Diversity Training Outcomes: Assessing Impact of Diversity Training on Attitudes Towards Societal Diversity and Cognitive Empathy

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DIVERSITY TRAINING OUTCOMES: ASSESSING IMPACT OF DIVERSITY TRAINING ON ATTITUDES TOWARDS SOCIETAL DIVERSITY AND COGNITIVE EMPATHY

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Master of Science

by

Iris Smith

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DIVERSITY TRAINING OUTCOMES: ASSESSING IMPACT OF DIVERSITY TRAINING ON ATTITUDES TOWARDS SOCIETAL DIVERSITY AND COGNITIVE EMPATHY

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ABSTRACT

DIVERSITY TRAINING OUTCOMES: ASSESSING IMPACT OF DIVERSITY TRAINING ON ATTITUDES TOWARDS SOCIETAL DIVERSITY AND COGNITIVE EMPATHY

by Iris Smith

Understanding the perspectives of others and appreciating their differences are important due to diversity increasing in society. However, research on diversity has seldom examined the ineffectiveness of diversity training on attitudes towards societal diversity and cognitive empathy. The present study was conducted to examine how diversity training affects one’s attitudes toward societal diversity and cognitive empathy. It was hypothesized that attitudes towards societal diversity and cognitive empathy would improve as a result of diversity training. Gender and ethnicity were also hypothesized to interact with diversity training such that women and ethnic minorities would show more positive attitudes towards societal diversity and more cognitive empathy than men and non-ethnic minorities. A total of 308 incoming university freshmen students participated in mandatory diversity training. Participants completed pen-and-paper surveys which assessed their attitudes towards societal diversity and cognitive empathy. Consistent with the hypotheses, results showed that both attitudes towards societal diversity and cognitive empathy improved after diversity training. However, there was no interaction effect of gender and ethnicity, suggesting that diversity training was similarly effective for both genders and both ethnicities.
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We did it FAM!
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Introduction

The implementation of diversity training within organizations has grown exponentially as organizations seek to navigate the diverse workplace (Pendry, Driscol, & Field, 2007). Given this trend, diversity training is an increasingly important area of research. Diversity training studies have suggested that training assists in the achievement of three primary goals: increased diversity knowledge, improved diversity attitudes, and the development of diversity skills (Kulik & Roberson, 2008). Due to these three goals, research has paid more attention to a better understanding of the relationship between diversity training and desired outcomes, as well as how demographic variables (e.g., ethnicity, gender) influence these relationships (Pendry et al. 2007).

Although a number of studies have explored improvement of diversity attitudes (Beruzkova, Jehn, & Spell, 2012; Chang, 2002; Rudman, Ashmore, & Gary, 2001), the current study focuses specifically on attitudes towards societal diversity and developing cognitive empathy as a diversity skill. No literature to date has examined the relationship between diversity training and attitudes towards societal diversity or cognitive empathy. Furthermore, no literature to date has examined the interaction of gender and ethnicity with diversity training on these outcomes.

Past research has found a positive relationship between diversity training and diversity attitudes and skills (Dovidio et al., 2004). Due to these findings, I believe there should be positive relationships between diversity training and attitudes towards societal diversity and cognitive empathy. Additionally, literature suggests that positive outcomes of diversity training are greater for women and ethnic minorities than for men and non-
ethnic minorities, respectively (Hood, Muller, & Seitz, 2001). Consequently, I believe the relationships between diversity training and attitudes towards societal diversity and cognitive empathy would be stronger for women and ethnic minorities than for men and non-ethnic minorities.

**Definition and Evolution of Diversity Training**

Diversity training is defined as a distinct set of instructional programs aimed at facilitating positive intergroup interactions, reducing prejudice and discrimination, and enhancing the skills, knowledge, and attitudes of participants in their interactions with others who are dissimilar to them (Pendry et al., 2007). Diversity training has evolved over time as unfolding historical events in American society necessitated shifts in the content of diversity training. Despite changes in diversity training content throughout the past few decades, the goals of diversity training have remained the same. This is true for anti-discrimination training in the 1960s and 1970s, assimilation training in the early 1980s, inclusion sensitivity, and respect for differences training in the late 1980s and 1990s, and finally contemporary cultural competency training from 2000 to the present.

**Anti-discrimination training.** Anti-discrimination training was developed to prevent unfair treatment of minority employees by expanding diversity knowledge. Anti-discrimination training arose in response to political events that took place in the 1960s and 1970s. Prior to the Civil Rights movement of the 1960s, Jim Crow laws were in effect (Anand & Winters, 2008). These regulations legalized the segregation and separation of whites and African Americans. The abolishment of Jim Crow laws resulted
in desegregation, which legalized equality between races. During this time, minorities, specifically African Americans, began to enter the workplace (Anand & Winters, 2008).

Despite legislation requiring equal treatments of all races, vestiges of segregation remained prevalent within the workplace (Lasch-Quinn, 1999). As part of the Civil Rights movement from 1964 to 1970, the Civil Rights Act was passed in response to remnants of segregation present throughout American society. The Civil Rights Act brought about the first form of diversity training referred to as anti-discrimination training. This training was implemented as a means to protect minorities from discrimination in the workplace.

The primary focus of anti-discrimination training was to achieve the goal of imparting diversity knowledge. Training disseminated knowledge to the leaders of organizations to ensure they were in compliance with newly emerging legislation resulting from the Civil Rights Act (Anand & Winters, 2008). President John F. Kennedy issued affirmative action regulations for the hiring of minorities. In order to address the problem of fewer minority employees than white employees in the workplace, affirmative action established methods for ensuring diversity within institutions by instating a system of diversity quotas or requirements that specific numbers of minority employees must be hired by an organization (Anand & Winters, 2008). Anti-discrimination training was also administered to supervisors to enhance their knowledge about recruiting and hiring processes to increase the number of minority employees within their organization (Lasch-Quinn, 1999).
Title VII of the Civil Rights Act of 1964 was developed to ensure that compliance standards were met (Anand & Winters, 2008). As part of the Civil Rights Act, Title VII made it illegal for employers with 15 or more employees to discriminate against employees on the basis of race, color, religion, gender, or national origin. Workplace discrimination was defined as unfair treatment in the processes of hiring, termination, promotion, compensation, job training, or any other term, condition, or privilege of employment (Lasch-Quinn, 1999).

The Equal Employment Opportunity (EEOC), founded in 1965, is a federal organization established to enforce Title VII and anti-discrimination within the workplace. If the EEOC finds probable cause for discrimination within an organization, the organization is mandated to institute anti-discrimination training (Anand & Winters, 2008). Some organizations implemented anti-discrimination training on their own to prevent lawsuits and negative publicity. Typical anti-discrimination training was often a one-time session, lasted an average of four hours, and was sometimes followed by case study examples for employees to analyze and discuss (Anand & Winters, 2008).

**Assimilation training.** In the early 1980s, the goals of diversity training shifted from building diversity knowledge to developing diversity skills. Assimilation training was administered to minorities to teach them skills to integrate with white co-workers. An emphasis on assimilation training emerged in response to political events that took place in the 1980s. During this time, President Reagan launched a campaign to reduce the bureaucracy of the federal government by scaling back federal regulations on organizations. In alignment with this goal, he deregulated diversity-related employment
laws (Anand & Winters, 2008). The EEOC spearheaded a change of diversity management from enforcement by the federal government to enforcement by organizations. In 1982, Clarence Thomas, currently serving as Associate Justice of the Supreme Court of the United States, was appointed head of the EEOC, and enforced President Reagan’s deregulation campaign. Thomas’ major initiative was to create the legal policies that allowed companies to have increased jurisdiction over diversity management (Anand & Winters, 2008). Deregulation resulted in an overall decline in diversity training as organizations no longer faced federal consequences for workplace discrimination. Organizations then began to remove diversity training from budgetary priorities and focused on other pressing issues, such as remaining competitive through quality standards (Anand & Winters, 2008).

Because companies were granted increased jurisdiction of their diversity management, the diversity training programs that remained intact were offered to black employees to reduce dissention. To create harmony in the workplace, black employees were taught skills to espouse the cultural standards and behavioral norms of their white coworkers and suppress behavioral and cultural norms that were unique to their own cultural identities (Anand & Winters, 2008). In sum, diversity skills were taught to minorities to help them adopt the behaviors of majority members (Lasch-Quinn, 1999).

**Inclusion, sensitivity, and respect for differences training.** During the late 1980s through the 1990s, the goal of diversity training shifted from developing assimilation skills to developing inclusion, sensitivity, and respect for differences. Additionally, a second goal of training during this period was to improve diversity attitudes (Karp &
Sutton, 1993). The shift to these new goals of diversity training emerged in response to historical events that took place in the late 1980s. In 1987, the Hudson Institute published a report entitled *Workforce 2000* (as cited in Karp & Sutton, 1993). This publication addressed the increasing demographic variety of individuals entering the workplace, including ethnicity, gender, age, and immigrant status (Anand & Winters, 2008). The report predicted that by the turn of the century, a drastic change in the workforce would occur with the massive entrance of ethnic minorities and women (Karp & Sutton, 1993). The publication introduced the term “diversity,” the diversity field, and awareness about the needs of a diverse workplace (Anand & Winters, 2008). Through this report, diversity became a household word throughout the United States (Karp & Sutton, 1993). By 1990, *Workforce 2000* brought about so much awareness for the increased need for workplace fairness that litigation against unfair practices increased dramatically (Karp & Sammour, 2000). Largely publicized cases included the Tailgate scandal in 1991, the Anita Hill case in 1992, and the Citadel Academy case in 1994 (Karp & Sammour, 2000). All three of these cases addressed a need for fair treatment of diverse populations.

As a result of these cases, there was a call for transformation of diversity training. The goal of training became the development of skills which furthered inclusion, sensitivity and respect for differences to create inclusive workplace environments in which all employees felt welcomed and supported (Karp & Sutton, 1993). Additionally, diversity training utilized methods to improve diversity attitudes. This specific training helped employees develop sensitivity and respect for differences by using modules about
proper behavior and etiquette for interactions with members of other groups. This included language to avoid slang terms associated with particular ethnic groups. Examples of slang phrases include “Hey, what’s up chica” (meaning ‘chick’ or girl, insulting Latinas and women in general), “ghetto” (meaning unflattering or cheap, insulting those of low socioeconomic status), “hoochie” (meaning a woman who is promiscuous, insulting all women), and “wife beater” (referring to men’s apparel, insulting victims of domestic violence). Finally, training sought to impart skills to alter and reduce stereotyped and biased thinking, such as “all African Americans have rhythm (Karp & Sutton, 1993).”

**Contemporary diversity training.** Contemporary diversity training incorporates the development of skills and attitudes towards diverse populations. The business case for diversity requires cultural competency. Cultural competency is the ability to understand the perspectives of diverse populations and resulting skills to communicate effectively with those whose culture is different than one’s own (Anand & Winters, 2008). The contemporary term “diversity” has expanded from ethnicity and gender to include age, disability status, socioeconomic status, religion, political perspective, sexual orientation, and nationality (Bezrukova et al., 2016).

Today, diversity training is both intended to accomplish the goals of prior eras previously discussed, as well as to meet the need to maintain a competitive edge. This competitive edge is created through innovation that arises from the understanding of diverse perspectives as well as navigating the diverse workplace with cultural competency (Bezrukova et al., 2016). There exists an increasingly diverse marketplace,
both internal and external to organizations. To remain competitive, organizations seek employees whose demographics are similar to their customer base both locally and within the global marketplace (Bezrukova et al., 2016). Additionally, the business case for diversity includes that a diverse workforce results in “out-of-the-box thinking” for problem solving. Creativity and innovation have been demonstrated to arise from diverse perspectives (Jackson & Joshi, 2011).

To meet today’s business case for diversity, diversity training has been expanded to incorporate the development of cultural competencies that employees in both dominant and minority groups must possess (Anand & Winters, 2008). There are several approaches and methodologies of contemporary diversity training. Details of these approaches and methodologies are discussed in the following section.

Contemporary Diversity Training Approaches

The goal of contemporary diversity training is to impart cultural competence and foster positive attitudes towards diversity. Although there are many training approaches, six are noteworthy: dissonance/guilt inducing approach, social identity approach, goal setting approach, stereotype discrediting approach, informative enlightenment approach, and perspective-taking approach (Lindsey, King, & Levine, 2015). All of these approaches are discussed below.

**Dissonance/guilt-inducing approach.** The dissonance/guilt-inducing approach encourages individuals to compare the experiences of their group to those of others (i.e., marginalized groups) and reflect on the injustices faced by marginalized groups. For example, white males are asked to identify workplace challenges faced by ethnic
minorities and women. This approach is often ineffective because it requires white males to take personal responsibility for issues they did not directly cause and to achieve the unattainable goals of changing history and rectifying historical discrimination (Karp & Sammour, 2000).

Social identity approach. Similar to the dissonance/guilt inducing approach, the social identity approach encourages trainees to compare their group to others. This approach utilizes cognitive tasks to create awareness of one’s own bias against members of other groups (Anand & Winters, 2008). An example of such a task is the Implicit Association Test (IAT), which is used in training to reduce bias and prejudice (Greenwald, McGhee, & Schwartz, 1998). IAT participants are presented with bias statements which they must identify as either positive or negative within a matter of seconds. The goal of these short response time intervals is for participants to respond with answers they implicitly believe to be true. An example of such a statement is “Black American.” If a participant responds that this statement is “bad,” it is likely the participant has implicit biases against black Americans (Pendry et al., 2007).

Goal setting approach. Goal setting is an action-based training method that encourages individuals to take steps towards making changes. Founded in goal setting theory, effective goals are posited to be specific, challenging, and achievable, which leads to better performance (Locke, Shaw, Saari, & Latham, 1981). Goal setting trainees are asked to set high-quality goals for promoting diversity within their organizations. An example of such a goal is to challenge colleagues’ jokes about marginalized groups whenever they are encountered in the workplace (Lindsey et al., 2015).
**Stereotype discrediting approach.** Similar to the goal setting approach, stereotype discrediting is an action-based method that has foundations in social psychology theory (Janis & King, 1954; Lindsey et al., 2015). This approach suggests that individuals who make statements that are discordant with their own belief system will eventually change their attitudes because the action of repetitiously making the statements convinces the individuals that they are true (Lindsey et al., 2015). Trainees are shown a series of statements contradicting stereotypes, and are then asked to identify statements which resonates for them. This results in a change in prejudiced attitudes toward stigmatized groups as non-stigmatized individuals begin to reflect on their own biases and recognize non-stereotyped ideas with which they identify. An example is the stereotyped statement, “Most African Americans are lazy” being compared to the statement, “Just like Caucasians, most African Americans are not lazy” (Lindsey et al. 2015). Individuals are asked to compare these statements, select the statement with which they identify, and reflect on biases they may possess based on their selection. Through this exercise, they are able to envision the stigmatized groups in a non-stereotyped manner.

**Informative enlightenment approach.** The primary focus of the current study is two approaches: informative enlightenment and perspective-taking. As previously discussed, these two approaches are utilized in the current study due to their emphasis on addressing the development of cultural competency skills and improving diversity attitudes. Informative enlightenment training is grounded in Social Identity Theory (Tajfel & Turner, 1986), in which an individual must balance physical, social, and mental identities (Tajfel & Turner, 1986). The goal of informative enlightenment training is to
enhance diversity attitudes by building a contextual, knowledge-based understanding of others’ perspectives (Anand & Winters, 2008). Trainees are taught about the historical legacy of discrimination and how it manifests in discrimination today. Additional themes addressed by informative enlightenment diversity training are in-group and out-group biases (i.e., preferential treatment given to in-group members rather than out-group members), and fundamental attribution error (i.e., all individuals in an out-group are mistaken to possess the same characteristics, particularly negative traits) (Ross, 1977). Informative enlightenment has been demonstrated to improve diversity attitudes by helping individuals have a deeper understanding of out-groups’ perspectives, which in turn helps them have more positive attitudes towards out-group members (Madera, Neal, & Dawson, 2011).

**Perspective-taking approach.** Perspective-taking, also grounded in social identity theory (Tajfel & Turner, 1986), suggests that identification and affiliation with a group of individuals with similar traits, or in-group, enhances one’s self-esteem (Tajfel & Turner, 1986). The goal of perspective-taking is to help trainees develop the diversity skill of cognitive empathy. Cognitive empathy is the ability to understand the perspective of others by considering their point of view (Todd, Bodenhausen, Richeson, & Galinsky, 2011). Cognitive empathy can be developed through perspective-taking exercises that emphasize reflection of the psychological experiences of others and how those experiences affect one’s point of view, feelings, and reactions to various scenarios which one encounters (Dovidio et al., 2004).
There are several methods of perspective-taking used to increase cognitive empathy (Anand & Winters, 2008). For example, perspective-taking through cognitive manipulation prompts individuals to imagine what it would be like to think and feel as members of the out-group, which leads to the ability to picture themselves as being in an out-group (Galinsky & Moskowitz, 2005). An example of a prompt is imagining a day in the life of a member of an out-group and writing about it (Madera et al., 2011). A second prompt is imagining a day in the life of a marginalized group and then writing a short narrative about the day to gain a better understanding of the challenges they may face (Lindsey et al., 2015). Another prompt is for minorities to consider perspectives of oppressors by reflecting upon situations in which they were the majority or an oppressor. This includes relationships with younger siblings or scenarios such as a sports team or sorority in which they excluded others who were not members (Karp & Sammour, 2000).

In addition to the contemplation of various in-group and out-group prompts, perspective-taking training may also include an intergroup dialogue in which members of a demographically diverse group discuss their individual unique perspectives with other participants in training.

Perspective-taking results in increased empathy, which in turn improves diversity attitudes (Todd et al., 2011). Empirical research has demonstrated that inducing perspective-taking leads to improved attitudes toward ethnic minorities (Dovidio et al., 2004). Batson et al. (1997) found that considering the perspective of a stigmatized group improves diversity attitudes toward the group. Following perspective-taking exercises, this negative attitude was transformed into more positive attitudes about marginalized
individuals who face challenges due to factors they have no control over and that society should do more to help them.

Galinsky and Moskowitz (2000) also found that diversity attitudes improved following perspective-taking exercises. In their study, they sought to determine if perspective-taking would lead to increased stereotype suppression, in which individuals restrain stereotyped thoughts about another group. Stereotype suppression was measured by a change in association of another groups from negative conceptions (e.g., scheming, cowardly, and deceptive) to positive conceptions (e.g., strategic, brave, and clever). They found that following perspective-taking exercises, there was an increase in stereotype suppression, suggesting a positive relationship between diversity training and diversity attitudes.

Review of Diversity Training Research

There are many positive outcomes of diversity training, including reduction of stereotypes, enhancement of multicultural skills, increased productivity and engagement, and increased retention of minority employees (Batson et al, 1997; Dovidio et al., 2004; Galinsky & Moskowitz, 2009; Todd et al., 2011). The following sections discuss improvement in diversity attitudes and cognitive empathy as a diversity skill as result of diversity training.

Diversity attitudes. Attitudes refer to a set of emotions, beliefs, and behaviors toward a particular object, person, thing, or event (Avery & Thomas, 2004). Diversity attitudes are emotions, beliefs, and attitudes towards diverse individuals, groups, and communities (Avery & Thomas, 2004). Of the three learning outcomes (increased
diversity knowledge, enhanced diversity skills, and positive diversity attitudes), positive
diversity attitudes have received the most attention in empirical research (Kulik &
Roberson, 2008).

In their meta-analysis, Kulik and Roberson (2008) identified 51 studies that
empirically assessed the effectiveness of diversity training on attitudinal outcomes.
Results showed that diversity training improved overall diversity attitudes but did not
improve attitudes towards specific stigmatized groups (Kulik & Roberson, 2008).
Countering these findings are a number of studies suggesting a positive relationship
between diversity training and diversity attitudes towards minorities. Madera et al. (2011)
found that diversity training that focused on perspective-taking was related to more
positive attitudes towards non-English speakers.

Lindsey et al. (2015) assessed outcomes of diversity training administered to college
students. Their study showed that perspective-taking training improved attitudes towards
lesbian, gay, bisexual, and transgender (LGBT) individuals and racial
minorities. Furthermore, a positive cross-over effect was demonstrated in which
behaviors towards LGBT individuals were more positive than behaviors towards non-
LGBT individuals even if that group was not mentioned in training.

As previously discussed, diversity literature suggests a positive relationship between
diversity training and diversity attitudes. However, I believe it is relevant to assess
attitudes towards societal diversity as these attitudes reflect a broader societal perspective
than other forms of attitudes towards diversity. To date, I am unaware of any study that
has assessed the relationship between diversity training and attitudes towards societal
diversity. To fill this gap, the current study examined attitudes toward societal diversity as the diversity attitude variable and the following hypothesis was tested:

*Hypothesis 1:* Attitudes towards societal diversity will increase between pre-diversity training and post-diversity training.

**Cognitive empathy.** Diversity skills are skills necessary to effectively and ethically interact with diverse individuals and groups (Avery & Thomas, 2004). Diversity skills have received the least amount of attention in diversity training evaluation studies. In their meta-analysis, Kulik and Roberson (2008) reviewed 313 diversity outcome studies and found that only 15 assessed diversity skills. They commented that this lack of focus on diversity skills was “surprising and disappointing since educators agree that the ultimate goal of diversity training is to prepare learners to work in a diverse world." (Kulik & Roberson, 2008, p. 314).

There are a number of diversity skills (e.g., communication, teamwork, conflict management); however, this study will examine empathy. Empathy is viewed as a multidimensional construct; two major forms of empathy often discussed in empathy literature are affective (emotional) empathy and cognitive empathy (perspective-taking) (Ang, 2010). Much of the diversity training research on empathy has focused on affective rather than cognitive empathy. As one of the few cognitive empathy studies, Fleming, Thomas, Shaw, Burnham, & Charles (2015) measured ethno-cultural empathy in healthcare students before and after a diversity training intervention. Ethno-cultural empathy was defined as one’s capacity to understand the perspective of others whose race and ethnicity differed from his or her own. It was found that empathy increased
significantly as a result of diversity training. Furthermore, this increase in empathy remained consistent one month following the training intervention.

As previously discussed, diversity literature suggests a positive relationship between diversity training and diversity skills. Additionally, literature suggests a positive relationship between diversity training and various forms of empathy. Due to the goals of contemporary diversity training to build cultural competency through the ability to understand other’s perspectives, it is relevant to assess cognitive empathy due to its applicability to understanding others' perspectives. To date, no studies have examined the relationship between diversity training and cognitive empathy. To fill this gap, the current study examined the relationship between diversity training and cognitive empathy. Based on the studies that have found a positive relationship between diversity training and various forms of empathy, it is likely there will also be a positive relationship between diversity training and cognitive empathy. Thus, the following hypothesis was tested:

*Hypothesis 2:* Cognitive empathy will increase between pre-diversity training and post-diversity training.

Given that diversity training is administered to people of different demographic groups, it is relevant to explore the possibility that demographic variables may interact with diversity training to influence the outcomes of attitudes towards societal diversity and cognitive empathy. Specifically, I find it important to consider the effects of gender and ethnicity on these outcomes as they have been the most demographic variables examined in diversity literature (Kulik & Roberson, 2008).
Interaction With Attitudes Toward Societal Diversity

Many studies have demonstrated that ethnicity and gender interact with diversity training to influence diversity attitudes, such that women and ethnic minorities have more positive diversity attitudes than males and non-ethnic minorities, respectively. Hood et al. (2001) sought to determine if increases in self-esteem (attitudes towards self) and collective-self esteem (attitudes towards one’s own ethnic group) following diversity training would be different for women versus men and for white versus non-white individuals. They found that white women had more positive diversity attitudes following diversity training but that white men had less positive diversity attitudes. Less positive diversity attitudes in white men following training was suggested to be due to their perception of lowered status resulting from the training’s overall discussion of white men’s lack of cultural competency (Ellis, 1994).

Alderfer, Alderfer, Bell, & Jones (1992) also examined if demographic variables would interact with diversity training to influence diversity attitudes. Results showed that after diversity training, blacks were more likely to change their perception of white people after diversity training; however, whites’ perception of blacks did not change after training.

I am unaware of any study to date that has tested whether the effect of diversity training on attitudes towards societal diversity changes as a function of the gender or ethnicity of the trainee. Based on research demonstrating that ethnicity and gender interact with diversity training to influence diversity attitudes, it is believed that there will be an interaction effect between gender or ethnicity with diversity training to influence
attitudes towards societal diversity. More specifically, the following hypotheses were tested:

*Hypothesis 3:* Gender will interact with diversity training to influence attitudes towards societal diversity, such that women will show more positive attitudes towards societal diversity after diversity training than men.

*Hypothesis 4:* Ethnicity will interact with diversity training to influence attitudes towards societal diversity, such that ethnic minorities will show more positive attitudes towards societal diversity after diversity training than non-ethnic minorities.

**Interaction With Cognitive Empathy**

A review of diversity literature on demographic moderators of the relationship between diversity training and diversity attitudes showed no research that has been conducted to examine if demographic variables interact with diversity training to influence empathy. Despite the lack of research in this area, it has been found that in general, women possess greater empathy than men (Joliffe & Harrington, 2006). Women were found to score higher in affective empathy than males (Joliffe & Harrington, 2006). In terms of gender differences in relationship to training, gender has been found to influence attitudes towards diversity as a result of empathy training. For example, Long, Angera, Carter, Nakamoto, & Kalso (1999) found that women showed greater empathy than men after completing empathy training. Empathy training is included in this discussion because of the similarity between its goals and the goals of diversity training in terms of inducing perspective-taking to understand the needs of groups other than
one’s own (Long et al., 1999). Smith et al. (1995) found that gender interacted with empathy training to influence empathy, such that increased empathy was greater for women than for men after empathy training. In a longitudinal study, Long et al. (1999) sought to determine if empathy training for couples would result in improved general empathy and if gender would influence this relationship, such that due to biological differences, women would have a greater improvement in empathy than men. They found that there was a gender difference in the change in empathy over time such that females’ empathy was greater than males’ empathy five weeks after the training and even more so six months after the training.

Following the pattern that gender interacts with empathy training to influence empathy, it is likely that the same will be true for cognitive empathy. To date, no study has specifically examined whether gender interacts with diversity training to influence cognitive empathy. Cognitive empathy is the ability to consider others’ perspectives, which is a goal of diversity training. Based on the previously discussed studies, it is likely that ethnicity will also interact with diversity training. Just as women, ethnic minorities are an underrepresented group and it is likely that they will also show greater cognitive empathy than non-ethnic minorities after diversity training. Thus, to fill this gap on the lack of interactive effect on gender or ethnicity and diversity training on cognitive empathy, the following hypotheses were tested:

Hypothesis 5: Gender will interact with diversity training to influence cognitive empathy, such that women show more cognitive empathy than men after diversity training.
Hypothesis 6: Ethnicity will interact with diversity training to influence cognitive empathy, such that ethnic minorities show more cognitive empathy than non-ethnic minorities after diversity training.

Purpose of the Study

The purpose of the current study was to understand the effect of diversity training on attitudes towards societal diversity and cognitive empathy. Furthermore, the current study examined the extent to which the demographic variables of gender and ethnicity interact with diversity training to influence attitudes toward societal diversity and cognitive empathy. Previous research has examined the interaction of gender and ethnicity with diversity training to influence diversity attitudes. However, no research has been conducted to examine this relationship with attitudes towards societal diversity. Additionally, previous research has examined the interaction of gender with empathy training to influence empathy. However, no research has been conducted to assess an interactive effect of gender or ethnicity and diversity training to influence cognitive empathy.

The current study sought to fill these literature gaps. By examining these seldom studied diversity training outcomes and interactive effects, this study sought to contribute to diversity training research by adding rigorous evaluation of the effects of diversity training, rigor that is lacking in diversity research (Ivancevich, & Glibert, 2000).
Method

Training Context

The diversity training that was evaluated for the current study was designed and administered by a state university in the western region of the United States. The university formed a Diversity Commission due to responses from a survey administered to a sample of the university’s students and faculty. The surveys indicated that the university lacked elements of an inclusive environment. The commission made recommendations in a “University Action Plan: Towards a More Welcoming Community.” Detailed in this action plan were steps designed to make the university a more inclusive environment in which community members could thrive and feel valued.

As a part of these efforts, the university's Office of Diversity, Equity, and Inclusion implemented mandatory diversity training for all incoming university freshmen students. The diversity training for the current study took place during the 2017 summer freshmen orientation. The mandatory two-hour diversity training consisted of three segments on the outcomes of diversity. The first segment of the training was a lecture addressing positive outcomes of diversity. Specifically, the lecture focused on the business case for diversity, in which diversity is shown to foster creativity and innovation through the meeting of diverse perspectives and the ability to be competitive in an increasingly diverse marketplace. The second segment of training included perspective-taking exercises, which included short video clips presenting scenarios in which microaggressions (unintentional slights through language and behaviors) were committed. Examples of microaggressions included in the scenarios were the use of
cultural garb as costumes, casual racial slurs, language and behaviors slighting sexual identity and orientation, stereotypes towards marginalized groups, perceptions of undocumented and low socioeconomic status students, and inappropriate behaviors in diverse settings. The clips provided the internal dialogue of the recipients of the microaggressions. In the third segment of the training, trainees were divided into groups of approximately 10 students. Student leaders facilitated dialogue sessions in which the trainees (i.e., incoming university freshmen) discussed the internal dialogue of the actors in the video clips. Additionally, trainees shared their unique perspectives with one another. The goals of the dialogue sessions were for students to use active listening, develop cognitive empathy for others, create and develop skills to foster sensitivity and inclusion, and gain greater understanding of others' reactions and personal experiences.

Participants

The sample for the study consisted of 308 university freshmen who participated in the diversity training and completed questionnaires before and after the diversity training session. The rationale for studying freshmen was that they were future members of the workforce. Data were collected through administration of pen-and-paper surveys. Participants who either did not complete the surveys both before and after the diversity training session or had an excessive amount of missing demographic data were eliminated from further analyses, thus yielding the final sample of 308 participants. Table 1 presents demographic information of participants.
Table 1

*Demographic Characteristics of Participants*

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17 years old</td>
<td>76</td>
<td>24.7</td>
</tr>
<tr>
<td>18 years old</td>
<td>209</td>
<td>67.9</td>
</tr>
<tr>
<td>19 years old</td>
<td>19</td>
<td>6.2</td>
</tr>
<tr>
<td>20 years old or older</td>
<td>2</td>
<td>.6</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>156</td>
<td>50.6</td>
</tr>
<tr>
<td>Female</td>
<td>152</td>
<td>49.4</td>
</tr>
<tr>
<td><strong>Sexual orientation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Straight</td>
<td>258</td>
<td>83.8</td>
</tr>
<tr>
<td>Gay”</td>
<td>10</td>
<td>3.2</td>
</tr>
<tr>
<td>Bisexual</td>
<td>7</td>
<td>2.3</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>1.0</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American/Black</td>
<td>36</td>
<td>11.7</td>
</tr>
<tr>
<td>Asian</td>
<td>118</td>
<td>38.3</td>
</tr>
<tr>
<td>Native Hawaiian/Pacific Islander</td>
<td>9</td>
<td>2.9</td>
</tr>
<tr>
<td>Latino/Hispanic</td>
<td>101</td>
<td>32.8</td>
</tr>
<tr>
<td>Multiple ethnicities</td>
<td>17</td>
<td>5.5</td>
</tr>
<tr>
<td>White (Non-ethnic minority)</td>
<td>26</td>
<td>8.4</td>
</tr>
<tr>
<td><strong>Major</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Applied science</td>
<td>36</td>
<td>11.7</td>
</tr>
<tr>
<td>Business</td>
<td>54</td>
<td>17.5</td>
</tr>
<tr>
<td>Education</td>
<td>4</td>
<td>1.3</td>
</tr>
<tr>
<td>Engineering</td>
<td>33</td>
<td>12.7</td>
</tr>
<tr>
<td>Humanities and arts</td>
<td>39</td>
<td>10.7</td>
</tr>
<tr>
<td>Science</td>
<td>36</td>
<td>11.7</td>
</tr>
<tr>
<td>Social sciences</td>
<td>45</td>
<td>14.6</td>
</tr>
<tr>
<td>Undeclared</td>
<td>60</td>
<td>19.5</td>
</tr>
</tbody>
</table>
The participants ranged from 17 to 23 years in age, with the average being 17.3 years ($SD = 1.4$). The majority of the participants (67.9%) were age 18 or 17 years old (24.5%), The sample consisted of 50.6% males and 49.4% females. The sexual orientation of a majority of the sample was straight (83.8%). The ethnic composition of the sample was diverse: Asian (38.3%), Latino/Hispanic (32.8%), African American/Black (11.7%), White (8.4%), multiple ethnicities (5.5%), and Native Hawaiian/Pacific Islander (2.9%). In total, 91.5% of the sample ($n = 282$) comprised of ethnic minorities.

Participants’ academic majors included business (17.5%), social sciences (14.6%), engineering (12.7%), applied science (11.7%), science (11.7%), and humanities and arts (10.7%). The socioeconomic status of the participants and their families was mostly upper class (32.8%) and upper middle class (32.5%). Participants’ parents’ highest level of education varied: 28.9% of the participants reported that their parents had a four-year
college degree, 18.5% reporting that their parents had completed high school or equivalent, 14.3% reporting that their parents had some college education, 14% reporting that their parents had less than high school education, and 11% reporting that their parents had master’s degrees.

Measures

Attitudes towards societal diversity. Pro-diversity beliefs are defined as an individual’s belief that society benefits from diversity (Asbrock & Kauff, 2015). The current study utilized the Pro-Diversity Beliefs Scale (Kauff & Wagner, 2012), which measures attitudes towards societal value of diversity with a 7-item scale. The Pro-Diversity Beliefs Scale was adapted for American society rather than its original form as has been used in German society. An example of this adaptation was changing the item, “Different ethnic and cultural groups enrich German culture” to “Different ethnic and cultural groups enrich American culture.” Additionally, the Pro-Diversity Beliefs Scale was amended to include a 4-point Likert scale, which measured the extent to which trainees agreed on each item. A 4-point format was created by eliminating the option of neither agree or disagree to force participants to indicate their level of agreement or disagreement. The Likert scale responses were as follows: (1) Strongly disagree, (2) Slightly disagree, (3) Slightly agree, (4) Strongly agree. Following the procedure of Asbrock and Kauff (2015), the mean of the seven items was calculated to create an overall score. The score for this study ranged from 1.00 to 4.00, with higher scores representing more positive attitudes towards societal diversity. Cronbach’s α was .45 for
before diversity training and .54 for after diversity training, indicating low scale reliabilities.

**Cognitive empathy.** Cognitive empathy is the ability to consider the perspective of others (Todd et al., 2011). The current study utilized a portion of the 36-item Questionnaire of Cognitive and Affective Empathy (QCAE) validated by Reniers, Corcoran, Drake, Shryane, & Völlm (2011). For the purposes of the current study, 13 QCAE items were determined to measure cognitive empathy through a principal components analysis (Reniers et al., 2011) were utilized. This scale asked respondents to indicate their level of agreement on empathy-related statements. An example of an item measuring cognitive empathy is “I am good at predicting how someone will feel.” As with the original QCAE scale, a 4-point Likert scale was used to measure the extent to which trainees agreed with each item. The Likert scale responses were as follows: (1) *Strongly disagree*, (2) *Slightly disagree*, (3) *Slightly agree*, and (4) *Strongly agree*. The mean of the 13 items was computed to create an overall score for cognitive empathy. The overall score ranged from 1.00 to 4.00, with higher scores indicating that a participant had higher cognitive empathy. Cronbach’s α was .56 for before diversity training and .53 for after diversity training, indicating low scale reliabilities.

The questionnaires used before and after the diversity training were identical with the exception of demographic items asked only before the diversity training.

**Demographic variables.** On the questionnaire administered before the diversity training, participants were asked to provide their demographic information including age,
gender, ethnicity, academic major, socioeconomic status, and their parent’s highest level of education. See Appendix for the full version of the two questionnaires.

**Procedure**

**Before diversity training.** It was mandatory that all university freshmen attend the diversity training session; however participation in this research study was optional. Incoming freshmen were divided into groups of 10, with each group assigned to junior or senior university undergraduate students who served as group facilitators. Participants were provided instructions for the paper-and-pen questionnaire to review for roughly two minutes. Included in the instructions were descriptions of the purpose and nature of the study. Additionally, participants were ensured that their responses would remain anonymous and confidential and that participation in the study was optional. Finally, participants were told they would be asked to complete the survey both before and after the diversity training session. Excluded from the instructions was the study’s intent to assess changes in the measures after the training. The study’s intent was intentionally excluded in order to prevent demand characteristics in which participants unconsciously answer in a manner they feel would meet the purpose of the study (Orne, 2009).

Those who agreed to participate in the study were instructed by their group facilitator to take five minutes to complete the questionnaire. Participants were asked to make up a five-digit code that would be used to identify and match their before- and after-diversity training questionnaires. Demographic variables of the participants were obtained on the first page of the questionnaire and the second page contained the attitudes towards societal diversity and cognitive empathy measures. Upon completion of the
questionnaire, participants were instructed to hand their questionnaires to their group facilitator.

After diversity training. Following the two-hour diversity training session, group facilitators distributed questionnaires. Participants were asked to provide the same five-digit code used on the questionnaire before the diversity training, and were then given five minutes to complete the questionnaire. The after-diversity training questionnaire also measured attitudes towards societal diversity and cognitive empathy. Upon completing the questionnaire, participants were thanked for their participation and asked to return their questionnaires to their group facilitator.
Results

Descriptive Statistics

Descriptive statistics for attitudes towards societal diversity and cognitive empathy for before and after diversity training were assessed using Statistical Package for the Social Science software. Descriptive statistics are displayed in Table 2. Attitudes towards societal diversity before diversity training were low ($M = 1.57, SD = .64$), indicating that participants did not seem to agree that society benefited from diversity. Attitudes towards societal diversity only slightly improved after diversity training ($M = 1.63, SD = .62$). Before diversity training, participants did not have a high level of cognitive empathy ($M = 1.74, SD = .57$). Cognitive empathy also improved only slightly after diversity training ($M = 1.87, SD = .50$).

Table 2

<table>
<thead>
<tr>
<th></th>
<th>Before Training</th>
<th>After Training</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
</tr>
<tr>
<td>Attitudes Towards Societal Diversity</td>
<td>1.57</td>
<td>.64</td>
</tr>
<tr>
<td>Cognitive Empathy</td>
<td>1.74</td>
<td>.57</td>
</tr>
</tbody>
</table>
Tests of Research Hypotheses

Hypothesis 1 predicted that attitudes towards societal diversity would improve after diversity training. A paired sample t-test was conducted to test the hypothesis to evaluate the difference in attitudes towards societal diversity before and after diversity training. Results showed that attitudes towards societal diversity improved after diversity training ($M = 1.63 \ SD = .62$) compared to before diversity training ($M = 1.57 \ SD = .64$). The results were significant, $t(307) = -2.00, p < .05$, providing support for Hypothesis 1.

Hypothesis 2 predicted that cognitive empathy would improve after diversity training. A paired sample t-test was conducted to test the hypothesis to evaluate the difference in cognitive empathy before and after diversity training. Results showed that cognitive empathy improved after training ($M = 1.87 \ SD = .50$) when compared to cognitive empathy before diversity training ($M = 1.74 \ SD = .58$). The results were significant, $t(307) = -4.75; p < .001$, providing support for Hypothesis 2.

Hypotheses 3, 4, 5, and 6 stated that gender (H3 and H5) and ethnicity (H4 and H6) would interact with diversity training to influence attitude towards societal diversity and cognitive empathy such that females’ and ethnic minorities’ attitude towards societal diversity and cognitive empathy would improve more after diversity training than males and non-ethnic minorities. These hypothesized interactions were tested through a 2 x 2 mixed factorial analysis of variance (ANOVA) in which the between-subjects factor was gender (male vs. female) (H3 and H5) or ethnicity (ethnic minorities vs. non-ethnic minorities) (H4 and H6) and the within-subjects factor was diversity training (before and after diversity training).
Table 3 presents the means and standard deviations for attitudes towards societal diversity as a function of diversity training and gender. As can be seen in Table 3, there was a slight, non-significant improvement of attitudes toward societal diversity after diversity training. This was true for both males and females.

Table 3

Means and Standard Deviations of Attitudes Towards Societal Diversity as a Function of Diversity Training and Gender

<table>
<thead>
<tr>
<th>Diversity Training</th>
<th>Before</th>
<th>After</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>1.59</td>
<td>1.63</td>
<td>1.61</td>
</tr>
<tr>
<td>(n = 156)</td>
<td>(.67)</td>
<td>(.63)</td>
<td>(.59)</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>1.57</td>
<td>1.64</td>
<td>1.60</td>
</tr>
<tr>
<td>(n = 152)</td>
<td>(.62)</td>
<td>(.61)</td>
<td>(.54)</td>
</tr>
<tr>
<td>Total</td>
<td>1.58</td>
<td>1.63</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.64)</td>
<td>(.62)</td>
<td></td>
</tr>
</tbody>
</table>

Table 4 presents a summary of the ANOVA results. There was no significant interaction between gender and diversity training, $F(1, 306) = .24, p = .63$, indicating that gender did not interact with diversity training to influence attitudes toward societal diversity. Thus, Hypothesis 3 was not supported.
Table 4

ANOVA Summary Table for Attitudes Toward Societal Diversity as a Function of Diversity Training and Gender

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between-subjects Variable</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>.01</td>
<td>1</td>
<td>.01</td>
<td>.02</td>
</tr>
<tr>
<td>Error</td>
<td>196.65</td>
<td>306</td>
<td>.64</td>
<td></td>
</tr>
<tr>
<td>Within-subjects Variable</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training</td>
<td>.62</td>
<td>1</td>
<td>.62</td>
<td>4.00*</td>
</tr>
<tr>
<td>Training x Gender</td>
<td>.04</td>
<td>1</td>
<td>.04</td>
<td>.25</td>
</tr>
<tr>
<td>Error</td>
<td>47.47</td>
<td>306</td>
<td>.16</td>
<td></td>
</tr>
</tbody>
</table>

*Note. * p < .05  ** p < .01

Table 5 presents the means and standard deviations for attitudes towards societal diversity as a function of ethnicity and diversity training. As can be seen in Table 5, ethnic minority participants showed a slight, non-significant improvement in their attitudes toward societal diversity after diversity training. However, non-ethnic minority participants showed slightly more negative attitudes towards societal diversity after diversity training. This slight difference was non-significant.
Table 5

*Means and Standard Deviations of Attitudes Towards Societal Diversity as a Function of Diversity Training and Ethnicity*

<table>
<thead>
<tr>
<th>Diversity Training</th>
<th>Before</th>
<th>After</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minority (n = 282)</td>
<td>1.56</td>
<td>1.64</td>
<td>1.60</td>
</tr>
<tr>
<td>(n = 282)</td>
<td>.62</td>
<td>.61</td>
<td>.55</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Minority (n = 26)</td>
<td>1.69</td>
<td>1.65</td>
<td>1.67</td>
</tr>
<tr>
<td>(n = 26)</td>
<td>.62</td>
<td>.67</td>
<td>.75</td>
</tr>
<tr>
<td>Total</td>
<td>1.58</td>
<td>1.63</td>
<td></td>
</tr>
<tr>
<td>(n = 26)</td>
<td>.58</td>
<td>.62</td>
<td></td>
</tr>
</tbody>
</table>

Table 6 presents a summary of the ANOVA results. There was no significant interaction between ethnicity and diversity training, $F(1, 306) = .95, p = .33$, indicating that ethnicity did not interact with diversity training to influence attitudes toward societal diversity. Thus, Hypothesis 4 was not supported.
Table 6

ANOVA Summary Table for Attitudes Toward Societal Diversity as a Function of Diversity Training and Ethnicity

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between-subjects Variable</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnicity</td>
<td>.25</td>
<td>1</td>
<td>.25</td>
<td>.39</td>
</tr>
<tr>
<td>Error</td>
<td>196.41</td>
<td>306</td>
<td>.64</td>
<td></td>
</tr>
<tr>
<td>Within-subjects Variable</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training</td>
<td>.01</td>
<td>1</td>
<td>.01</td>
<td>.09</td>
</tr>
<tr>
<td>Training x Ethnicity</td>
<td>.15</td>
<td>1</td>
<td>.15</td>
<td>.95</td>
</tr>
<tr>
<td>Error</td>
<td>47.36</td>
<td>306</td>
<td>.15</td>
<td></td>
</tr>
</tbody>
</table>

Note. * p < .05 ** p < .01

Table 7 presents the means and standard deviations for cognitive empathy as a function of gender and diversity training. As can be seen in Table 7, both female and male participants showed a slight, non-significant improvement in cognitive empathy after diversity training.

Table 7

Means and Standard Deviations of Cognitive Empathy as a Function of Diversity Training and Gender

<table>
<thead>
<tr>
<th>Diversity Training</th>
<th>Before</th>
<th>After</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>1.77</td>
<td>1.89</td>
<td>1.83</td>
</tr>
<tr>
<td>(n = 156)</td>
<td>(.60)</td>
<td>(.52)</td>
<td>(.51)</td>
</tr>
<tr>
<td>Female</td>
<td>1.71</td>
<td>1.85</td>
<td>1.78</td>
</tr>
<tr>
<td>(n = 152)</td>
<td>(.56)</td>
<td>(.47)</td>
<td>(.46)</td>
</tr>
<tr>
<td>Total</td>
<td>1.74</td>
<td>1.87</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.58)</td>
<td>(.50)</td>
<td></td>
</tr>
</tbody>
</table>
Table 8 presents a summary of the ANOVA results. There was no significant interaction between gender and diversity training, $F(1, 306) = .10, p > .05$, indicating that gender did not interact with diversity training to influence cognitive empathy. Thus, Hypothesis 5 was not supported.

Table 8

ANOVA Summary Table for Cognitive Empathy as a Function of Diversity Training and Gender

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>$F$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between-subjects Variable</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>.44</td>
<td>1</td>
<td>.44</td>
<td>.90</td>
</tr>
<tr>
<td>Error</td>
<td>43.57</td>
<td>306</td>
<td>.47</td>
<td></td>
</tr>
<tr>
<td>Within-subjects Variable</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training</td>
<td>2.60</td>
<td>1</td>
<td>2.60</td>
<td>22.49**</td>
</tr>
<tr>
<td>Training x Gender</td>
<td>.01</td>
<td>1</td>
<td>.01</td>
<td>.10</td>
</tr>
<tr>
<td>Error</td>
<td>35.39</td>
<td>306</td>
<td>.12</td>
<td></td>
</tr>
</tbody>
</table>

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

Table 9 presents the means and standard deviations for cognitive empathy as a function of diversity training and ethnicity. As can be seen in Table 9, ethnic minority and non-ethnic minority participants showed a slight, non-significant improvement in cognitive empathy after diversity training.
Table 9

Means and Standard Deviations of Cognitive Empathy as a Function of Diversity Training and Ethnicity

<table>
<thead>
<tr>
<th>Diversity Training</th>
<th>Before</th>
<th>After</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minority (n = 282)</td>
<td>1.75</td>
<td>1.88</td>
<td>1.82</td>
</tr>
<tr>
<td>(n = 282)</td>
<td>(.58)</td>
<td>(.50)</td>
<td>(.49)</td>
</tr>
<tr>
<td>Non-Minority (n = 26)</td>
<td>1.62</td>
<td>1.70</td>
<td>1.65</td>
</tr>
<tr>
<td>(n = 26)</td>
<td>(.50)</td>
<td>(.47)</td>
<td>(.44)</td>
</tr>
<tr>
<td>Total</td>
<td>1.74</td>
<td>1.87</td>
<td></td>
</tr>
<tr>
<td>(n = 308)</td>
<td>(.58)</td>
<td>(.50)</td>
<td></td>
</tr>
</tbody>
</table>

Table 10 presents a summary of the ANOVA results. There was no significant interaction between ethnicity and diversity training, $F(1, 306) = .56, p > .05$, indicating that ethnicity did not interact with diversity training to influence cognitive empathy. Thus, Hypothesis 6 was not supported.

Table 10

ANOVA Summary Table for Cognitive Empathy as a Function of Diversity Training and Ethnicity

<table>
<thead>
<tr>
<th>Source</th>
<th>$SS$</th>
<th>$df$</th>
<th>$MS$</th>
<th>$F$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between-subjects Variable</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnicity</td>
<td>1.33</td>
<td>1</td>
<td>1.33</td>
<td>2.85</td>
</tr>
<tr>
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<td>.53</td>
<td>4.61*</td>
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Note. * $p < .05$ ** $p < .01$
In summary, results showed participants’ attitudes towards societal diversity and cognitive empathy improved after diversity training. However, gender and ethnicity did not interact with diversity training to improve attitudes towards societal diversity or cognitive empathy. The findings indicate that the effect of diversity training on attitudes towards societal diversity and cognitive empathy was essentially the same for both genders (male and female) and both ethnic groups (ethnic minority and non-ethnic minority).
Discussion

The increasing diversity of contemporary society necessitates research on the effectiveness of diversity training. The purpose of diversity training is to enhance diversity knowledge and skills. Appreciation for societal diversity and understanding of the perspectives of others might increase equitable and inclusive treatment of all individuals. To understand the outcomes of diversity training, the current study examined the effectiveness of diversity training on attitudes towards societal diversity and cognitive empathy. Furthermore, an interaction effect between gender and ethnicity with diversity training to influence attitudes towards societal diversity and cognitive empathy was tested for.

Summary of Findings

Hypothesis 1 stated that attitudes towards societal diversity would improve as a result of diversity training. Consistent with the hypothesis, attitudes toward societal diversity improved after diversity training. These findings suggest that after individuals participated in diversity training, they more strongly agreed that society benefited from diversity. Hypothesis 2 stated that cognitive empathy would improve as a result of diversity training. Consistent with hypothesis 2, results suggested that participants showed more cognitive empathy after diversity training. These results indicate that after individuals participated in diversity training, they had greater ability to understand others’ perspectives than they did before diversity training. Together, these results demonstrated
that diversity training resulted in more positive attitudes towards societal diversity and more cognitive empathy.

Gender and ethnicity were hypothesized to interact with diversity training to influence attitudes towards societal diversity. More specifically, it was expected that after diversity training, females’ (H3) and ethnic minorities’ (H4) attitudes towards societal diversity would improve more than males’ and non-ethnic minorities’ attitudes, respectively. These hypotheses were not supported. Both women and ethnic minorities did not show more positive attitudes towards societal diversity after diversity training than did male and non-ethnic minority participants. These results indicate that after diversity training, neither females or ethnic minorities had more positive attitudes about diversity of a society than males and non-ethnic minorities.

These findings are inconsistent with previous findings. For example, diversity literature suggests that females and ethnic minorities have more positive diversity attitudes than males and non-ethnic minorities, and that diversity training further improves these differences (Aldefer et al., 1992). The findings of the present study may be due to measurement of attitudes towards societal diversity, whereas previous studies simply measured attitudes toward diversity (e.g., Kulik & Roberson, 2008; Lindsey et al., 2015; Madera et al., 2011). Diversity attitudes are defined as emotions, beliefs, and attitudes about diverse individuals, groups, and communities (Avery & Thomas, 2004), whereas attitudes about societal diversity are in alignment with Asbrock and Kauff’s (2015) definition of pro-diversity beliefs as an individual’s belief that society benefits from diversity. Thus, it might be possible that attitudes towards societal diversity are
different from diversity attitudes and that diversity training affects women and ethnic minorities’ diversity attitudes more than attitudes towards societal diversity.

Empathy training literature suggests that women have greater levels of empathy than men after empathy training (Long et al., 1999; Smith et al., 1995). Given these findings, the present study hypothesized that gender would interact with diversity training such that women would show a greater increase in cognitive empathy after diversity training than would men (H5). However, this hypothesis was not supported. These findings may be due to the difference between affective empathy, defined as emotional empathy (Ang, 2010) and cognitive empathy, defined as the ability to consider others’ point of view (Todd et al., 2011). The empathy training discussed in the literature demonstrates that gender interacts with diversity training to influence affective empathy but not cognitive empathy. It is possible that women have a greater proclivity for emotional empathy than men, but women and men have a similar ability to consider others’ perspectives.

Finally, ethnicity was expected to interact with diversity training to influence cognitive empathy. Hypothesis 6 stated that ethnic minorities would show a greater increase in cognitive empathy after diversity training than non-ethnic minorities. However, this hypothesis was not supported. Similar to gender, it is conceivable that diversity training affects ethnic minorities and non-ethnic minorities similarly in their ability to understand others’ perspectives.

**Theoretical Implications**

There are a number of theoretical implications of the present study. First, this study filled several literature gaps in diversity literature. Although the examination of diversity
attitudes is prevalent in diversity literature (e.g. Avery & Thomas, 2004; Kulik & Roberson, 2008; Lindsey et al., 2015; Madera et al., 2011), attitudes towards societal diversity are nearly absent. This study introduced attitudes towards societal diversity as an outcome of diversity training. The present study suggests that diversity training not only improves diversity attitudes, but also attitudes towards societal diversity.

Second, this study also examined cognitive empathy as an outcome of diversity training. The perspective-taking approach is frequently utilized in contemporary diversity training, and cognitive empathy measures the ability to consider the perspectives of others (Lindsey et al., 2015). This study is the only study to date that assesses cognitive empathy as an outcome of diversity training. Results indicated that diversity training also resulted in a greater level of cognitive empathy.

Finally, although diversity training literature has explored demographic variables as interacting with diversity training to influence training outcomes (Aldefer et al., 1992; Ellis, 1994; Hood et al., 2001), the findings of the present study showed that gender and ethnicity did not interact with diversity training to influence attitudes towards societal diversity and cognitive empathy. It is plausible that other demographic variables might interact with diversity training to influence attitudes toward societal diversity and cognitive empathy.

**Practical Implications**

One practical implication of the present study is that diversity training could be used to improve cognitive empathy. Additionally, the findings of more positive attitudes towards societal diversity after diversity training can help trainers shift the focus of
diversity training. The majority of diversity training literature pertains to the historical
legacy of discrimination in the United States. As the marketplace becomes increasingly
diverse, it is important that diversity training incorporates a business lens to remain
current and follow the trends of our evolving society and resulting perceptions of
diversity within our society.

Cultural competency is the ability to interact effectively with others through
familiarization with their cultures, values, and beliefs (Lasch-Quinn, 1999). Understanding the perspectives of others is an important cultural competency to possess. Given increasing diversity within our society, it is of great value to have cognitive empathy. Using cognitive empathy is likely to lead to the manifestation of equitable and inclusive treatment of all groups. The present study showed that diversity training could improve one’s ability to understand others’ perspectives. Therefore, exposure to cognitive empathy practices can provide participants tools to create equitable and inclusive treatment of others within their daily lives.

Finally, the findings that neither gender or ethnicity interacted with diversity training on attitudes towards societal diversity and cognitive empathy might provide diversity trainers with an optimistic outlook on diversity training overall. A goal of diversity training is to develop training that transforms the attitudes of participants by interacting with others who are dissimilar to them (Pendry et al., 2007). Ideally, the transformational process will be equally impactful for all trainees, regardless of their gender, ethnicity, or other demographic variables. Since neither gender or ethnicity interacted with the
outcomes examined in the current study, diversity trainers might be encouraged about the impact of their work on all trainees, regardless of their gender and ethnicity.

**Strengths of The Study**

Informative enlightenment and perspective taking have been found to be effective diversity training approaches and therefore are prevalent in contemporary diversity training (Galinsky & Moskowitz, 2000; Madera et al., 2001; Todd et al., 2011). Since the study used these diversity training approaches, the results of the present study might be generalizable.

Another strength of the study lies in the longitudinal nature of the study. By measuring the same individuals before and after diversity training, one was able to examine how their attitudes towards societal diversity and cognitive empathy changed overtime.

**Limitations and Directions for Future Research**

Consistent with many studies, the present study is not without limitations. One limitation of the study is the relatively small number of non-ethnic minority participants. Non-ethnic minority participants comprised of only 8.5% of the sample, whereas 91.5% of participants were ethnic minorities. The lack of interactive effect of ethnicity with diversity training on attitudes toward societal diversity and cognitive empathy might be due to the small number of non-ethnic minority participants. Thus, a future study should include more non-ethnic minority participants.

A second limitation of the study is the average age of the participants. The majority of participants were 18 years of age. The rationale for using this age group was due to the
fact that training was mandatory for incoming university freshmen. However, the results might have been different for participants of an older age range with greater experience navigating the world as adults in the workforce. Future research should also include people of varying ages.

Another limitation of the present study is the short duration of the diversity training. Training was conducted for a single two-hour session. It is possible that if participants were given a longer, more thorough diversity training session in which the training was administered over several days, there might be larger effects on attitudes toward societal diversity and cognitive empathy. Therefore, future research should examine the effect of lengthier diversity training sessions on the outcomes explored in the current study.

**Conclusion**

The present study examined the effect of diversity training which utilized informative enlightenment and perspective taking. Specifically, this study sought to determine attitudes towards societal diversity and cognitive empathy as outcomes of diversity training. Additionally, interactive effects of gender and ethnicity with diversity training on these outcomes were tested. The findings of this study demonstrated that diversity training led to improved attitudes towards diversity within a society and cognitive empathy. Additionally, this study showed that diversity training affected both men and women, and both ethnic minorities and non-ethnic minorities equally on attitudes towards societal diversity and cognitive empathy.

As the business case for diversity gains momentum in diversity training, diversity trainers should seek to enrich training curriculum with themes of the benefits of diversity
within our society. Additionally, curriculum should emphasize the importance of understanding others’ perspectives to treat them in an equitable and inclusive manner.
References


Appendices
Demographic Questionnaire

What is your age? _________________

What is your major? ________________________________

Will you be living on campus in the fall? ____________

What is your home zip code? ________________________

What is your race/ethnicity? __________________________________________

What is your sovereign identity (If Applicable) ? __________________________

What is your gender identity? ____________________________________________

What is your sexual orientation? ______________________________

What is your socioeconomic status? Please select the highest level of education completed by your parents or guardians

☐ Under Class
☐ Working Poor
☐ Working Class
☐ Lower Middle Class
☐ Upper Middle Class
☐ Upper Class
☐ Less than high school
☐ High School or equivalent
☐ Some college
☐ 2-year college/AA degree
☐ 4-year college
☐ Master’s degree
☐ Doctoral degree

Scale Items
**Pro-diversity Scale Items**

A society with high cultural diversity is more capable to deal with new problems.

Problems can best be solved by groups consisting of individuals with different cultural backgrounds.

For a country it is better if there is variety of different cultures.

Only a society with a considerable amount of cultural diversity can handle the challenges of the future.

Different ethnic and cultural groups enrich American culture.

Culturally diverse groups are usually more productive than very homogenous groups.

When people in a community are very similar dealing with new problems is easier.

**Cognitive Empathy Scale Items**

I sometimes find it difficult to see things from the ‘other persons’ point of view.

I sometimes try to understand my friends better by imagining how things look from their perspective.

When I am upset at someone, I usually try to ‘put myself in their shoes' for a while.

Before criticizing somebody, I try to imagine how I would feel if I was in their place.

I can easily tell if someone else wants to enter a conversation.

I can pick up quickly if someone says one thing but means another.

I find it easy to put myself in somebody else's shoes.

I am good at predicting how someone will feel.

I am quick to spot when someone in a group is feeling awkward or uncomfortable.

Other people tell me I am good at understanding how they are feeling and what they are thinking.

I can easily tell if someone else is interested or bored with what I am saying.
I can sense if I am intruding, even if the other person does not tell me.

I can easily work out what another person might want to talk about.