19 April 2017

Honors Committee
Dominican University
7900 West Division Street
River Forest, IL 60305

Dear Honors Committee,

We are submitting the following project, “The Protective Power of Similar Ethnicity: Moderating the Effect of Stereotype-Threat with Latino Students” in fulfillment of a requirement for a Bachelor of Science Degree with Distinction in Psychology.

Sincerely,

Adilene Osnaya
Mayra A. Gaona
The Protective Power of Similar Ethnicity: Moderating the Effect of Stereotype-Threat with Latino Students

A Project in Fulfillment of a Requirement for the Degree with Distinction in Psychology

Submitted to the Honors Committee
By Adilene Osnaya & Mayra A. Gaona
19 April 2017
Abstract

Steele’s (1997) stereotype threat theory states that members of stereotyped minority groups underperform as a result of being afraid of confirming the negative stereotypes surrounding their group. The purpose of this study was to investigate the presence of a Latino instructor as a moderator of stereotype threat as found by Marx and Goff (2005). We predicted that Latino students who were given a “diagnostic” assessment by a Latino instructor could perform the same as White students and better than Latino students who were given this assessment by a White instructor. Furthermore, if this prediction was supported, we hypothesized that this finding would be further explained by ethnic identity strength, such that Latino students who strongly identify with their ethnicity would be more affected by stereotype threat and their performance would be hindered following activation of negative stereotypes. Results showed no interaction between race of participant, race of instructor, and ethnic identification strength, indicating no protecting power of similar ethnicity. Despite the absence of an interaction, noteworthy is that simple effects tests showed that Latino students did perform the same as White participants when instructed by a Latino instructor. In addition, the performance of Latino students was better when instructed by a Latino instructor compared to when instructed by a White instructor. Further, these performance differences were pronounced for students with high ethnic identity strength. The implications of these findings are discussed.

Keywords: Stereotype-threat, academic achievement, ethnicity, ethnic identification,
The Protective Power of Similar Ethnicity:

Moderating the Effects of Stereotype-Threat with Latino Students

Regardless of ethnic background, historically, minorities tend to perform worse than their white peers in standardized testing (APA, 2012). There is an achievement gap in education in which Latinos and African Americans, among other minorities, are at the low end of the performance scale (Achievement gap, 2011). There are several factors that influence the performance of minority students in academia. Although it is true that minorities tend to perform worse on standardized testing, this is not due to intelligence or cognitive ability (APA, 2012). In addition to the effects of unequal educational experiences, the underperformance of minorities on academic assessments has often been attributed to stereotype threat. Stereotype threat is conceptually defined as an individual’s fear of confirming negative stereotypes about his or her ethnic group (Steele, 1997). This fear interferes with and hinders performance. Minority ethnic groups are often the targets of negative stereotypes. The consequences of this threat are most evident on academic examinations where minorities perform more poorly than their majority peers, even when their ability and potential is equal. Stereotype threat is of high relevance in our society because it affects the academic performance of many minorities (Kiefer & Sekaquaptewa, 2007; Rodríguez, 2014). The relationship between stereotype threat and academic performance is alarming because it prevents minority students from achieving their full potential. Understanding the way in which stereotype threat works, its detrimental effects, and how to address it is are important justice issues (Marx & Goff, 2005). As a result, buffering the effects of stereotype threat has become the focus of many research studies (eg., Brown & Day, 2006; Johns, Schmader, & Martens, 2005; Marx & Goff, 2005; Nadler & Clark, 2011).
Understanding Stereotype Threat

Steele (1997) argued that in order to achieve success in school, students need to be able to identify with school achievement. This process of identification refers to an ability to embrace school achievement as part of one’s self definition. If this identification process does not occur, academic performance is affected. Steele (1997) points to the exposure to stereotype threat and to students accepting negative stereotypes about themselves as possible factors that are related to failure to identify with school achievement. It follows then that in order for stereotype threat to be activated and hinder academic performance, an individual must meet the following criteria: the task assigned to the individual must be difficult, the individual must feel that he or she excels in the subject, the individual must feel that the subject is of high importance to him or her and a negative stereotype must be activated that leads the individual to be preoccupied and fearful of fulfilling the negative stereotype (Steele, 1997).

The Effects of Stereotype Threat

The existence of stereotype threat has been amply documented (Brown & Day, 2006; Ganley et al., 2013; Kiefer & Sekaquaptewa, 2007; Nadler & Clark, 2011; Nguyen & Ryan, 2008). The focus of much of the research in this area has been in establishing stereotype threat as a real problem faced by minorities. Small, insignificant, and/or neutral statements can remind people of and trigger powerful negative stereotypes, which often are related to race and gender. For example, a study done by Brown and Day (2006) demonstrated that the performance of African Americans is affected by negative stereotypes. The study included 88 white participants and 53 African Americans. Participants were randomly assigned to one of three conditions: a low threat condition, a standard high threat condition and a high threat condition. In the low threat condition, the test was described as a set of puzzles. In the standard threat condition, the test was
described as a simple standard examination. Finally, in the high threat condition, the test was described as an IQ test. Results indicated that African Americans under the low threat condition scored significantly higher than African Americans under the standard or high threat conditions. It is worth noting that African American participants’ scores did not significantly differ from those of White participants under the low threat condition. These results support the conclusion that the significant differences in scores between African Americans and Whites may be attributed to stereotype threat rather than innate ability.

Another group that is targeted by negative stereotypes is women. Kiefer and Sekaquaptewa (2007) studied implicit math-gender stereotyping, implicit math identification, and implicit gender identification on women’s math performance. This study included 138 female college students. Participants were randomly assigned to one of two conditions: the diagnostic and non-diagnostic (reduced threat condition). In this study, women were given a math test, an explicit stereotyping measure, a demographic information sheet, and most importantly, the Implicit Association Test. These tests measured the amount of implicit stereotype in women found by categorization of words in a set of five different stages. Women were asked to categorize certain words into different categories such as “self”, “female”, “male”, or “other”. An example of a phrase that was used as a prompt was “good at math”. Different words and phrases relevant to gender and math were presented. Depending on how the women categorized the words and phrases, the authors determined whether and to what extent the women held stereotypes about women and math. The researchers found that implicit associations between gender and math occur in women. They found that math-gender associations, not gender or math identification, alone, moderate the level to which stereotype threat affects performance. Specifically, women who showed less implicit math-gender stereotyping had higher performance
than women who showed more implicit math-gender stereotyping, no matter the condition. Women who implicitly associated math with women more than men were the ones who were least affected by stereotype threat. These results suggest that women’s implicit associations between mathematics and gender heavily influence their math performance. This study suggests that when stereotype threat is present, implicit stereotypes can be activated, thus affecting performance.

**Buffering the Effects of Stereotype Threat**

Recent research has extended its focus of study not only to investigate the effects of stereotype threat on performance but also to find methods to buffer these harmful effects. For example, teaching targeted groups about stereotype threat and its effects has been offered as a solution for this problem. Johns et al. (2005) investigated this method in women. Seventy-five women and 42 men were randomly assigned to one of three conditions. In condition 1, participants were given a test described as a non-diagnostic activity. In condition 2, participants were given a test described as a measure of mathematical aptitude comparing genders. Finally, in condition 3, participants were given a test with the same description as in condition 2. However, participants in this condition were also given a brief description of what stereotype threat is and what it does. Results revealed that women in the non-diagnostic condition scored as well as men. Women in the mathematical aptitude condition scored significantly less well than men. For women in the teaching intervention condition, their scores were as high as the men’s scores in the same condition. These results suggest that teaching women about the effects of stereotype threat can lessen these effects. This finding has important implications for other minorities.

Another method to diminish the effects of stereotype threat was tested by Marx and Goff (2005). In their study experimenter race was investigated as a moderator of stereotype threat.
The researchers hypothesized that Black participants would experience higher levels of stereotype threat and their performance would diminish when given a diagnostic test by a White experimenter but would perform the same as White participants when given the diagnostic test by a Black experimenter. Thirty-two Black participants and 27 White participants took part in this study. All participants were exposed to a high threat condition in which participants were presented with a challenging verbal test. The test was administered by either a Black or a White experimenter. Stereotype threat was induced in two ways: participants were told that the test was diagnostically accurate at determining strengths and weaknesses and they were asked to indicate their race at the top of the test booklet. Results showed that Black participants who were given a test by a Black experimenter did better than those Black participants who were given a test by a White experimenter. Additionally, Black participants who were given a test by a Black experimenter performed equal to White participants in the same session. Finally, White participants’ performance was not affected by the race of the experimenter. The results of this study suggest that similar ethnicity between a test administrator and students can moderate the effects of stereotype threat and serve a protective function for Black students, even under high stereotype threat conditions.

**Ethnic Identity Strength and Stereotype Threat**

As noted above, prior research indicates that stereotype threat is real among minority groups. Moreover, activating stereotype threat does not have the same effect on all members of targeted groups; some individuals are more likely to be affected by stereotype threat than others. Specifically, individuals who highly identify with a group that is the target of negative stereotypes may experience more detrimental effects. A study by Armenta (2010) demonstrates that ethnic group identification can be a moderator of math performance for Asian Americans.
and Latinos. Results showed that under a high stereotype threat condition Asian Americans, about whom there are positive stereotypes about math, performed better than Latinos. Furthermore, highly ethnically identified Asian Americans performed better and highly ethnically identified Latinos performed worse when a high math stereotype threat was present. However, the performance of Asian Americans and Latinos who were not highly ethnically identified was not different. These findings suggest that Asian Americans who are highly ethnically identified perform better because there is a stereotype that Asian Americans perform well in mathematics, whereas highly ethnically identified Latinos do not perform as well because of the negative stereotype that Latinos underperform in mathematics. This study suggests that high identification with an ethnic group increases the chances to which individuals within that group will feel inclined to confirm that stereotype about their group due to the stereotype threat effect.

**Gaps in the Research Literature**

Finding ways to buffer the negative effects of stereotype threat is of high importance. The previous research on this topic has focused primarily on the negative stereotypes surrounding African Americans and race and women and mathematics (Johns et al., 2005; Marx & Goff, 2005). Although some research on other ethnic groups such as Asian Americans and Latinos has been conducted, not much research has been conducted to understand or to moderate the effects of stereotype threat on Latinos. Latinos often face similar negative stereotypes as African Americans. The few studies that focus on Latinos have used English assessments as the dependent measure for academic performance (e.g., Rodríguez, 2014). The present study attempted to fill this gap in the research literature by focusing on Latino students.
The Present Study

In order to address gaps in the research literature, the present study aimed to replicate and extend past research with a sample of Latino college students. As a first aim, the present study replicated Marx and Goff (2005), who found a protective effect of similar ethnicity on an English language assessment. In the present study, we expected to see an effect of experimenter race on the performance of Latino students; that is Latino students would perform as well as White students when a diagnostic test was administered by a Latino experimenter but not when it was administered by a White experimenter. As a second aim, we were also interested in the role that ethnic identification plays on the effects of negative stereotypes. Based on the conclusions reached by Armenta (2010), we expected to find that Latinos who strongly identified with their ethnic background were more likely to be affected by stereotype threat than Latinos who weakly identified with a Latino ethnic identity.

The present study tested two main hypotheses. First we hypothesized that there would be an interaction between experimenter race and participant race on Latino participants’ English language competence, such that we expected Latino participants to perform the same as White participants when instructed by a Latino experimenter but less well when instructed by a White experimenter, lending support to the protective power of similar ethnicity. Second, we hypothesized that this finding, if observed, would be further explained by an interaction between ethnic identity strength and experimenter race on Latino students’ English language competence, such that Latino participants who have a strong sense of ethnic identification would be more affected by stereotype threat, therefore their performance would be hindered by having negative stereotypes about Latinos activated by a White experimenter, showing the importance of ethnic identity strength in stereotype threat effects.
Method

Participants

Participants were recruited by convenience sampling through email and in person at Dominican University. They were 18 years old or older in order to be able to provide informed consent. We targeted specific instructors to ask if we could make brief (3 minutes) presentations about our study in their classes. Times were scheduled for any students interested in participating in the study. All students were allowed to participate. However, due to the focus of our study, our sample for data analysis was limited to White and Latino participants only. Participants were 39 Whites and 50 Latinos. Seventy-nine percent of participants were female, 19% were male, and 2% of participants did not report their gender. Over 50% of participants were freshmen. All participants were given $5 as compensation for their participation in the study, funded through an Undergraduate Research Support Grant through URSCI, and students enrolled in introductory psychology courses were also granted course credit.

Measures

Stereotype Threat

In order to induce stereotype threat, we used two methods. First, and most commonly used in stereotype-threat related studies, we asked participants to put an “X” next to their ethnicity (Marx & Goff, 2005). However, since Latinos are a fast growing minority in the U.S. and the study was conducted at a Hispanic Serving Institution where more than 50% of the student body is Hispanic, simply asking participants to indicate their ethnicity was not considered a strong enough manipulation to induce stereotype threat. Therefore, the second method we used to induce stereotype threat was to tell participants that “historically, minorities
tend to perform worse than Whites on standardized testing.” This strong manipulation makes the
negative stereotypes explicit (Rodríguez, 2014).

Demographic Questions

Participants were asked to report their age, gender, year in school, and ethnicity (see
Appendix D).

Ethnic Identity

Ethnic identification was measured using Phinney’s (1992) Multi-Group Ethnic Identity
Measure (MEIM) (see Appendix D). The measure assesses how strongly an individual identifies
with his or her ethnic group. Participants responded to 11 statements which included, “I think a
lot about how my life will be affected by my ethnic group membership” and “I have a lot of pride
in my ethnic group and its accomplishments.” Responses were given using a 4-point scale, (1)
indicating Strongly Disagree and (4) indicating Strongly Agree. Higher scores indicated a
stronger ethnic identification whereas lower scores indicated a weaker or lack of ethnic
identification. Cronbach’s alpha was calculated to establish inter-item reliability (\(\alpha = 0.9\)). The
11 items in this scale were averaged to create the ethnic identity strength variable. For this new
variable, the median was calculated (Median = 3.18). Participants whose averaged score for this
scale was 3.18 and above were considered to have high ethnic identification and those whose
averaged score was less than 3.18 were considered to have low ethnic identification.

English Competence

To assess English language competence, all participants answered a number of questions
associated with their experience with the English language (see Appendix D). These questions
included: How important are writing and reading to you? What was your reading and English
ACT (or SAT) score? And What was your grade in English 102? Participants responded to these
questions by indicating a number from (1) not at all important/very bad to (5) very important/very good. Only those who responded to each question with a 3 or above were included in the data analyses. These questions were aimed to identify individuals who are high achieving in the English language and who believed that this subject was important to them. Identifying high achieving participants who consider English language highly important is essential to meet Steele’s (1997) criteria for the activation and effectiveness of stereotype threat.

**Academic Performance**

Participants were given 30 minutes to complete the English assessment. The assessment consisted of 32 multiple choice questions taken directly from the English and reading sections of the ACT (see Appendix D). The format of the assessment was similar to the ACT. For the English section of the assessment, the passage and questions were placed next to each other in a two column format. For the reading section, the questions were located below the reading passage. All questions were answered on a machine-scorable form (scantron) provided to the participants. Academic performance was measured by the number of questions answered correctly out of 32.

**Manipulation Check**

Participants were asked a set of questions as part of the assessment packet. The manipulation check (see Appendix E) consisted of four questions. The questions were What was the race/ethnicity of the experimenter?, What do you think is the purpose of the study?, How difficult were the questions?, and How confident are you in your answers? The answers to these questions were used by the researchers to see if we were able to successfully induce stereotype threat, to see if the experimenter race manipulation was successful, and to see if any of the
participants were able to guess the hypothesis of the study. Data from 23 participants had to be dropped from data analysis because these participants guessed the hypothesis of our study.

Procedure

This conceptual replication and extension was pre-registered in advance of data analysis on the Open Science Framework. All materials, procedures, data spreadsheets, data analyses, and relevant citations have been uploaded and are available at https://osf.io/mcafr/.

After recruitment (see Recruitment Scripts in Appendix A), participants reported to their scheduled session where they were welcomed by the student researchers and either a White or Latina instructor. At the start of the session, participants were given two consent forms (see Appendix B). Participants were asked to read, sign, and return one of the consent forms; the second consent form was for them to keep. In order to simulate a testing environment, the instructor was responsible for all the research procedures during the session and the student researchers left the testing room. After consenting, participants received the assessment packet and a scantron. In order to activate stereotype threat, the instructor told participants that they were being asked to complete an English language assessment diagnostic of their English language competence. In addition, the instructor asked participants to put an “X” next to his or her ethnicity and explained that historically, minorities tend to perform worse than Whites on standardized testing (see Appendix C). Once verbal instructions were given, participants began the assessment. The assessment packet (see Appendix D) contained the demographic questions, ethnic identification measure, English assessment, English competency measure, and a manipulation check. Participants were given 40 minutes to complete the entire packet (30 minutes for the English assessment). After 40 minutes, assessment packets and scantrons were collected. Participants were then debriefed, compensated, and thanked for their participation.
Results

Prior to running analyses, participants who were not White or Latino, did not meet Steele’s criteria for successful stereotype-threat activation to occur, and who guessed the hypothesis of the study were removed. The original sample size was 131 participants. After removing those who did not meet the criteria above, the sample size was reduced to 89 participants (39 White and 50 Latinos).

Recall that the present study aimed to test two hypotheses: We hypothesized that Latino participants would perform the same as White participants when given an assessment by a Latino experimenter but would perform worse than White participants when given an assessment by a White experimenter. Furthermore, we hypothesized that if hypothesis 1 was supported, that finding would be further explained by participants’ ethnic identification strength, such that participants who strongly identify with their ethnicity would be more affected by the activation of stereotype threat and their performance would be diminished when the negative stereotype associated with Latinos and English language competences was activated by a White instructor. showing the importance of ethnic identity strength in stereotype threat effects. In order to test these hypotheses, a 2 x 2 x 2 between-subjects ANOVA was conducted (see results in Table 1). The independent variables were race of participant (White or Latina), race of instructor (White or Latina), and ethnic identity strength (high or low). The dependent variable was academic performance measured based upon the number of questions answered correctly out of 32. Results revealed no support for the expected interaction between race of participant and race of instructor ($p = .346$). Additionally, there was no support for the expected interaction between race of participant, race of instructor, and ethnic identity strength ($p = .618$). However, these results indicated a main effect of race of participant, such that White participants ($M = 21.65, SD = .708$,}
95% CI: 20.245, 23.061) performed better than Latino participants \( (M = 18.35, SD = .625, 95\% CI: 17.109, 19.598) \) by 3.3 points. On average, White participants scored 22 points out of 32 compared to Latino students who on average scored 18 points out of 32. It is noteworthy to say that despite this three-point difference, neither group scored very well.

*Main Effect of Race of Participant*

The main effect of race of participant indicated that White and Latino participants did not have equal performance on the English language competence measure. In order to further explore the difference between the groups, two independent t-tests were conducted (see Table 2). As part of the assessment packet, participants were asked to report their English ACT scores and current GPA. The first t-test was conducted with race of participant as the independent variable and ACT as the dependent variable. Results indicated a significant difference in ACT scores between Whites \( (M = 25.77, SD = 4.36, 95\% CI: 25.77, 26.508) \) and Latinos \( (M = 22.17, SD = 3.36, 95\% CI: 21.68, 22.66) \); \( t(81) = 4.25, p = .018 \). White participants’ ACT scores were 3.61 points higher than Latino participants’ scores \((95\% CI: 1.92, 5.29)\). The second t-test was conducted with race of participant as the independent variable and GPA as the dependent variable. Results indicated a non-significant difference in GPA between Whites \( (M= 3.39, SD = .365, 95\% CI: 3.33, 3.45) \) and Latinos \( (M= 3.21, SD = .432, 95\% CI: 3.15, 3.28) \); \( t(81) = 1.98, p = .133, 95\% CI: -.00, .36 \). The results of these t-tests revealed that participants differed only in their ACT scores.

To further explore the influence of ACT scores on the interaction between race of participant, race of experimenter, and ethnic identity strength, we conducted another 2 x 2 x 2 between-subjects ANOVA with ACT scores entered as a covariate (see Table 3). Once again, results indicated no statistically significant interaction between race of participant, race of
instructor, and ethnic identity strength \(F(1,71) = 1.103, p = .814\). Adding ACT scores as a covariate eliminated the main effect of race of participant observed in the results obtained from the first ANOVA, but controlling for this difference did not lead to any noteworthy effects. Therefore, the results indicate no statistically significant support for an interaction between race of participant, race of experiment, and ethnic identity strength.

Since the purpose of the study was to test two very specific hypotheses, we conducted simple effects mean comparisons between the performance of Latino and White participants by race of instructor. For hypothesis 1, we found that Latino participants performed significantly less well than White participants \(M_{{\text{Diff}}} = -3.89, SD_{{\text{Diff}}} = 3.95, 95\% \text{ CI} [-6.20, -1.58], p = .001\) when instructed by a White instructor. However, the difference in performance between Latino and White participants when instructed by a Latino instructor was not significant \(M_{{\text{Diff}}} = -2.12, SD_{{\text{Diff}}} = 4.63, 95\% \text{ CI}[-4.92, 0.68], p = .135\). Although the effect is small, this finding suggests that having a Latino instructor can buffer the detrimental effects of negative stereotypes on performance (see Figure 2).

In order to further explore hypothesis 2, mean comparisons between the performance of Latino and White participants by race of instructor were conducted. These comparisons were conducted separately for participants who were categorized as having low ethnic identification and for participants who were categorized as having high ethnic identification. For the low ethnic identification condition, Latino participants performed significantly less well than White participants when instructed by a White instructor \(M_{{\text{Diff}}} = -3.11, SD_{{\text{Diff}}} = 4.56, 95\% \text{ CI}[-5.94, -0.27], p = .032\) but performed similarly when instructed by a Latino instructor \(M_{{\text{Diff}}} = -2.14, SD_{{\text{Diff}}} = 4.12, 95\% \text{ CI}[-5.37, 1.08], p = .184\). For the high ethnic identification condition, Latino participants performed significantly less well than White participants when instructed by a White
instructor ($M_{\text{Diff}} = -4.68, SD_{\text{Diff}} = 3.95, 95\% \text{ CI} [-8.55, -0.80], p = .021$) but performed similarly when instructed by a Latino instructor ($M_{\text{Diff}} = -1.94, SD_{\text{Diff}} = 4.75, 95\% \text{ CI} [-6.69, -2.80], p = .402$). The difference in performance between Latino and White participants when instructed by a White instructor was greater for participants in the high ethnic identification condition ($M_{\text{Diff}} = -4.68, SD_{\text{Diff}} = 3.95$) compared to those in the low ethnic identification ($M_{\text{Diff}} = -3.11, SD_{\text{Diff}} = 4.56$). Additionally, the difference in performance between Latino and White participants when instructed by a Latino instructor was lower for participants in the high ethnic identification condition ($M_{\text{Diff}} = -1.94, SD_{\text{Diff}} = 4.75$) compared to those in the low ethnic identification condition ($M_{\text{Diff}} = -2.14, SD_{\text{Diff}} = 4.12$). These results suggest that, even though the effect is small, ethnic identity strength does play a role in the relationship between stereotype threat and academic performance (see Figure 3 and Figure 4).

**Discussion**

The present study did not replicate the findings of Marx and Goff (2005). We did not find a protective power of similar ethnicity as Latino students did not perform as well as White participants when instructed by a Latina or White instructor. The lack of an interaction indicating a protective effect of the presence of a Latino instructor indicates that our results did not replicate those of Marx and Goff. Interestingly, although not statistically significant, the performance of Latino students was marginally higher when they were instructed by a Latino instructor compared to when they were instructed by a White instructor (see Figure 1). This trend in the results warrants further exploration in future research. There are several factors that could have influenced the results of this study.

A major concern when analyzing the data was the differences in participants’ preexisting ACT scores. As mentioned previously, there was a 3-point difference in the self-reported ACT
scores between White participants and Latino participants. This difference indicates that our White and Latino participants did not enter the study with equivalent levels of English Language skills as measured by the ACT which indicates a confounding variable. This 3-point difference was also observed in the participants’ scores on the portion of the ACT used as the dependent variable for this study. This difference found in the dependent variable is consistent with the established predictive validity of the ACT. The variability in preexisting ACT scores could have been controlled for by holding a pre-screening session of participants like the one done by Marx and Goff (2005). During participant recruitment, Marx and Goff (2005) asked participants to report their Verbal SAT score and they were only recruited if they had a score of 610 (83rd percentile) or higher. The present study did not screen for preexisting scores, thus the variability found in our results was not solely due to the activation of stereotype-threat and the moderation of the race of the instructor.

An additional possible explanation for why we were not able to replicate Marx and Goff’s (2005) findings could be the lack of statistical power due to a small sample size. Although the total number of participants was 89, each participant was assigned to only one of four conditions (White participants instructed by White instructor, White participants instructed by Latina instructor, Latino participants instructed by White instructor, and Latino participants instructed by Latina instructor). Thus, there were only about 22 participants in each of the four conditions. The sample size of the present study was relatively similar to the one obtained by Marx and Goff (2005). Their sample size consisted of 32 Black and 27 White participants, allowing for only about 14 participants in each of the four conditions. Despite their small sample size, Marx and Goff (2005) were able to find significant results which might suggest that the lack of statistical power was not the defining factor for our inability to replicate their findings.
Although our sample size was similar to the one used by Marx and Goff, the variability in pre-existing ACT performance of our sample, as mentioned in the previous paragraph, may have prevented us from having the statistical power to find statistically significant results.

Furthermore, another factor that could have influenced our results is the construct validity of our independent and dependent variable. Our ability to successfully and effectively induce stereotype-threat could have been affected by participant’s preexisting knowledge about stereotype-threat theory. Despite our efforts to remove data from participants who were able to guess the hypotheses, the theory of stereotype-threat has recently been incorporated as part of the curriculum for introduction to psychology courses. Thus, most students who participated in this study have had previous exposure to what stereotype-threat is and to the effects it has on its targets. This could have affected our results because, as mentioned in the introduction, knowledge about stereotype-threat can serve as a moderator for its effects (Johns, Schrader & Martens, 2005). Our dependent variable was measured by using an unchanged portion of the ACT. This measure was effective because it is a measure that has established validity as it is administered to high school students every year and the scores are used for college admission.

Additionally, the context in which the study took place could have affected the results. If we compare the context in which Marx and Goff (2005) administered their study to the context of the present study, it is certainly not the same. Marx and Goff administered their study to Harvard students. We administered our study to Dominican University students. Harvard students are not as diverse as Dominican students. Harvard only admits the highest performing students. Nonetheless, the amount of minority students who attend Harvard is very small compared to those who attend Dominican. The Harvard ethnic distribution for the class of 2020 is as follows: 13.7% African American, 22.1% Asian American, 12.6% Latino or Hispanic, 2.6%
Native American or Pacific Islander, and 49% White (Harvard, 2017). Dominican’s student population is as follows: 0.4% American Indian, 3% Asian, 8.9% African American, 55.4% Latino or Hispanic, and 29.3% White (Office of Institutional Effectiveness, 2016). The student body is much more diverse at Dominican University compared to Harvard. At an institution like Dominican University belonging to a minority group such Hispanic or Latino hardly seems threatening when this group makes up over 50% of the student body. This context could have influenced our results because despite our efforts to simulate a high-threat condition for our participants, they may not have felt threatened by our manipulation.

All in all, our results were not able to replicate those found by Marx and Goff (2005). However, our results suggest that, although not significant, the performance of Latino students was marginally higher when they were instructed by a Latino instructor compared to when they were instructed by a White instructor. These results could be explained by a small sample size, preexisting ACT scores, preexisting knowledge of stereotype-threat, and the setting in which the study took place.

Based on the results of this study, there are many possible implications for future research. Evidently, future research in this area and with the Latino population is necessary to establish the effects of stereotype-threat, the protective power of similar ethnicity, and the degree to which ethnic identity strength plays a role in this relationship. In order to avoid the confound presented by pre-existing ACT scores, future research could focus on more selective institutions, like Harvard, where the variation in ACT scores can be controlled for and the differences observed in the dependent measure can be attributed to the manipulation. Additionally, future research needs to address the issue of exposure to stereotype threat. The psychology department at Dominican University has integrated the teaching of stereotype-threat into its curriculum,
however, other institutions have not made this step. Future studies could compare the effects of stereotype-threat for students who have and have not been exposed to it. These students could include students from other institutions but could also be extended to include high school students who are often not familiar with psychology. Finally, the issue of statistical power could be addressed by conducting large multisite studies to see the extent to which results could replicate across sites.
References


The protective power of similar ethnicity


**Table 1**

ANOVA Summary for Race of Participant, Race of Experimenter, and Ethnic Identity Strength

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race of Experimenter</td>
<td>.375</td>
<td>1</td>
<td>.375</td>
<td>.020</td>
<td>.889</td>
</tr>
<tr>
<td>Race of Participant</td>
<td>233.161</td>
<td>1</td>
<td>233.161</td>
<td>12.206</td>
<td>.001*</td>
</tr>
<tr>
<td>Ethnic Identity Strength</td>
<td>.037</td>
<td>1</td>
<td>.037</td>
<td>.02</td>
<td>.965</td>
</tr>
<tr>
<td>Race of Participant * Race of Experimenter</td>
<td>17.175</td>
<td>1</td>
<td>17.175</td>
<td>.899</td>
<td>.346</td>
</tr>
<tr>
<td>Race of Experimenter * Ethnic Identity Strength</td>
<td>1.049</td>
<td>1</td>
<td>1.049</td>
<td>.055</td>
<td>.815</td>
</tr>
<tr>
<td>Race of Participant * Ethnic Identity Strength</td>
<td>.004</td>
<td>1</td>
<td>.004</td>
<td>.000</td>
<td>.989</td>
</tr>
<tr>
<td>Race of Participant * Race of Experimenter * Ethnic Identity Strength</td>
<td>4.795</td>
<td>1</td>
<td>4.795</td>
<td>.251</td>
<td>.618</td>
</tr>
<tr>
<td>Error</td>
<td>1547.321</td>
<td>81</td>
<td>19.103</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>36,651</td>
<td>89</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Statistically significant at p<.05

**Table 2**

Results of t-tests and descriptive statistics for ACT scores and GPA by Race of Participant

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Whites Group</th>
<th>Latinos Group</th>
<th>95% CI for Mean Difference</th>
<th>t</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>n</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>ACT Score</td>
<td>25.77</td>
<td>4.366</td>
<td>35</td>
<td>22.17</td>
<td>3.367</td>
</tr>
<tr>
<td>GPA</td>
<td>3.39</td>
<td>.365</td>
<td>36</td>
<td>3.21</td>
<td>.432</td>
</tr>
</tbody>
</table>

*Statistically significant at p<.05
Table 3
ANOVA Summary for Race of Participant, Race of Experimenter, and Ethnic Identity Strength with ACT Scores as a Covariate

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACT Scores</td>
<td>52.441</td>
<td>1</td>
<td>52.441</td>
<td>2.654</td>
<td>.108</td>
</tr>
<tr>
<td>Race of Experimenter</td>
<td>1.243</td>
<td>1</td>
<td>1.243</td>
<td>.063</td>
<td>.803</td>
</tr>
<tr>
<td>Race of Participant</td>
<td>69.178</td>
<td>1</td>
<td>69.178</td>
<td>3.5</td>
<td>.065</td>
</tr>
<tr>
<td>Ethnic Identity Strength</td>
<td>.446</td>
<td>1</td>
<td>.446</td>
<td>.023</td>
<td>.881</td>
</tr>
<tr>
<td>Race of Experimenter * Race of Participant</td>
<td>21.723</td>
<td>1</td>
<td>21.723</td>
<td>1.099</td>
<td>.298</td>
</tr>
<tr>
<td>Race of Experimenter * Ethnic Identity Strength</td>
<td>.051</td>
<td>1</td>
<td>.051</td>
<td>.003</td>
<td>.959</td>
</tr>
<tr>
<td>Race of Participant * Ethnic Identity Strength</td>
<td>2.967</td>
<td>1</td>
<td>2.967</td>
<td>.150</td>
<td>.700</td>
</tr>
<tr>
<td>Race of Experimenter * Race of Participant * Ethnic Identity Strength</td>
<td>1.103</td>
<td>1</td>
<td>1.103</td>
<td>.056</td>
<td>.814</td>
</tr>
<tr>
<td>Interaction</td>
<td>1.103</td>
<td>1</td>
<td>1.103</td>
<td>.056</td>
<td>.814</td>
</tr>
<tr>
<td>Error</td>
<td>1403.145</td>
<td>71</td>
<td>19.763</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>32,644</td>
<td>80</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Statistically significant at p<.05

Figure 1. Performance on English Assessment of White and Latino Participants by Race of Experiment

Performance of White and Latino Participants by Race of Experimenter

Number of Questions Answered Correctly (with SEM)

Race of Experimenter

White

Latino
Figure 2. Difference in Performance Between White Students and Latino Students by Race of Instructor.
Figure 3. Difference in Performance Between White Students and Latino Students by Race of Instructor for Low Ethnic Identification.

Figure 4. Difference in Performance Between White Students and Latino Students by Race of Instructor for High Ethnic Identification.
Appendix A

Verbal Recruitment Script

Hello - My name is Adilene Osnaya and this is Mayra Gaona. We are psychology students here at Dominican. We are working with Dr. Taylor-Ritzler. We are here to talk to you about participating in a research study focusing on the ability of students to complete an English/reading assessment. If you choose to participate, you will be asked to answer questions about yourself and to complete a test that includes grammar and reading comprehension questions. The study will take about 50 minutes to complete.

If you decide to participate in this study, your scores will be kept confidential.

Remember, this is completely voluntary. You can choose to be in the study or not. If you'd like to participate, we can go ahead and schedule a time for you to participate. If you need more time to decide if you would like to participate, you may also email us with your decision.

If you have any more questions about this process or if you need to contact me about participation, we may be reached at osnaadil@my.dom.edu, gaonmayr@my.dom.edu or tritzler@dom.edu

Thank you so much.
Email Recruitment Script

Dear Student,

My name is Mayra Gaona (or Adilene Osnaya) and I am a student from the psychology department here at Dominican University. I am working with one of our faculty members, Dr. Taylor-Ritzler. I am emailing you to invite you to participate in a research study that measures the ability of students to complete an English/reading assessment.

If you decide to participate in this study, you will be asked to complete questions you would answer on any standardized test. You will be asked to answer questions about yourself and to complete a test that includes grammar and reading comprehension questions. The study will take about 50 minutes to complete. Your scores will be used to see how students are currently performing in English and will be kept confidential.

Remember, this is completely voluntary. You can choose to be in the study or not. If you'd like to participate or have any questions about the study, please email me at gaomayr@my.dom.edu (or osnaadil@my.dom.edu) or email my faculty advisor at tritzler@dom.edu.

Thank you very much.

Sincerely,

Mayra Gaona (or Adilene Osnaya)
Appendix B
Informed Consent Form

The purpose of this assessment is to gain general knowledge about the ability of Dominican University students to complete an English/reading assessment.

If you agree to participate you will need to sign this consent form and complete the assessment. The process should take about 40 minutes.

There are no risks to participating in this study beyond those that you would experience in your day-to-day life as a student at Dominican University.

There are no direct benefits to you for your participation, other than any course credit you might receive for research participation. You will not be compensated for your participation.

All of the information obtained from you will be kept confidential. The assessments will not be accessed by any individuals other than the researchers or used for any purposes beyond the research study.

This is a voluntary assessment. You are free to withdraw from the study at any time. If you would like any additional information or have any questions or concerns, please ask any of our researchers.

Adilene Osnaya: osnaadil@my.dom.edu
Mayra Gaona: gaonmayr@my.dom.edu
Faculty supervisor Dr. Tina Taylor-Ritzler: tritzler@dom.edu

I am at least 18 years or older. I have read the above information and understand that participation in this study is voluntary. I have had the opportunity to ask questions. I am aware that I may end my participation in the study at any time. I consent to participate in the study.

______________________________
Signature of participant

______________________________
Date
Appendix C

Data Collection Script

Hello- I am Dr. Ritzler (or Dr. Ibarra, Dr. Petrov, Dr. Caldwell). Welcome and thank you for being here.

Please write the ID number located on the top, right corner of your packet on your scantron under ID NUMBER. Please also bubble in this number.

—Pause while students fill in scantron—

Before you begin, please put an “X” next to your ethnicity.

The packet you have in front of you is a diagnostic assessment of your English language competence.

Historically, minorities have performed worse than Whites on standardized tests.

Read the instructions carefully and answer all questions to the best of your ability.

You will have 30 minutes to complete the assessment.
Good luck and you may begin.
Appendix D

Feelings about Your and Other Ethnic Groups

A. Age: ________
B. Gender: __________
C. Year in school: ________
D. In terms of ethnic group, I consider myself to be (your make up the term and write it here):
E. According to the categories below (which you see on many official forms), my ethnicity is:
   (1) Asian, Asian American, or Oriental
   (2) Black of African American
   (3) Hispanic or Latino
   (4) White, Caucasian, European, not Hispanic
   (5) American Indian
   (6) Mixed; parents are from two different groups
   (7) Other (write in): _______________________

<table>
<thead>
<tr>
<th>F.</th>
<th>Please circle the number that best corresponds to your level of agreement with each of the statements that follow.</th>
<th>Strongly disagree</th>
<th>Somewhat disagree</th>
<th>Somewhat agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I have spent time trying to find out more about my own ethnic group, such as its history, traditions and customs.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2.</td>
<td>I am active in organizations or social groups that include mostly members of my own ethnic group.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3.</td>
<td>I have a clear sense of my ethnic background and what it means for me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4.</td>
<td>I think a lot about how my life will be affected by my ethnic group membership.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5.</td>
<td>I have a strong sense of belonging to my own ethnic group.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6.</td>
<td>I understand pretty well what my ethnic group membership means to me, in terms of how to relate to my own group and other groups.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7.</td>
<td>In order to learn more about my ethnic background, I have often talked to other people about my ethnic group.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8.</td>
<td>I have a lot of pride in my ethnic group and its accomplishments.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9.</td>
<td>I participate in cultural practices of my own group, such as special food, music, or customs.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10.</td>
<td>I feel a strong attachment towards my own ethnic group.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11.</td>
<td>I feel good about my cultural or ethnic background.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

G. What is the ethnic background of your father? ______________________________________
H. What is the ethnic background of your mother? _____________________________________
Grammar and Vocabulary Assessment Use your scantron for the questions that follow.

DIRECTIONS: In the passage that follows, certain words and phrases are underlined and numbered. Below the passages, you will find alternatives for the underlined part. In most cases, you are to choose the one that best expresses the idea, makes the statement appropriate for standard written English, or is worded most consistently with the style and tone of the passage as a whole. If you think the original version is best, choose "NO CHANGE.

The following paragraphs may or may not be in the most logical order. Each paragraph is numbered in brackets, and question 14 will ask you to choose where Paragraph 2 should most logically be placed.

Passage II
My Father's Garden

[1] When I was a boy growing up in Delhi, India, we had a kitchen garden behind our downstairs apartment. My father was an avid gardener, he still is1; and every Saturday morning he would put on his work clothes, pick up his hoe and trowel, and would head2 out the back door. 3

[2] As a ten-year-old, I was supremely unenthusiastic about swinging a hoe in the garden when I could be out playing with my friends. Having tried and failed4, my father was unable to make a gardener of me. I had no qualms, of course5, about enjoying the results of his labor: the potatoes, squash, cucumbers, and cauliflower that he pursued6 out of the earth. I would even help him dig.

1. A. NO CHANGE
   B. gardener—he still is—
   C. gardener, he still is—
   D. gardener and he still is

2. A. NO CHANGE
   B. picked up his hoe and trowel, and headed
   C. pick up his hoe and trowel, and head
   D. picking up his hoe and trowel, and headed

3. If the word Saturday were deleted from the preceding sentence, the essay would primarily lose:
   A. evidence that the father was an avid gardener.
   B. a detail that changes the meaning of the sentence.
   C. support for a point made earlier
   D. a crucial link to the following paragraph.

4. Which of the choices best emphasizes how much the father wanted his son to share his avid interest in gardening?
   A. NO CHANGE
   B. Because of my indifference to his hobby,
   C. Contrary to this thinking,
   D. Despite his repeated attempts.
my father was unable to make a gardener of me, I had no qualms, of course\(^5\), about enjoying the results of his labor: the potatoes, squash, cucumbers, and cauliflower that he pursued\(^6\) out of the earth. I would even help him dig out the potatoes or cut a cucumber from its vine. To me, it was much more fun to reap than sowing.\(^7\)

[3] Many years later, living in an upstairs apartment I am more often\(^8\) sorry I didn’t follow my father out to the garden. I have several indoor plants, but the experience is not the same. The few times that I’ve helped a friend with yard work has given\(^9\) me the joy of touching the soil with an open palm, to get\(^10\) the earth under my fingernails, of patting down the berm around a newly transplanted sapling. Now that I live far from my father (I live in Iowa on the other side of the world), I wish I’d spend\(^11\) more time with him in the garden.

5. A. NO CHANGE  
   B. More important, I had no qualms  
   C. It stands to reason, then, that I certainly would have no qualms  
   D. I had no qualms, as a consequence of it,

6. A. NO CHANGE  
   B. coaxed  
   C. surrendered  
   D. enlisted

7. A. NO CHANGE  
   B. the most fun to reap than to sow  
   C. much more fun to reap than to sow  
   D. the most fun reaping than if I’d had to sow.

8. The best placement for the underlined portion would be:  
   A. where it is now.  
   B. after the word sorry.  
   C. after the word follow.  
   D. after the word garden (ending the sentence with a period).

9. A. NO CHANGE  
   B. have given  
   C. has gave  
   D. have gave

10. A. NO CHANGE  
    B. with getting  
    C. of getting  
    D. got

11. A. NO CHANGE  
    B. wished I had spent  
    C. wish I had spent  
    D. wish to have spent
4] My favorite photograph of my father shows him squatting on his heels, trowel in hand, behind a golden heap of onions freshly pulled from the ground. 12 His glowing smile are evidence of his pride in the onions—the proof of his labor and love—and in me, the photographer, his son. In that photo, his love of the land and his love for me are somehow intertwined, indivisible. It is that same love—love of kin, love of land—that pushes under my fingernails, pushes against my skin, when I thrust my hand into the yielding earth and think that on its far side my father might be doing the same. 

Questions 14 and 15 ask about the preceding passage as a whole.

14. For the sake of the logic and coherence of the essay, Paragraph 2 should be placed:
   A. where it is now.
   B. before Paragraph 1.
   C. after Paragraph 3.
   D. after Paragraph 4.

12. At this point, the writer is considering adding the following true statement: I have many photo albums, and each one includes pictures of my father in various poses. Should the writer make this addition here?
   A. Yes, because it informs the reader that the photograph he describes in the preceding sentence is not the only one he has of his father.
   B. Yes, because it informs the reader that the writer is more than an amateur photographer.
   C. No, because it contradicts the writer’s claim that the photograph he describes in the preceding sentence is one he also treasures.
   D. No, because it distracts the reader from the main focus of the paragraph and does not logically fit at this point in the essay.

13. A. NO CHANGE
   B. is
   C. were
   D. OMIT the underlined portion.

15. Suppose the writer had intended to write a brief essay showing how a value he holds as an adult is very different from what he felt as a child. Would this essay successfully fulfill the writer’s goal?
   A. Yes, because the essay shows how the writer came to value gardening when this was something he had not appreciated as a child.
   B. Yes, because the essay shows that as an adult the writer finally learned to value his father’s ability to be a good parent, when as a child he had not done so.
   C. No, because the focus of the essay is on the writer’s father’s values and not on the values of the writer himself.
   D. No, because the essay is not about values; rather, it is about one man’s avid interest in backyar
Reading-Comprehension Assessment

What Methods Do Andean Farmers Use?

Public debate around climate change and its effects on agriculture tends to focus on the large-scale industrial farms of the North. Farmers who work on a small scale and use traditional methods have largely been ignored. However, as the world slowly comes to terms with the threat of climate change, Native farming traditions will warrant greater attention.

In the industrial model of agriculture, one or two crop varieties are grown over vast areas. Instead of trying to use local resources of soil and water optimally and sustainably, the natural environment is all but ignored and uniform growing conditions are fabricated through large-scale irrigation and the intensive use of artificial fertilizers and pesticides. For example, a handful of basically similar potato varieties, all of which require nearly identical soil conditions, temperature, rainfall, and growing seasons, account for almost all global production. When these global crops are no longer suited to the environment in which they are grown, when their resistance to disease and pests begins to fail, or the climate itself changes, the best way to rejuvenate the breeding stock will be to introduce new genetic material from the vast diversity of crop varieties still maintained by indigenous peoples.

In contrast to the industrial model, Andean potatoes and other Andean crops such as squash and beans grown by Quechuan farmers exhibit extraordinary genetic diversity, driven by the need to adapt crops to the extraordinary climatic diversity of the region. Along the two axes of latitude and altitude, the Andes encompasses fully two-thirds of all possible combinations of climate and geography found on Earth. The Andean potato has been adapted to every environment except the depth of the rainforest or the frozen peaks of the mountains. Today, facing the likelihood of major disruptions to the climatic conditions for agriculture worldwide, indigenous farmers provide a dramatic example of crop adaptation in an increasingly extreme environment. More importantly, Native farmers have also safeguarded the crop diversity essential for the future adaptations.

Adapted from Craig Benjamin, “The Machu Picchu Model: Climate Change and Agricultural Diversity.” © 1999 by Craig Benjamin.

1. What is the main idea of the first paragraph?
   A. Attention to Native farming practices will lead to greater awareness of the threat of climate change.
   B. Popularity of small-scale farming in the North will lead to greater attention to Native farming practices.
   C. Global demand for food will lead to increasing efficiency of large-scale farming in the North.
   D. It will be worthwhile to include a greater focus on Native farming practices in public discussions concerning the threat of climate change.
   E. Despite potential climate change, public debate will have little effect on industrial farming practices
2. In the second paragraph, the information about potato-growing practices in the industrial model of agriculture serves to:
   A. give an example of a potential problem that Native farming practices could help to alleviate.
   B. show the likely global consequences of a possible food shortage caused by industrial farming practices.
   C. show how pests and disease are less effectively resisted by crops grown in the industrial farming model.
   D. give an example of how public debate has had little effect on the agricultural practices of the North.
   E. give an example of how Native farming practices and industrial farming practices derive from different climatic conditions.

3. The passage states that which of the following is true of the small number of potato varieties that account for most of the potatoes produced on Earth currently?
   A. They are grown in the Andean region.
   B. They all require very similar soil and climate conditions.
   C. They are no longer suited to their environment.
   D. They are based on genetic material from crops developed by indigenous peoples.
   E. They make optimal use of available soil and water resources.

4. As it is used in the passage, the underlined word *fabricated* most nearly means:
   A. woven.
   B. falsely stated.
   C. fully clothed.
   D. manufactured.
   E. unwrapped.
Fortune Tellers
A young couple entered the restaurant in Andy’s view. They were holding hands. Andy sat back down in his chair. He felt sick. He turned and faced his father, who was eating xôi.

“What’s the matter, son?” asked his father. “I thought you were going to the birthday party.”

“It’s too late.”

“Are you sure?”

Andy nodded. He looked at the plate of xôi. He wanted to bury his face in it.

“Hi, Andy.” A voice came from behind.

Andy looked up. He recognized the beautiful face, and he refused to meet her eyes. “Hi, Jennifer,” muttered Andy, looking at the floor.

“You didn’t miss much, Andy. The party was dead. I was looking for you, hoping you could give me a ride home. Then I met Tim, and he was bored like me. And he said he’d take me home…. Andy, do you want to eat with us? I’ll introduce you to Tim.”

Andy said, “No, I’m eating xôi with my father.”

“Well, I’ll see you in school then, okay?”

“Yeah.” And Andy watched her socks move away from his view.

Andy grabbed a chunk of xôi. The rice and beans stuck to his fingernails. He placed the chunk in his mouth and pulled it away from his fingers with his teeth. There was a dry bitter taste. But nothing could be as bitter as he was, so he chewed some more. The bitterness faded as the xôi became softer in his mouth, but it was still tasteless. He could hear the young couple talk and giggle. Their words and laughter and the sounds of his own chewing mixed into a sticky mess. The words were bitter and the laughter was tasteless, and once he began to understand this, he tasted the sweetness of xôi. Andy enjoyed swallowing the sticky mess down. Andy swallowed everything down—sweetness and bitterness and nothingness and what he thought was love.

1. Who is telling this story?
   A. Jennifer
   B. Andy
   C. Tim
   D. Andy’s father
   E. An unnamed narrator

2. What is the most reasonable conclusion to make from the statement in the first paragraph, “He felt sick.”?
   A. Eating xôi with his father gave Andy a stomachache.
   B. Andy was upset when he saw Jennifer holding hands with Tim.
   C. Andy was unhappy about the restaurant his father had selected.
   D. Andy was upset with Jennifer for making him miss the party.
   E. Andy mistakenly thought that Tim was his best friend.

3. According to the passage, Tim would most likely describe the party as:
   A. mysterious.
   B. lively.
   C. dull.
   D. upsetting.
   E. remarkable.

4. Based on the last paragraph, it can be most reasonably inferred that Andy’s increasing enjoyment of eating xôi was related to:
   A. hearing Tim and Jennifer laughing and talking.
   B. the fact that it stuck to his fingernails.
   C. sitting at a table with Tim and Jennifer while he ate.
   D. the fact that his father made the xôi.
   E. seeing Tim and Jennifer eating xôi.

5. This passage is mainly about the relationship between:
   A. Andy and his father.
   B. Andy and Tim.
   C. Andy’s father and Tim.
   D. Jennifer and Tim.
   E. Jennifer and Andy.
In the 1930s, why did author Zora Neale Hurston choose Eatonville, Florida, to be the first source for her collection of folklore?

I was glad when somebody told me, “You may go and collect Negro folklore.” In a way, it would not be a new experience for me. When I pitched head foremost into the world I landed in the crib of Negroism. It was fitting me like a tight chemise. I couldn’t see it for wearing it. It was only when I was off in college, away from my native surroundings, that I could stand off and look at my garment. Then I had to have the spy-glass of anthropology to look through.

I was asked where I wanted to work and I said, “Florida. It’s a place that draws people—Negroes from every Southern state and some from the North and West.” So I knew that it was possible for me to get a cross section of the Negro South in one state. And then I realized that I felt new myself, so it looked sensible for me to choose familiar ground.

I started in Eatonville, Florida, because I knew that the town was full of material and that I could get it without causing any hurt or harm. As early as I could remember, it was the habit of the men particularly to gather on the store porch in the evenings and swap stories. Even the women would stop and break a breath with them at times. As a child when I was sent down to the store, I’d drag out my leaving to hear more.

Folklore is not as easy to collect as it sounds. The ideal source is where there are the fewest outside influences, but these people are reluctant at times to reveal that which the soul lives by. I knew that even I would have some hindrance among strangers. But here in Eatonville I knew everybody was going to help me.


1. Which of the following does the author use as a metaphor for the culture in which she was born?
   A. College
   B. Garment
   C. Southern state
   D. Spy-glass
   E. Story

2. Based on the first paragraph, it is most reasonable to conclude that while in college the author:
   A. decided to become a professor of anthropology.
   B. decided that she did not want to live permanently in Eatonville, Florida.
   C. felt that her teachers prevented her from studying what she wanted.
   D. became disenchanted with anthropology.
   E. understood her own culture in new and different ways.
3. As it is used in the passage, the highlighted word *material* most nearly means:
   A. diversity.
   B. fabric.
   C. information.
   D. money.
   E. energy.

4. In the second paragraph, the author indicates that one reason she chose to work in Florida was that she wanted to collect folklore:
   A. from people of different geographical backgrounds.
   B. where her teachers suggested she do so.
   C. from a place she had never visited.
   D. in a state far from where she grew up.
   E. in a state with a large urban population.

5. In the first paragraph, the author’s claim, “In a way, it would not be a new experience for me,” refers to the fact that:
   A. she had already attended college in Florida.
   B. she had already collected folklore in Florida for a college course.
   C. she had already experienced new cultures by leaving home.
   D. she was already familiar with the folklore she was to collect.
   E. she had already received permission to conduct the study.

6. Based on information in the third paragraph, which of the following statements about the interactions on the porch can be most reasonably inferred?
   A. The adults encouraged the author (as a child) to stay and tell stories.
   B. Men were more frequent participants than were women.
   C. Most of the storytellers had not grown up in Eatonville.
   D. The author's parents sent her to the porch to hear the stories.
   E. One man in particular told most of the stories.

7. In the last paragraph, the author writes that folklore collecting:
   A. is less difficult than it appears.
   B. is easiest to accomplish in isolated places because people there freely reveal their innermost thoughts.
   C. can be difficult in isolated places, even though the people there are the best sources.
   D. is more difficult than publishing what has been collected.
   E. is the best way to reveal what is important to people.

8. Which of the following is NOT among the reasons the author gives for her decision to collect folklore in Eatonville?
   A. The people of Eatonville would be grateful that she published their stories.
   B. The people of Eatonville would have many stories for her collection.
   C. Eatonville and its people are familiar to her.
   D. She believes that she can collect stories without doing harm.
   E. She believes that the people of Eatonville will help her in her project.
Appendix E
Debriefing Form/Manipulation Check

1. What was the race/ethnicity of the participant?
2. What do you think is the purpose of the study?
3. How difficult were the questions?
4. How confident are you in your answers?
Debriefing Form

Taking into consideration the racial climate of the country and university, this study is of critical relevance. Thank you for your participation. Our study aims to understand the effect of stereotype threat on academic performance for Latino students. Specifically, the study seeks to assess whether Latino students experience diminished academic performance compared to their White peers when negative stereotypes about Latinos are activated and when they are administered a high stakes assessment by an instructor who is of the same or a different ethnic background. Recall that prior to completing the English assessment you were told that “Historically, minorities have performed worse than Whites on standardized tests.” This statement was made to activate a negative stereotype for Latino students, which is one of the criteria that must be met for stereotypes to affect performance, as explained below. One of the most critical factors in understanding the performance of our minority students is stereotype threat. Although it is true that minorities tend to perform worse on standardized testing, this is not due to a lack of intelligence or cognitive ability (APA, 2012). There are several factors that could influence an individual’s performance, including unequal educational opportunities and psychological factors. In terms of psychological factors, the underperformance of students is most often attributed to exposure to negative stereotypes that preoccupy and distract students, thereby diminishing their cognitive resources (Marx & Goff, 2005). Being aware of and understanding how stereotype-threat lowers the academic performance of students is essential to addressing this issue. Many researchers such as Ganley et al. (2013) and Rodriguez (2014) aim to demonstrate that stereotype-threat and not intelligence is responsible for bright minority students not demonstrating their full potential during standardized testing.

In order for stereotype to have the power to threaten or diminish performance, the following criteria must be met: the stereotype must be activated, the task assigned to the individual must be difficult, the individual must feel that they excel in the subject, and the individual must feel that the subject is of high importance to him or her (Steele, 1997). The body of work about stereotype threat is well substantiated. For example, research has shown that when negative stereotypes about women and math are activated, even high math achieving women may underperform (Kiefer & Sekaquaptewa, 2006). Much of the research has been conducted on how negative stereotypes about the intelligence and academic ability of African Americans diminish African Americans’ performance (Marx & Goff, 2005).

Research has been done involving stereotype threat, however what makes our research different is that this is one of the first studies focusing on Latinos. A unique contribution of the proposed study is that we are assessing stereotype threat among Latino students by activating negative stereotypes about Latinos and English language competence. An additional contribution of this study is that we are assessing whether the presence of a Latino instructor moderates stereotype threat for Latino students. White students in the study are serving as experimental controls. Specifically, our study objective is to test the relationship between the presence of an instructor of the same ethnicity (Latina(o) or White) as the participant (Latina(o) or White) and participants' performance on an English assessment. If the presence of a Latino instructor does buffer the effect of negative stereotypes, it will suggest an institutional mechanism for improving student performance even when negative stereotypes are operating. We are conducting this research in order to identify a difficult, but real problem in our education system. We hope that this research can be the beginning of more research done on Latinos and stereotype threat.
For more information about this research you may want to read:

If you are aware of anyone who is planning to participate in this study, we ask that you not discuss the study with them until after they have participated in it. Prior knowledge of the study questions and procedures would negatively affect our results.

If you have any questions regarding our study, please feel free to contact any of our researchers.
Adilene Osnaya: osnaadil@my.dom.edu
Mayra Gaona: gaonmayr@my.dom.edu
Faculty supervisor: Dr. Tina Taylor-Ritzler: tritzler@my.dom.edu

Once again, thank you for your participation in this study!