Rejected

Research Questions 2:		
<i>Are changes in multicultural competencies significantly different for undergraduate students in an online multicultural course who complete online reflective discussions with peers as compared to those who complete individual reflection worksheets?</i>		
H₀2a:	The changes in multicultural competencies for students completing online reflective discussions with peers or individual reflection worksheets are not statistically significant from the beginning of the course to the end of the course for undergraduate students in an online multicultural course.	Retained
H₀2b:	The changes in multicultural competencies for students completing online reflective discussions with peers or individual reflection worksheets are not statistically significant from the beginning of the course to the end of the course for undergraduate students in an online multicultural course when controlling for multicultural personality scores.	Retained

Table 4.15 Continued

Ho2c:	The changes in multicultural competencies for students completing online reflective discussions with peers or individual reflection worksheets are not statistically significant from the beginning of the course to the end of the course for undergraduate students in an online multicultural course when controlling for multicultural personality scores and pre-test multicultural competencies.	Retained
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Research Questions 3:		
<i>Do demographic differences of undergraduate students, such as multicultural personality score, age, ethnicity, gender and religion (while considering pre-test multicultural competencies) predict the development of multicultural competencies in an online multicultural course?</i>		
H₀3:	Demographic differences of undergraduate students, such as multicultural personality score, age, ethnicity, gender and religion (while considering pre-test multicultural competencies) do not predict the development of multicultural competencies.	Rejected

Research Question 4:		
<i>Does completion of an online multicultural course have a significant effect on undergraduate students' development in each of the six constructs of the EMC/RSEE instrument, and are those changes significant when considering the students' study treatment group or gender?</i>		
Ho4a:	Completion of an online multicultural course does not result in an effect on undergraduate students' development in each of the six constructs of the EMC/RSEE instrument.	Rejected COD RCD EPT ARP EFA
		Retained AMS

Table 4.15 Continued

Ho4b: When considering the study treatment groups separately (control group: online reflective discussion with peers; treatment group: individual reflection worksheets), there is no difference in students' development in each of the six constructs of the EMC/RSEE instrument in an online multicultural course.

DISCUSSION:

Rejected

COD
RCD
EPT
ARP
EFA

Retained

AMS

WORKSHEET:

Rejected

COD
RCD
EPT
ARP
EFA

Retained

AMS

Table 4.15 Continued

Ho4c: When considering the gender of students separately (male and female), there is no difference in students' development in each of the six constructs of the EMC/RSEE instrument in an online multicultural course.

MALES:

Rejected

COD

EPT

ARP

Retained

RCD

AMS

EFA

FEMALES:

Rejected

COD

RCD

EPT

ARP

EFA

Retained

AMS

CHAPTER V

CONCLUSIONS, DISCUSSION, AND RECOMMENDATIONS

The purpose of this study was to determine the effect of two different reflective strategies (online reflective discussion with peers as compared to individual reflection worksheets) on the development of multicultural competencies among undergraduate students completing an online multicultural course. The following research questions guided the study:

- RQ 1. Does completion of an online multicultural course, requiring either online reflective discussion with peers or individual reflection worksheets as the reflection strategy, have a significant effect on undergraduate students' development of multicultural competencies?
- RQ 2. Are changes in multicultural competencies significantly different for undergraduate students in an online multicultural course who complete online reflective discussions with peers as compared to those who complete individual reflection worksheets?

RQ 3. Do demographic differences of undergraduate students, such as multicultural personality score, age, ethnicity, gender and religion (while considering pre-test multicultural competencies) predict the development of multicultural competencies in an online multicultural course?

RQ 4. Does completion of an online multicultural course have a significant effect on undergraduate students' development in each of the six constructs of the EMC/RSEE instrument, and are those changes significant when considering the students' study treatment group or gender?

Two stages of Transformative Learning Theory, critical reflection and reflective discourse, informed the experimental design of this study. The learning impact of two different reflective strategies, online reflective discussion with peers (i.e. reflective discourse) and individual reflection worksheets (i.e., critical reflection), was unknown in an online multicultural course. Based on the findings of this experimental study (see Chapter IV), and realizing the limitations of the population, conclusions are discussed in the following section. The results of the study provide important findings related to: (a) the impact the online multicultural course had on the students' development of multicultural competencies, and in turn, diversity consciousness; (b) the effect two reflective strategies had on the development of multicultural competencies, diversity consciousness, and learning for undergraduate students in the online multicultural course; and, (c) the relationship between multicultural competence and multicultural personality.

Conclusions

Transformative Learning Theory (Mezirow, 1991/2000) serves as the theoretical framework to guide the lens through which learning is approached in this study.

According to the four stages of Transformative Learning Theory (experience, critical reflection, action, and reflective discourse), learners transform their frames of reference and develop new critically-informed perspectives (Mezirow, 2000). This theoretical framework describes the intention of an online multicultural course to “prepare students to critically analyze historical and contemporary examples of socially constructed groups in American society and culture and the distribution of political, economic, and/or cultural benefits afforded to these groups” (OSU, 2018, para. 10). The concepts of reflection, critical reflection, discourse, reflective discourse, and meaning-making influenced the design of the experimental study and conclusions drawn from the findings.

Conclusion 1: Completion of the online multicultural course positively effected undergraduate students’ development of multicultural competencies.

Brown (2004) has suggested that a stand-alone multicultural course can impact factors of cultural diversity awareness. Using the overall competency pre- and post-test scores from the six EMC/RSEE instrument constructs, this study found students’ multicultural competence improved after the completion of the online multicultural course. This finding contradicts the report of Chery (2017), who found no change in competence level among students when considering all subscale scores together.

Beyond the investigation of overall change for students, Snodgrass et al. (2018) recommended the use of experimental design to compare and analyze differences in development of multicultural competencies based on instructional methods.

Transformative Learning Theory (Mezirow, 2000) suggests critical reflection and reflective discourse are two integral components in the learning process. To support this notion, it was confirmed that students in the two reflective strategy groups (individual

reflection worksheet and online reflective discussion with peers) improved in multicultural competence after completion of an online multicultural course.

Conclusion 2: There was no difference in the development of multicultural competencies between undergraduate students who completed individual reflection worksheets and students who completed online reflective discussion with peers in this online multicultural course.

Earlier research studies indicated the importance of reflection in online learning (Brookfield, 2000; Cain & Smith, 2009; Hatton & Smith, 1995; Markewitz, 2007; Means et al., 2010; Pulford, 2011). In comparing students who completed individual reflection worksheets to students who completed online reflective discussions with peers, no difference was found between the group mean change in multicultural competencies. Preliminary analyses to establish correlation between study variables found moderate relationships between student post-test multicultural competency scores, pre-test multicultural competency scores, and multicultural personality scores. When controlling for pre-test multicultural competencies and multicultural personality scores, there were still no differences in post-test multicultural competencies scores among students regardless of course reflection strategy.

This finding suggests there is no added learning benefit to online reflective discussion with peers when compared to individual reflection worksheets. Brookfield (2000) suggests critical reflection as a precursor to reflective discourse in the transformative learning process; the findings of this study support this notion. While activities requiring self-reflection, self-regulation, and self-monitoring in online courses have been said to lead to greater levels of achievement and understanding for students

(Means et al., 2010), our findings cannot necessarily draw this same conclusion. This finding also counters the conclusion of other scholars that found online discussion as more advantageous to learning than other forms of reflection in an online course (Cain & Smith, 2009; Kanuka et al., 2007; Markewitz, 2007; Pulford, 2011). Although a preference for socially-mediated reflection is evident in the literature (Brookfield, 2000; Hatton & Smith, 1995), this study does not provide evidence to preference individually or socially-mediated reflective strategies in this online multicultural course.

Conclusion 3: For undergraduate students completing this online multicultural course, pre-test multicultural competencies scores and multicultural personality scores may predict post-test multicultural competencies scores.

Personality traits are theorized to impact how college students react to unfamiliar cultures (Pascarella et al., 1996; Ashton & Lee, 2007; Drape et al., 2017). Ponterotto (2010) and Mallinckrodt (2014) hypothesize a connection between multicultural personality dispositions and students' development rate of multicultural competencies in college. Findings from this study suggest multicultural personality scores, along with pre-test multicultural competencies scores, may predict a student's post-test multicultural competencies score after completion of this online multicultural course. It is concluded that a students' multicultural personality disposition may explain why students in this online multicultural course develop competencies at different rates. While literature related to multiculturalism mentions the age, gender, ethnicity, and religion of a person (Lehman, 1992; Miles & Kivlighan, 2012; Miville et al., 1999; Ponterotto et al., 2014; Spanierman & Hepner, 2004; Vontress, 1986, 1988) may impact their rate of multicultural competencies development, these correlations were not found in this study.

Conclusion 4: When considering the six constructs of Everyday Multicultural Competencies individually, completion of this online multicultural course, regardless of reflection strategy or gender, did not effect the development of Anxiety and Lack of Multicultural Self-Efficacy among undergraduate students. The constructs of Resentment and Cultural Dominance and Empathic Feeling and Acting as an Ally were also not effected by completion of this online multicultural course among the male students.

Of the six constructs comprising the EMC/RSEE instrument, decreased group mean scores in Resentment and Cultural Dominance (RCD) and Anxiety and Multicultural Self-Efficacy (AMS) are expected over a period of time (Chery, 2017; Mallinckrodt et al., 2014). The remaining four constructs are expected to show positive changes over time as students mature and develop emotional intelligence (Chery, 2017; Mallinckrodt et al., 2014). AMS refers to the level of discomfort and perception of being ill-equipped to handle social situations (Mallinckrodt et al., 2014). With increased communicative empathy a desire of multicultural education (Wang et al., 2003)., one might expect students to improve in their self-efficacy and skill (Sue, 2001) to communicate empathic understanding to others, decrease in their level of resentment, and demonstrate heightened awareness, empathy, and openness toward other cultures and groups.

In this study, however, completion of the multicultural course did not result in a decreased change in mean scores of the AMS construct (Figure 5.1). Rather, student scores increased, showing a negative impact of the course on student multicultural self-efficacy. These findings are similar to Brown's (2004), suggesting some students in the

course may have only shifted between initial entry-level attitudes toward multiculturalism, rather than experiencing a transformation in their frame of reference (Mezirow, 2000).

When comparing reflection strategy group mean scores, it appears students in the online reflective discussion with peers group showed a decrease in AMS construct scores while students in the individual reflection worksheet group showed an increase (Figure 5.2). Although neither change in group mean score were statistically significant, the practical significance of this finding warrants further investigation into the impact different instructional reflective strategies in an online multicultural course may have on students' development of multicultural self-efficacy.

Likewise, a similar finding exists when comparing change in AMS construct scores among gender groups. Male students showed an increase in AMS construct group mean scores, while female student group mean scores decreased (Figure 5.3). Although not statistically significant and limited by this study's population, the preliminary finding holds practical significance and adds to the online multicultural education literature base by suggesting female students may improve in multicultural self-efficacy more than male students as a result of an online multicultural course.

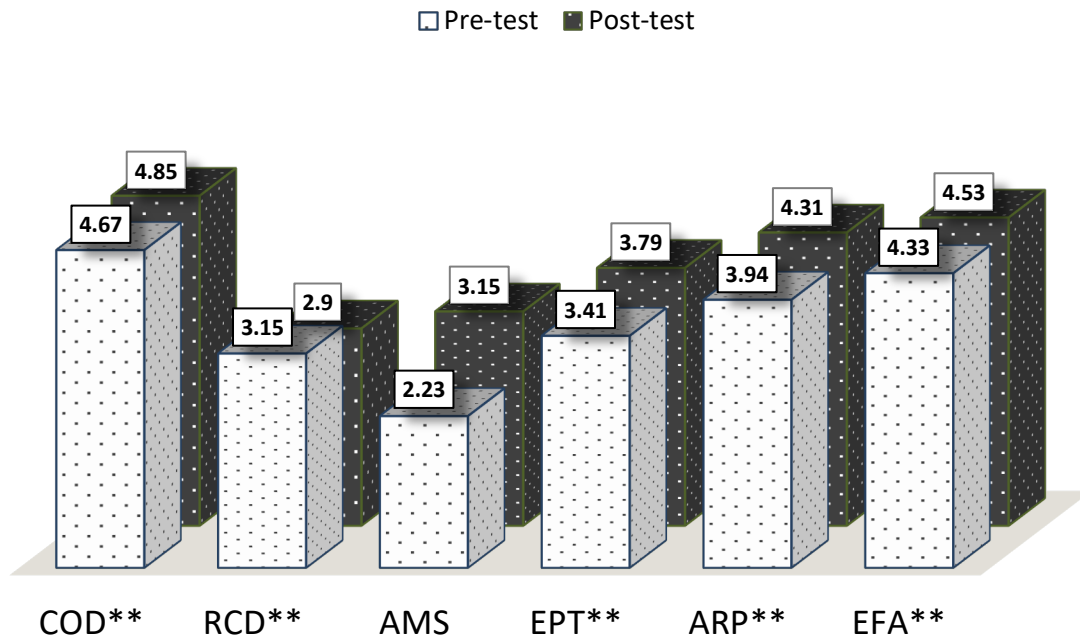
Male students also appear to experience less growth in the construct areas of Resentment and Cultural Dominance (RCD) and Empathic Feeling and Acting as an Ally (EFA) (Figure 5.3). While both male and female students decreased RCD group mean scores after completion of an online multicultural course, the male student group mean change was not statistically significant. Findings from other studies showed students sometimes react to multicultural education with a defensive demeanor (Ahlquist, 1992;

Banks, 1994; Gorski, 2009; Irvine, 1992; Larke & Larke, 1999; Lehman, 1992; Miles & Kivlighan, 2012). The practical significance of this finding suggests female students may decrease their sense of resentment and cultural dominance relatively more than male students through the duration of an online multicultural course. Similarly, male student mean group scores for the EFA construct increased by the end of the course, but not at a significant amount. This practical finding may suggest women students develop a stronger sense of empathy and ally-behavior than males as a result of completing an online multicultural course.

The four conclusions of this study provide several points for discussion and implications related to online multicultural instruction. Recommendations for practice and research are also discussed in the remaining sections.

Figure 5.1

Comparison of Pre- and Post-test Scores of the Everyday Multicultural Competencies/Revised Scale of Ethnocultural Empathy Constructs



Note. COD = Cultural Openness and Desire to Learn construct of the Everyday Multicultural Competencies/Revised Scale of Ethnocultural Empathy (EMC/RSEE) instrument; RCD = EMC/RSEE Resentment and Cultural Dominance construct; AMS = EMC/RSEE Anxiety and Lack of Multicultural Self-Efficacy construct; EPT = EMC/RSEE Empathic Perspective-Taking construct; ARP = EMC/RSEE Awareness of Contemporary Racism and Privilege construct; EFA = EMC/RSEE Empathic Feeling and Acting as an Ally construct

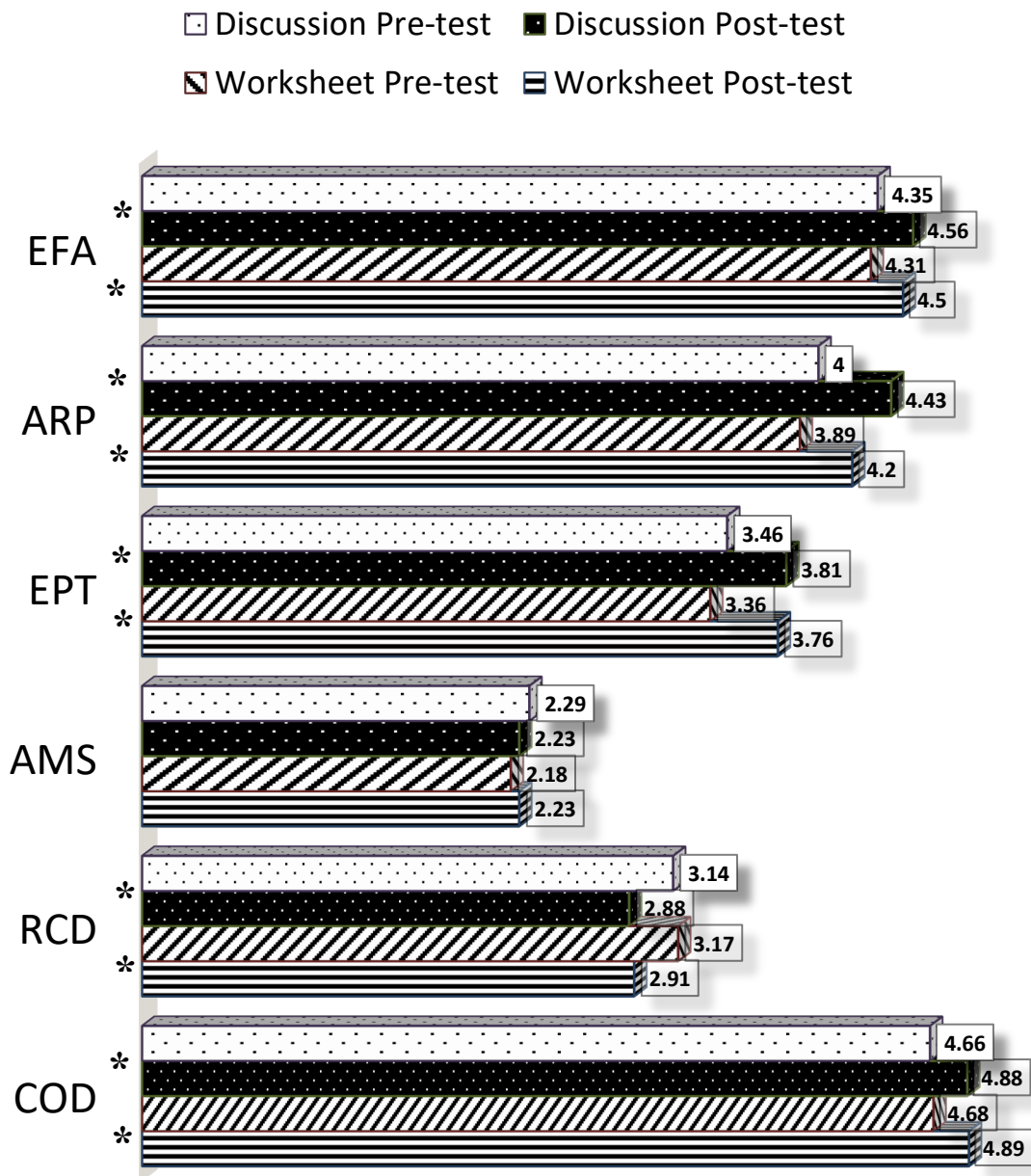
** $p < .01$.

Figure 5.2

Comparison of Pre- and Post-Test Scores of the Everyday Multicultural

Competences/Revised Scale of Ethnocultural Empathy Constructs by Group (Control:

Online Reflective Discussion with Peers; Treatment: Individual Reflection Worksheets)



Note. COD = Cultural Openness and Desire to Learn construct of the Everyday

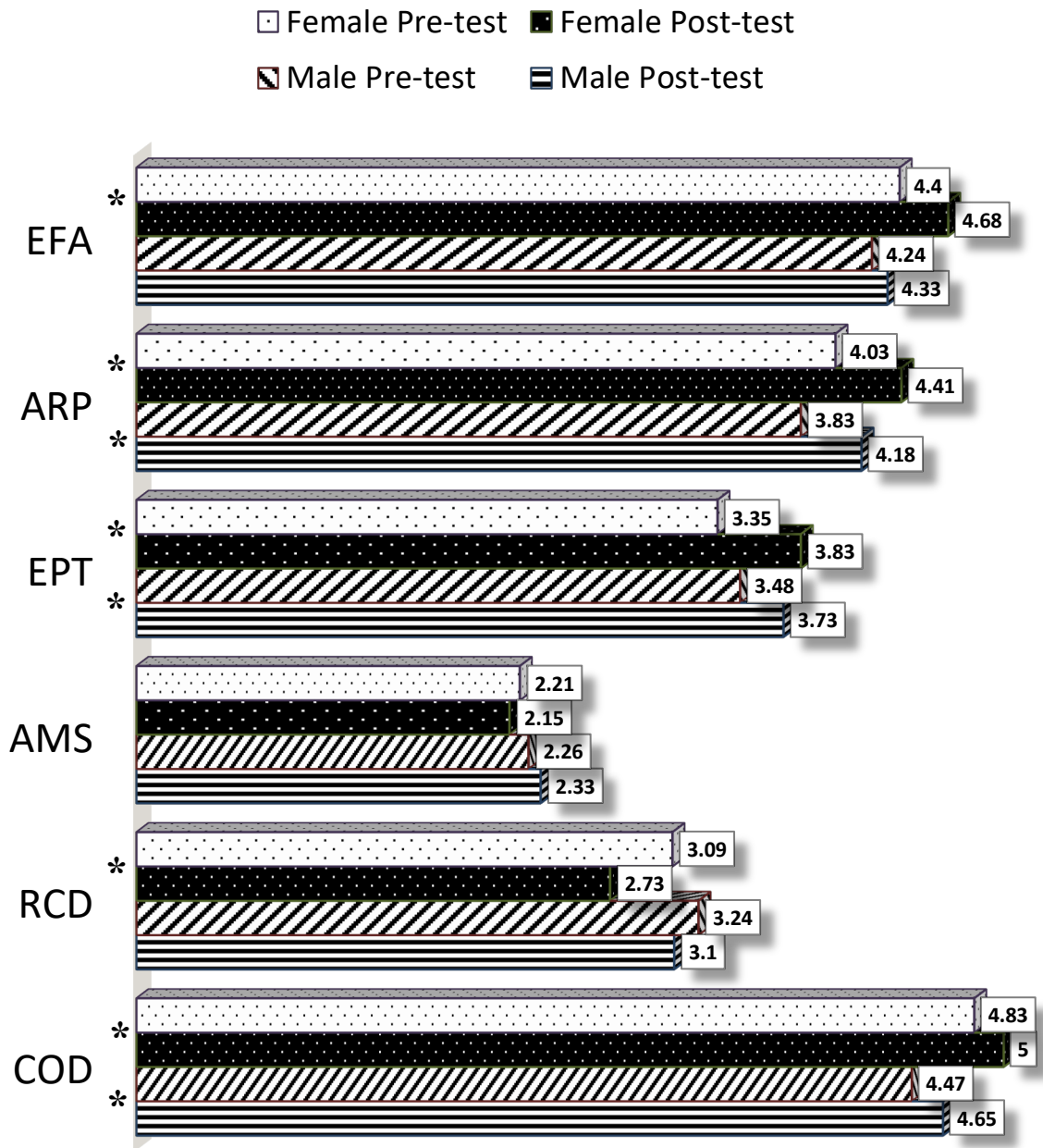
Multicultural Competencies/Revised Scale of Ethnocultural Empathy (EMC/RSEE)

instrument; RCD = EMC/RSEE Resentment and Cultural Dominance construct; AMS = EMC/RSEE Anxiety and Lack of Multicultural Self-Efficacy construct; EPT = EMC/RSEE Empathic Perspective-Taking construct; ARP = EMC/RSEE Awareness of Contemporary Racism and Privilege construct; EFA = EMC/RSEE Empathic Feeling and Acting as an Ally construct.

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

Figure 5.3

Comparison of Pre- and Post-Test Scores of the Everyday Multicultural Competences/Revised Scale of Ethnocultural Empathy Constructs by Gender



Note. COD = Cultural Openness and Desire to Learn construct of the Everyday Multicultural Competencies/Revised Scale of Ethnocultural Empathy (EMC/RSEE)

instrument; RCD = EMC/RSEE Resentment and Cultural Dominance construct; AMS = EMC/RSEE Anxiety and Lack of Multicultural Self-Efficacy construct; EPT = EMC/RSEE Empathic Perspective-Taking construct; ARP = EMC/RSEE Awareness of Contemporary Racism and Privilege construct; EFA = EMC/RSEE Empathic Feeling and Acting as an Ally construct

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

Discussion and Implications

Research related to online learning, and specifically the use of asynchronous online discussion (AOD) as a reflection strategy, has produced conflicting messages. While some researchers suggest AOD improves learning in the online course environment, others have advocated for students to engage in more critical individual reflection to meet course learning goals. This study does not demonstrate a preference for one reflection strategy over the other, as students in both groups of the experiment demonstrated a positive change in multicultural competencies as a result of the the course. Rather than solely relying on socially-mediated reflective strategies such as AOD in online multicultural courses, the inclusion of multiple forms of individually-mediated reflection may be sufficient to meet student learning goals (Brookfield, 2000; Hatton & Smith, 1995). Findings of this study also refute Chery's (2017) claim that a change in overall multicultural competency development may not be found at the conclusion of a course and/or training.

Perhaps the finding that students in this study did experience a positive change in multicultural competencies from pre- to post-test administration is a result of the course design. In retrospect, the design of the online multicultural course fits within Bank's (2004) five dimensions of multicultural education through content integration, knowledge construction, and prejudice reduction. The course also follows Brown's (1998) four-phase process to influence multicultural ethical decision-making, which includes the use of (a) self-examination, (b) cultural-awareness, (c) ethical reflection, and (d) classroom strategy, to guide students in developing more multicultural perspectives. The first three weeks of the course focus on students developing self-awareness and understanding of

diversity concepts through examination of their own culture and experiences. Students complete an assignment called “Food and My Story” in this time period, which requires them to investigate how a typical meal or dish in their family or community is connected and representative of their culture. This assignment early on in the course establishes common ground among the students to further discuss multiculturalism by helping all students recognize aspects of their own culture, especially the culturally-dominant White students.

The next two weeks of the online multicultural course shift to Brown’s (1998) cultural-awareness phase, where students develop diversity consciousness by learning about the dimensions of culture and current challenges that exist in diverse societies. The PBS series episode “A Class Divided,” which highlights third-grade educator Jane Elliot’s experimental exercise to demonstrate discrimination and prejudice with her class in 1970, is used as a case study at this juncture of the course. Students demonstrate their development of cultural awareness and understanding of discrimination and prejudice through thorough analysis and reflection of the case study.

Students move beyond self-examination and cultural-awareness to ethical reflection in the last two weeks of the course. By studying the connection between leadership and multiculturalism and analyzing the multicultural concepts presented in the feature film “Crash,” students reflect on how multicultural perspectives guide leaders toward inclusive and equitable decision-making.

A review of literature related to pedagogical practices for online courses would suggest more objective forms of instruction and assessments to determine student learning; however, even though this online multicultural course includes weekly reading

quizzes for accountability, it leans heavily on subjective reflection as assessment of student learning. The online classroom strategies utilized in this multicultural course that emphasize significant reflection on course concepts, whether socially-mediated or individually-mediated, appear to be sufficient for fostering student achievement of learning goals and the development of multicultural competencies.

Not all multicultural education courses are created equal. As universities and colleges have adopted mandatory diversity coursework, general education requirements in diversity education, and/or multicultural programming, some courses may have been developed by faculty without expertise in multicultural education or influence of multicultural scholars such as Banks (2004). The positive impact the online multicultural course in this study had on students' development of multicultural competencies could also be attributed to the background experience and training in multicultural education of the faculty who developed and designed the course. While universities and colleges should continue to incorporate multicultural education throughout all aspects of a student's college experience, consideration should be given to the credentials of faculty, instructors, and staff leading these initiatives. With much research conducted in these areas, those with expertise in the multicultural education and programming discipline should be consulted, if not given the charge, to lead the curricular development of multicultural initiatives on campus.

Ryman et al. (2009) posits transformative learning is possible in online courses when students develop an online community through critical discourse and parallel leadership. Critical discourse can occur online through either critical reflection or reflective discourse, like individual reflection worksheets and online reflective discussion

with peers. It can be concluded from this study that at least two stages of the transformative learning process (Mezirow, 2000), critical reflection and reflective discourse, are evident across the duration of the online multicultural course. Yet, participation in socially-mediated reflection has not been shown to guarantee learning outcomes are achieved any more so than those students displaying pedagogical lurking behavior (Dennen, 2008). With there being no difference between group means in the change of multicultural competencies based on reflection strategy, this study suggests the benefit of both as instructional practices to support the student's transformative learning process. It should also be considered that a student's development of multicultural competencies may be a long-term moral maturing process as they grow into ethical multicultural decision makers (Brown, 2004).

It has been reported by Banks (2004) that much research conducted in the area of multicultural education has been varied. In this study, although overall multicultural competencies scores showed positive change as a result of the online multicultural course, individual construct scores for the two reflection strategy groups and students grouped by gender were varied after further analysis. Even though an aim of multicultural education, and hence this course, is to develop students' multicultural skills, it appears the course itself nor the different types of reflective strategies significantly effected students' sense of multicultural self-efficacy. Mean group scores did, however, suggest that students completing the individual reflection worksheets decreased in multicultural self-efficacy while students in the online reflective discussion group increased. This finding raises the questions as to whether the lack of a social component to the reflection

process (i.e., requiring students to interact with their peers in the course through AOD) for the individual reflection worksheet group could have played a part in this difference.

It is also found that within the AMS construct, male students' sense of multicultural self-efficacy decreased while female students confidence in their ability to handle multicultural social situations improved. Male students also appear to experience less growth in the construct areas of Resentment and Cultural Dominance (RCD) and Empathic Feeling and Acting as an Ally (EFA) as compared to female students. Overall, changes in the multicultural competencies constructs for male students in this study are only significant in three of the six constructs. Why might this be the case? White and/or male students, as the dominant political identity in the United States and culturally hegemonic race and/or gender, have been found to be somewhat more resistant toward multicultural education during college (Banks, 2004; Larke & Larke, 1999; Lehman, 1992; Miles & Kivlighan, 2012). Over 60% of the male students in this study reported their ethnicity as White ($n = 29$). Other studies have shown male students who are members of minority ethnic groups often have higher levels of multicultural competencies upon entering college as a result of their environment and community while growing up. According to Lehman's (1992) confrontational stages of resistance to multicultural education, it could be concluded that male students, and in particular White male students, may have shifted in stages from shock to examination, without fully actualizing understanding and acceptance.

A final conclusion from the findings of this study does support theoretical assumptions of a connection between multicultural personality disposition (Ponterotto, 2010) and the development of multicultural competencies among college undergraduates

(Mallinckrodt et al., 2014). Even though student multicultural personality scores, when controlled for in this study, did not allow for significant group mean differences between the two reflection strategy groups, they were related to post-test multicultural competency scores and held predictive value. It may be of use for multicultural educators to explore the multicultural personality disposition of undergraduate students to better guide curricular and instructional decisions throughout the duration of their course(s) to minimize resistance behavior and improve learning achievement.

Recommendations for Practice

Based on the findings of this study, the following recommendations are made for faculty and instructors teaching an online multicultural course for undergraduate students:

1. Online multicultural instructors should consider incorporating either online reflective discussion with peers or individual reflection worksheets, or both, as instructional strategies in online courses. Any single strategy should not be viewed as a one-size-fit-all instructional method to guide students through critical discourse and reflection in an online multicultural course, as both reflective strategies in this study proved conducive for student learning. Both individually-mediated and socially-mediated reflective strategies (Hatton & Smith, 1995; Herrington & Oliver, 2002; Knights, 1985) facilitate student learning in the online environment, with neither better than the other in this study.
2. Rather than adopting asynchronous online discussion as the sole instructional reflective strategy simply because of its prevalent use and adoption as a best practice in the online learning environment (Allen & Hartman, 2009; Hawkes, 2006; Piburn & Middleton, 1997; Seale & Cann, 2000) instructors should consider other evidence-

based strategies that may better lead to achieved learning goals. Online discussion boards may not necessarily be the most effective pedagogical practice depending on the course's objectives and content. When developing online multicultural courses, instructors should consider all evidence-based instructional options.

3. When utilizing asynchronous online discussion boards in online multicultural courses, instructors should not discount the time investment required to ensure a quality course design. Loncar et al. (2014) states online discussions must be mediated, controlled and facilitated by the instructor in order to result in effective learning. For online multicultural courses in particular, given the critical nature of the content, significant instructor participation and presence (Blignaut & Trollip, 2003; Radziszewska & Rogoff, 1991; Tallent-Runnels et al., 2006; Weinberger et al., 2005; Yang, 2008) must be dedicated to the facilitation of the course.
4. Undergraduate students should enroll and complete at least one multicultural course that has shown to be effective through assessment as a part of their curriculum. While many universities and colleges now offer at least one diversity or multicultural-related course and have established multicultural programming on campus (Banks & Banks, 2001; Fitzgerald & Lauter, 2004), it is not necessarily a requirement for all core general education curriculum, nor have student learning outcomes been properly assessed. The findings of this study show students do benefit personally by taking the AGLE 2403 multicultural course at OSU by developing more multicultural competence. This may also be the case for students completing assessed multicultural courses at other institutions. If the courses are shown to be effective, students should be required to complete at least one multicultural course during their college tenure.

Recommendations for Research

Further opportunities for investigation related to online multicultural instruction arose as a result of the findings from this study. The following research questions are recommended for future inquiry:

1. Does the factorial structure of the study's instruments (the EMC/RSEE and MPI-SF) among the undergraduate student population completing the online multicultural course align with the instruments' initial validation procedures? The validation of the instruments with this study's population would not have been robust due to the limited number of participants. It is strongly encouraged that the factorial structure of the instruments be validated among undergraduate student populations at multiple predominately White institutions with data collected from participants so that analyses results in an at least 10 to 1 participant to item ratio. The study should be replicated in this course for multiple semesters.
2. Are differences in development among the six constructs of everyday multicultural competencies (EMC/RSEE) influenced uniquely by students' differing levels among the seven sub-scales of multicultural personality (MPI-SF)? With a relationship shown to perhaps exist between multicultural personality disposition and everyday multicultural competencies, researchers should investigate the potential interactions and effects between the six EMC/RSEE constructs and the seven MPI-SF subscales.
3. A qualitative analysis of students' reflective responses in this online multicultural course should be pursued to determine if the responses mimic the process of transformative learning or if there are differences in quality between the groups. Qualitative analysis would also provide more insight into whether a student's

multicultural personality disposition played a unique role in their participation in the course.

4. Do students' level of multicultural competencies continue to change or remain the same six months/a year/four year after completing AGLE 2403? Further longitudinal data collection and analysis should be pursued to show retention of student learning outcomes and to grasp a larger picture of the effect an online multicultural course has on students.
5. Are other instructional reflective strategies beyond the two used in this study more effective in promoting learning in an online multicultural course? Only two strategies, online reflective discussion with peers and individual reflection worksheets, were used in this study. However, many other reflective strategies are recommended and discussed in literature as well. Further experimental studies should be conducted to better understand effective instructional strategies that promote learning in online multicultural courses.
6. Why are undergraduate students not lessening their anxiety and lack of multicultural self-efficacy (AMS construct of the EMC/RSEE) after completing an online multicultural course? To address this question, researchers may need to use a mixed-methods design to understand both quantitatively and qualitatively the impact of an online multicultural course.
7. Why is there a difference in multicultural competencies development between male and female undergraduate students after completion of an online multicultural course? Is there an explanation for why male students did not show a significant change in the Resentment and Cultural Dominance and Empathic Feeling and Acting as an Ally

constructs of everyday multicultural competencies, as well as the AMS construct?

Future studies should be designed to look more closely at the difference among genders and their experiences in undergraduate online multicultural courses.

8. Would students develop multicultural competencies differently in an online multicultural course when multicultural personality subscales, gender, and reflection strategy are considered through multivariate analysis? The data from this study provides the opportunity to explore the differences among the reflection groups more complexly by investigating the effects of multiple variables simultaneously. It would be advantageous to collect data from participants by replicating this study in the course for multiple semesters.
9. What other variables may impact student multicultural development and differences between reflection groups? Variables such as overall course satisfaction, self-efficacy, student performance, and retention were not looked at in this study. However, it would be interesting to understand the roles course satisfaction, self-efficacy, performance, and retention play in student engagement and learning in an online multicultural course. It is also recommended to future researchers to see if these variables differ based on the type of reflective activity students are required to complete.

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https://doi.org/10.1207/s15389286ajde1903_3

APPENDICES

APPENDIX A PERMISSIONS

IRB EXEMPT APPROVAL LETTER



Oklahoma State University Institutional Review Board

Date: 04/11/2019
Application Number: AG-19-11
Proposal Title: The Development of Multicultural Competencies in an Agricultural in a Multicultural Society Course: Does Discourse Matter?

Principal Investigator: Lauren Cline
Co-Investigator(s):
Faculty Adviser: PENNY P WEEKS, Ph.D.
Project Coordinator:
Research Assistant(s):

Processed as: Exempt
Exempt Category:

Status Recommended by Reviewer(s): Approved

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in 45CFR46.

This study meets criteria in the Revised Common Rule, as well as, one or more of the circumstances for which continuing review is not required. As Principal Investigator of this research, you will be required to submit a status report to the IRB triennially.

The final versions of any recruitment, consent and assent documents bearing the IRB approval stamp are available for download from IRBManager. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be approved by the IRB. Protocol modifications requiring approval may include changes to the title, PI, adviser, other research personnel, funding status or sponsor, subject population composition or size, recruitment, inclusion/exclusion criteria, research site, research procedures and consent/assent process or forms.
2. Submit a request for continuation if the study extends beyond the approval period. This continuation must receive IRB review and approval before the research can continue.
3. Report any unanticipated and/or adverse events to the IRB Office promptly.
4. Notify the IRB office when your research project is complete or when you are no longer affiliated with Oklahoma State University.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact the IRB Office at 405-744-3377 or irb@okstate.edu.

Sincerely,
Oklahoma State University IRB

REGISTRAR FERPA APPROVAL LETTER

4/8/2019

Oklahoma State University Mail - Fwd: Request Approved - Banner/SIS - REGISTRAR(2316)



Cline, Lauren <lacline@ostatemail.okstate.edu>

Fwd: Request Approved - Banner/SIS - REGISTRAR(2316)

1 message

Weeks, Penny <penny.weeks@okstate.edu>
To: "Cline, Lauren" <lauren.l.cline@okstate.edu>

Fri, Apr 5, 2019 at 5:47 PM



Sent from my iPhone

Begin forwarded message:

From: <fim@okstate.edu>
Date: April 5, 2019 at 4:44:18 PM CDT
To: <penny.weeks@okstate.edu>
Subject: Request Approved - Banner/SIS - REGISTRAR(2316)

Requested For:
-- Penny Weeks
-- Agricultural Ed, Comm & Leadership

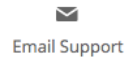
Data needed:
-- Student directory information and coursework for AGLE 2403-spring 2019, summer 2019, fall 2019, and spring 2020.

Status:
-- Request Approved -- The Data Provider will contact you on how to retrieve the data.

<https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Fairs.okstate.edu%2FDW%2FDataRequest%2FRequests.aspx%3FReq%3D2316%26Act%3D2%26View%3D1&data=02%7C01%7Cpenny.weeks%40okstate.edu%7C08f574966525470a548908d6ba0fdc54%7C2a69c91de8494e34a230cdf8b27e1964%7C0%7C636900974612982093&data=Jlr74N9jRfHdLBU2WhAdTCmk6fO7a0FYpFWr2W%2BS%2Bs%3D&reserved=0>

<https://mail.google.com/mail/u/0?ik=aacf073794&view=pt&search=all&permthid=thread-f%3A1630016068782082899%7Cmsg-f%3A1630016068782082899&sim...> 1/1

APPROVAL FOR USE OF FIGURES



Multidimensional Facets of Cultural Competence

Author: Derald Wing Sue
Publication: The Counseling Psychologist
Publisher: SAGE Publications
Date: 11/01/2001

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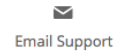
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Multicultural Personality: An Evolving Theory of Optimal Functioning in Culturally Heterogeneous Societies

Author: Joseph G. Ponterotto
Publication: The Counseling Psychologist
Publisher: SAGE Publications
Date: 07/01/2010

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Comments? We would like to hear from you. E-mail us at customer@copyright.com

APPENDIX B
EVERYDAY MULTICULTURAL COMPETENCIES/REVISED SCALE OF
ETHNOCULTURAL EMPATHY INSTRUMENT



Everyday Multicultural Competencies/Revised Scale of Ethnocultural Empathy
Version Attached: Full Test

PsycTESTS Citation:

Mallinckrodt, B., Miles, J. R., Bhaskar, T., Chery, N., Choi, G., & Sung, M.-R. (2014). Everyday Multicultural Competencies/Revised Scale of Ethnocultural Empathy [Database record]. Retrieved from PsycTESTS. doi: <http://dx.doi.org/10.1037/t28136-000>

Instrument Type:
Rating Scale

Test Format:
On the 48-item Everyday Multicultural Competencies/Revised Scale of Ethnocultural Empathy, participants use a 6-point Likert-type scale, ranging from 1 (strongly disagree) to 6 (strongly agree).

Source:
Mallinckrodt, Brent, Miles, Joseph R., Bhaskar, Tripti, Chery, Nicole, Choi, Gahee, & Sung, Mi-Ra. (2014). Developing a comprehensive scale to assess college multicultural programming. *Journal of Counseling Psychology*, Vol 61(1), 133-145. doi: 10.1037/a0035214

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Test content may be reproduced and used for non-commercial research and educational purposes without seeking written permission. Distribution must be controlled, meaning only to the participants engaged in the research or enrolled in the educational activity. Any other type of reproduction or distribution of test content is not authorized without written permission from the author and publisher. Always include a credit line that contains the source citation and copyright owner when writing about or using any test.

**Everyday Multicultural Competencies/Revised Scale of Ethnocultural Empathy
EMC/RSEE**

Item no.	Item
<u>Factor 1: Cultural Openness and Desire to Learn (10 items)</u>	
m65.	I think it is important to be educated about cultures and countries other than my own.
m50.	I welcome the possibility that getting to know another culture might have a deep positive influence on me.
m61.	I admire the beauty in other cultures.
m31.	I would like to work in an organization where I get to work with individuals from diverse backgrounds.
m12.	I would like to have dinner at someone's house who is from a different culture.
m07.	I am interested in participating in various cultural activities on campus.
m06.	Most Americans would be better off if they knew more about the cultures of other countries.
m73.	A truly good education requires knowing how to communicate with someone from another culture.
m38.	I welcome being strongly influenced by my contact with people from other cultures.
m40.	I believe the United States is enhanced by other cultures.
<u>Factor 2: Resentment and Cultural Dominance (10 items)</u>	
m10.	Members of minorities tend to overreact all the time.
m35.	When in America, minorities should make an effort to merge into American culture.
m66.	I do not understand why minority people need their own TV channels.
m54.	I fail to understand why members from minority groups complain about being alienated.
s10.	I feel irritated when people of different racial or ethnic backgrounds speak their language around me.
m71.	Minorities get in to school easier and some get away with minimal effort.
m85.	I am really worried about White people in the U.S. soon becoming a minority due to so many immigrants.
m01.	I think American culture is the best culture.
m60.	I think members of the minority blame White people too much for their misfortunes.
m18.	People who talk with an accent should work harder to speak proper English.
<u>Factor 3: Anxiety and Lack of Multicultural Self-Efficacy (7 items)</u>	
m19.	I feel uncomfortable when interacting with people from different cultures.
m14.	I often find myself fearful of people of other races.
m28.	I doubt that I can have a deep or strong friendship with people who are culturally different.
m04.	I really don't know how to go about making friends with someone from a different culture.
m95.	I am afraid that new cultural experiences might risk losing my own identity.
m75.	I do not know how to find out what is going on in other countries.
m09. ^a	I am not reluctant to work with others from different cultures in class activities or team projects.

**Everyday Multicultural Competencies/Revised Scale of Ethnocultural Empathy
EMC/RSEE**

Item no.	Item
<u>Factor 4: Empathic Perspective-Taking (5 items)</u>	
s19.	It is easy for me to understand what it would feel like to be a person of another racial or ethnic background other than my own.
s28. ^a	It is difficult for me to put myself in the shoes of someone who is racially and/or ethnically different from me.
s31. ^a	It is difficult for me to relate to stories in which people talk about racial or ethnic discrimination they experience in their day to day lives.
s06.	I can relate to the frustration that some people feel about having fewer opportunities due to their racial or ethnic backgrounds.
s02. ^a	I don't know a lot of information about important social and political events of racial and ethnic groups other than my own.
<u>Factor 5: Awareness of Contemporary Racism and Privilege (8 items)</u>	
m39.	The U.S. has a long way to go before everyone is truly treated equally.
m34.	For two babies born with the same potential, in the U.S. today, in general it is still more difficult for a child of color to succeed than a White child.
s20.	I can see how other racial or ethnic groups are systematically oppressed in our society.
m20.	Today in the U.S. White people still have many important advantages compared to other ethnic groups.
s25.	I am aware of how society differentially treats racial or ethnic groups other than my own.
s07.	I am aware of institutional barriers (e.g., restricted opportunities for job promotion) that discriminate against racial or ethnic groups other than my own.
m15. ^a	Racism is mostly a thing of the past.
m25. ^a	In America everyone has an equal opportunity for success.
<u>Factor 6: Empathic Feeling and Acting as an Ally (8 items)</u>	
s21. ^a	I don't care if people make racist statements against other racial or ethnic groups.
s15.	I get disturbed when other people experience misfortunes due to their racial or ethnic background.
s03.	I am touched by movies or books about discrimination issues faced by racial or ethnic groups other than my own.
s26.	I share the anger of people who are victims of hate crimes (e.g., intentional violence because of race or ethnicity).
s16. ^a	I rarely think about the impact of a racist or ethnic joke on the feelings of people who are targeted.
s30.	When I hear people make racist jokes, I tell them I am offended even though they are not referring to my racial or ethnic group.

**Everyday Multicultural Competencies/Revised Scale of Ethnocultural Empathy
EMC/RSEE**

Item no.	Item
s22.	When I see people who come from a different racial or ethnic background succeed in the public arena, I share their pride.
s11.	When I know my friends are treated unfairly because of their racial or ethnic backgrounds, I speak up for them.

Note. m = item generated specifically for this study, s = item taken from the Scale of Ethnocultural Empathy.

^a Reverse key.

APPENDIX C
MULTICULTURAL PERSONALITY INVENTORY – SHORT FORM INSTRUMENT

3/10/2020

Oklahoma State University Mail - Re: Multicultural Personality Inventory



Cline, Lauren <lacline@ostateemail.okstate.edu>

Re: Multicultural Personality Inventory

1 message

JOSEPH Ponterotto [Staff/Faculty [GSE]] <ponterotto@fordham.edu>
To: "Cline, Lauren" <lacline@ostateemail.okstate.edu>

Mon, Feb 18, 2019 at 1:15 PM

Hi Lauren,
No problem; I am traveling this week. As soon as I can access a computer I will resend.
Prof Ponterotto

Sent from my iPhone

On Feb 18, 2019, at 11:14 AM, Cline, Lauren <lacline@ostateemail.okstate.edu> wrote:

Dr. Ponterotto,

I hope this email finds you well. I am a doctoral student at Oklahoma State University, and reached out to you back in December regarding your Multicultural Personality Inventory instrument. Since our original email exchange, I have somehow misplaced (or accidentally deleted) your email with the MPI instrument, MPI-SF, and related manuscripts to the MPI-SF. Would you be willing to share those instruments and manuscripts with me again? I am still interested in utilizing the instruments with my doctoral dissertation research and am putting together materials to complete a pilot study in a few months.

I appreciate your time and consideration of my request.

Sincerely,

Lauren Cline
Ph.D. Student - Graduate Teaching Associate
Department of Agricultural Education, Communications and Leadership
College of Agricultural Sciences and Natural Resources
Oklahoma State University
445 Agriculture Hall
405-744-3036 (office)
lauren.l.cline@okstate.edu

Self Perception Scale
 Copyright © 2007 by Joseph G. Ponterotto, Ph. D.

Please indicate your degree of agreement to each item by circling the appropriate number.

1 Disagree Strongly	2 Disagree	3 Unsure	4 Agree	5 Agree Strongly
---------------------------	---------------	-------------	------------	------------------------

1.	I have very close friends who represent diverse ethnic groups	1	2	3	4	5
2.	I speak out against oppression that I see (e.g., racism, sexism, homophobia, ageism)	1	2	3	4	5
3.	I enjoy reading humorous and comedic articles and books	1	2	3	4	5
4.	Friends of my opposite gender consider me a helpful person to talk with when they are upset or under stress	1	2	3	4	5
5.	I feel a deep sense of pride in being part of my racial group	1	2	3	4	5
6.	My close friends consider me "together" and emotionally stable	1	2	3	4	5
7.	I believe living things are interconnected with non-living earthly matter (e.g., wind, land, sun, and sky) in some spiritual sense	1	2	3	4	5
8.	I have very close friends who are gay or lesbian	1	2	3	4	5
9.	In times of stress I rely on my sense of spirituality as a coping mechanism	1	2	3	4	5
10.	I have verbally confronted a close family member or friend who has made homophobic comments or who has shared an anti-gay or lesbian joke	1	2	3	4	5
11.	Most of my close friends are from my own ethnic group(s)	1	2	3	4	5
12.	I believe I have a pretty good sense of humor	1	2	3	4	5
13.	I feel a deep sense of pride in being part of my ethnic group(s)	1	2	3	4	5
14.	I am a very emotionally stable person	1	2	3	4	5
15.	I have very close friends who are bisexual	1	2	3	4	5
16.	Most of my close friends are from my own sexual orientation group	1	2	3	4	5
17.	I have given considerable thought to what it means to be part of my ethnic group(s)	1	2	3	4	5

Self Perception Scale
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18.	My close friends say that I have a good sense of humor	1	2	3	4	5
19.	I have verbally confronted a close family member or friend who has made sexist comments or who has shared a sexist joke	1	2	3	4	5
20.	I would evaluate my psychological health as very high	1	2	3	4	5
21.	In times of stress I think of and draw emotional strength from my ancestors	1	2	3	4	5
22.	I think it is important to understand and value both similarities and differences among people of different sexual orientations	1	2	3	4	5
23.	I am aware of the history of my racial group(s) outside this country	1	2	3	4	5
24.	Close family members sometimes perceive me as emotionally unstable	1	2	3	4	5
25.	I am a very spiritual person	1	2	3	4	5
26.	I love when a movie I am watching causes me to laugh out loud	1	2	3	4	5
27.	I have very close friends of the opposite sex	1	2	3	4	5
28.	Most of my close friends are from my own racial group	1	2	3	4	5
29.	My closest family members consider me "together" and emotionally stable	1	2	3	4	5
30.	Most of my close friends represent my gender group	1	2	3	4	5
31.	I really think heterosexual people should be more involved in speaking out against negative attitudes and behaviors towards gays, lesbians, and bisexuals	1	2	3	4	5
32.	I am aware of the history of my ethnic group(s) outside of this country	1	2	3	4	5
33.	It is easy for me to laugh at myself if I do something silly or stupid	1	2	3	4	5
34.	I believe all humans and animals are interconnected in some spiritual way	1	2	3	4	5
35.	Most of my close friends are from my own religious group	1	2	3	4	5
36.	Close friends sometimes perceive me as emotionally unstable	1	2	3	4	5

Self Perception Scale
 Copyright © 2007 by Joseph G. Ponterotto, Ph. D.

37.	I have verbally confronted a close family member or friend who has made racist comments or who has shared a racist joke	1	2	3	4	5
38.	I find a lot of strong support in my ethnic group affiliations	1	2	3	4	5
39.	I have very close friends who represent diverse racial groups	1	2	3	4	5
40.	I believe all humans are interconnected with each other in a spiritual way	1	2	3	4	5
41.	Family members who know me best would say I have a good sense of humor	1	2	3	4	5
42.	I generally feel a close bond with others of the opposite sex	1	2	3	4	5

Scoring Directions for the Multicultural Personality Inventory (MPI)

Introduction

Users of the MPI must have completed the “Utilization Request Form” before incorporating the MPI in their professional work.

The MPI-SF is a 42-item Likert-type self-report measure of multicultural personality. The MPI represents an operationalization of the multicultural personality theory put forth by Ponterotto (“Multicultural Personality: An Evolving Theory of Optimal Functioning in Culturally Heterogeneous Societies,” *The Counseling Psychologist*, 2010, 38 (5), 714-758). Users of the MPI should read this article and the ongoing development and validity studies on the MPI before use.

Scoring

Of the 42 items on the MPI, 38 are worded and scored in a positive direction (high scores indicate a higher level of the multicultural personality construct as theoretically presented in Ponterotto [2010]), and 4 are worded and scored in a negative direction (where low scores indicate a lower level of the multicultural personality). Naturally, when tallying the Total score response, these latter 9 items need to be reverse-scored. Reverse scoring means that that if a respondent circles “1” they should get five points; a “2” four points, a “3” three points, a “4” two points, and a “5” one point.

There are a total of seven factors on the MPI: *Racial and Ethnic Identity Development*, *Social Justice and Activism*, *Psychological Health*, *Connectedness and Spirituality*, *Humor*, *Opposite Gender Connection*, and *Culturally Diverse Friendships*. Both exploratory and confirmatory factor analyses support the seven-factor MPI structure, and thus researchers should always calculate the mean, standard deviation, and coefficient alpha for each of the seven subscales. A user friendly guide in interpreting coefficient alpha and its relationship to study statistical Power and variable Effect Sizes is presented in Ponterotto and Ruckdeschel (“An Overview of Coefficient Alpha and a Reliability Matrix for Estimating Adequacy of Internal Consistency Coefficients with Psychological Research Measures,” 2007, *Perceptual and Motor Skills*, 105, 997-1014). Researchers can also calculate the MPI total score (including the mean, standard deviation, and coefficient alpha) across all seven factors and 70 items, however, this total score provides less interpretive significance.

Factor 1: Racial and Ethnic Identity Development

6 items: 5, 13, 17, 23, 32, 38

Factor 2: Social Justice and Activism

6 items: 2, 10, 19, 22, 31, 37

Factor 3: Psychological Health (Items in parentheses are reverse-scored)

6 items: 6, 14, 20, (24), 29, (36)

Self Perception Scale
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Factor 4: Connectedness and Spirituality

6 items: 7, 9, 21, 25, 34, 40

Factor 5: Humor

6 items: 3, 12, 18, 26, 33, 41

Factor 6: Opposite Gender Connection (Items in parentheses are reverse-scored)

6 items: 4, 8, 15, 27, (30), 42

Factor 7: Culturally Diverse Friendships (Items in parentheses are reverse-scored)

6 items: 1, (11), (16), (28), (35), 39

The Multicultural Personality Inventory (MPI) is Copyrighted© by Joseph G. Ponterotto, Ph.D.,
Counseling Psychology Program, Division of Psychological and Educational Services, Room
1008, Graduate School of Education, Fordham University at Lincoln Center, 113 West 60th
Street, New York, New York 10023-7478 (212-636-6480); Ponterotto@Fordham.edu.

APPENDIX D
AGLE 2403: AGRICULTURAL LEADERSHIP IN A MULTICULTURAL SOCIETY
SYLLABI

INDIVIDUAL REFLECTION WORKSHEETS SECTION SYLLABUS

AGRICULTURAL LEADERSHIP 2403

College of Agricultural Science & Natural Resources - Oklahoma State University

Authentic Leadership ♦ Professionalism ♦ Diversity ♦ Critical Thinking ♦ Commitment to Agriculture

AGRICULTURAL LEADERSHIP IN A MULTICULTURAL SOCIETY FALL 2019 - 1ST 8 WEEKS – CRN # 70019

INSTRUCTOR/CONTACT INFORMATION:

Instructor: Dr. Bill Weeks
405-744-5129 office
405-743-4109 home
405-780-5261 cell
Email: bill.weeks@okstate.edu

Teaching Assistants—Ms. Cammie Grace Weaver and Ms. Katherine Bezner
Email: cammie_grace.weaver@okstate.edu, kbezner@okstate.edu

SYLLABUS ATTACHMENT:

For more information on important dates for the semester, academic integrity issues and where to go for help, refer to the university syllabus attachment which you can find here:

https://academicaffairs.okstate.edu/sites/default/files/Fall%202019%20Syllabus%20Attachment_0.pdf

COMMUNICATION PLAN:

Please contact me via email (bill.weeks@okstate.edu) with course-related questions. I will typically respond to student emails within 24 hours. If it is an emergency, text or call me. Phone conferences may also be arranged by first emailing me and I'd be glad to meet you in my office if you are on campus. You can text me, but it will take me a long time to reply because I have short, fat, farmer fingers. If I sign my name as "Bill" or Billy G., please feel free to address me the same way. I prefer "Bill" to Mr. Weeks, Doc, or Prof. I will notify you if I am going to be out-of-touch for any reason—for example at a conference or in therapy. You are welcome to contact TAs Cammie Grace and Katherine with your questions if that is more comfortable for you.

TECHNICAL REQUIREMENTS/STUDENT SUPPORT AND SERVICES:

The course is supported by CANVAS, OSU's course management system. Students may access OSU's Online Classroom and Community at my.okstate.edu using their OKEY username and password. Answers to common questions regarding CANVAS are available at:

<https://it.sharepoint.okstate.edu/TechnologySupport/ResourceCenters/SharedDocuments/onlineclassroom.aspx>. OSU Helpdesk: helpdesk@okstate.edu, 405-744-HELP, or 1-877-951-4836.

STUDENTS WITH DISABILITIES:

According to the Americans with Disabilities Act, each student with a disability is responsible for notifying the University of his or her disability and to request accommodations. If any member of a class thinks that he/she has a qualified disability and needs special accommodations, he/she should notify the instructor and request verification of eligibility for accommodations from the Office of Student Disability Services, 315 Student Union. Please advise the instructor of such disability as soon as possible, and contact Student Disability Services, to ensure timely implementation of appropriate accommodations.

Oklahoma State University is committed to the maintenance of the highest standards of integrity and ethical conduct of its members. This level of ethical behavior and integrity will be maintained in this course. Participating in a behavior that violates academic integrity (e.g., unauthorized collaboration on homework or assignments, plagiarism, multiple submissions of the same assignment, cheating on examinations, fabricating information, helping another person cheat, having unauthorized advance access to examinations, altering or destroying the work of others, and fraudulently altering academic records) will result in your being sanctioned. Violations may subject you to disciplinary action including the following: receiving a failing grade on an assignment, examination, or course, receiving a notation of a violation of academic integrity on your transcript, and being suspended from the University. You have the right to appeal the charge. Contact the Office of Academic Affairs, 101 Whitehurst, 405-744-5627.
<http://academicintegrity.okstate.edu/>

ACADEMIC DISHONESTY/MISCONDUCT:

Oklahoma State University is committed to the maintenance of the highest standards of integrity and ethical conduct of its members. This level of ethical behavior and integrity will be maintained in this course. Participating in a behavior that violates academic integrity (e.g., unauthorized collaboration on homework or assignments, plagiarism, multiple submissions of the same assignment, cheating on examinations, fabricating information, helping another person cheat, having unauthorized advance access to examinations, altering or destroying the work of others, and fraudulently altering academic records) will result in your being sanctioned. Violations may subject you to disciplinary action including receiving a failing grade on an assignment, examination, or course, receiving a notation of a violation of academic integrity on your transcript, and being suspended from the University. You have the right to appeal the charge. Contact the Office of Academic Affairs, 101 Whitehurst, 405-744-5627,
<http://osu.okstate.edu/acadaffr/aa/academicintegrity.htm>

COURSE FORMAT:

AGLE 2403 is offered completely online and does not require any face-to-face contact. The course is intense (a short course) and will require focused attention over the eight-week period. **Please keep in mind that you are completing readings and assignments at twice the typical pace of a fall or spring semester course.** You will have assignments due weekly. You are expected to participate weekly in online discussions and to turn in corresponding assignments by the stated deadlines. Late assignments will be penalized 10% each day late to a maximum of 50%.

REQUIRED COURSE TEXT:

Diversity Consciousness: Opening our Minds to People, Cultures, & Opportunities, 4th edition, by Richard D. Bucher.

Crash (2004). Directed by Paul Haggis. Screenplay by Paul Haggis & Robert Moresco. R rated for some (very) rough language. Released by Lions Gate Films. Starring Don Cheadle, Sandra Bullock, Thandie Newton, Matt Dillon, and Terrence Howard. (You may purchase the film, rent it, or pay to view the film through an online vendor such as Amazon Prime, YouTube, or Hulu.)

It is imperative that you get your textbook immediately. You may either purchase your book from a local bookstore (limited supplies available) or order the book from an online vendor.

COURSE DESCRIPTION/OBJECTIVE(S):

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- Evaluating personal barriers related to women and minorities to fulfilling leadership roles in the agricultural sciences and natural resources.
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- Critically analyzing contemporary issues related to gender, race, and ethnicity.

COURSE EVALUATION:

Assignment	Assignment Description	Points
Self-Assessments	Before starting Module 1/Week #1 activities, students should complete a self-assessment in Canvas. During Week #8, students will complete a 2 nd self-reassessment in Canvas.	40 pts (20 pts each)
Weekly Reflection Worksheets Weekly worksheets (7) open Wednesday and due midnight on Friday.	Students are expected to participate through reflection worksheets (7 times). Students should submit completed reflection worksheets in Canvas each week by midnight on Friday.	140 pts (20 pts each)
Food and “My” Story Cooking Assignment & PowerPoint Photos/Documentation-50 pts PowerPoint/Reflection-50 pts	Prepare a family recipe (document through photos). Prepare a PowerPoint presentation with pictures based on assignment guidelines. Post your PPT to CANVAS AND Discussion.	100 pts
<u>A Class Divided</u> -1 ½ -2 page written reflection	Written reflection on the film. Papers should include integration of course concepts and follow the assignment guidelines. Post to CANVAS.	100 pts
Quizzes (7 quizzes) Quizzes open Sunday thru Wednesday.	Reading and key word tests will be given online and may utilize T/F or MC. Quizzes will be timed. Please prepare (read) before beginning the quiz.	350 pts (50 pts each)
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Grade Insurance An OPTIONAL assignment, submit 1 ½ -2-page reflection to CANVAS.	Students may select any one assignment to complete as extra credit. <u>Grade Insurance may be submitted any time before September 23.</u>	Extra Credit (20 pts)

COURSE GRADE:

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COURSE OUTLINE:

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Week #7 9/30	Leadership (Chapter 8)
Week #8 10/7	Final Project Papers Due Wednesday, October 9th

WEEKLY REFLECTION WORKSHEETS:

A weekly reflections worksheet will be available each week on Wednesday and should be submitted by midnight on Friday in Canvas. The worksheet for each week will have instructions and reflection questions for you to respond to and should be submitted as one document at the end of the week. Responses to each reflection question should be **no more than a paragraph** (5-7 sentences), attempt to connect your personal thoughts with **relevant course content**, and demonstrate **depth of thought**.

A rule of thumb for daily worksheets in AGLE 2403 is to treat the class like a regular face-to-face class by “attending” class regularly and engage in personal reflection each day – don’t wait until the end of the week to complete the worksheet. Students should complete the weekly reflections by following the instructions and answering ALL questions on the worksheets. **I will award points weekly based upon the QUALITY of the responses you submit with your worksheet each week.**

WRITTEN ASSIGNMENTS:

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Source: Oklahoma State University Style Guide 2016

ONLINE REFLECTIVE DISCUSSION SECTION SYLLABUS

AGRICULTURAL LEADERSHIP 2403

College of Agricultural Science & Natural Resources - Oklahoma State University

Authentic Leadership ♦ Professionalism ♦ Diversity ♦ Critical Thinking ♦ Commitment to Agriculture

AGRICULTURAL LEADERSHIP IN A MULTICULTURAL SOCIETY FALL 2019 - 1ST 8 WEEKS – CRN # 65396

INSTRUCTOR/CONTACT INFORMATION:

Instructor: Dr. Bill Weeks
405-744-5129 office
405-743-4109 home
405-780-5261 cell
Email: bill.weeks@okstate.edu

Teaching Assistants—Ms. Cammie Grace Weaver and Ms. Katherine Bezner
Email: cammie_grace.weaver@okstate.edu, kbezner@okstate.edu

SYLLABUS ATTACHMENT:

For more information on important dates for the semester, academic integrity issues and where to go for help, refer to the university syllabus attachment which you can find here:

https://academicaffairs.okstate.edu/sites/default/files/Fall%202019%20Syllabus%20Attachment_0.pdf

COMMUNICATION PLAN:

Please contact me via email (bill.weeks@okstate.edu) with course-related questions. I will typically respond to student emails within 24 hours. If it is an emergency, text or call me. Phone conferences may also be arranged by first emailing me and I'd be glad to meet you in my office if you are on campus. You can text me, but it will take me a long time to reply because I have short, fat, farmer fingers. If I sign my name as "Bill" or Billy G., please feel free to address me the same way. I prefer "Bill" to Mr. Weeks, Doc, or Prof. I will notify you if I am going to be out-of-touch for any reason—for example at a conference or in therapy. You are welcome to contact TAs Cammie Grace and Katherine with your questions if that is more comfortable for you.

TECHNICAL REQUIREMENTS/STUDENT SUPPORT AND SERVICES:

The course is supported by CANVAS, OSU's course management system. Students may access OSU's Online Classroom and Community at my.okstate.edu using their OKEY username and password. Answers to common questions regarding CANVAS are available at:

<https://it.sharepoint.okstate.edu/TechnologySupport/ResourceCenters/SharedDocuments/onlineclassroom.aspx>. OSU Helpdesk: helpdesk@okstate.edu, 405-744-HELP, or 1-877-951-4836.

STUDENTS WITH DISABILITIES:

According to the Americans with Disabilities Act, each student with a disability is responsible for notifying the University of his or her disability and to request accommodations. If any member of a class thinks that he/she has a qualified disability and needs special accommodations, he/she should notify the instructor and request verification of eligibility for accommodations from the Office of Student Disability Services, 315 Student Union. Please advise the instructor of such disability as soon as possible, and contact Student Disability Services, to ensure timely implementation of appropriate accommodations.

Oklahoma State University is committed to the maintenance of the highest standards of integrity and ethical conduct of its members. This level of ethical behavior and integrity will be maintained in this course.

Participating in a behavior that violates academic integrity (e.g., unauthorized collaboration on homework or assignments, plagiarism, multiple submissions of the same assignment, cheating on examinations, fabricating information, helping another person cheat, having unauthorized advance access to examinations, altering or destroying the work of others, and fraudulently altering academic records) will result in your being sanctioned. Violations may subject you to disciplinary action including the following: receiving a failing grade on an assignment, examination, or course, receiving a notation of a violation of academic integrity on your transcript, and being suspended from the University. You have the right to appeal the charge. Contact the Office of Academic Affairs, 101 Whitehurst, 405-744-5627.
<http://academicintegrity.okstate.edu/>

ACADEMIC DISHONESTY/MISCONDUCT:

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<http://osu.okstate.edu/acadaffr/aa/academicintegrity.htm>

COURSE FORMAT:

AGLE 2403 is offered completely online and does not require any face-to-face contact. The course is intense (a short course) and will require focused attention over the eight-week period. **Please keep in mind that you are completing readings and assignments at twice the typical pace of a fall or spring semester course.** You will have assignments due weekly. You are expected to participate weekly in online discussions and to turn in corresponding assignments by the stated deadlines. Late assignments will be penalized 10% each day late to a maximum of 50%.

REQUIRED COURSE TEXT:

Diversity Consciousness: Opening our Minds to People, Cultures, & Opportunities, 4th edition, by Richard D. Bucher.

Crash (2004). Directed by Paul Haggis. Screenplay by Paul Haggis & Robert Moresco. R rated for some (very) rough language. Released by Lions Gate Films. Starring Don Cheadle, Sandra Bullock, Thandie Newton, Matt Dillon, and Terrence Howard. (You may purchase the film, rent it, or pay to view the film through an online vendor such as Amazon Prime, YouTube, or Hulu.)

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Assignment	Assignment Description	Points
Self-Assessments	Before starting Module 1/Week #1 activities, students should complete a self-assessment in Canvas. During Week #8, students will complete a 2 nd self-reassessment in Canvas.	40 pts (20 pts each)
Participation in Online Discussions Weekly discussions (7) open Wednesday and close at midnight on Friday.	Participate weekly in online discussions. Answer each of discussion questions and respond to other student's posts as appropriate. You should not only post to the discussions, but read discussion and ask questions of the other participants. I am expecting at least 10 posts each week and that you read at least 25 posts from fellow students.	140 pts
Food and "My" Story Cooking Assignment & PowerPoint Photos/Documentation-50 pts PowerPoint/Reflection-50 pts	Prepare a family recipe (document through photos). Prepare a PowerPoint presentation with pictures based on assignment guidelines. Post your PPT to CANVAS AND Discussion.	100 pts
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PARTICIPATION IN ONLINE DISCUSSION:

Participation is expected during the second part of each week (Wednesday through Friday as posted in the weekly modules). Students are expected to not only **POST to all online discussion questions** for the week, but to also **read the posts** made by their classmates, **read comments**, and **ask their peers questions**. Original posts to each question should be **no more than a paragraph** (5-7 sentences), attempt to connect your personal thoughts with **relevant course content**, and conclude with a question to spur deeper conversation on the topic.

The class will be divided into “discussion groups” so that you do not have to follow the discussion of all of the students enrolled in the class. Barring some last minute scheduling changes you will be divided into five groups of about 10 each, labeled simply 1 - 5.

A rule of thumb for online discussion in AGLE2403 is to treat the class like a regular face-to-face class by “attending” class regularly and engage in thought-provoking discussion with your peers. Students should respond to each of the questions posted by the instructor and read the majority of posts made by your peers. If a peer replies to your post, be sure to respond appropriately to further the conversation. Each day, you will need to follow a few of the threads and get involved in the discussion. **Points will be awarded weekly based upon the number of QUALITY posts that you AUTHOR and the number of posts that you READ. To earn full points for discussion, I will be looking for you to author at least 10 QUALITY posts and for you to read at least 25 posts weekly.**

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Source: Oklahoma State University Style Guide 2016

APPENDIX E
SCALE OF SOCIAL DESIRABILITY

Self Assessment

Dare You Say What You Think? The Social-Desirability Scale

Do you say what you think, or do you tend to misrepresent your beliefs to earn the approval of others? Do you answer questions honestly, or do you say what you think other people want to hear?

Telling others what we think they want to hear is making the socially desirable response. Falling prey to social desirability may cause us to distort our beliefs and experiences in interviews or on psychological tests. The bias toward responding in socially desirable directions is also a source of error in the case study, survey, and testing methods. You can complete the Social-Desirability Scale devised by Crowne and Marlowe to gain insight into whether you have a tendency to produce socially desirable responses.

Directions: Read each item and decide whether it is true (T) or false (F) for you. Try to work rapidly and answer each question by clicking on the T or the F. Then click on Total Score to access the Scoring Key and interpret your answers.

1. T F Before voting I thoroughly investigate the qualifications of all the candidates.
2. T F I never hesitate to go out of my way to help someone in trouble.
3. T F It is sometimes hard for me to go on with my work if I am not encouraged.
4. T F I have never intensely disliked anyone.
5. T F On occasions I have had doubts about my ability to succeed in life.
6. T F I sometimes feel resentful when I don't get my way.
7. T F I am always careful about my manner of dress.
8. T F My table manners at home are as good as when I eat out in a restaurant.
9. T F If I could get into a movie without paying and be sure I was not seen, I would probably do it.
10. T F On a few occasions, I have given up something because I thought too little of my ability.
11. T F I like to gossip at times.
12. T F There have been times when I felt like rebelling against people in authority even though I knew they were right.
13. T F No matter who I'm talking to, I'm always a good listener.
14. T F I can remember "playing sick" to get out of something.
15. T F There have been occasions when I have taken advantage of someone.
16. T F I'm always willing to admit it when I make a mistake.
17. T F I always try to practice what I preach.
18. T F I don't find it particularly difficult to get along with loudmouthed, obnoxious people.
19. T F I sometimes try to get even rather than forgive and forget.
20. T F When I don't know something I don't mind at all admitting it.
21. T F I am always courteous, even to people who are disagreeable.
22. T F At times I have really insisted on having things my own way.
23. T F There have been occasions when I felt like smashing things.
24. T F I would never think of letting someone else be punished for my wrong-doings.
25. T F I never resent being asked to return a favor.
26. T F I have never been irked when people expressed ideas very different from my own.
27. T F I never make a long trip without checking the safety of my car.
28. T F There have been times when I was quite jealous of the good fortune of others.
29. T F I have almost never felt the urge to tell someone off.
30. T F I am sometimes irritated by people who ask favors of me.
31. T F I have never felt that I was punished without cause.
32. T F I sometimes think when people have a misfortune they only got what they deserved.
33. T F I have never deliberately said something that hurt someone's feelings.

SOURCE: D. P. Crowne and D. A. Marlowe, A new scale of social desirability independent of pathology, *Journal of Consulting Psychology* 24 (1960): 351. Copyright 1960 by the American Psychological Association. Reprinted by permission.

Reset

Total Score

SCORING KEY FOR THE SOCIAL DESIRABILITY SCALE

Below is a summary of the answers you provided that match the answers found in the Scoring Key (not shown). Your total score is also provided. Read the text in the blue box to interpret your score. Click Reset to take the Self-Assessment again.

1. T	___	10. F	___	18. T	___	26. T	___
2. T	___	11. F	___	19. F	___	27. T	___
3. F	___	12. F	___	20. T	___	28. F	___
4. T	___	13. T	___	21. T	___	29. T	___
5. F	___	14. F	___	22. F	___	30. F	___
6. F	___	15. F	___	23. F	___	31. T	___
7. T	___	16. T	___	24. T	___	32. F	___
8. T	___	17. T	___	25. T	___	33. T	___
9. F	___						

Interpreting Your Score:

Low Scorers (0–8). About one respondent in six earns a score between 0 and 8. Such respondents answered in a socially undesirable direction much of the time. It may be that they are more willing than most people to respond to tests truthfully, even when their answers might meet with social disapproval.

Average Scorers (9–19). About two respondents in three earn a score from 9 through 19. They tend to show an average degree of concern for the social desirability of their responses, and it may be that their general behavior represents an average degree of conformity to social rules and conventions.

High Scorers (20–33). About one respondent in six earns a score between 20 and 33. These respondents may be highly concerned about social approval and respond to test items in such a way as to avoid the disapproval of people who may read their responses. Their general behavior may show high conformity to social rules and conventions.

Reset

Back to Questions

APPENDIX F
PRE-TEST RECRUITMENT STATEMENT AND INSTRUMENT

PRE-TEST RECRUITMENT STATEMENT

Self-Assessment to complete before starting WEEK ONE

COMPLETE THIS SELF-ASSESSMENT BEFORE BEGINNING THE WEEK 1 MODULE.

THE WEEK 1 MODULE WILL BECOME AVAILABLE ONCE THIS ASSIGNMENT IS COMPLETED.

Welcome to AGLE 2403: Agriculture in a Multicultural Society! It is important that you take a few minutes to begin thinking about your personal views, opinions, beliefs, and/or attitudes about some of the topics we will be discussing over the next eight weeks together. To help you do this, please take the following self-assessment ([CLICK THE BLUE HYPERLINKED STATEMENT BELOW](#)):

[AGLE 2403 Self-Assessment \(Pre\)](#)

This self-assessment should take you about 15-20 minutes to complete and looks at your personality traits and competencies related to multiculturalism. Make sure to read each question carefully and answer it honestly. There will be no grade assigned to your answers, just for your completion of the activity. Completing the activity gives you a great foundation to begin reflecting on your own experiences with multiculturalism as we start the course!

The self-assessment is available before the start of class (Saturday, August 17) and must be completed during the first week of class before starting the Week 1 activities by Sunday, August 25 at 11:59pm.

20 points

Due Aug 25 11:59pm
Closes Sept 1 11:59pm

PRE-TEST
EMC/RSEE, MPI-SF, AND DEMOGRAPHICS

Everyday Multicultural Competencies

Start of Block: EMC

The statements below are opinions you may have heard expressed at one time or another. Please indicate your current level of agreement with each statement.

Q1 I think American culture is the best culture.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q4 I don't know a lot of information about important social and political events of racial and ethnic groups other than my own.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q5 I am touched by movies or books about discrimination issues faced by racial or ethnic groups other than my own.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q6 I really don't know how to go about making friends with someone from a different culture.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q7 Most Americans would be better off if they knew more about the cultures of other countries.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q8 I can relate to the frustration that some people feel about having fewer opportunities due to their racial or ethnic backgrounds.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q9 I am interested in participating in various cultural activities on campus.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q10 I am aware of institutional barriers (e.g., restricted opportunities for job promotion) that discriminate against racial or ethnic groups other than my own.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q11 I am not reluctant to work with others from different cultures in class activities or team projects.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q12 Members of minorities tend to overreact all the time.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q13 I feel irritated when people of different racial or ethnic backgrounds speak their language around me.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q14 When I know my friends are treated unfairly because of their racial or ethnic backgrounds, I speak up for them.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q15 I would like to have dinner at someone's house who is from a different culture.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q16 I often find myself fearful of people of other races.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q17 Racism is mostly a thing of the past.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q18 I get disturbed when other people experience misfortunes due to their racial or ethnic background.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q19 I rarely think about the impact of a racist or ethnic joke on the feelings of people who are targeted.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q20 People who talk with an accent should work harder to speak proper English.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q21 I feel uncomfortable when interacting with people from different cultures.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q22 It is easy for me to understand what it would feel like to be a person or another racial or ethnic background other than my own.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q23 Today in the U.S. White people still have many important advantages compared to other ethnic groups.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q24 I can see how other racial or ethnic groups are systematically oppressed in our society.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q25 I don't care if people make racist statements against other racial or ethnic groups.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q26 When I see people who come from a different racial or ethnic background succeed in the public arena, I share their pride.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q27 In American everyone has an equal opportunity for success.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q28 I am aware of how society differentially treats racial or ethnic groups other than my own.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q29 I share the anger of people who are victims of hate crimes (e.g., intentional violence because of race or ethnicity).

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q30 I doubt I can have a deep or strong friendship with people who are culturally different.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q31 is difficult for me to put myself in the shoes of someone who is racially and/or ethnically different from me.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q32 When I hear people make racist jokes, I tell them I am offended even though they are not referring to my racial or ethnic group.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q33 I would like to work in an organization where I get to work with individuals from diverse backgrounds.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q34 It is difficult for me to relate to stories in which people talk about racial or ethnic discrimination they experience in their day to day lives.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q35 For two babies born with the same potential, in the U.S. today, in general it is still more difficult for a child of color to succeed than a White child.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q36 When in American, minorities should make an effort to merge into American culture.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q37 I welcome being strongly influenced by my contact with people from other cultures.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q38 The U.S. has a long way to go before everyone is truly treated equal.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q39 I believe the United States is enhanced by other cultures.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q40 I welcome the possibility that getting to know another culture might have a deep positive influence on me.

- Strongly disagree
- Disagree
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- Slightly agree
- Agree
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Q41 I fail to understand why members from minority groups complain about being alienated.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q42 I think members of the minority blame White people too much for their misfortunes.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q43 I admire beauty in other cultures.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q44 I think it is important to be educated about cultures and countries other than my own.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q45 I do not understand why minority people need their own TV channels.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q46 Minorities get in to school easier and some get away with minimal effort.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q47 A truly good education requires knowing how to communicate with someone from another culture.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q48 I do not know how to find out what is going on in other countries.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q49 I am really worried about White people in the U.S. soon becoming a minority due to so many immigrants.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q50 I am afraid that new cultural experiences might risk losing my own identity.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Page Break

Start of Block: MPI-SF

Multicultural Personality Inventory - Short Form

Q89 I have very close friends who represent diverse ethnic groups

- Disagree strongly
- Disagree
- Unsure
- Agree
- Agree strongly

Q90 I speak out against oppression that I see (e.g., racism, sexism, homophobia, ageism)

- Disagree strongly
- Disagree
- Unsure
- Agree
- Agree strongly

Q91 I enjoy reading humorous and comedic articles and books

- Disagree strongly
- Disagree
- Unsure
- Agree
- Agree strongly

Q92 Friends of my opposite gender consider me a helpful person to talk with when they are upset or under stress

- Disagree strongly
- Disagree
- Unsure
- Agree
- Agree strongly

Q93 I feel a deep sense of pride in being part of my racial group

- Disagree strongly
- Disagree
- Unsure
- Agree
- Agree strongly

Q94 My close friends consider me "together" and emotionally stable

- Disagree strongly
- Disagree
- Unsure
- Agree
- Agree strongly

Q95 I believe living things are interconnected with non-living earthly matter (e.g., wind, land, sun, and sky) in some spiritual sense

- Disagree strongly
- Disagree
- Unsure
- Agree
- Agree strongly

Q96 I have very close friends who are gay or lesbian

- Disagree strongly
- Disagree
- Unsure
- Agree
- Agree strongly

Q97 In times of stress I rely on my sense of spirituality as a coping mechanism

- Disagree strongly
- Disagree
- Unsure
- Agree
- Agree strongly

Q98 I have verbally confronted a close family member or friend who has made homophobic comments or who has shared an anti-gay or lesbian joke

- Disagree strongly
- Disagree
- Unsure
- Agree
- Agree strongly

Q99 Most of my close friends are from my own ethnic group(s)

- Disagree strongly
- Disagree
- Unsure
- Agree
- Agree strongly

Q100 I believe I have a pretty good sense of humor

- Disagree strongly
- Disagree
- Unsure
- Agree
- Agree strongly

Q101 I feel a deep sense of pride in being part of my ethnic group(s)

- Disagree strongly
 - Disagree
 - Unsure
 - Agree
 - Agree strongly
-

Q102 I am a very emotionally stable person

- Disagree strongly
- Disagree
- Unsure
- Agree
- Agree strongly

Q103 I have very close friends who are bisexual

- Disagree strongly
- Disagree
- Unsure
- Agree
- Agree strongly

Q104 Most of my close friends are from my own sexual orientation group

- Disagree strongly
- Disagree
- Unsure
- Agree
- Agree strongly

Q105 I have given considerable thought to what it means to be part of my ethnic group(s)

- Disagree strongly
- Disagree
- Unsure
- Agree
- Agree strongly

Q106 My close friends say that I have a good sense of humor

- Disagree strongly
- Disagree
- Unsure
- Agree
- Agree strongly

Q107 I have verbally confronted a close family member or friend who has made sexist comments or who has shared a sexist joke

- Disagree strongly
- Disagree
- Unsure
- Agree
- Agree strongly

Q108 I would evaluate my psychological health as very high

- Disagree strongly
- Disagree
- Unsure
- Agree
- Agree strongly

Q109 In times of stress I think and draw emotional strength from my ancestors

- Disagree strongly
- Disagree
- Unsure
- Agree
- Agree strongly

Q110 I think it is important to understand and value both similarities and differences among people of different sexual orientations

- Disagree strongly
- Disagree
- Unsure
- Agree
- Agree strongly

Q111 I am aware of the history of my racial group(s) outside this country

- Disagree strongly
- Disagree
- Unsure
- Agree
- Agree strongly

Q112 Close family members sometimes perceive me as emotionally unstable

- Disagree strongly
- Disagree
- Unsure
- Agree
- Agree strongly

Q113 I am a very spiritual person

- Disagree strongly
- Disagree
- Unsure
- Agree
- Agree strongly

Q114 I love when a movie I am watching causes me to laugh out loud

- Disagree strongly
- Disagree
- Unsure
- Agree
- Agree strongly

Q115 I have very close friends of the opposite sex

- Disagree strongly
- Disagree
- Unsure
- Agree
- Agree strongly

Q116 Most of my close friends are from my own racial group

- Disagree strongly
- Disagree
- Unsure
- Agree
- Agree strongly

Q117 My closest family members consider me "together" and emotionally stable

- Disagree strongly
- Disagree
- Unsure
- Agree
- Agree strongly

Q118 Most of my close friends represent my gender group

- Disagree strongly
- Disagree
- Unsure
- Agree
- Agree strongly

Q119 I really think heterosexual people should be more involved in speaking out against negative attitudes and behaviors toward gays, lesbians, and bisexuals

- Disagree strongly
- Disagree
- Unsure
- Agree
- Agree strongly

Q120 I am aware of the history of my ethnic group(s) outside of this country

- Disagree strongly
- Disagree
- Unsure
- Agree
- Agree strongly

Q121 It is easy for me to laugh at myself if I do something silly or stupid

- Disagree strongly
- Disagree
- Unsure
- Agree
- Agree strongly

Q122 I believe all humans and animals are interconnected in some spiritual way

- Disagree strongly
- Disagree
- Unsure
- Agree
- Agree strongly

Q123 Most of my close friends are from my own religious group

- Disagree strongly
- Disagree
- Unsure
- Agree
- Agree strongly

Q124 Close friends sometimes perceive me as emotionally unstable

- Disagree strongly
- Disagree
- Unsure
- Agree
- Agree strongly

Q125 I have verbally confronted a close family member or friend who has made racist comments or who has shared a racist joke

- Disagree strongly
- Disagree
- Unsure
- Agree
- Agree strongly

Q126 I find a lot of strong support in my ethnic group affiliations

- Disagree strongly
- Disagree
- Unsure
- Agree
- Agree strongly

Q127 I have very close friends who represent diverse racial groups

- Disagree strongly
- Disagree
- Unsure
- Agree
- Agree strongly

Q128 I believe all humans are interconnected with each other in a spiritual way

- Disagree strongly
- Disagree
- Unsure
- Agree
- Agree strongly

Q129 Family members who know me best would say I have a good sense of humor

- Disagree strongly
- Disagree
- Unsure
- Agree
- Agree strongly

Q130 I generally feel a close bond with others of the opposite sex

- Disagree strongly
- Disagree
- Unsure
- Agree
- Agree strongly

Start of Block: Demographics



Demographics

Q88 9 Digit OSU CWID: (XXXXXXXXXX)

Q87 Gender:

Q90 My age:

Q88 I identify my ethnicity as: (select all that apply)

- White
- Black or African American
- American Indian or Alaska Native
- Asian
- Native Hawaiian or Pacific Islander
- Other

Q91 What is your present religion, if any?

- Protestant
- Roman Catholic
- Mormon
- Greek or Russian Orthodox
- Jewish
- Muslim
- Buddhist
- Hindu
- Atheist
- Agnostic
- None

APPENDIX G
POST-TEST RECRUITMENT STATEMENT AND INSTRUMENT

POST-TEST RECRUITMENT STATEMENT

Self Re-Assessment to complete by the end of WEEK EIGHT

NOTE: THIS SELF RE-ASSESSMENT MUST BE COMPLETED THE END OF WEEK EIGHT.

As we wrap up the course, please complete the self re-assessment below, which should take less than 10 minutes. Make sure to read each question carefully and answer it honestly based on your personal views, opinions, beliefs, and/or attitudes. There will be no grade assigned to your answers, just for your completion of the activity.

[AGLE 2403 Self Re-Assessment](#)

The self re-assessment is available to complete Saturday, October 5 through Sunday, October 13 at 11:59pm. Be sure to complete the self re-assessment before the course ends on October 13.

20 points

Due Oct 13 11:59pm

Closes Oct 18 11:59pm

POST-TEST
EMC/RSEE

Everyday Multicultural Competencies

Start of Block: EMC

The statements below are opinions you may have heard expressed at one time or another. Please indicate your current level of agreement with each statement.

Q1 I think American culture is the best culture.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q4 I don't know a lot of information about important social and political events of racial and ethnic groups other than my own.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q5 I am touched by movies or books about discrimination issues faced by racial or ethnic groups other than my own.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q6 I really don't know how to go about making friends with someone from a different culture.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q7 Americans would be better off if they knew more about the cultures of other countries.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q8 I can relate to the frustration that some people feel about having fewer opportunities due to their racial or ethnic backgrounds.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q9 I am interested in participating in various cultural activities on campus.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q10 I am aware of institutional barriers (e.g., restricted opportunities for job promotion) that discriminate against racial or ethnic groups other than my own.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q11 I am not reluctant to work with others from different cultures in class activities or team projects.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q12 Members of minorities tend to overreact all the time.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q13 I feel irritated when people of different racial or ethnic backgrounds speak their language around me.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q14 When I know my friends are treated unfairly because of their racial or ethnic backgrounds, I speak up for them.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q15 I would like to have dinner at someone's house who is from a different culture.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q16 I often find myself fearful of people of other races.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q17 Racism is mostly a thing of the past.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q18 I get disturbed when other people experience misfortunes due to their racial or ethnic background.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q19 rarely think about the impact of a racist or ethnic joke on the feelings of people who are targeted.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q20 People who talk with an accent should work harder to speak proper English.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q21 I feel uncomfortable when interacting with people from different cultures.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q22 It is easy for me to understand what it would feel like to be a person or another racial or ethnic background other than my own.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q23 Today in the U.S. White people still have many important advantages compared to other ethnic groups.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q24 I can see how other racial or ethnic groups are systematically oppressed in our society.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q25 I don't care if people make racist statements against other racial or ethnic groups.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q26 When I see people who come from a different racial or ethnic background succeed in the public arena, I share their pride.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q27 In American everyone has an equal opportunity for success.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q28 I am aware of how society differentially treats racial or ethnic groups other than my own.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q29 I share the anger of people who are victims of hate crimes (e.g., intentional violence because of race or ethnicity).

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q30 I doubt I can have a deep or strong friendship with people who are culturally different.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q31 It is difficult for me to put myself in the shoes of someone who is racially and/or ethnically different from me.

- Strongly disagree
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- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
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- Strongly disagree
- Disagree
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- Slightly agree
- Agree
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- Strongly disagree
- Disagree
- Slightly disagree
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Q38 The U.S. has a long way to go before everyone is truly treated equal.

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Q39 I believe the United States is enhanced by other cultures.

- Strongly disagree
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- Disagree
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- Slightly agree
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- Strongly disagree
- Disagree
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- Disagree
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- Strongly disagree
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- Strongly disagree
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- Slightly agree
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Q48 I do not know how to find out what is going on in other countries.

- Strongly disagree
- Disagree
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- Slightly agree
- Agree
- Strongly agree

Q49 I am really worried about White people in the U.S. soon becoming a minority due to so many immigrants.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

Q50 I am afraid that new cultural experiences might risk losing my own identity.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly agree

APPENDIX H
PARTICIPANT DEBRIEFING STATEMENT

DEBRIEFING STATEMENT

The Development of Multicultural Competencies in an Agricultural in a Multicultural Society Course: Does Discourse Matter?

Researcher: Lauren Lewis Cline

Advisor: Dr. Penny Pennington Weeks

If you will remember back to the first and last week of class, you completed a survey related to your perceptions of multiculturalism. This information helped your instructor better understand your level of multicultural competencies and multicultural personality at the beginning of the course in order to determine any change in competency that may have occurred as a result of the course. Additionally, your completion of either online discussions or individual reflection worksheets was a component of a study to determine which reflective instructional method contributed to learning about multiculturalism the most. In order to accurately determine if there was an effect as a result of the instructional method, the complete purpose of the survey was not explained. By limiting the information given to you at the beginning of the semester, we were able to study the effect of the instructional method on your development of multicultural competencies through this course. Your responses to the surveys will not be connected to you at all in the reporting of aggregate data; any identifiable information, such as your name and/or CWID has been removed from the data. We want to thank you again for completing the surveys and participating in our study as a part of this course.

If you do not consent to participation in the study and wish to have your data removed, please email the researchers listed below within two weeks of receiving this statement.

Contact information

If you have any questions or concerns, you can contact the researcher at (405)-744-3036, lauren.l.cline@okstate.edu, 445 Agricultural Hall, or the research advisor at (405) 744-4748, penny.weeks@okstate.edu, 442 Agricultural Hall.

If you have questions about your rights as a research volunteer or would simply like to speak with someone other than the research team about concerns regarding this study, please contact the OSU IRB at (405) 744-3377 or irb@okstate.edu. All reports or correspondence will be kept confidential.

Additional Resources:

If following this study, you experience feelings of distress, please consult the below resources for psychological services and consultation.

On Campus

Psychological Services Center
118 N. Murray Hall
(405) 744-5975
<http://psychology.okstate.edu/psc/index.html>

University Counseling Services
320 Student Union
(405) 744-5458
<http://www.okstate.edu/ucs/counselingservice.html>

OSU University Health Services
(405) 744-5975
<http://www.okstate.edu/UHS/uhsservices.htm#counselingservices>

APPENDIX I
AGLE 2403 FEEDBACK CRITERIA

STATEMENT FOR DISCUSSION SECTION:

PARTICIPATION IN ONLINE DISCUSSION:

Participation is expected during the second part of each week (Wednesday through Friday as posted in the weekly modules). Students are expected to not only **POST to all online discussion questions** for the week, but to also **read the posts** made by their classmates, **read comments**, and **ask their peers questions**. Original posts to each question should be **no more than a paragraph** (5-7 sentences), attempt to connect your personal thoughts with **relevant course content**, and conclude with a question to spur deeper conversation on the topic.

A rule of thumb for online discussion in AGLE2403 is to treat the class like a regular face-to-face class by “attending” class regularly and engage in thought-provoking discussion with your peers. Students should respond to each of the questions posted by the instructor and read the majority of posts made by your peers. If a peer replies to your post, be sure to respond appropriately to further the conversation. Each day, you will need to follow a few of the threads and get involved in the discussion. **Points will be awarded weekly based upon the number of QUALITY posts that you AUTHOR and the number of posts that you READ. To earn full points for discussion, I will be looking for you to author at least 10 QUALITY posts and for you to read at least 25 posts weekly.**

STATEMENT FOR WORKSHEET SECTION:

WEEKLY REFLECTION WORKSHEETS:

A weekly reflections worksheet will be available each week on Wednesday and should be submitted by midnight on Friday in Canvas. The worksheet for each week will have instructions and reflection questions for you to respond to and should be submitted as one document at the end of the week. Responses to each reflection question should be **no more than a paragraph** (5-7 sentences), attempt to connect your personal thoughts with **relevant course content**, and demonstrate **depth of thought**.

A rule of thumb for daily worksheets in AGLE 2403 is to treat the class like a regular face-to-face class by “attending” class regularly and engage in personal reflection each day – don’t wait until the end of the week to complete the worksheet. Students should complete the weekly reflections by following the instructions and answering ALL questions on the worksheets. **I will award points weekly based upon the QUALITY of the responses you submit with your worksheet each week.**

APPENDIX J
AGLE 2403 WEEKLY REFLECTION QUESTIONS

WEEK ONE

1. In the section titled Beginning Adjustments on page 15, your author offers the scenario of a young woman who was scolded by an airport security guard. The security guard got the same medicine back at him when a passenger told him “that young lady has problems you and I don’t have.” How does that scenario apply to this chapter?
2. I’ve considered an out of class experience, where everyone would take a turn as being a Wal Mart greeter for a couple of hours. Let’s say we did that. What diversity might you encounter if I assigned you to that task? That is, as you greet people, what diversity would you encounter?
3. Discuss the meaning and consequences of cultural cruise control; how does this concept apply to you?
4. Contrast assimilation and pluralism and give an example of one. How are these terms related to the melting pot vs. salad bowl debate? Where do you stand?
5. Which one of the diversity myths do/did you believe prior to reading the chapter...or which of the diversity myths do you think most people believe? Explain.

WEEK TWO

1. On pages 54 and 55, your author writes of a study where doctors' in a study watched videos and then made an evaluation of a patients' pain or treatment. What did they conclude and why might we care?
2. On page 38, your author dives into learning and teaching styles as elements of diversity. How important is it for teachers to recognize these differences in students?
3. See item #5 on page 56, Thinking about what you read in chapter #2, take a stab at explaining how this may have happened. That is, why did USDA loan officers discriminate against black farmers?
4. At the top of page 45, your author writes about the work of Daniel Goleman who is credited with the concept of emotional intelligence. E.I. has five components: self-awareness, self-regulation, social skills, motivation, and empathy. Taking empathy, he says that doctors who show empathy are less likely to be sued. Do you believe that? Why?
5. Read Case Study #3 on page 58 and respond to one of the three discussion questions.

WEEK THREE

1. After watching the 60 Minutes Interview with Supreme Court Justice Sonia Sotomayor, can you identify any of the *six barriers to success* that Sotomayor overcame? She admits that when she practiced corporate law she was referred to as “one tough bitch”, any thoughts on that statement.
2. Take a close look at Figure 3.3 on page 66, “our people are not perfect, but our culture is superior to others”. What can you take away from that chart?
3. On page 68, your author discusses the hillbilly or "poor white trash" stereotype. How does your author explain why that stereotype tolerated (and embraced) by so many?
4. On pages 69, your author describes the stereotype of attractiveness. What advantages to the pretty ones get? What is your opinion? Do *pretty* people have a leg up on the rest of us?
5. My Polish grandmother came to the U.S. in the 1920s as a teenager. Her older sister was supposed to travel to America, but stayed behind. Some students are aware of their cultural background, others know very little. What about you? Do you know a lot? If so why, or why not?

WEEK FOUR

1. What is your reaction to the reading on "cultural encapsulation"? Your author says, "cultural encapsulation" prior to college is one of the major reasons why college life can be such an adjustment. Think so?
2. Warren Buffet calls it the ovarian lottery; that he, in many ways, had a huge head start; that he was born into privilege. Have you experienced any unearned privilege in your life? Any advantage you got because of who you were. Lay in on the line!
3. Research shows that throwing diverse (remember students are diverse in many ways) students together in the same settings is no guarantee that they will interact or get to know each other. To what extent have you experienced "self-segregation" or that "keeping with those like you" at OSU?
4. I hope that after taking this class, each of you understands the importance of diversity consciousness. I would also hope that we could all move away from using the term "politically correct", . . . it is a crutch that is overused and misunderstood. What have you learned from this chapter specifically related to your own diversity consciousness?
5. Is it necessary to require students to take a diversity course?

WEEK FIVE

1. Men talk in report language, women talk in rapport language. The block on page 128 outlines the differences between men and women in how they speak, do you agree?
2. You are at work. Your boss calls you "honey," but you prefer that he call you by your first name or Ms.(or) Mr. ____ (last name). You explain this to your boss as tactfully as possible, but he (she) laughs it off. You don't feel as that he (she) understands how strongly you feel about this. How do you respond?
3. You and your friend are using the photocopying machine in the library. You accidentally copy the wrong material. Your friend, realizing the mistake you just made, says, "You're such a retard." How do you respond?
4. In the thinking through diversity section on page 136. Respond to the question posed. When explaining your answer, practice integrating concepts from our reading.
5. The insert of page 130 reminds you that nothing in your employee electronic communications is private. What adjustments might you need to make as you enter the workforce? Or, if you are in a leadership role, what policies would you consider regarding social media, email, etc.?

WEEK SIX

1. After reading the article from the link in Content for this week, comment. A controversial class exercise assigned to some of the city's middle school students has inflamed parents. Any thoughts on this attempt to teach about diversity?
2. Your author says that the homogeneity (people like you) of your social network will greatly influence how you see the world. What about your own Social Network? How different are they from you?
3. If you don't have a twitter account, sign up for one. If you already have an account, type in #diversity, you will see a listing of current top tweets on this topic. What dimensions of diversity did you see? What can be learned from these tweets? Do any of these tweets enhance your diversity consciousness?
4. If you are a Facebook user, reflect on the recognition (or lack of recognition) of cultural diversity, you see on those you follow. Do you have friends whose posts make you cringe?
5. If you have a Twitter account, do you follow anyone who you would consider a "mentor"? What have learned recently from any mentor that you follow on Twitter.com?

WEEK SEVEN

1. In the middle of page 220, generational differences are revealed. I know that many of you VALUE your cell phones, tablets, etc., So NOT counting how much you value technology, speculate on a couple of differences in what YOU value when you compare yourself to Baby Boomers. For some of you that is your parent's generation, for others it is your grandparents' generation. Jump to Figure 9.2 in the next chapter if you are having trouble with this.
2. Take the building blocks for diversity consciousness assessment on pages 225-226. Then reflect on your score. Where do you need the most improvement?
3. Respond to the prompts in the "Thinking through Diversity" section at the very bottom of page 227.
4. Let's see if you have had a long drink from the AGLE 2403 Kool-Aid dispenser. Hofstede has studied culture and has come up with six dimensions; or six ways people from different cultures value things differently. Draw (make yourself) a chart like the one in Figure 8.8 (include in your answer) and rank your cultural preference accordingly.
5. Take a look at the Profile in Diversity Consciousness section on page 235. How important do you think empathy is to leaders?

VITA

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