

**DIMINISHING THE THREAT: REDUCING INTERGROUP ANXIETY
AND PREJUDICE IN INDIVIDUALS LOW IN OPENNESS TO
EXPERIENCE**

by

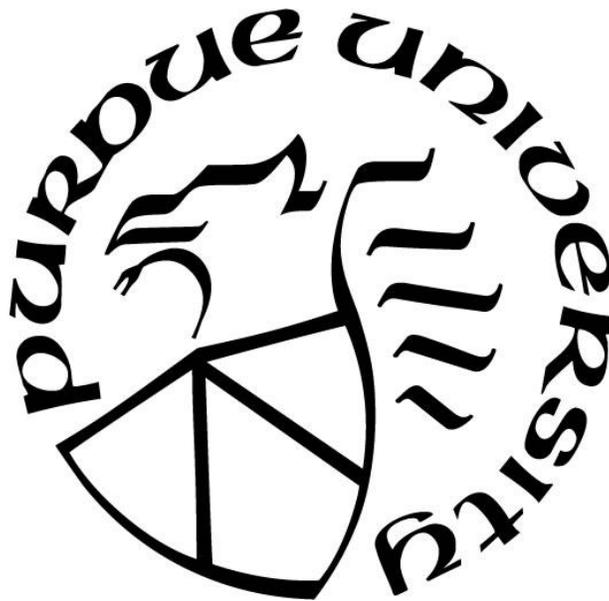
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To Kent, my Corinthian pillar

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ABSTRACT

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Title: Diminishing the Threat: Reducing Intergroup Anxiety and Prejudice in Individuals Low in Openness to Experience.

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As the world continues to diversify and we begin to move towards a majority-minority America, it becomes ever critical for organizations to utilize diversity training effectively to create a more equitable work environment. This is especially true when considering the growth of Latino immigrants in the work force and how majority group members may view this as a threat to their group dominance, resulting in experiences of discrimination and prejudice towards minorities. However, research regarding the best methods to utilize to reduce prejudice against specific targeted groups has been inconclusive, and little work has been done to investigate personality characteristics as potential boundary conditions of diversity training effectiveness. Thus, the goal of this study is to investigate the effectiveness of two diversity training methods, perspective taking and imagined contact, specifically for trainees low in Openness to Experience who may be especially resistant to training. To test this over two time points (two weeks apart), we recruited White participants (N= 471) via Amazon's Mechanical Turk, highlighted the demographic changes occurring in the modern workforce, randomly assigned them to either the perspective taking, imagined contact, or control condition, and then measured their Openness to Experience, intergroup anxiety, prejudiced attitudes and behavioral intentions towards Latino immigrants. Results revealed no significant interactions with Openness to Experience, thus resulting in its omission from the final model. Results also did not provide evidence for the training methods having a significant direct effect on the reduction of prejudice and the increase in behavioral intentions towards Latino immigrants. However, there was support found for intergroup anxiety such that it mediated the relationship between the diversity training methods and prejudiced attitudes and behavioral intentions. Exploratory analyses also revealed imagined contact to be more effective at reducing prejudice and increasing positive behavioral intentions

via a reduction in intergroup anxiety compared to the perspective taking condition. Implications, future research, and limitations are discussed.

CHAPTER 1. INTRODUCTION

“A diverse economy is a strong economy. Businesses that embrace our nation’s changing demographics reap the economic benefits of a diverse and inclusive workforce.”- Center for American Progress

According to the U.S. Census Bureau, millennials make up more than a quarter of the world population and are one of the most diverse generations with 44.2 percent classifying themselves as being a part of a minority racial or ethnic group. As the country becomes more diverse, so does the workforce. The National Center for Public Policy and Higher Education projected that by 2020, the racial minority working-age population will double to 37 percent from 18 percent while the White working population will decline from 82 percent to 63 percent (2005). The U.S. Census Bureau also predicts that by 2042, non-Hispanic Whites will no longer comprise over 50% of the U.S. population, creating what is known as a “majority-minority” America (2008). However, with this diversity comes the potential for conflict. A series of experiments conducted by Craig and Richeson (2014) show that when exposed to information regarding the increase in racial diversity, Whites expressed greater levels of both explicit and implicit racial bias, harboring more negative attitudes towards minority ethnic groups while simultaneously expressing more automatic pro-White bias. These results support the notion that Whites view this shift in demographics as a threat to their group dominance, which can easily become a source of tension in the workplace. However, interestingly enough, despite the fact that Latinos are growing at an increasingly rapid pace, with a projected growth rate of 93.2% between the years of 2016-2060 (Vespa, Armstrong & Medina, 2018), they are typically understudied in the diversity training literature.

Diversity training is often used as a response to prejudice and other biases (King, Gulik, & Avery, 2010). In fact, now more than ever, organizations are utilizing diversity training initiatives in response to this diversification and subsequent potential conflict. Indeed, a previous survey conducted by The New York Times (2007) revealed that of 265 HR professionals and diversity specialists from companies with an average of 10,000 employees, 55% of them had a diversity department, and over 80% reported conducting mandatory or voluntary diversity training for all levels of employees. However, it still remains unclear whether or not diversity

training is effective at reducing workplace inequity, with recent literature revealing that the effectiveness of diversity training is quite variable (Bezrukova, Spell, Perry, & Jehn 2016). This is particularly alarming given the previously mentioned growth rate of Latinos not only within the country but in the workplace as well, with their numbers within the labor force expected to increase to 20% by 2024 (Bureau of Labor Statistics, 2017). Consequently, this creates greater opportunities for contact between majority group members and Latinos. For some individuals, engaging in the contact needed to have positive relationships with and attitudes towards Latino immigrants comes naturally, while for others, it can be a source of anxiety, which can lead to workplace conflict and stressors, making effective training for these types of trainees particularly relevant. Hence, the aim of this research is to develop and empirically test a theoretical diversity training model that seeks to determine how best to reach resistant trainees and ultimately reduce intergroup anxiety and subsequent prejudiced attitudes and behaviors towards Latino immigrants in the workplace (see Figure 1). Specifically, this model will explore if the diversity training activities of perspective taking and imagined contact will be effective in reducing intergroup anxiety and subsequent negative outgroup attitudes in participants low in Openness to Experience, who are naturally less likely to engage in and have meaningful contact with Latino immigrants when compared to those high in this trait.

As such, this study stands to make important contributions to the diversity management literature. First, given that the mixed results seen in the extant literature point to the presence of moderators, it is especially important to investigate Openness to Experience as a boundary condition to training effectiveness. Surprisingly, individual differences are rarely considered when determining what makes training effective for some trainees and ineffective (or even counterproductive) for others. In fact, a review of the literature showed that only 17 studies examined trainee characteristics and their impact on outcomes of diversity training (Bezrukova et al., 2012). Thus, finding a substantive moderator that explains when effects are positive versus negative versus null can help to clarify some inconsistent findings and contribute to the extant literature. Examining intergroup anxiety as a type of threat and its subsequent reduction as the mechanism through which perspective taking and imagined contact can be effective is also another important contribution to the literature. As it stands, few studies have been able to identify mediators that can explain why a given diversity training exercise is effective (Lindsey, King, Hebl, & Levine, 2015), making it crucial to gain a better understanding of not only how,

but why said training can be effective in reducing prejudiced attitudes and behaviors towards minorities in those who may especially resistant. Furthermore, I address these gaps in the literature while also measuring my mediator and outcome variables over two time periods, which is novel in diversity training research (Kulik & Roberson, 2008). Thus, in conducting this study, I hope to examine the boundary conditions to the effectiveness of diversity training and also investigate the mechanism through which it is effective in hopes of not only reaching resistant trainees but also broadening the diversity management literature and determining how diversity training can be most effective for all involved.

Literature Review

Perceived Threat and Intergroup Anxiety

Despite the many positive effects of immigration such as increasing cultural and racial diversity, and adding trillions of dollars to the U.S. gross domestic product (GDP) (Blau & Mackie, 2016), many Americans still hold negative attitudes towards immigrants, with 37% of Americans claiming that immigration is making society worse (Pew Research Center, 2015). These opinions could be rooted in the potential group threat that immigrants pose. Research has shown that one of the main contributors to perceived intergroup threat is the size of the minority group (Quillian 1995, 1996) and as of 2015, immigrants make up 13.5 percent of the total U.S. population, with this number expected to rise to reach 78 million foreign-born individuals in the U.S. by 2065 (Pew Research Center, 2015). Hence, it stands to reason that Non-Hispanic Whites would be even more threatened by Latino immigrants seeing as the intersection between race and immigration status gives rise to a myriad of perceived threats such as job loss, cultural degradation and limited resources. Subsequently, this sense of perceived threat can have negative consequences in the form of hostility and prejudice towards Latino immigrants (Craig and Richeson, 2014).

According to the integrated threat theory of prejudice, prejudice is manifested between groups as a result of four types of threats: realistic threats, symbolic threats, intergroup anxiety, and negative stereotypes (Stephan & Stephan, 1996). Realistic threats have to do with threats that impact the overall welfare of the in-group. This can include threats to political power, threats to physical beings in the form of warfare, and threats to the surrounding resources (Ashmore & Del

Boca, 1976; Stephan & Stephan, 1996). In Stephan and Stephan's (1996) integrated threat theory of prejudice, they focus primarily on subjectively perceived realistic threats imposed by the out-group. They argue that it doesn't matter if a threat is actually "real" or not because it is the perception itself that leads to prejudice (Stephan & Stephan, 1996; Stephan, Ybarra & Bachman, 1999). Symbolic threats are primarily concerned with cultural group differences in the form of morals, values, standards, beliefs, and overall group identity (Stephan & Stephan, 1996). Issues such as perceived moral differences due to culture or religion are considered symbolic threats because they threaten the social fabric of the in-group (Murray & Marx, 2013). Differing values and beliefs between groups threatens the in-group's ethnocentric worldview, which subsequently leads to feelings of hostility and prejudice towards the outgroup (Stephan & Stephan, 1996; Stephan et al., 1999). Negative stereotypes embody the expectations concerning members of the stereotyped outgroup (Stephan, Ybarra, Martinez, Schwarzwald & Tur-Kaspa, 1998). Though not intuitively viewed as a threat, out-group stereotypes often contain traits that link directly back to threats such as being aggressive (Martinez, 1995). Finally, intergroup anxiety has to do with the feelings of anxiousness that occur during intergroup interactions as a result of being concerned about negative outcomes such as embarrassment and rejection (Stephan & Stephan, 1985). Though anxiety itself is inherently less alarming than the feelings and actions associated with the other forms of threat such as hostility and aggression, given the current state of affairs, some would say that anxiety is even more important to consider. This is because traditionally, Whites' biases toward minorities have been characterized as reflecting "antipathy," often including intense feelings of anger and hatred (Allport, Clark & Pettigrew, 1954). However, contemporary forms of racial bias among Whites toward minorities often involve feelings of anxiety and discomfort (Dovidio & Gaertner, 2004; Smith & Mackie, 2005), indicating that it is a much more common emotion during intergroup interactions.

In addition, research has shown that anxiety can be particularly high when there is a history of antagonism between the two groups and if the groups are placed in an environment where competitive interactions can occur (Gudykunst, 1988, 1998), both of which are relevant in regard to this study. This is due to the fact that there has been past and present conflict between Whites and Latinos in the United States, and the workplace, in which there are opportunities for promotions and monetary gain, provides an increasingly competitive environment. These uneasy feelings can result in the avoidance of and prejudice towards those with different group

memberships (Stephan & Stephan, 1985). In fact, a meta-analysis of 95 studies that examined intergroup threat found that intergroup anxiety had the strongest relationship to outgroup attitudes when compared to the other threats (Riek, Mania, Gaertner, 2006). It has been shown to predict prejudice towards immigrants from Cuba, Mexico, and Asia (Stephan et al., 1999), African Americans (Stephan et al., 2002), native Canadians (Corenblum & Stephan, 2001), and people with AIDS and cancer (Berrenberg, Finlay, Stephan, & Stephan, 2002). It appears that the anxiety can lead to a narrowed focus of attention, which results in simplified, expectancy-confirming processing. This simplified processing leads to a reliance on stereotypes to guide judgements when evaluating outgroup members (Wilder, 1993). However, from what we know of personality research, some individuals are going to feel more threatened, and therefore feel more anxious than others at the thought of engaging in contact with Latino immigrants, which can lead to exaggerated negative outgroup attitudes (Brandt et al., 2015; Sibley & Duckitt, 2008). Specifically, we predict that this is especially true for those low in Openness to Experience (Brandt et al., 2015; Sibley & Duckitt, 2008).

Openness to Experience

Openness to Experience is the propensity to be broad-minded, curious, imaginative and adaptive (Barrick & Mount, 1991). It shapes the way that people interact with others and distinguishes people who prefer to seek out the new and unknown from those who prefer familiarity and routine (McCrae, 1994; McCrae & Costa, 1997). This trait is especially expressed when individuals have an opportunity to be creative or are expected to learn a new way of doing things and accept other ways of thinking (Tett & Burnett, 2003). What is particularly relevant to this study is that Openness to Experience has a stronger and more consistent relationship with measures of prejudice and interracial attitudes when compared to any other Big Five factor (Ekehammer & Akrami, 2003). This relationship with prejudice manifests itself in different ways and has unique implications for intergroup anxiety and subsequent intergroup contact with Latino immigrants for those who are high versus low in this trait.

People high in Openness to Experience tend to have livelier imaginations, are more open-minded, curious, have fewer behavioral inhibitions and are more likely to take risks when compared to those low in this trait (Bakker, Klemmensen, Norgaard, & Schumacher, 2016). They are more willing to adapt, learn and think of new ways to do things (McCrae and Costa,

1987). As a result, those high in Openness to Experience are seen to be more tolerant towards people from diverse groups (Brandt, Chambers, Crawford, Wetherell & Reyna, 2015). For example, people high in this trait, on average, report less prejudice (Sibley & Duckitt, 2008) and form more positive attitudes and opinions towards outgroup members (Flynn, 2005) when compared to those low in this trait. It was also found that high Openness to Experience is positively correlated with the Universal-Diverse Orientation (UDO), which is a scale that measures awareness and acceptance of both the similarities and differences among people (Strauss & Connerly, 2003; Thompon, Brossart, Carlozzi & Miville, 2002). Those who score higher on this are better able to bond with others who are like them while also appreciating those who are different, which is a crucial part of inter-group relations (Strauss & Connerly, 2003). This is a result of the fact that in their natural propensity to be curious and intellectually open, they already initiate in more intergroup contact, on average, as opposed to those low in this trait (Jackson & Poulsen, 2005). It was found by Jackson and Poulsen (2005) that those high in Openness not only frequently seek out intergroup situations but also actively contribute to the quality of those interactions by making them more pleasant, which leads to relatively low levels of prejudice. It was also found that this relationship between Openness and reduced prejudiced outgroup attitudes was partially mediated via reduced intergroup anxiety (Turner, Dhont, Hewstone, Prestwich, & Vonofakou, 2014). This makes sense seeing as people who score high in Openness are less likely to feel intergroup anxiety as they naturally tend to be drawn to new experiences (Maddi & Berne, 1964). Taken together, this research suggests that because those who are high in Openness to Experience are already engaging in actual intergroup contact and reporting less prejudice via reduced intergroup anxiety, diversity training would be less important or even unnecessary for this specific group of people.

In contrast to those high in Openness to Experience, people low in this trait are typically close-minded and seek out familiar things, places and people, refusing to step outside of their comfort zones (McCrae, 1987, 1996; McCrae & Costa, 1997). They tend to not engage in divergent thinking or in activities that will cause uncertainty about their choices (George & Zhou, 2001). Low Openness to Experience has also been consistently correlated with political conservatism (Carney, Jost, Gosling, and Potter, 2008), conservative values (Jost, Glaser, Krunglanski, & Sulloway, 2003), and intolerance and prejudice (Brandt et al., 2015; Sibley & Duckitt, 2008). More importantly, it was found that people low in this trait tend to score higher

on measures of right-wing authoritarianism (RWA; Cohrs, Kampfe- Hargrave, & Riemann, 2012; Sibley & Duckitt, 2008) which has been consistently linked to biased and prejudiced attitudes (Adorno et al., 1950). People high in RWA operate out of the framework that the world is dangerous and threatening, therefore their goal is to exercise social control and security (Duckitt, Wagner, du Plessis, Birum, 2002). In addition, based on Perry and Sibley's (2013) Dual- Process Model, people low in Openness may show a *seize and freeze* bias. This means that they are not only more sensitive to information that suggests that the social world is dangerous (seize) but are also simultaneously less likely to pay attention to stereotype discrediting information that could potentially challenge their biases (freeze; Perry & Sibley, 2013). This results in people who are more attentive to information signaling danger about an out-group but are less inclined to change their mind about it in the face of alternative evidence, which further perpetuates their intolerance (Duckitt & Sibley, 2009; McCrae, 1987; Perry & Sibley, 2013). Thus, it stands to reason that this group may experience higher levels of intergroup anxiety and, as a result, not seek out as much opportunities in the workplace to engage with Latino immigrants (Plant & Butz, 2006; Plant & Butz, & Tartakovsky, 2008), perpetuating the racial divide and sustained prejudiced attitudes and behaviors. Therefore, the goal of this research is to find appropriate diversity training that will reduce intergroup anxiety among individuals low in Openness to Experience which will, in turn, improve attitudes and behaviors.

Diversity Training

Diversity training can be defined as a “distinct set of instructional programs aimed at facilitating positive intergroup interactions, reducing prejudice and discrimination, and enhancing the skills, knowledge, and motivation of participants to interact with diverse others” (Bezrukova, Jehn, & Spell, 2012, p. 208). Though diversity training is now widely used, there are a myriad of critical yet unanswered questions regarding its effectiveness and quality (Bezrukova et al., 2012). People come into sessions with previously held attitudes, biases and beliefs, which tends to make it more emotionally and politically charged when compared to other forms of training (Alderfer, 1992; Paluck, 2006). As a result, diversity training can sometimes result in backlash, in which trainees produce the opposite effects of those desired by trainers (Legault, Gutsell, & Inzlicht, 2011). At its worst, diversity training has been shown counterproductively to increase expressions of prejudice in some cases and reinforce stereotypes

and prejudice in others (Robb & Doverspike, 2001; Legault et al., 2011). Other work has also indicated that diversity training often produces null or negative effects (Kalev, Dobbin, & Kelly, 2006). Despite this, diversity training can also have numerous benefits for all those involved in the interaction. Generally, it can improve work attitudes, the social climate, increase motivation, retain diverse talent, avoid the negative consequences of EEO law suits, and increase cognitive learning about diversity related topics (Bezrukova et al., 2012; Bezrukova et al., 2016; Naff & Kellough, 2003; Simons, 1992). Specifically, diversity training has been shown to improve attitudes and both intended and objective supportive behaviors towards LGB individuals (Lindsey et al., 2015; Madera, King, & Hebl, 2013), create more job opportunities for minorities (Barak, 2005), and increase job satisfaction for members of the majority group by eliminating unfair practices (Bond & Haynes, 2014). Other studies have also shown how diversity training programs can reduce implicit and explicit biases in students, improve productivity of diverse employees, and increase mental healthcare professional's understanding of diverse clients' needs (Anand & Winters, 2008; Rudman, Ashmore & Gary, 2001; Theye, 2017). At the organizational level, it can produce enhanced self-knowledge in employees (Brickson, 2000), encourage skills needed to work with people from different groups (Ely & Thomas, 2001) and improve productivity (Ely, 2004). A recent meta-analysis of over 40 years of diversity training evaluations has also shown that diversity training can be especially effective when paired with other diversity initiatives, targeted to awareness and skills development and when it occurs over a significant period of time (Bezrukova, Spell, Perry & Jehn, 2016). In sum, though the outcomes are somewhat variable, the purpose of diversity training is to increase compliance, harmony, and ultimately induce transformation for the participants so that they can effectively work together in diverse organizations (Rossett & Bickham, 1994).

Imagined Intergroup Contact

Positive intergroup contact can reduce intergroup anxiety and thus reduce prejudiced attitudes towards those of different group memberships (Pettigrew & Tropp, 2008). A meta-analysis by Pettigrew and Tropp (2006) found that there is a highly significant effect of contact on prejudice, regardless of target group, age group, geographical area or contact setting. For example, it was found that contact among White elementary school children with South Asian students led to decreased intergroup anxiety and subsequently predicted more positive explicit

group attitudes (Turner, Hewstone, & Voci, 2007). The theory of intergroup contact states that positive and consistent contact with a minority group member and witnessing stereotype discrediting evidence about said member can alter negatively held stereotypes (Rothbart and John, 1985). However, this only occurs under certain circumstances. Allport et al. (1954) claimed that reduced prejudice could occur via intergroup contact only when these four features of the contact situation are present: equal status between the groups in the situation, common goals, intergroup cooperation and authority support. With these circumstances in place, the positive contact creates dissonance about the out-group, meaning the assumptions that the in-group member previously held no longer sync up with what is actually encountered during the intergroup interaction. In turn, this leads to attitude change because it allows for in-group members to categorize out-group members accurately based on the attributes they come into contact with (Brewer & Brown, 1998, p.578; Hewstone, Rubin, & Willis, 2002 pp. 589-593; Oakes, Haslam, & Reynolds, 1999, p. 64). Furthermore, for such dissonance to occur to induce this positive change, the contact must be intimate enough to generate a tie with minority group members (Amir, 1976; Pettigrew, 1997a). However, there are many things that can impede this close contact between in-group and out-group members from occurring. For instance, there may be inherent structural barriers, such as groups not mixing socially or residing in different areas with closed off communities, that hinder the chances of meaningful connections being made (Rugh & Massey, 2014). On the other hand, even if individuals have opportunities to engage in intergroup contact, those high in intergroup anxiety will avoid these beneficial situations (Plant & Butz, 2006; Plant et al., 2008). As such, it may be difficult for those low in Openness to Experience to engage in the intergroup contact needed to reduce intergroup anxiety and change their prejudiced attitudes and behaviors. Therefore, various forms of indirect contact, such as imagined intergroup contact, may provide a solution to the barriers that intergroup anxiety poses on intergroup interactions and outgroup attitudes.

According to Crisp and Turner (2009), “imagined intergroup contact involves mentally stimulating a social interaction between an in-group member and an outgroup member.” This imagined contact is usually prompted to be positive in nature to avoid individuals from incorrectly imagining negative interactions and experiences negative emotions (Mallett, Wilson, & Gilbert, 2008; Shelton & Richeson, 2005). This process of imagining an efficacious interaction with someone from an outgroup should parallel the processes involved in actual

intergroup contact, which allows for automatic positive associations to be made. They posit that these automatic positive associations lead to a reduction in apprehension when actually engaging in future contact (Crisp & Turner, 2009). Imagined contact also operates off the basis that mental imagery can elicit similar emotional and motivational responses as real experiences (Dadds, Bovdjerg, Redd, & Cutmore, 1997). Previous research has shown that imagining social contexts can have real impact on subsequent attitudes and behaviors. For example, when participants imagined a crowded situation, they exhibited fewer helping behaviors when compared to control participants, in line with the bystander effect (Garcia, Weaver, Moskowitz, & Darley, 2002). This shows that the psychological experience of imagining a situation can elicit similar attitude and behavioral effects seen in direct and actual experiences. In addition, what makes imagined intergroup contact particularly useful within a diversity training context is that it allows for individuals to still receive the benefits from contact when the positive circumstances needed (equal group status, common goals...etc) for actual intergroup contact to be effective are unavailable or hard to achieve given certain populations and barriers.

Imagined contact has also been shown to be particularly effective in reducing prejudiced attitudes and behaviors. In a series of experiments, Turner, Crisp et al. (2007) found that participants who were asked to imagine a positive interaction with an elderly or gay person expressed more positive attitudes and stereotyped less when compared to participants who did not. It was also found in another study that when heterosexual men imagined that they were talking to a homosexual man, they later evaluated homosexual men more positively and stereotyped them less when compared to participants who had been told to imagine an outdoor scene (Turner et al., 2007). Consistent with previous research on actual contact (e.g. Turner et al., 2007c; Voci & Hewstone, 2003), this positive attitude change was mediated by reduced intergroup anxiety. In another study, imagined intergroup contact reduced intergroup anxiety, which increased intentions to engage in future actual intergroup contact (Husnu & Crisp, 2010). Imagined intergroup contact can also promote outgroup approach behaviors (Turner & West, 2012). It was found that British high school students who imagined talking to an asylum seeker reported a subsequent stronger tendency to approach asylum seekers than did participants in the control condition (Turner, West & Christie, 2013). Taken together, this evidence shows that imagined intergroup contact can be effective at reducing intergroup anxiety in those low in Openness to Experience.

Perspective Taking

Perspective taking can also act as a form of non-threatening contact for those low in Openness to Experience. Perspective taking can be defined as actively considering the psychological experiences of someone who is different from oneself and thinking about how those experiences differ from our own (Todd, Bodenhausen, Richeson, & Galinsky, 2011). It is specifically different from imagined contact in that instead of imaging an interaction, such as a conversation, with someone who is different than oneself, with perspective taking, the individual actually imagines that they are that person, experiencing an imagined situation from that person's perspective. It is positively associated with moral development (Kohlber, 1976), empathy, altruism (Cialdini, Brown, Lewis, Luce, & Neuberg, 1997), and prosocial behavior (Batson et al., 1995). Within a social identity theory (Tajfel & Turner 1986) framework, perspective taking should be effective at breaking down psychological barriers between in-group and out-group members. This is because it allows individuals to think about what it would be like to be a member of a different group, thus, breaking down this "us versus them" mentality in individuals (Galinsky, Ku & Wang, 2005). For example, Galinsky and Moskowitz (2000) found that perspective taking was even better at reducing stereotyping than stereotype suppression because perspective-taking activates the self-concept. This activation results in an overlap between cognitive representations of the self and of the target which results in the two entities merging to share more common elements (Galinsky & Moskowitz, 2000). This overlap is what allows perspective takers to build stronger bonds between themselves and members of the outgroup more effectively which leads to reduced stereotyping (Galinsky, Ku & Wang, 2005). It was also found that having a positive self-concept or high self-esteem perpetuated this process in that by proscribing their positive traits to the out-group, it led them to evaluating the targets more positively when compared to someone who did not have high self-esteem (Galinsky & Ku, 2004).

Research has also shown that perspective taking is effective at reducing both implicit and explicit biases (Todd & Galinsky, 2014). For example, one study found that perspective taking was an effective strategy for reducing automatic expressions of racial bias against African-Americans across a series of experiments. Participants who adopted the perspective of a Black target not only exhibited more positive automatic interracial evaluations, but also displayed an increase in awareness of racial inequalities when compared to the control conditions (Todd et al.,

2011). Another series of experiments conducted by Shih, Stotzer and Guterrez (2013) also bolsters the claim that perspective taking is an effective method at improving both implicit and explicit attitudes towards minorities. In their first study, they found that watching a movie which starred an Asian American movie character reduced explicit prejudice towards other Asian American individuals. In their follow-up study, they induced empathy towards the Asian American movie character and upon taking the IAT, participants reported improved implicit attitudes when compared to the control group (Shih et al., 2013). These positive attitudes can also translate into behaviors. In an experiment by Batson et al. (2002), participants listened to an interview with a convicted heroin addict and a drug dealer and those in this condition not only had more positive attitudes towards hard drug users, but allocated more funds to help drug addicts when given a choice to allocate student senate funds.

Additionally, in intergroup contact research, perspective taking is seen to be critical for allowing prejudice reduction to occur (Brown & Hewstone, 2005). Their relationship is such that intergroup contact enables individuals to take the perspective of an outgroup member and emphasize with their concerns, which subsequently leads to improved intergroup attitudes (Pettigrew & Tropp, 2008). For example, in a research study investigating grandparent-grandchild relationships, it was found that the act of perspective taking was an important mediator between contact with a grandparent and out-group attitudes (Harwood, Hewstone, Paolini, and Voci, 2005). In another study that looked at the predictors of intergroup forgiveness, it was found that intergroup contact was positively related to perspective taking and outgroup attitudes among a group of Catholics and Protestants in Northern Ireland (Hewstone, Cairns, Voci, Hamberger & Niens, 2006). Furthermore, in a meta-analysis conducted by Pettigrew and Tropp (2008) which looked at the most studied mediators of contact effects (increased knowledge, reduced anxiety about the contact, and increased empathy and perspective taking), it was found that perspective taking was a crucial mediator in reducing prejudice. As such, because of the relationship perspective taking has with intergroup contact, it has been shown to aid in anxiety reduction as well. In a study conducted by Aberson and Haag (2007), it was found that first intergroup contact promoted understanding of outgroup perspectives, then this perspective taking lead to reduced intergroup anxiety and that in turn lead to lessened stereotyping and more positive intergroup attitudes. This research study promotes the idea that perspective taking mediates the contact-anxiety relationship. Thus, because perspective taking is seen to be the

mechanism through which intergroup contact reduces intergroup anxiety, it stands to reason that it should be effective as a stand-alone activity in reducing intergroup anxiety and thus improving outgroup attitudes and behavioral intentions towards Latino immigrants in those low in Openness to Experience.

Current Study

Overview and Hypotheses

In the current study, we will examine the influence of imagined contact and perspective taking on intergroup anxiety and negative outgroup attitudes and behaviors on individuals low in Openness to Experience (see Figure 1). Specifically, we predict:

Hypothesis 1: The training methods imagined contact and perspective taking will be associated with a significant reduction in intergroup anxiety when compared to the control condition.

Hypothesis 2: The training methods imagined contact and perspective taking will be associated with a significant reduction in prejudicial attitudes and an increase in behavioral intentions when compared to the control condition.

Hypothesis 3a: Intergroup anxiety will mediate the relationship between diversity training methods and prejudicial attitudes towards Latino immigrants.

Hypothesis 3b: Intergroup anxiety will mediate the relationship between diversity training methods and behavioral intentions towards Latino immigrants.

Hypothesis 4a: Openness to Experience will moderate the mediating role of intergroup anxiety and the relationship between diversity training methods and prejudicial attitudes such that the significant indirect effect will exist for those who are low in Openness but not for those who are high in this trait.

Hypothesis 4b: Openness to Experience will moderate the mediating role of intergroup anxiety and the relationship between diversity training methods and behavioral intentions such that the significant indirect effect will exist for those who are low in Openness but not for those who are high in this trait.

Furthermore, exploratory analyses comparing perspective taking versus imagined contact will be conducted to determine which diversity training activity is most effective for those low in

Openness to Experience. In a recent study in which Turkish Cypriots were asked to imagine contact with Greek Cypriots to improve outgroup evaluations and attitudes, it was found that perspective taking mediated the relationship between imagined contact and outgroup attitudes. Participants reported less prejudice as a result of when they imagined contact, they took the perspective of the other person (Husnu & Crisp, 2015). This suggests that there is some theoretical and practical overlap between the two constructs and activities, making it difficult to predict which one will be more effective. Also, the nature of the study itself makes it hard to predict which activity will be more effective. This is because imagined contact works best with people who haven't had contact with the target outgroup before (Turner et al., 2007) while perspective taking is seen to be more effective for those who have had previous contact that was strained. As a result, because there are already some states in the United States that have a majority-minority population of Latinos (e.g. New Mexico), while in others this is not the case, it is important to consider both methods seeing as contact or lack of will vary across the sample.

CHAPTER 2. METHOD

Power Analyses

To determine an appropriate sample size, a power analysis was conducted specifying 3 predictors including a two-way interaction (power= 0.95, α = 0.05) and a small expected effect size (f = .25). These parameters were chosen based off of previous studies that have looked at diversity training in this context (Lindsey et al., 2015), and indicated a total sample size of 400. Other studies that have measured changes in diversity related attitudes and behaviors or focused specifically on diversity training effectiveness have had anywhere from 118 total participants (Lindsey et al., 2015) to 475 total participants (Madera et al., 2013) depending on the nature of the study. Therefore, for the current study, 500 participants were targeted to be recruited to leave flexibility for removing participants prior to data analysis due to incomplete data or failed manipulation checks. This sample size was also necessary to account for any attrition that could occur between time points one and two.

Participants

For the purpose of this study, 504 participants were recruited through Amazon's Mechanical Turk. Specifically, to maximize the utility of the sample, we used panel services offered by TurkPrime to selectively recruit participants were at least 18 years old, worked at least part time, lived in the United States and identified as White. Only individuals who self-identified as White were eligible to participate in this study because it allows the focus to be placed on how diversity training activities affect majority group members' attitudes and behaviors in relation to Latino immigrants.

This study utilized two time points, in which participants were paid \$1.00 for participating in each survey for a total of \$2.00 in compensation. For the first-time point, 33 participants were excluded on the bases of lack of eligibility (i.e., not White) and failed manipulation checks, resulting in 471 participants who successfully completed the first time-point survey. For the second time-point, 403 participants completed the survey. However, 112 participants were disqualified because their email addresses were unable to be matched with that

of their time one email addresses, resulting in a final time two sample of 291. Taking into account the final sample for time one ($N= 471$) and time two ($N= 291$), there was an overall attrition rate of 38%.

With regards to the overall sample, 36% ($N= 195$) participants identified as male, 51% ($N= 275$) identified as female and the age of participants ranged from 19 to 78 with a mean of 41.59 ($M= 41.59$, $SD= 12.23$). Over 50% of the sample identified as Christian with 41.8% of participants reporting that they were liberal when describing their political ideology. In terms of employment status, 58.6% reported that they were employed full time and 13.7% indicated that they were employed part-time. Of the sample, 35% of participants reported having a four-year degree. Finally, participants indicated the amount of previous contact had with Latino immigrants, with 18.6% of the sample reporting daily contact.

Design and Procedure

As mentioned previously, this study involved two time points through survey links. At the start, participants were informed that this was a study about worker's reactions to the changing labor force in the United States. They were then told that this study would take approximately 20 minutes and were subsequently given the study information sheet so that they could provide informed consent to participate if they desired. Participants were then exposed to the changing racial demographics, stressing that as a result, they will likely encounter more Latino immigrants in the workforce. This information was used as a constant across all conditions:

“According to the U.S. Census Bureau, millennials make up more than a quarter of the world population and are one of the most diverse generations with 44.2 percent classifying themselves as being a part of a minority racial or ethnic group. As the country becomes more diverse, so does the workforce. The National Center for Public Policy and Higher Education (2005) projected that by 2020, the racial minority working-age population will double to 37 percent from 18 percent while the White working population will decline from 82 percent to 63 percent. In addition, according to a 2016 report by the Society for Human Resource Management, Hispanic/Latino workers are the biggest source of change in the workforce. It is projected that they will account for one. out of every two new workers entering the workforce by 2025.”

Next, participants were randomly assigned to one of three conditions in which they (1) were asked to partake in a perspective taking exercise, (2) asked to partake in an imagined intergroup contact exercise or (3) be a part of the control group (all described below). After participating in these diversity training activities, participants then completed measures which include demographic information, Big 5 personality traits, diversity related attitudes and behavioral measures, and other trait based and workplace specific measures. Some of the measures were used in supplemental analysis, while others acted as fillers. A manipulation check in the form of a word and time limit ensured that participants engaged fully in the diversity training tasks. After completing the measures, participants were thanked for their participation and received their first payment of \$1.00 for time-point one. Two weeks after completing the study, previous participants were contacted and asked to complete the attitude and behavioral measures again to assess long term effects of perspective taking and imagined contact on prejudiced attitudes and behaviors towards Latino immigrants. Those that completed this second survey received the second payment of \$1.00 and were thanked for their participation.

Perspective Taking Writing Task

Once assigned to the perspective taking condition, participants were asked to consider the challenges that Latino immigrants have to go through in the workplace, such as harassment, being undermined, and being ostracized because of their identity. With these challenges in mind, using instructions adapted from Galinsky and Moskowitz (2000), participants were specifically instructed to write a perspective taking narrative essay following the instructions *“For this task, take the perspective of a Latino immigrant. That is, go through the typical work day in their shoes, as if you were that person.”* Participants were then informed to take approximately 3-5 minutes writing their essay and were required to have written at least 50 words before proceeding in the study to ensure that they thoroughly completed the task.

Imagined Contact Exercise

Following the designs of previous imagined contact research (e.g. Turner et al., 2007), participants were asked to take 3 minutes to imagine the following situation: *Imagine you are in the employee break room getting your morning cup of coffee. You notice another employee enter the room whom you’ve never seen before. The employee tells you that they’re new to the*

organization and you find out that they are a Latino immigrant. You both end up talking for 30 minutes and you find out some new and interesting things about the new employee. When you part ways you realize you enjoyed talking with the new employee. They were then instructed to type ten fun and interesting things they learned from this positive interaction in the spaces provided to compound the fact that this was a pleasant and not an awkward or difficult interaction, as per instructed by Turner et al. (2007).

Control Group

Participants in this condition were given an imagination task in which they were asked to imagine an outdoor scene of their choosing. In creating consistency between conditions, participants were also asked to take 3-5 minutes imagine their outdoor scenery and then writing a short essay about what they just envisioned. Again, participants were required to write at least 50 words before proceeding to the rest of the study to ensure that they remained engaged in the given task.

Measures

Dependent Variables

Attitudinal Measure

To measure prejudiced attitudes towards Latino immigrants, the Prejudicial Attitudes Survey (Stephan & Stephan, 1993) was utilized. This scale consists of six emotional (e.g., hatred) and six evaluative (e.g., admiration) terms and responses are coded on a scale from 1 (do not feel this emotion at all) to 9 (I feel this emotion extremely). All positive emotions were reverse coded and averaged with the negative emotion words such that the higher scores reflect greater feelings of prejudice ($\alpha = .93$).

Behavioral Measure

To measure behavioral intentions towards Latino immigrants, the 7-item supportive behaviors towards LGB individuals (Madera et al., 2013) was utilized. This scale was designed to capture self-reported supportive behaviors towards LGB individuals but will be adapted such that each item is focused on Latino immigrants instead. A sample item includes, "Been friends

with a Latino Immigrant.” This measure utilized a 7-point Likert scale ranging from 1 (never) to 7 (all the time) and the internal reliability was .85.

Mediator

Intergroup Anxiety

Intergroup anxiety was measured using a modified version of Stephan and Stephan’s (1985) intergroup anxiety scale which was introduced as a measure of intergroup anxiety toward interacting with outgroups as a whole. The measure consists of 12 items in which the same question was asked for each: “If you were the only member of your ethnic group and you were interacting with people from a different racial or ethnic group (e.g. working on a project with them), how would you feel compared to occasions when you are interacting with people from your own ethnic group?” For the purpose of this study, the question will be modified to focus specifically on interactions with Latino immigrants. The 12 items then employed a 10-point scale to determine the extent to which individuals would feel apprehensive, uncertain, worried, awkward, anxious, threatened, comfortable, trusting, friendly, confident, safe and at ease. The 10-point scale ranged from 1 (I do not feel this emotion at all) to 10(I feel this emotion extremely). All positive emotions were reverse scored and then averaged with the negative emotions score so that higher values reflect greater intergroup anxiety ($\alpha = .95$).

Moderator

Big Five Personality Trait Test

This measure was used to assess the individual personality characteristics of participants, specifically where they fall on the continuum in terms of Openness to Experience (Goldberg, 1990). This measure contains 50 items which assess the five Big Five factors with 10 items each: Extraversion, Agreeableness, Conscientiousness, Emotional Stability, and Openness to Experience. For the purpose of this study and in the interest of time, only the traits of Openness to Experience and Agreeableness were measured, resulting in a total of 20 items. Examples for the Openness to Experience factor include “Have a vivid imagination” and “Am not interested in abstract ideas” (reverse coded). The shortened ten-item scale of Openness to Experience has an internal reliability of .88. A sample item for the Agreeableness factor include “Am interested in

people” and the shortened ten-item scale of Agreeableness has an internal reliability of .82. Participants responded to each item on a 7-point scale, 1 (strongly disagree) to 7 (strongly agree) and all participants completed this measure regardless of condition.

CHAPTER 3: RESULTS

Removing Participants

Two manipulation checks were included throughout the data collection process. The first being that after engaging in one of three tasks (perspective taking, imagined contact, control), participants were asked to select which activity they had been asked to complete (i.e. imagine a day in the life of a Latino immigrant as if you were that person or imagine an outdoor scene). The second was the assessment of quality of the narrative essays. This was done to ensure that participants not only followed instructions but fully engaged in the activity. My screening revealed that 7 participants failed to identify as White and 26 participants either failed the manipulation check to choose what they had to imagine or as a result of the quality of the task performed. This resulted in a total of 33 participants being excluded for a final sample size of 471. Unfortunately, in reviewing the activities, it was found that participants in the perspective taking and control conditions had higher levels of negative responding in the form of racist remarks when compared to participants in the imagined contact condition. Thus, a chi-square analysis revealed that there was a significant difference in the number of participants excluded across the experimental conditions, $X^2(2, N = 504) = 10.74, p = .005$, with 16 participants being excluded from the control, 14 from the perspective taking condition and only 3 from the imagined contact condition. This resulted in a total of 151 participants in the control condition, 144 in the perspective taking condition and 175 participants in the imagined contact condition.

Preliminary Analyses

In finding that there was a significant difference in the number of participants excluded across conditions, a one-way analysis of variance was conducted to see if there were also any differences based on condition for Openness to Experience (the moderator). The one-way ANOVA revealed that there was no significant difference across experimental conditions on the moderator, $F(2, 468) = 1.68, p = .188, \eta_p^2 = .007$. Reliability analyses were then conducted for the four scales of interest, which all showed adequate reliability (all $\alpha > .80$; see Table 1). Next, descriptive statistics and correlations were run between all variables, which can be found in

Table 2 and 3 respectively. A ceiling effect for Openness to Experience was subsequently found in that most participants averaged across the conditions had high levels of this personality trait such that the means were above 5.00 on a 7-point Likert scale. This signals a restriction of range and a lack of variance, suggesting it may be difficult to capture how the activities impact those low in Openness in future analyses. Fortunately, it was also found that all variables were related to each other in predictable ways. For example, Openness to Experience was negatively correlated with intergroup anxiety, prejudicial attitudes and positively correlated with behavioral intentions. Similarly, intergroup anxiety and prejudicial attitudes were strongly positively correlated with one another.

Test of Hypotheses

Main Effects

To test hypothesis 1 and 2 at time 1, a one-way analysis of variance was conducted to determine the main effect of experimental condition (imagined contact versus perspective taking versus control) on the proposed mediator intergroup anxiety and the dependent variables of prejudicial attitudes and behavioral intentions towards Latino immigrants. As expected, participants differed by experimental condition on intergroup anxiety such that those in the control condition reported higher levels of intergroup anxiety in comparison to those in the diversity training condition, $F(2, 468) = 3.36, p = .035, \eta_p^2 = .014$. Post hoc comparisons using the LSD test revealed that this significant difference was seen specifically between the control group ($M = 3.16, SD = 1.84$) and the imagined contact condition ($M = 2.66, SD = 1.44$). However, the perspective taking condition ($M = 2.95, SD = 2.03$) did not significantly differ from the control condition. Contrary to our predictions, the results further showed that there was not a significant main effect between the experimental conditions and the main dependent variables of prejudicial attitudes, $F(2, 468) = 1.968, p = .141, \eta_p^2 = .008$ or behavioral intentions $F(2, 468) = 1.071, p = .344, \eta_p^2 = .005$. Thus, hypothesis 1 was partially supported while hypothesis 2 was not.

The main effect of experimental condition on the mediator of intergroup anxiety and the dependent variables of prejudicial attitudes and behavioral intentions was also investigated over time. At time 2, it was subsequently found that there was no significant difference seen between the experimental conditions (control versus imagined contact versus perspective taking) on

intergroup anxiety, $F(2, 288) = 1.216$, $p = .298$, $\eta^2 = .008$, indicating that the main effect observed at time 1 did not persist two weeks later at time 2. Furthermore, there were no significant main effects found of the experimental condition on prejudicial attitudes, $F(2, 288) = .800$, $p = .450$, $\eta^2 = .006$, or behavioral intentions, $F(2, 288) = 1.072$, $p = .344$, $\eta^2 = .007$, found at time 2.

Though there were no significant results found at neither time 1 nor time 2 for the experimental condition on the dependent variables of prejudicial attitudes and behavioral intentions, a one-way repeated measures ANOVA with a Greenhouse-Geisser correction was conducted to see if there were any significant differences between the two-time points. It was subsequently found that prejudicial attitudes statistically differed between time points, $F(1, 290) = 13.743$, $p = .000$, $\eta^2 = .045$. Bonferroni post hoc tests revealed that there was a significant increase in prejudice from time 1 ($M = 3.185$, $SD = 1.77$) to time 2 ($M = 3.404$, $SD = 1.75$), suggesting that the further removed participants became from the intervention (two weeks), the more their prejudiced attitudes towards Latino immigrants grew. In regard to the dependent variable of behavioral intentions, there was a marginally significant difference found between the two-time points, $F(1, 290) = 3.604$, $p = .059$, $\eta^2 = .012$, such that participants at time 1 had stronger behavioral intentions to support Latino immigrants ($M = 5.45$, $SD = 1.24$) in comparison to time 2 ($M = 5.38$, $SD = 1.23$). Analyses were also conducted while controlling for previous contact and political ideology and there were no significant differences or changes within the data as a result of these covariates.

Moderation and Mediation Analyses

The full hypothesized model (see figure 1) predicted that Openness to Experience would moderate the relationship between the diversity training conditions and prejudicial attitudes and behavioral intentions and the relationship between diversity training conditions and intergroup anxiety. Hayes' (2013) PROCESS Macro Model 8 with 10,000 bootstrap resamples was intended to be utilized for this analysis, however, simple moderation analyses did not demonstrate any significant interactions (all p 's $> .05$). Thus, neither hypothesis 4a nor 4b was supported.

As a result, instead of testing a moderated mediation model, Openness to Experience was omitted from the model, and a simple mediation analysis was conducted. As such, to test the full model, a simple mediation analysis predicting prejudicial attitudes and behavioral intentions

using Hayes' (2013) PROCESS Macro Model 4 and 10,000 bootstrap resamples with intergroup anxiety as the mediator and diversity training condition as the independent variable was conducted. The independent variable was dummy coded such that the diversity training activities of imagined contact and perspective taking could be compared individually against the control condition. This was done instead of orthogonally contrast coding the variables, which would have allowed imagined contact and perspective taking to be directly compared against each other and collectively against the control, because previous ANOVA results revealed that only imagined contact significantly reduced intergroup anxiety, indicating a need to determine if imagined contact would separately drive a significant indirect effect.

Prejudicial Attitudes

First, in predicting prejudicial attitudes at time 1, results from a simple mediation analysis indicated that diversity training is indirectly related to prejudicial attitudes through its relationship with intergroup anxiety. Specifically, as can be seen in Figure 2, in which the experimental conditions are dummy coded such that the control and perspective taking conditions are coded as 0 and imagined contact is coded as 1, when one goes from the control condition to the diversity training activity of imagined contact, participants reported less intergroup anxiety, $b = -.50$, $SE = .20$, $t(471) = -2.57$, $p = .01$, which was subsequently related to a significant reduction in prejudicial attitudes. A 95% bias-corrected confidence interval based on 10,000 bootstrap samples indicated that the indirect effect of imagined contact on prejudicial attitudes via intergroup anxiety was significant, $-.31$, 95% CI: $-.55$, $-.08$, (did not cross 0). Moreover, because the direct effect (c') was non-significant, this suggests that the relationship between imagined contact and prejudicial attitudes was mediated by intergroup anxiety. However, this significant indirect effect was only seen for the activity of imagined contact, not perspective taking, partially supporting hypothesis 3a and providing evidence that imagined contact may be more effective than perspective taking. In examining these results at time 2 (two weeks later), there were no significant main or indirect effects, suggesting that the impact that imagined contact had on prejudice via intergroup anxiety did not persist over time.

Behavioral Intentions

Next, in predicting behavioral intentions at time 1, the simple mediation analyses revealed a significant indirect effect (confidence intervals did not cross 0) of imagined contact on positive behavioral intentions towards Latino immigrants via feelings of intergroup anxiety (.19, 95% CI: [.06, .35]). Specifically, as one goes from the control condition to the imagined contact condition, there is a significant increase in positive behavioral intentions via a reduction in intergroup anxiety (see figure 3). Similarly, as seen with the prejudicial attitudes, there was no significant indirect effect of perspective taking on behavioral intentions via intergroup anxiety. Thus, intergroup anxiety specifically mediated the relationship between imagined contact and behavioral intentions, providing partial support for hypothesis 3b. Furthermore, in examining these results at time 2 (two weeks later), there were no significant main or indirect effects, suggesting that the impact that the imagined contact had on behavioral intentions via intergroup anxiety did not persist over time.

CHAPTER 4: DISCUSSION

General Discussion

Immigrants are a substantial and growing segment of the U.S. labor force. In 2008, the Bureau of Labor Statistics reported that 24.1 million workers (15.6%) in the U.S labor force were foreign- born. This indicates a growing need to determine how best to integrate these persons into the work force and how to acclimate majority group members of this shift in demographics in way that pushes them towards diversity and not from it. However, there is not a lot of literature that explains how best to reach trainees who may be especially resistant during the training process, and even less that compare and contrast different methods of doing this. Thus, the primary goal of the current research was to determine if the diversity training activities of perspective taking and imagined contact could help trainees who may be especially threatened by diversity such as those low in Openness to Experience to have better attitudes and behaviors towards Latino immigrants in the workplace via a reduction in intergroup anxiety.

Results revealed partial support for my hypotheses. Specifically, hypothesis 1 and 2 predicted that participants in the diversity training activity conditions versus the control condition would see lower levels of intergroup anxiety (H1) and prejudiced attitudes and an increase in behavioral intentions towards Latino immigrants (H2). What was subsequently found was only a significant difference between the control condition and the imagined contact condition in regard to a reduction in intergroup anxiety, with no differences being found between the perspective taking condition and the control condition. In addition, there were no significant differences found between the experimental conditions on the dependent variables of prejudicial attitudes and behavioral intentions. These initial results only show partial support for hypothesis 1 with no support shown for hypotheses 2.

Though imagined contact functioned the way it should in reducing intergroup anxiety, perspective taking did not, resulting in the weak support for hypothesis 1. Thus, while I was unable to provide support that both imagined contact and perspective taking would be better than the control group in reducing intergroup anxiety, this is still insightful in that one goal of this study was to determine which diversity training activity may be more effective at reducing intergroup anxiety and subsequent prejudiced attitudes and behaviors. These results provide

initial evidence in support of imagined contact being the superior activity within this context. However, it is still alarming that perspective taking was unable to significantly reduce intergroup anxiety in comparison to the control as imagined contact did. One possible explanation as to why perspective taking may not have enjoyed similar success may lie in the nature of the experiment itself.

In previous studies, in which perspective taking has been shown to be effective, the experiments have been commonly conducted in a lab or in-person setting with undergraduate students (see Anderson & Haag, 2007; Galinsky & Moskowitz, 2000; Lindsey et al., 2015). In comparison, this study was conducted with an online sample, which may have resulted in a lack of quality in the perspective taking activity, which can be seen by the number of participants that had to be removed on the basis of these parameters ($N= 14$). In fact, a number of participants that had to be removed from the perspective taking condition were a result of them engaging in overtly racist remarks towards Latino immigrants. For example, one participant said,

“I would go to the nearest Lowe's or Home Depot and look for the **gringo that wants workers**. I would stand there in the parking lot waiting. After a while I would decide that being in the USA without papers and being sought by ICE was not the way I wanted to live out my life, so I would pack up my meager possessions and return to South America, where I belong. **Build the wall.**”

This language shows that this participant was engaging with the narrative based on their own negative stereotypes. This may have been easier to do in an online setting because of the level of anonymity that comes with doing a survey by yourself as opposed to being surrounded by other students or even knowing the researcher in an indirect way. This phenomenon is backed empirically by the cyber bullying literature. When young adults are asked why they engaged in cyber bullying, the common response relates to the disinhibition effect (Suler, 2004). The disinhibition effect refers to the behavior associated with a decline in concern about self-representation and the judgement of others when using the internet as a communication interface where they can be anonymous (Joinson, 1998; Suler, 2004). This anonymity allows users to feel as if they are invisible or faceless, which in turn, eliminates social disapproval concerns or concerns about being punished for unpopular opinions (Suler, 2004). Thus, the online context of the study and the nature of the threat may have posed additional barriers to the effectiveness of perspective taking in being able to reduce intergroup anxiety. Furthermore, the poor results from

this experiment could indicate that an activity such as perspective taking, in order to be effective, must be done in a setting that diminishes the possibility of carelessness in the form of supervision or being surrounded by others engaging in the same task, such that the feeling of invisibility is not as strongly felt. In contrast, imagined contact had specific instructions to have a positive interaction with a Latino immigrant, indicating that the specific instructions are what allowed participants to effectively engage in that activity. This is bolstered by the lack of participants that had to be removed on the basis of incorrectly engaging with the activity and, in general, the positive information that participants imagined gaining from this interaction. This suggests that in the current political climate, one has to be more directive when conducting diversity training, especially if this occurs remotely, as we are becoming more and more global and in person training may not always be feasible for bigger corporations.

In regard to the lack of support for hypothesis 2, the ineffectiveness of perspective taking and imagined contact on having a direct effect on prejudicial attitudes and behavioral intentions also speaks to the notion of better understanding design characteristics and intentions within diversity training. There has been few research that has focused on identifying which elements within diversity training are associated with positive outcomes (Holladay, Knight, Page, & Quinones, 2003). Subsequently, it was found that diversity training had stronger effects on all learning outcomes when the training provided more motivation to learn (e.g. educational settings, integrated, and mandatory) than when it does not (e.g. organizational settings, standalone, and voluntary; Bezrukova et al., 2016). This indicates that the effectiveness of the diversity training activities could have been diminished because of the way it was posed, which 1) may have been very threatening, and 2) did not have a focus on learning more about said group. Thus, these are important considerations to take into account for future diversity training research.

Fortunately, simple mediation analysis did reveal partial support for both hypothesis 3a and 3b in that intergroup anxiety mediated the relationship between the diversity training activities and prejudiced attitudes (H3a) and behavioral intentions (H3b). Specifically, as one went from the control to the activity of imagined contact, there was a decrease in intergroup anxiety which led to a decrease in prejudiced attitudes and an increase in positive behavioral intentions towards Latino immigrants. However, there were no significant indirect effects seen for those in the perspective taking condition. These results show further support of imagined

contact being more effective than perspective taking. In a meta-analytic review of studies that implemented imagined contact, it was found that the more participants were asked to elaborate on the context in which the imagined interaction took place, the stronger the positive effects would be (Miles & Crisp, 2014). The more participants thought specifically about when and where the imagined contact took place, the description of the target, what the contact actually looked like, and the amount of time spent imagining the situation, the stronger effect it has on attitudes and behaviors (Miles & Crisp, 2014). In this particular study, there was a lot of time spent building the positive interaction for participants. Participants were also requested to elaborate on what they learned, all of which resulted in imagined contact being effective at reducing prejudiced attitudes and behaviors towards Latino immigrants via a reduction in intergroup anxiety. More importantly, these results show the importance of reducing intergroup anxiety, seeing as there were no significant main effects between diversity training activities and prejudiced attitudes and behavioral intentions. It suggests that in situations dealing with a minority population that is highly politicized as threatening, creating training centered around reducing the anxiety associated with interacting with the group may be more beneficial than focusing narrowly on prejudiced attitudes and behaviors.

There was no support for hypothesis 4a or 4b, in that Openness to Experience did not moderate the mediating role of intergroup anxiety and it also did not moderate the relationship between diversity training activities and diversity related outcomes. Because there were no significant interactive effects found in the moderated mediation analysis, Openness to Experience was omitted from the overall model. It was expected that because those low in Openness in Experience were less likely to engage in actual contact (McCrae, 1987, 1996; McCrae & Costa, 1997), that indirect forms of contact such as imagined contact and perspective taking would be more effective in reducing their intergroup anxiety. Instead, there were no significant results found for those low in Openness to Experience across any of the relatively coded conditions (control condition versus imagined contact and perspective taking or imagined contact versus perspective taking), suggesting that the activities did not help people low in this trait reduce their intergroup anxiety and in turn their prejudice. One possible explanation is the lack of variability in Openness within the sample. Openness was measured on a seven-point scale, with the mean for each condition, centering between 5.46 to 5.60 (see table A.2), indicating a restriction of range. This means there were not any participant that were truly “low”

in this trait, making sense of why there were no interactive effects found for this variable if everyone was fairly high.

Finally, there were no significant main or indirect effects seen at time two (2 weeks later), indicating that the impact imagined contact had on intergroup anxiety did not persist. In fact, based on the repeated measures ANOVA, it was seen that prejudiced attitudes and positive behavioral intentions got significantly worse over time. However, this makes sense based on prompting theory perspective (Sitzman, Ely, Brown, & Bauer, 2010). Prompting theory states that participants use prompts from the environment not only to self-regulate but also enhance learning after training (Carver & Scheir, 1990; Winne, 2005). This can reinforce knowledge based learning but can diminish attitudinal or behavioral learning because of the negative light in which minorities are painted in the media. Thus, it makes sense that prejudicial attitudes and behavioral intentions did not get better in time because of what participants are being exposed to in popular media. Furthermore, in Bezrukova et al.'s (2016) meta-analysis, it was found that attitudinal learning decayed over time, suggesting that reactions and attitudes might be more malleable for participants post-training when compared to knowledge based outcomes.

Theoretical and Practical Implications

Despite several unexpected results, this study theoretically contributes to the literature in a few ways. First, this study compares and contrasts the efficacy of two diversity training methods, perspective taking and imagined contact. There is plenty of research to support the overall effectiveness of both perspective taking and imagined contact (see Batson et al., 1995; Cialdini et al., 1997; Turner et al., 2007), however there has been little done in terms of determining which method is superior within a diversity training context. Though the results do favor imagined contact, it is hard to draw a definite conclusion on which training method is better for especially resistant trainees because of the nature of the online study and the lack of variability in Openness to Experience. However, this study hopefully serves as a foundation for research, specifically in informing how best to structure diversity training based on the availability and location of the targeted audience.

Second, another important theoretical contribution this research stands to make is in the study of individual characteristics as boundary conditions of effectiveness for theoretically driven diversity training activities. As previously mentioned, individual characteristics and their

impact on training effectiveness has been sorely understudied, particularly in the domain of personality traits. Most previous studies have focused on demographic trainee characteristics (Bezrukova et al., 2012). Though there were no interactive effects seen with Openness to Experience as a moderator, likely given the range restriction, this information can still be theoretically relevant in guiding future diversity researchers on potential pitfalls to consider when investigating how to reach resistant trainees. Additionally, this study extends the perspective taking literature by discovering that it is an activity best done in-person and with direct instructions so as to avoid stereotypical reactions to the minority group they are taking the perspective of. This research illuminates the potential inefficiencies of perspective taking and, as a result, informs future interventions and how they are implemented so that intergroup anxiety can be reduced. Furthermore, this study also utilizes two time-points, adding a longitudinal element to the design which is usually ignored in this type of research (Bezrukova et al., 2012), which allows us to track how these effects change over time.

Practically, this research can inform organizations on the importance of taking into account the design characteristics of the training they are determined to implement and if the design of said program is most effective for that particular situation. As witnessed in this study, diversity training activities that may have been successful in other contexts may not transfer over, exhibiting the importance of understanding that all training is not equally effective for all contexts. This research also reveals the need to take diversity training beyond the typically examined groups. The fact that so many participants in the perspective taking condition wrote blatantly racist remarks demonstrates the effect the current political climate has on individuals and the fear that is being felt as a result of the changing racial demographics (Craig and Richeson 2014; U.S. Census Bureau, 2008). As a result, diversity training needs to be better utilized to determine how to effectively reach majority group members who are threatened by minority groups that are demonized and politicalized in media (i.e. immigrants, refugees, Muslims).

Limitations

As with any research, the present study is not without limitations. First, this study utilized MTurk along with TurkPrime to obtain the sample. The possible limitation in using these platforms to recruit participants is based in the design of the study. Participants were asked to perspective take and imagine a scenario while not being explicitly watched, meaning they may

have not been as engaged in the study and tasks as they should have been, which could account for the overall ineffectiveness of the results. However, attention checks and manipulations in the form of timed responses and word limits were imposed on participants to attempt to minimize overall carelessness in responses as much as possible.

Second, at least at first, the participants did not know explicitly that they were engaging in a diversity training exercise in hopes of getting realistic responses and reactions from participants in regard to the majority-minority America. However, in an actual organizational setting, participants would know the purpose of these activities, which could change the way participants respond based off of motivation and incentives. Additionally, there were no empirical measures in place that would indicate how well participants could perspective take in relation to one another. If this had been measured then it could have been controlled for and determined if it would have made a difference in the impact the diversity training activities could have had on the participants' overall intergroup anxiety.

Future Research Directions

Future research should focus on investigating the effectiveness of imagined contact in online settings as the consistent successful implementation of this activity could be useful to global organizations and their diversity training agendas. As mentioned previously, organizations are becoming increasingly global, with more than 3.9 million U.S. employees telecommuting (Global Workplace Analytics, 2017). As a result, it is crucial to not only investigate which diversity training activities work best, but also which activities are more effective for employees who cannot attend in-person sessions. For example, employees may not have the opportunity to be in one centralized location, or employees within a certain geographic location may not have the opportunity to engage in the intergroup contact needed to reduce prejudice, thus, establishing imagined contact as an effective online diversity training tool can assist organizations in their diversity oriented goals.

In addition, given the racist remarks seen in the perspective taking exercise, future research should include investigating the qualitative data gathered from this experiment. This can determine if patterns or trends can be seen in the responses and if so, what that means for the overall effectiveness of perspective taking and its usefulness in reducing intergroup anxiety. For example, responses could be tied to the political climate in that participants are mimicking what

they hear in the media. And if so, this could mean that the activity of perspective taking needs to be modified in order to address these attitudes and behaviors for politicized populations. Extending this thought, research could also further investigate how the most effective training program can be developed to help majority group members feel comfortable with minority groups that they find particularly threatening like Latino immigrants. For instance, if there are other minority groups that have been particularly politically and socially demonized, research can be done to determine if traditional diversity training methods or a more mixed method approach may be better to address the issue. It can even be taken further by determining which groups majority group members find most threatening and investigating which training activities would be most effective at reducing intergroup anxiety across different platforms and mediums.

Though focusing on personality traits proved to be a dead end in this study, future research should continue to focus on potential boundary conditions to the overall effectiveness of diversity training. The more we understand about what makes training work for all involved, the better researchers and practitioners alike can develop diversity programs that can create lasting change for all employees.

Conclusion

As America's global economy continues to grow, so does the need to understand how people of different backgrounds, nationalities and cultures can come together and create a harmonious work environment. This issue becomes even more pressing as majority group members begin to feel threatened by these demographic changes. As such, this research adds to the ever-growing diversity literature by determining which diversity training activity would be best utilized to reduce prejudiced attitudes, and increase positive behavioral intentions via a reduction in intergroup anxiety. While it was found that Openness to Experience did not moderate this relationship, canceling out the notion of reaching resistant trainees, this study illuminated the importance of considering design characteristics and also the importance of reducing intergroup anxiety with particularly threatening populations. Therefore, these findings offer guidance for future research that can be used to explore how to effectively implement diversity training such that the desired goals of a more equitable work environment are met.

TABLES

Table 1. Reliability Statistics for Dependent Variables

	Time 1	Time 2
Dependent Variable	Cronbach's a	Cronbach's a
Openness	.878	
Intergroup Anxiety	.946	.944
Prejudicial Attitudes	.930	.928
Behavioral Intentions	.848	.875

Table 2. Descriptive Statistics for Dependent Variables

	Time 1 (N= 471)						Time 2 (N= 291)					
	Imagined Contact (N= 176)		Perspective Taking (N= 144)		Control (N= 151)		Imagined Contact (N= 106)		Perspective Taking (N= 91)		Control (N=94)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Openness	5.46 ^a	1.00	5.62 ^a	.87	5.46 ^a	.88	-	-	-	-	-	-
Intergroup Anxiety	2.66 ^{ac}	1.44	2.95 ^{ab}	2.03	3.16 ^{ab}	1.84	2.71 ^a	1.46	2.86 ^a	1.75	3.09 ^a	1.89
Prejudicial Attitudes	3.03 ^a	1.45	3.11 ^a	1.81	3.39 ^a	1.83	3.41 ^a	1.72	3.24 ^a	1.76	3.56 ^a	1.77
Behavioral Intentions	5.57 ^a	1.06	5.59 ^a	1.20	5.41 ^a	1.31	5.41 ^a	1.13	5.50 ^a	1.32	5.24 ^a	1.24

Note: Differences in superscript represent significant mean differences at the $p < .05$ level

Table 3. Correlations between Dependent Variables

	1	2	3	4
1 Openness	-			
2 Intergroup Anxiety	-.16**	-		
3 Prejudicial Attitudes	-.21**	.66**	-	
4 Behavioral Intentions	.25**	-.58**	-.78**	-

**p < .01

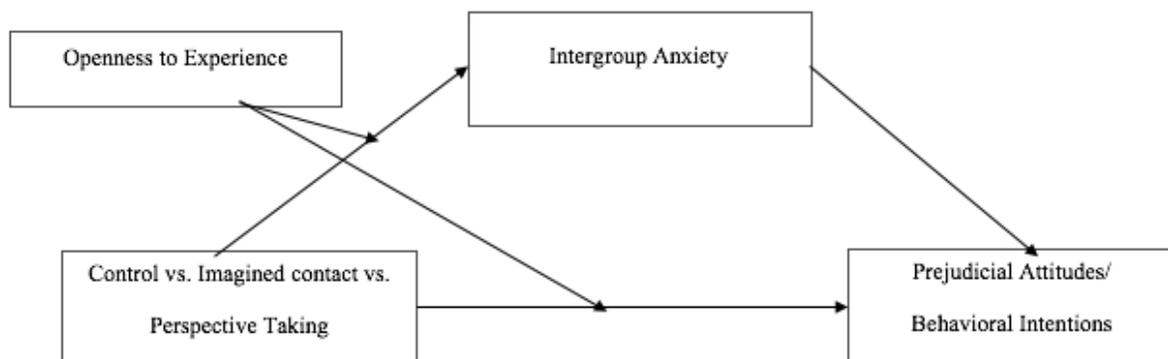
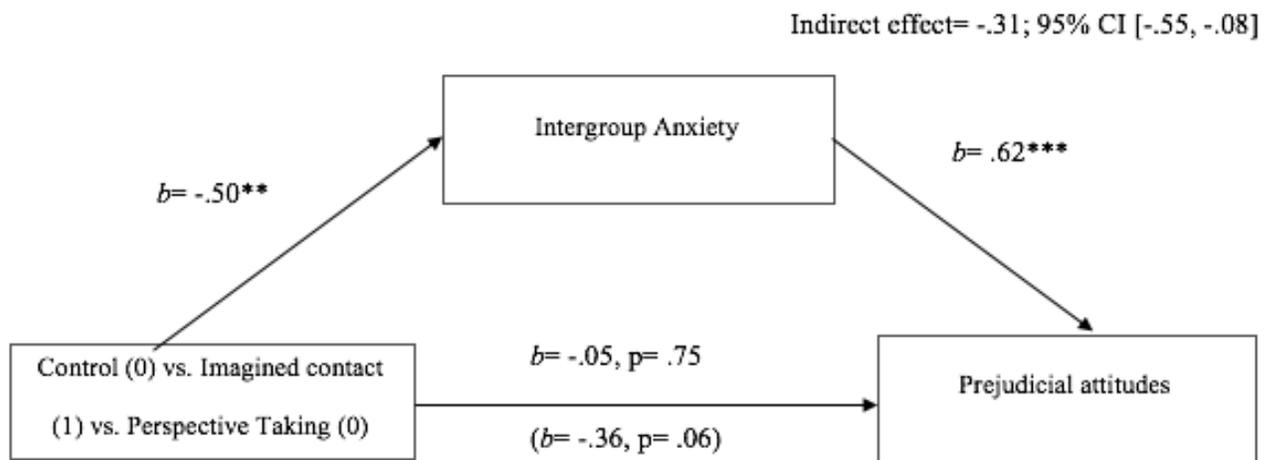
FIGURES

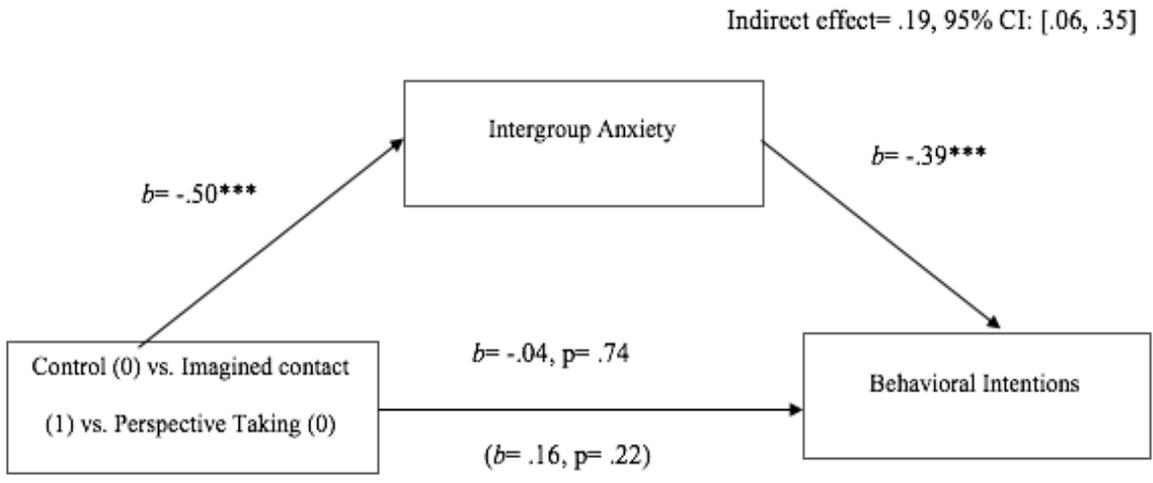
Figure 1: Proposed Theoretical Model



* *control versus imagined contact*

Note: The condition variable was coded such that the control and perspective taking were coded as .000 and imagined contact was coded as 1 (**dummy coded**) to compare imagined contact against the control group. The result in parentheses represented the total effect, that is participants in the imagined contact condition felt .36 standard deviations less prejudicial attitudes than participants in the control condition. b = unstandardized regression coefficient; $p < .05^*$, $p < .01^{**}$, $p < .001^{***}$

Figure 2: Mediation Model Predicting Prejudicial Attitudes Time 1



* control versus imagined contact

Note: The condition variable was coded such that the control and perspective taking were coded as .000 and imagined contact was coded as 1(**dummy coded**) to compare imagined contact against the control group. The result in parentheses represented the total effect, that is participants in the imagined contact condition felt .16 standard deviations more positive behavioral intentions than participants in the control condition. $b =$ unstandardized regression coefficient; $p < .05^*$, $p < .01^{**}$, $p < .001^{***}$

Figure 3: Mediation Model Predicting Behavioral Intentions Time 1

REFERENCES

- Aberson, C. L., & Haag, S. C. (2007). Contact, perspective taking, and anxiety as predictors of stereotype endorsement, explicit attitudes, and implicit attitudes. *Group Processes & Intergroup Relations*, *10*(2), 179-201.
- Adorno, T. W., Frenkel-Brunswick, E., Levinson, D., & Sanfor, R. N. (1950). *The authoritarian personality*. New York: Harper & Brothers.
- Alderfer, C. P. (1992). Changing race relations embedded in organizations: Report on a long-term project with the XYZ Corporation.
- Allport, G. W., Clark, K., & Pettigrew, T. (1954). The nature of prejudice.
- Amir, Y. (1976). The role of intergroup contact in change of prejudice and race relations. In P. A. Katz (Ed.), *Towards the elimination of racism* (pp. 245–280). New York: Pergamon.
- Anand, R., & Winters, M. (2008). A retrospective view of corporate diversity training from 1964 to the present. *Academy of Management Learning & Education*, *7*, 356–372.
- Ashmore, R. D., & DEL BOCA, F. K. (1976). Psychological approaches to understanding intergroup conflicts. In *Towards the elimination of racism* (pp. 73-123).
- Bakker, B. N., Klemmensen, R., Nørgaard, A. S., & Schumacher, G. (2016). Stay loyal or exit the party? How openness to experience and extroversion explain vote switching. *Political Psychology*, *37*(3), 419-429.
- Barak, M. E. M. (2016). *Managing diversity: Toward a globally inclusive workplace*. Sage Publications.
- Barrick, M. R., & Mount, M. K. (1991). The big five personality dimensions and job performance: a meta-analysis. *Personnel psychology*, *44*(1), 1-26.
- Batson, C. D., Turk, C. L., Shaw, L. L., & Klein, T. R. (1995). Information function of empathic emotion: Learning that we value the other's welfare. *Journal of personality and social psychology*, *68*(2), 300.
- Batson, C. D., Chang, J., Orr, R., & Rowland, J. (2002). Empathy, attitudes, and action: Can feeling for a member of a stigmatized group motivate one to help the group? *Personality and Social Psychology Bulletin*, *28*(12), 1656-1666.

- Berrenberg, J. L., Finlay, K. A., Stephan, W. G., & Stephan, C. (2002). Prejudice toward people with cancer or AIDS: Applying the integrated threat model. *Journal of Applied Behavioral Research, 7*(2), 75-86.
- Bezrukova, K., Jehn, K. A., & Spell, C. S. (2012). Reviewing diversity training: where we have been and where we should go. *Academy of Management Learning & Education, 11*, 207–227.
- Bezrukova, K., Spell, C. S., Perry, J. L., & Jehn, K. A. (2016). A meta-analytical integration of over 40 years of research on diversity training evaluation. *Psychological Bulletin, 142*(11), 1227.
- Bond, M. A., & Haynes, M. C. (2014). Workplace Diversity: A Social–Ecological Framework and Policy Implications. *Social Issues and Policy Review, 8*(1), 167–201.
doi:10.1111/sipr.12005
- Brandt, M. J., Chambers, J. R., Crawford, J. T., Wetherell, G., & Reyna, C. (2015). Bounded openness: The effect of openness to experience on intolerance is moderated by target group conventionality. *Journal of personality and social psychology, 109*(3), 549.
- Brewer, M. B., & Brown, R. J. (1998). Intergroup relations. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (4th ed., pp. 554–594). Boston: McGraw-Hill.
- Brickson, S. (2000). The impact of identity orientation on individual and organizational outcomes in demographically diverse settings. *Academy of Management Review, 25*(1), 82–101.
- Brown, R., & Hewstone, M. (2005). An integrative theory of intergroup contact. *Advances in experimental social psychology, 37*(37), 255-343.
- Bureau of Labor Statistics, U.S. Department of Labor. (2017, September 25). 26.8 million Hispanics or Latinos in the U.S. labor force in 2016. *The Economics Daily*. Retrieved from <https://www.bls.gov/opub/ted/2017/26-point-8-million-hispanics-or-latinos-in-the-u-s-labor-force-in-2016.htm>.
- Carney, D. R., Jost, J. T., Gosling, S. D., & Potter, J. (2008). The secret lives of liberals and conservatives: Personality profiles, interaction styles, and the things they leave behind. *Political Psychology, 29*, 807–839.

- Carver, C. S., & Scheier, M. (1990). *Principles of self-regulation: Action and emotion*. Guilford Press.
- Cialdini, R. B., Brown, S. L., Lewis, B. P., Luce, C., & Neuberg, S. L. (1997). Reinterpreting the empathy–altruism relationship: When one into one equals oneness. *Journal of personality and social psychology*, *73*(3), 481.
- Cohrs, J. C., Kämpfe-Hargrave, N., & Riemann, R. (2012). Individual differences in ideological attitudes and prejudice: Evidence from peer- report data. *Journal of Personality and Social Psychology*, *103*, 343– 361.
- Corenblum, B., & Stephan, W. G. (2001). White fears and native apprehensions: An integrated threat theory approach to intergroup attitudes. *Canadian Journal of Behavioural Science*, *33*(4), 251.
- Craig, M. A., & Richeson, J. A. (2014). More diverse yet less tolerant? How the increasingly diverse racial landscape affects White Americans’ racial attitudes. *Personality And Social Psychology Bulletin*, *40*(6), 750-761. doi:10.1177/0146167214524993
- Crisp, R. J., & Turner, R. N. (2009). Can imagined interactions produce positive perceptions? *American Psychologist*, *64*, 231–240.
- Dadds, M. R., Bovbjerg, D. H., Redd, W. H., & Cutmore, T. R. (1997). Imagery in human classical conditioning. *Psychological bulletin*, *122*(1), 89.
- Dovidio, J. F., & Gaertner, S. L. (2004). Aversive racism. *Advances in experimental social psychology*, *36*, 4-56.
- Duckitt, J., & Sibley, C. G. (2009). A dual-process motivational model of ideology, politics, and prejudice. *Psychological Inquiry*, *20*(2-3), 98-109.
- Duckitt, J., Wagner, C., du Plessis, I., & Birum, I. (2002). The psychological bases of ideology and prejudice: Testing a dual process model. *Journal of Personality and Social Psychology*, *83*, 75–93.
- Ekehammar, B., & Akrami, N. (2003). The relation between personality and prejudice: A variable- and a person-centered approach. *European Journal of Personality*, *17*, 449–464.
- Ely, R. J. (2004). A field study of group diversity, participation in diversity education programs, and performance. *Journal of Organizational Behavior*, *25*: 755–780.

- Ely, R. J., & Thomas, D. A. (2001). Cultural diversity at work: The effects of diversity perspectives on work group processes and outcomes. *Administrative Science Quarterly*, 46(2), 229–273.
- Esen, E. (2005). 2005 workplace diversity practices survey report. Alexandria, VA: Society for Human Resource Management.
- Flynn, F. J. (2005). Having an open mind: the impact of openness to experience on interracial attitudes and impression formation. *Journal of personality and social psychology*, 88(5), 816.
- Francine D. Blau and Christopher Mackie. (2016). *The Economic and Fiscal Consequences of Immigration*. Washington: National Academies of Science, Engineering, and Medicine. Retrieved from <https://www.nap.edu/catalog/23550/the-economic-and-fiscal-consequences-of-immigration>.
- Galinsky, A. D., & Ku, G. (2004). The effects of perspective-taking on prejudice: The moderating role of self-evaluation. *Personality and Social Psychology Bulletin*, 30(5), 594-604.
- Galinsky, A. D., Ku, G., & Wang, C. S. (2005). Perspective-taking and self-other overlap: Fostering social bonds and facilitating social coordination. *Group Processes & Intergroup Relations*, 8, 109–124.
- Galinsky, A. D., & Moskowitz, G. B. (2000). Perspective-taking: decreasing stereotype expression, stereotype accessibility, and in-group favoritism. *Journal of personality and social psychology*, 78(4), 708.
- Garcia, S. M., Weaver, K., Moskowitz, G. B., & Darley, J. M. (2002). Crowded minds: The implicit bystander effect. *Journal of personality and social psychology*, 83(4), 843.
- George, J., & Zhou, J. (2001). When openness to experience and conscientiousness are related to creative behavior: An interactional approach. *Journal of Applied Psychology*, 86, 513–524.
- Global Workplace Analytics. (2017). *The 2017 State of Telecommuting in the U.S. Employee Workforce Report*. Retrieved from <https://www.flexjobs.com/2017-State-of-Telecommuting-US/>
- Goldberg, L. R. (1990). An alternative" description of personality": the big-five factor structure. *Journal of personality and social psychology*, 59(6), 1216.

- Gudykunst, W. B. (1988). Uncertainty and anxiety. *Theories in intercultural communication*, 123-156.
- Gudykunst, W. B. (1998). Applying anxiety\uncertainty management (AUM) Theory to intercultural adjustment training. *International Journal of Intercultural Relations*, 22(2), 227-250.
- Harwood, J., Hewstone, M., Paolini, S., & Voci, A. (2005). Grandparent-grandchild contact and attitudes toward older adults: Moderator and mediator effects. *Personality and Social Psychology Bulletin*, 31(3), 393-406.
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York: Guilford Press.
- Hewstone, M., Cairns, E., Voci, A., Hamberger, J., & Niens, U. (2006). Intergroup contact, forgiveness, and experience of “The Troubles” in Northern Ireland. *Journal of Social Issues*, 62(1), 99-120.
- Hewstone, M., Rubin, M., & Willis, H. (2002). Intergroup bias. *Annual Review of Psychology*, 53, 575 – 604.
- Ho, A. K., Sidanius, J., Kteily, N., Sheehy-Skeffington, J., Pratto, F., Henkel, K. E., ... & Stewart, A. L. (2015). The nature of social dominance orientation: Theorizing and measuring preferences for intergroup inequality using the new SDO₇ scale. *Journal of Personality and Social Psychology*, 109(6), 1003.
- Holladay, C. L., Knight, J. L., Paige, D. L., & Quiñones, M. A. (2003). The influence of framing on attitudes toward diversity training. *Human Resource Development Quarterly*, 14(3), 245-263.
- Husnu, S., & Crisp, R. J. (2010). Elaboration enhances the imagined contact effect. *Journal of Experimental Social Psychology*, 46(6), 943-950.
- Husnu, S., & Crisp, R. J. (2015). Perspective-taking mediates the imagined contact effect. *International Journal of Intercultural Relations*, 44, 29-34.
- Jackson, J. W., & Poulsen, J. R. (2005). Contact experiences mediate the relationship between five-factor model personality traits and ethnic prejudice. *Journal of Applied Social Psychology*, 35,667–685.

- Joinson, A. N. 1998. Causes and implications of disinhibited behavior on the Internet. In *Psychology and the Internet: Intrapersonal, interpersonal and transpersonal implications*, ed. J. Gackenbach, 43–60. New York: Academic Press.
- Jost, J. T., Glaser, J., Kruglanski, A. W., & Sulloway, F. J. (2003). Political conservatism as motivated social cognition. *Psychological Bulletin*, *129*, 339–375.
- Kalev, A., Dobbin, F., & Kelly, E. (2006). Best practices or best guesses? Assessing the efficacy of corporate affirmative action and diversity policies. *American sociological review*, *71*(4), 589-617.
- King, E. B., Gulick, L. M., & Avery, D. R. (2010). The divide between diversity training and diversity education: Integrating best practices. *Journal of Management Education*, *34*(6), 891-906.
- Kohlberg, L. (1971). Stages of moral development. *Moral education*, *1*, 23-92.
- Kulik, C. T., & Roberson, L. (2008). Common goals and golden opportunities: Evaluations of diversity education in academic and organizational settings. *Academy of Management Learning & Education*, *7*(3), 309-331.
- Legault, L., Gutsell, J. N., & Inzlicht, M. (2011). Ironic effects of anti-prejudice messages: How motivational interventions can reduce (but also increase) prejudice. *Psychological Science*, *22*(12), 1472-1477.
- Lindsey, A., King, E., Hebl, M., & Levine, N. (2015). The impact of method, motivation, and empathy on diversity training effectiveness. *Journal of Business And Psychology*, *30*(3), 605-617.
- Maddi, S. R., & Berne, N. (1964). Novelty of productions and desire for novelty as active and passive forms of the need for variety. *Journal of Personality*, *22*, 270–277.
- Madera, J. M., King, E. B., & Hebl, M. R. (2013). Enhancing the effects of sexual orientation diversity training: The effects of setting goals and training mentors on attitudes and behaviors. *Journal of Business and Psychology*, *28*(1), 79-91.
- Mallett, R. K., Wilson, T. D., & Gilbert, D. T. (2008). Expect the unexpected: Failure to anticipate similarities leads to an intergroup forecasting error. *Journal of personality and social psychology*, *94*(2), 265.

- Martinez, C. (1995). *Stereotype and content: Semantic components of Gypsy's representations*. Paper presented at the XXV Inter-American Congress of Psychology, San Juan, Puerto Rico.
- McCrae, R. R. (1994). Openness to experience: Expanding the boundaries of Factor V. *European Journal of Personality*, 8, 251–272.
- McCrae, R. R. (1996). Social consequences of experiential openness. *Psychological Bulletin*, 120, 323–337.
- McCrae, R. R., & Costa, P. T. (1987). Validation of the five-factor model of personality across instruments and observers. *Journal of personality and social psychology*, 52(1), 81.
- McCrae, R. R., & Costa, P. T., Jr. (1997). Conceptions and correlates of openness to experience. In R. Hogan, J. A. Johnson, & S. R. Briggs (Eds.), *Handbook of personality psychology* (pp. 825–847). San Diego, CA: Academic Press.
- Murray, K. E., & Marx, D. M. (2013). Attitudes toward unauthorized immigrants, authorized immigrants, and refugees. *Cultural Diversity and Ethnic Minority Psychology*, 19(3), 332.
- The National Center for Public Policy and Higher Education (2005). *The U.S. Workforce is Becoming More Diverse Policy Report*. Retrieved from http://www.highereducation.org/reports/pa_decline/decline-f1.shtml
- Naff, K., & Kellough, E. 2003. Ensuring employment equity: Are federal diversity programs making a difference? *International Journal of Public Administration*, 26: 1307–1336.
- The New York Times. 2007. *Looking around the corner: The view from the front line*. New York: The New York Times Company.
- Oakes, P. J., Haslam, S. A., & Reynolds, K. J. (1999). Social categorization and social context: Is stereotype change a matter of information or of meaning? In D. Abrams, & M. A. Hogg (Eds.), *Social identity and social cognition* (pp. 55–79). Oxford, UK: Blackwell.
- Paluck, E. L. (2006). Diversity training and intergroup contact: A call to action research. *Journal of Social Issues*, 62, 577–595.
- Perry, R., & Sibley, C. G. (2013). Seize and freeze: Openness to Experience shapes judgments of societal threat. *Journal of Research in Personality*, 47, 677–686.
- Pettigrew, T. F. (1997a). Generalized intergroup contact effects on prejudice. *Personality and Social Psychology Bulletin*, 23, 173–185.

- Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology, 90*(5), 751–783.
- Pettigrew, T. F., & Tropp, L. R. (2008). How does intergroup contact reduce prejudice? Meta-analytic tests of three mediators. *European Journal of Social Psychology, 38*(6), 922-934.
- Pew Research Center. (2015). *Modern Immigration Wave Brings 59 Million to U.S., Driving Population Growth and Change Through 2065*. Retrieved from <http://www.pewhispanic.org/2015/09/28/modern-immigration-wave-brings-59-million-to-u-s-driving-population-growth-and-change-through-2065/>.
- Plant, E. A., & Butz, D. A. (2006). The causes and consequences of an avoidance-focus for interracial interactions. *Personality and Social Psychology Bulletin, 32*(6), 833-846.
- Plant, E., Butz, D. A., & Tartakovsky, M. (2008). Interethnic interactions: Expectancies, emotions, and behavioral intentions. *Group Processes & Intergroup Relations, 11*(4), 555-574.
- Plaut, V. C., Garnett, F. G., Buffardi, L. E., & Sanchez-Burks, J. (2011). “What about me?” Perceptions of exclusion and Whites' reactions to multiculturalism. *Journal of Personality and Social Psychology, 101*(2), 337.
- Quillian, L. (1995). Prejudice as a response to perceived group threat: Population composition and anti-immigrant and racial prejudice in Europe. *American Sociological Review, 60*, 586-611.
- Quillian, L. (1996). Group threat and regional change in attitudes toward African-Americans. *American Journal of Sociology, 102*, 816-860.
- Riek, B. M., Mania, E. W., & Gaertner, S. L. (2006). Intergroup threat and outgroup attitudes: A meta-analytic review. *Personality and social psychology review, 10*(4), 336-353.
- Robb, L. A., & Doverspike, D. (2001). Self-reported proclivity to harass as a moderator of the effectiveness of sexual harassment-prevention training. *Psychological Reports, 88*, 85–88.
- Rossett, A., & Bickham, T. (1994). Diversity Training: Hope, Faith and Cynicism. *Training, 31*(1).
- Rothbart, M., & John, O. P. (1985). Social categorization and behavioral episodes: A cognitive analysis of the effects of intergroup contact. *Journal of Social Issues, 41*, 81–104.

- Rudman, L. A., Ashmore, R. D., & Gary, M. L. (2001). "Unlearning" automatic biases: The malleability of implicit prejudice and stereotypes. *Journal of Personality and Social Psychology*, *81*, 856–868.
- Rugh, J. S., & Massey, D. S. (2014). Segregation in post-civil rights America: Stalled integration or end of the segregated century?. *Du Bois Review: Social Science Research on Race*, *11*(2), 205-232.
- Shelton, J. N., & Richeson, J. A. (2005). Intergroup contact and pluralistic ignorance. *Journal of personality and social psychology*, *88*(1), 91.
- Shih, M. J., Stotzer, R., & Gutiérrez, A. S. (2013). Perspective-taking and empathy: Generalizing the reduction of group bias towards Asian Americans to general outgroups. *Asian American Journal of Psychology*, *4*(2), 79.
- Sibley, C. G., & Duckitt, J. (2008). Personality and prejudice: A meta-analysis and theoretical review. *Personality and Social Psychology Review*, *12*, 248–279.
- Simons, G. F. (1992). *The questions of diversity: Assessment tools for organizations and individuals*. Amherst, MA: ODT, Inc.
- Sitzman, T., Ely, K., Brown, K. G., & Bauer, K. N. (2010). Adding a web-based perspective to the self-assessment of knowledge: Compelling reasons to utilize affective measures of learning. *Academy of Management Learning & Education*, *9*(2), 169-191.
- Smith, E. R., & Mackie, D. M. (2005). Aggression, hatred, and other emotions. *On the nature of prejudice: Fifty years after Allport*, 361-376.
- Stephan, W. G., & Stephan, C. W. (1985). Intergroup anxiety. *Journal of social issues*, *41*(3), 157-175.
- Stephan, W. G., & Stephan, C. W. (1993). Cognition and affect in stereotyping: Parallel interactive networks. In *Affect, cognition and stereotyping* (pp. 111-136).
- Stephan, W. G., & Stephan, C. W. (1996). Predicting prejudice. *International Journal of Intercultural Relations*, *20*(3-4), 409-426.
- Stephan, W. G., Boniecki, K. A., Ybarra, O., Bettencourt, A., Ervin, K. S., Jackson, L. A., ... & Renfro, C. L. (2002). The role of threats in the racial attitudes of Blacks and Whites. *Personality and Social Psychology Bulletin*, *28*(9), 1242-1254.
- Stephan, W. G., Ybarra, O., & Bachman, G. (1999). Prejudice toward immigrants. *Journal of Applied Social Psychology*, *29*(11), 2221-2237.

- Stephan, W. G., Ybarra, O., Martinez, C. M., Schwarzwald, J., & Tur-Kaspa, M. (1998). Prejudice toward immigrants to Spain and Israel: An integrated threat theory analysis. *Journal of Cross-Cultural Psychology, 29*(4), 559-576.
- Strauss, J., & Connerley, M. (2003). Demographics, personality, contact, and universal-diverse orientation: An exploratory examination. *Human Resource Management, 42*, 159-174.
- Suler, J. (2004). The online disinhibition effect. *Cyberpsychology & behavior, 7*(3), 321-326.
- Tajfel, H., & Turner, J. C. (1986). The social identity theory of intergroup behavior. In W. G. Austin & S. Worchel (Eds.), *Psychology of Intergroup Relations* (pp. 7-24). Chicago: Nelson-Hall.
- Tett, R. P., & Burnett, D. D. (2003). A personality trait-based interactionist model of job performance. *Journal of Applied Psychology, 88*(3), 500.
- Theye, A. E. (2017). The effects of diversity training on mental healthcare professionals serving Hispanic patients in Rural Oregon. *Dissertation Abstracts International, 77*.
- Thompson, R. L., Brossart, D. F., Carlozzi, A. F., & Miville, M. L. (2002). Five-factor model (Big Five) personality traits and universal-diverse orientation in counselor trainees. *The Journal of Psychology, 136*, 561-572.
- Todd, A. R., Bodenhausen, G. V., Richeson, J. A., & Galinsky, A. D. (2011). Perspective taking combats automatic expressions of racial bias. *Journal of personality and social psychology, 100*(6), 1027.
- Todd, A. R., & Galinsky, A. D. (2014). Perspective-Taking as a Strategy for Improving Intergroup Relations: Evidence, Mechanisms, and Qualifications. *Social and Personality Psychology Compass, 8*(7), 374-387.
- Turner, R. N., Crisp, R. J., & Lambert, E. (2007). Imagining intergroup contact can improve intergroup attitudes. *Group Processes & Intergroup Relations, 10*(4), 427-441.
- Turner, R. N., Dhont, K., Hewstone, M., Prestwich, A., & Vonofakou, C. (2014). The role of personality factors in the reduction of intergroup anxiety and amelioration of outgroup attitudes via intergroup contact. *European Journal of Personality, 28*(2), 180-192.
- Turner, R. N., Hewstone, M., & Voci, A. (2007). Reducing explicit and implicit outgroup prejudice via direct and extended contact: The mediating role of self-disclosure and intergroup anxiety. *Journal of personality and social psychology, 93*(3), 369.

- Turner, R. N., & West, K. (2012). Behavioural consequences of imagining intergroup contact with stigmatized outgroups. *Group Processes & Intergroup Relations*, 15(2), 193-202.
- Turner, R. N., West, K., & Christie, Z. (2013). Out-group trust, intergroup anxiety, and out-group attitude as mediators of the effect of imagined intergroup contact on intergroup behavioral tendencies. *Journal of Applied Social Psychology*, 43(S2).
- United States Census Bureau (June 25, 2015). *Millennials Outnumber Baby Boomers and Are Far More Diverse*, *Census Bureau Reports*. Retrieved from <https://www.census.gov/newsroom/press-releases/2015/cb15-113.html>
- U.S. Census Bureau. (2008, August 14). *An older and more diverse nation by midcentury*. Retrieved from <http://www.census.gov/newsroom/releases/archives/population/cb08-123.html>
- Vachon, D. D., & Lynam, D. R. (2016). Fixing the problem with empathy: Development and validation of the affective and cognitive measure of empathy. *Assessment*, 23(2), 135-149.
- Vespa, J., Armstrong, D., & Medina, L. (2018, March). *Demographic Turning Points for the United States: Population Projections for 2020 to 2060*. Retrieved from https://www.census.gov/content/dam/Census/library/publications/2018/demo/P25_1144.
- Voci, A., & Hewstone, M. (2003). Intergroup contact and prejudice toward immigrants in Italy: The mediational role of anxiety and the moderational role of group salience. *Group Processes & Intergroup Relations*, 6(1), 37-54.
- Wilder, D. A. (1993). The role of anxiety in facilitating stereotypic judgments of outgroup behavior. In *Affect, cognition and stereotyping* (pp. 87-109).
- Winne, P. H. (2005). A perspective on state-of-the-art research on self-regulated learning. *Instructional science*, 33(5), 559-565.

APPENDIX

Measurement Materials

Perceptions of Today's Changing Workforce

Following a page with study information and the consent form, all participants will be given a brief description about the shifting demographics in the U.S. workforce:

“According to the U.S. Census Bureau, millennials make up more than a quarter of the world population and are one of the most diverse generations with 44.2 percent classifying themselves as being a part of a minority racial or ethnic group. As the country becomes more diverse, so does the workforce. The National Center for Public Policy and Higher Education (2005) projected that by 2020, the racial minority working-age population will double to 37 percent from 18 percent while the White working population will decline from 82 percent to 63 percent. In addition, according to a 2016 report by the Society for Human Resource Management, Hispanic/Latino workers are the biggest source of change in the workforce. It is projected that they will account for one out of every two new workers entering the workforce by 2025.”

Following this, participants will be given one of 3 sets of instructions: perspective taking, imagined contact or outdoor scene. Each version is presented and labeled below:

Perspective Taking:

Please consider the challenges that Latino immigrants have to go through in the workplace such as harassment, being undermined, and being ostracized because of their identity. With this in mind, take the perspective of a Latino immigrant. That is, go through the typical work day in their shoes, as if you were that person.

For this task, please take at least 3 minutes to write a short essay on what this work day through the lens of being a Latino immigrant. Imagine what their day would look like in the first-person perspective, as if you were the person you are imagining. Try to write at least 150 words before proceeding.

Imagined Contact:

Please take at least 3 minutes to imagine the following situation:

Imagine you are in the employee break room getting your morning cup of coffee. You notice another employee enter the room whom you've never seen before. The employee tells you that they're new to the organization and you find out that they are a Latino immigrant. You both end up talking for 30 minutes and you find out some interesting and new things about the new employee. When you part ways you realize you enjoy talking with the new employee and that the interaction was positive, relaxed and comfortable.

Following this, please list the interesting and new things you learned about this person. Try to write at least ten things before proceeding.

Outdoor Scene:

Please take at least 3 minutes to imagine an outdoor scene. Try to imagine aspects of the scene (e.g., is it a beach, a forest, are there trees, hills, what's on the horizon).

Following this, please write a short essay on what you imagined. Try to write at least 150 words before proceeding.

Participants will then be asked to complete the following items, as shown (with citations indicating source) below:

Intergroup Anxiety Measure (Stephan and Stephan, 1985)

Instructions: If you were the only member of your ethnic group and you were interacting with a Latino immigrant at work (e.g. working on a project with them), how would you feel compared to occasions when you are interacting with people from your own ethnic group?

1 (I do not feel this emotion at all) - 10 (I feel this emotion extremely)

Positive Emotions

1. Comfortable
2. Trusting
3. Friendly
4. Confident
5. Safe
6. At Ease

Negative Emotions

1. Apprehensive
2. Uncertain
3. Worried
4. Awkward
5. Anxious
6. Threatened

Prejudicial Attitudes Survey (Stephan and Stephan, 1993)

Instructions: Participants will be asked to indicate the degree to which they feel 12 distinct evaluative or emotional reactions towards Latino immigrants on a 10-point scale running from

1 (not at all)- 10 (extreme)

Evaluative Reactions

1. Admiration
2. Acceptance
3. Sympathy
4. Hostility- reverse
5. Superiority
6. Warmth

Emotional Reactions

1. Disliking- reverse
2. Rejection- reverse
3. Affection
4. Disdain- reverse
5. Approval
6. Hatred- reverse

Behavioral Intentions towards Latino immigrants (adapted from Madera et al., 2013)

Instructions: Please rate the following statements based on the degree to which they are descriptive of your intended behavior in the future.

1 (strongly disagree)- 7 (strongly agree).

1. I will promote tolerance and respect for Latino immigrants
2. I will not laugh at 'immigrant' jokes
3. I will not use derogatory terms to refer to immigrants
4. I will interact with individuals of different racial and immigration status
5. I will become friends with a Latino immigrant
6. I will attend a social or community event supporting Latino immigrants

Realistic Threats (adapted from Stephan et al., 1999)

Instructions: Please indicate the extent to which you agree or disagree with the following statements.

1 (strongly disagree) – 10 (strongly agree)

1. Latino immigrants should learn to conform to the rules and norms of American society as soon as possible after they arrive.
2. Latino immigrants is undermining American culture.
3. The values and beliefs of Latinos immigrants regarding work are basically quite similar to those of most Americans.
4. The values and beliefs of Latino immigrants regarding moral and religious issues are not compatible with the beliefs and values of most Americans.
5. The values and beliefs of Latino immigrants regarding family issues and socializing children are basically quite similar to those of most Americans.
6. The values and beliefs of Latino immigrants regarding social relations are not compatible with the beliefs and values of most Americans.
7. Latino immigrants should not have to accept American ways.

Symbolic Threats (adapted from Stephan et al., 1999)

Instructions: Please indicate the extent to which you agree or disagree with the following statements.

1 (strongly disagree) – 10 (strongly agree)

1. Latino immigrants get more from this country than they contribute.
2. The children of Latino immigrants should have the same right to attend public schools in the United States as Americans do.
3. Latin immigration has increased the tax burden on Americans.
4. Latin immigrants are not displacing American workers from their jobs.
5. Latin immigrants should be eligible for the same health-care benefits received by Americans.
6. Social services have become less available to Americans because of Latino immigrants
7. The quality of social services available to Americans has remained the same, despite Latino immigrants
8. Latino immigrants are as entitled to subsidized housing or subsidized utilities (water, sewage, electricity) as poor Americans are.

Diversity Attitudes: Diversity Endorsement Measure (adapted from Plaut, Garnett, Buffardi, Sanchez-Burks 2011)

Instructions: Please indicate how strongly you agree or disagree with each statement. There are no "right" or "wrong" answers

1 (Strongly Disagree) - 7 (Strongly Agree)

1. Organizations should foster environments where differences are valued.
2. One of the goals of organizations should be to teach people from difference racial, ethnic, and cultural backgrounds how to work together.
3. An organization should expose employees to the important difference in ideas and values that exist in the world.
4. An organization should help employees understand that differences in backgrounds and experiences can lead to different values and ways of thinking.
5. At the organization, it is not enough for there to be diversity of lower-level employees, but there should also be diversity in leadership and supervisors.
6. It is important to have multiple perspectives in the workplace.

Attention Checks

If you are reading this please select the color red:

- Green
- Black
- Orange
- Red
- Blue

Demographic Questionnaire

Instructions: Now we have some questions about you so that we can better understand the make-up of our sample.

The Big Five Personality Trait Test- shortened 10- item version (Goldberg, 1992)

Instructions: Please indicate how strongly you agree or disagree with each statement. There are no "right" or "wrong" answers

1 (Strongly Disagree) – 5 (Strongly Agree)

Openness to Experience

- 1) I have a rich vocabulary
- 2) I have a vivid imagination
- 3) I have excellent ideas
- 4) I am quick to understand things
- 5) I use difficult words
- 6) I spend time reflecting on things
- 7) I am full of ideas

- 8) I have difficulty understanding abstract ideas- (reverse coded)
- 9) I am not interested in abstract ideas- (reverse coded)
- 10) I do not have a good imagination- (reverse coded)

Agreeableness

- 1) I am interested in people
- 2) I sympathize with other's feelings
- 3) I have a soft heart
- 4) I take time out for others
- 5) I feel others' emotions
- 6) I make people feel at ease
- 7) I am not really interested in others- (reverse coded)
- 8) I insult people- (reverse coded)
- 9) I am not interested in other people's problems- (reverse coded)
- 10) I feel little concern for others- (reverse coded)

To what extent have you had previous contact with Latino immigrants?

- 1. Daily
- 2. 4-6 times
- 3. 2-3 times a week
- 4. Once a week
- 5. 2-3 times a month
- 5. Never

With which gender do you identify?

Male

Female

Other (_____)

What is your age (in years)? _____

What is your race?

White/Caucasian

African American

Hispanic

East Asian

South Asian

Middle Eastern

Native American or American Indian

Native Hawaiian or Pacific Islander

Multiracial

Other _____

Religious Affiliation

Christian
Jewish
Muslim
Hindu
Buddhist
Atheist
Agnostic
Other, fill in blank

Political Party

Democrat
Republican
Independent
Other, fill in blank
None

Political Ideology

1. Extremely Liberal
2. Liberal
3. Somewhat Liberal
4. Moderate
5. Somewhat Conservative
6. Conservative
7. Extremely Conservative

What is your country of origin?

1. United States of America
2. Other, fill in blank

Have you ever lived outside the USA?

1. No
2. Yes, fill in blank

Is English your first language?

1. Yes
2. No

Employment Status

1. Employed full time

2. Employed part time
3. Unemployed looking for work
4. Unemployed not looking for work
5. Retired
6. Disabled

Hours per week worked

1. less than 10 hours
2. 10 – 20 hours
3. 20 – 30 hours
4. 30 – 40 hours
5. More than 40 hours

Highest education completed

1. Less than high school
2. High school graduate
3. Some college
4. 2 year degree
5. 4 year degree
6. Professional degree
7. Doctorate

Email

If you would like to be considered for time point 2 please enter your email address here:

Compensation

In order to compensate you, please enter your M-Turk ID here:

Additional Information

You completed several tasks in this study to help us understand attitudes towards Latino immigrants in the workplace and how to reduce prejudice towards them via diversity training activities. Research has shown that specific activities such as perspective taking and imagined contact can be beneficial in reducing prejudice towards outgroup members. However, we wanted to see if it could be effective for individuals who may be especially resistant to intergroup relations within the workplace. We hoped to add to the scientific knowledge base in this way.

Thank you for participating in this study. It would not be possible to continue research without the help of people like you. If you would like to learn more about this and similar research, you

may contact the investigator, Dominique Burrows (dburrows@iu.edu) or consult the references below.

Paluck, E. L. (2006). Diversity training and intergroup contact: A call to action research. *Journal of Social Issues*, 62, 577–595.

Pettigrew, T. F. (1997a). Generalized intergroup contact effects on prejudice. *Personality and Social Psychology Bulletin*, 23, 173–18.