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We Aren't So Different: Implicit Bias & Unintended Stereotyping

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We Aren't So Different: Implicit Bias & Unintended Stereotyping

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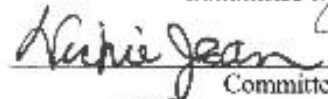
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Abstract

Implicit biases potentially influence attitudes and behaviors towards social in-groups and out-groups, such as racial minorities. In this empirical study, the strength of the implicit association measure (d) was obtained from 112 university students using the PsyToolKit version of the Implicit Association Test (IAT). These scores were then compared to d scores from various other sources, including the national-level IAT dataset provided by Project Implicit, a subset of the national dataset specific to Oklahoma, a new sample from a metropolitan university in Oklahoma, and a new sample from a nearby Historically Black College or University (HBCU). The IAT involves a computerized task where participants swiftly categorize words and pictures based on whether they convey negative or positive sentiments. In this experiment, participants used the "E" key for the left side of the screen and the "I" key for the right side. Pressing one key signifies that the stimulus belongs to the designated category (good/bad) while pressing the other key indicates that it does not. Key-press response times and error rates are then used to calculate d scores. Higher d scores suggest stronger associations with the particular group—thus, a high positive value implies a positive association with "White = Good" stimuli in this context. Conversely, a negative d score implies an association of "Black = Good".

Analysis of variance and *post-hoc tests* unveiled disparities in d -scores among the various datasets and racial groups. Overall, state-level d scores surpassed national-level d scores, suggesting more positive associations between White individuals and "Good". At the local level, the distinction between the metropolitan university and the HBCU was notable: The metropolitan area exhibited a negative d score, indicative of an association with Black individuals and "Good", while the HBCU population demonstrated positive d scores, signifying an association with White individuals and "Good". These variations in d scores among Black,

White, and other participants may indicate differences in the strength of implicit associations between race and valence across these distinct groups. Additionally, at the national level, d scores for Black participants were negative, while those for White participants were positive, and d scores for individuals of other races were positive. At the state level, d scores for Black participants remained negative, while those for White participants were positive, along with positive d scores for participants of other races. At the local level, both the metropolitan university and the HBCU exhibited differences in d scores among Black, White, and other participants, as previously mentioned. In the metropolitan area, Black participants exhibited positive d scores, White participants had negative d scores, and individuals of other races showed positive scores. Conversely, at the HBCU, Black participants had positive scores, White participants also had positive scores, and individuals of all other races similarly demonstrated positive scores. The intriguing results indicated that Black participants from the metropolitan area displayed a preference for White individuals and associated them with positive attributes, while White participants exhibited a preference for Black individuals, also associating them with positive traits. Moreover, at the HBCU, Black individuals similarly demonstrated a preference for White individuals and their associated positive attributes.

The survey administered following the computerized task included several different Likert scales, encompassing a discrimination scale consisting of questions regarding racial preference, scenario questions concerning social interactions with individuals of other races, the Social Dominance scale (SDO), Belief in a Just World, Humanitarianism, the Big Five Personality traits, Right-Wing Authoritarianism, and the Bayesian racism scale. Upon running a Pearson correlation between the survey scores and d scores, the results did not reveal significant correlations for all the listed scales, except for SDO, which exhibited a significant correlation

between the two. Survey scores were collected from both the metropolitan and HBCU populations.

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Chapter I

We Aren't So Different: Implicit Bias & Unintended Stereotyping

The ongoing propagation of negative portrayals of Black men and women in mass media continues to reinforce damaging stereotypes (Gerbner, 1998). In modern cinema, Black female actresses are frequently typecast into roles that hypersexualize their features or exaggerate stereotypical traits. For instance, they are often relegated to portraying struggling single mothers with multiple children from different fathers, characters that demand them to display loud or "ghetto" behaviors, or they are limited to nurturing roles as wise women who have overcome adversity and can impart their wisdom to the younger generation (Balaji, 2010; Balaji, 2009; Fischhoff et al., 1999). This issue bears significance as repeated exposure to mass media significantly contributes to the formation of standards for socially acceptable behavior (Adams & Stevenson, 2012). As an example, in the 2023 live-action adaptation of *The Little Mermaid*, the beloved character Ariel, recognized for her distinctive red hair and captivating voice, is now brought to life by a Black actress. This casting choice ignited a media frenzy, accompanied by racial remarks criticizing her skin color, dreadlocks, and facial features—attributes that are ostensibly unrelated to her capacity to embody the character. When did the hue of a fictional aquatic being become significant enough to provoke such a surge of animosity?

Regional and urban/rural variances in racial attitudes are evident (Patten, 2013). To illustrate, Oklahoma is frequently linked with rural living, casino gambling, and indigenous territories. Langston, which was once predominantly Black, is now the site of a historically Black college where the student population is primarily African American (McAuley, 1998). According to the prevailing sentiment in Langston, the town falls under the classification of rural non-farm land, characterized mainly by low-income housing and a limited number of businesses.

Situated twelve miles northeast of Guthrie, OK. Langston was established in 1890 in Logan County. Originally serving as a supply depot for the Black community, it carries substantial historical significance (Hamilton, 1977).

In contrast, not too far from Langston, there was a historically all-White town in Edmond, OK, known as a sundown town. Within this sundown town, an all-White university was established. First, a sundown town earned its ominous reputation due to the extreme measures it employed, either directly or indirectly, to exclude minorities. This was enforced through a strict curfew requiring minorities to leave town by sunset, with unlawful consequences for non-compliance (Edmond History Museum). Additionally, minorities were discouraged from owning property in Edmond, and in cases where they did, residents resorted to burning down their properties. Uncovering the dark history of Oklahoma presents a significant challenge due to the scarcity of legal documentation regarding its status as a sundown town. Much of the available information comes from historical accounts provided by residents who lived through these times and from historical museums in Oklahoma. Regardless of whether formal ordinances were implemented in Edmond during the 1920s, it remained an exclusively White town, actively promoted as such by its residents, known as Edmonites (as stated in the Edmond History Museum). For instance, during the 1920s and 1940s, both The Bank of Commerce and students attending Central State College (now known as the University of Central Oklahoma) publicly advertised Edmond's all-White status as part of their promotional efforts (Edmond History Museum).

History of Langston

Life in the 1800s differed significantly from the present day. For instance, during that period, African Americans were prohibited from attending any institutions of higher education in Oklahoma. Despite facing exclusion and rejection, their desire to learn remained strong. In July 1892, Black citizens in Oklahoma petitioned the court to advocate for their right to education. After several years, their pleas reached receptive ears, leading to the establishment of Langston University (Patterson, 1979).

Langston University carries immense cultural significance within the African American community, with its legacy marked by enduring sacrifices and resolute determination, which have played pivotal roles in shaping the institution into the renowned establishment it is today. To delve deeper into Langston's history, it is only fitting to begin at its origin. Langston University was established on March 12, 1897, and its doors were first opened on September 3, 1898, providing people of color with an educational environment conducive to their success. Originally named the "Colored Agricultural and Normal University" (Patterson, 1979), it was conceived as a safe haven for both male and female individuals of color to pursue higher education. Dr. Inman E. Page (1898-1915) served as the university's inaugural president. Dr. Page set the stage for other talented African American leaders to continue with the same mission in mind, to promote Black Excellence.

Purpose Of Study

While prior research on discrimination employing the Implicit Association Test (IAT) predominantly focuses on the individual level, there is a noticeable scarcity of studies examining rural and urban areas, particularly within towns in Oklahoma. This research seeks to fill this gap

in the literature by investigating two historical towns in Oklahoma, considering the possibility that these communities may harbor lingering racial sentiments from the past. This research seeks to enhance our understanding of discrimination and investigate how diverse environments may influence the development of negative associations towards various racial backgrounds.

While delving into the discriminatory history of Oklahoma, the primary sources of information for this study are two historical towns—Edmond (UCO) and Langston (LU). Notably, Langston holds particular significance in this research due to its historical importance, carrying both racial significance and cultural relevance for the Black community. The enduring legacies held by Langston for the Black community stand as a testament to the hardships, disparities, and experiences regularly faced within the community. This is precisely why Langston serves as the representative sample for the minority population in this study.

The research will be conducted among the undergraduate student bodies of both the University of Central Oklahoma (UCO) and Langston University (LU). I hypothesize that a notable difference in d scores derived from the computer-based tasks will exist between UCO and LU. Additionally, I hypothesize that there will be a significant correlation between implicit measures of discrimination (d scores) against Black people and explicit measurements of perceived discrimination (Self-report). The primary objective of this study is to explore the potential variation in negative stereotypes across rural and urban areas by examining specific regions within the state of Oklahoma.

Significance of Study

This study holds substantial importance in shedding light on the daily inequalities experienced by minority populations. Additionally, it aims to raise awareness and provide

insights into these challenges. By delving into oppression, stereotypes, and racial backlash, this study seeks to educate those unaware of their biases. It encourages critical thinking about the profound impact that these factors can have on a particular racial group. The field of racial studies is a broad topic that evolves with each new generation. Despite significant progress in combating racial discrimination, it remains a persistent global issue that affects individuals today, albeit to varying degrees. This study aims to foster greater awareness, encouraging individuals to consider the potential harm in their words and to be mindful of others' feelings and emotions. The ultimate objective is to sow the seeds of understanding and empathy, nurturing their growth into meaningful connections and friendships by the study's conclusion.

Limitations of The Study

The study's limitations encompass the absence of a random sample for both of the schools involved. Recruitment for participants at UCO came from SONA portal, while Langston's participants were recruited based on class affiliation

The Implicit Association Test (IAT) serves as a valuable tool for assessing implicit biases or attitudes that individuals may not openly express (Greenwald & Banaji, 1995). Social psychologists propose that specific attitudes can manifest both implicitly and explicitly, suggesting that people might experience variations in their feelings, thoughts, and behaviors compared to what they openly express (Bertrand, et al., 2005). The validated measurement can effectively gauge these implicit biases by analyzing response speed to targeted stimuli, revealing the strength of unconscious associations. The main purpose of the IAT is to gauge associations or attitudes toward particular social groups, self-identity, or products.

In this current study, words and images are categorized and presented on the screen. The objective is to measure the time it takes for participants to respond to stimuli associated with both African-American and White individuals. When evaluating the race IAT, implicit associations become evident through differences in response times. To put it differently, faster response times indicate a more pronounced mental association when the stimulus aligns with the words presented.

While the IAT is a validated measurement, it is not without its shortcomings. Contrary to predicting racism or directly testing biases, its actual focus lies in assessing associations and attitudes towards particular groups. Furthermore, the scores obtained from the IAT can be influenced by explicit factors like the participant's mood, the researcher's race, or the participant's sleep quality. The IAT can also be prone to priming effects as well. Additionally, the test is thought to capture associations rooted in cultural knowledge rather than truly uncovering deeply ingrained implicit associations within an individual's self. Despite the controversial critiques regarding the IAT's use for measurement, this test is still the most useful tool for completing this study. Measuring implicit biases is inherently challenging, as it involves unspoken thoughts and sentiments about target categories.

Calculating d scores

The IAT can be evaluated by calculating the d score. According to the new scoring algorithm developed by Anthony G. Greenwald, d scores are derived by extracting the "inclusive standard deviation" from trials conducted in stages 3, 4, 6, and 7. Additionally, mean response times for these stages are computed, followed by calculating a mean difference score from those select stages (6 minus 3) (7 minus 4). These difference scores are then divided by their respective inclusive standard deviations, resulting in a d score, which represents the overall

strength of association towards the target stimulus. Respectively, there are ranges of d scores that effectively gauge the strength of association present.

For instance, d scores ranging from -0.15 to 0.15 signify little to no preference, while scores from -0.15 to -0.34 and 0.15 to 0.34 indicate a slight preference. Furthermore, scores ranging from -0.35 to -0.64 and 0.35 to 0.64 suggest a moderate preference, and d scores of 0.65 and above indicate a strong preference for the target stimulus. Note that positive scores are linked with pro-White and anti-Black preferences, whereas negative scores are associated with pro-Black and anti-White preferences.

Chapter II

Review Of Literature

Oklahoma boasts a complex historical narrative encompassing experiences of abuse, discrimination, stereotypes, and empowerment. Project Implicit has offered valuable resources regarding the Implicit Association Test (IAT) and prior research, highlighting the necessity of expanding investigations in Oklahoma to delve into potential detriments. In this paper, the literature review will delve deeper into the relevant empirical research concerning implicit and explicit measurements employed to assess exposure to discrimination. Additionally, it will investigate the correlation between the detrimental consequences of exposure to discrimination, particularly within the context of Oklahoma, utilizing both implicit and explicit assessment tools.

Description of Implicit Tools:

Implicit measurement tools, like the implicit association task (IAT), were developed with the primary purpose of evaluating the strength of the association between target stimuli and evaluative attributes. The traditional design of the IAT involves seven block trials, each

featuring distinct latencies and instructions that require participants to employ two response keys, namely "E" and "I" to categorize stimuli (Greenwald, et al., 2003). According to the Project Implicit website, the first category of the Implicit Association Test (IAT) includes a brief practice round designed to help participants understand the presented instructions followed by trials shortly after. This practice round aims to ensure accurate results for the remainder of the experiment. After completing the practice round, the main trials commence.

The IAT measures the strength of an association between target and concept stimulus (e.g., living object versus non-living objects) and it also measures the strength of association between specific attributes (e.g., unpleasant words versus pleasant words). These trials begin with a stimulus of choice displayed in the center of the screen, surrounded by words associated with a specific attribute positioned on either side of the selected stimulus. Participants are instructed to choose the words that most closely correspond to the pictures by pressing the corresponding keys on the computer.

In the second trial, participants encounter words associated with the categories of “good” and “bad”. They are instructed to choose the appropriate response based on their perception of the relationship between these words. For instance, if a word that could be construed as unpleasant appears in the center of the screen, participants should press the “I” key on the keyboard to indicate the right side of the screen, where the “unpleasant” category is located. Conversely, they should do the opposite for words associated with the “pleasant” category by selecting the “E” key to select the left side of the screen.

As the Implicit Association Test (IAT) progresses, the previous rounds combine by presenting a stimulus and words separately in the center of the screen. For instance, on the right side of the screen, the attributes “unliving/unpleasant” are paired with the “I” key for selection,

while on the left side of the screen, attributes such as “living/pleasant” form a category with “E” as the sorting key. Participants are given clear instructions to accurately categorize the centrally displayed stimulus into the perceived category. Upon the completion of one trial, the attribute categories are counterbalanced. For instance, on the right side of the screen, categories like “unliving/pleasant” may be displayed, while the opposite is presented on the left side.

Participants are then directed to follow the same instructions as before. As the experiment progresses, the words will be counterbalanced and switch sides periodically. However, if participants carefully follow the provided directions, the experiment should proceed smoothly.

Empirical Studies of the IAT in Detecting Perceived Discrimination

In previous studies involving the Implicit Association Test (IAT), this tool has been applied to a wide range of social interactions in daily life. However, for the specific focus of this paper, we will narrow our attention to previous race/ethnic IAT studies. These race IAT studies generally follow a similar programming structure, with their primary objective centered on investigating differences in discrimination based on racial distinctions. For instance, Harvard University has made notable contributions by developing a series of IATs, including those related to race. Much of the race IAT research aims to uncover disparities in discrimination and its adverse effects on health.

For instance, Zestcott, et al., (2022) conducted a study to investigate the correlation between perceived discrimination against stigmatized groups and negative health outcomes. The study focused on two groups: White, Black, and Native American individuals, drawing upon past data related to cardiovascular disease. Most of this data was collected from the *Project Implicit* website dataset for public use for the race IAT. Initially, Zestcott et al. aimed to investigate whether holding prejudiced attitudes toward individuals from marginalized populations is

significantly related to health risks. To test this hypothesis, they analyzed preexisting data and postulated that there would be a significant correlation between harboring prejudicial attitudes toward people of color and experiencing adverse health risks in the targeted population.

The data for this project was collected between 2003 and 2015 at the state and county levels. It involved implicit and explicit racial data, with participation from Black, White, and Native American individuals, focusing on cardiovascular disease (CVD). To augment this dataset, information from the CDC WONDER database was incorporated. Additionally, the analysis included the examination of data on explicit and implicit CVD mortality risk for each of the three ethnicities separately. The study's results revealed a positive association between racial prejudice and cardiovascular disease mortality risk across different racial groups. This association was observed in both prejudiced and stigmatized groups.

A recent study conducted by Gran-Ruaz, et al., (2022) compared racial inequalities among Black Americans and Black Canadians using both implicit and explicit measurements. The initial aim of the study was to investigate the impact of implicit biases on Black individuals residing within both traditionally White and non-White groups in the United States and Canada. Additionally, the study sought to explore the potential repercussions of these biases on the mental health of Black individuals in the United States.

The measurement employed for this particular study was a specialized IAT known as the Black-White Implicit Association Test (BW-IAT). This tailored test is designed to specifically gauge implicit attitudes and stereotypes associated with Black populations. In conjunction with the implicit task, the researchers also administered an explicit self-report measurement aimed at assessing the “warmth” participants felt toward a group of Black people. To delve into more specifics, participants were presented with questions framed as follows: “Please rate on a scale of

0-10 how warm you feel toward Black people, specifically a group of Black people?” The scale ranged from “extremely cold” to “extremely warm”. This explicit measurement was employed to potentially gauge biases held by individuals from other ethno-racial groups toward Black people in a general sense.

The researchers also utilized a second self-report measurement, which was randomly administered to select participants. This scale was the Modern Racism Scale (MRS; McConahay, 1986), a well-established self-report instrument designed to assess explicit contemporary prejudicial attitudes toward Black people in general. Sample questions from the MRS include statements such as “Black people in general should not insert themselves where they are not wanted” or “Discrimination directed at Black people in general is no longer a problem”. The scale is a Likert scale ranging from strongly disagree to strongly agree for the answer choices.

In response to the initial research question concerning the extent of implicit biases among various ethno-racial groups held against Black people in both the U.S. and Canada, the results yielded four significant discoveries:

1. The study found that explicit biases in both Canadian and American populations are remarkably similar.
2. Implicit biases were found to be associated with a decline in mental health for Black Americans, even when accounting for explicit biases.
3. The research indicated that many interracial groups exhibit anti-Black implicit biases.
4. Furthermore, a weak connection between implicit and explicit scores was identified.

Empirical Studies of Self-reported Measurements of Perceived Discrimination

Over the years, explicit measurement tools for assessing perceived discrimination and its correlation with negative health outcomes have seen a significant increase. Research has consistently revealed a positive association between DSM-diagnosed mental disorders, exposure to discrimination, and adverse physical health outcomes (Lewis, et al., 2015). These explicit studies provide valuable insights to society by actively demonstrating the harmful consequences of perceived discrimination against individuals, particularly people of color.

Self-report measurements can vary depending on the specific focus of a researcher's study. In the context of this paper, our attention is directed toward studies on perceived discrimination, which typically encompass a broad range of self-reported experiences related to discrimination. An additional instance of reported discrimination in the United States comes from the U.S. Department of Housing and Urban Development (2013). This department collected self-reported data that documented instances of abuse and bias faced by minority individuals in their attempts to find housing within society. For example, these reports detailed incidents where racial or ethnic minorities were informed about and shown fewer homes and available apartments than their White counterparts, regardless of their credit history.

The New York Civil Liberties Union (2014) conducted a study that collected data on civilians in New York and made a striking discovery. They found that Latino and Black residents were subjected to more frequent frisks compared to their White counterparts, yet they were less likely to be found with a weapon during these searches. When delving further into reported documents, it becomes evident that emergency rooms have shown disparities in providing adequate pain management care. For instance, Pletcher et al. (2008) reported that in cases involving kidney stones or bone fractures, Black and Latino patients were less likely to receive

proper and adequate pain medication compared to their White counterparts. In fact, the pain experienced by people of color often went unaddressed.

Summary

Based on previous studies concerning perceived discrimination, it becomes evident that there is a significant and pressing issue at hand. The mere exposure to discrimination takes a toll on both mental and physical health. Extensive literature reviews have thoroughly examined the effects of such exposure and have consistently concluded that it is negatively associated with self-reported conditions, including but not limited to breast cancer, hypertension, and high blood pressure (Williams & Mohammed, 2009). Delving deeper into the effects of discrimination on minority populations, recent studies have elucidated that discrimination acts as a social stressor, triggering negative experiences that elicit physiological responses, such as elevated blood pressure and increased heart rate. These heightened physiological responses, when sustained over time, can have detrimental effects on both physical and mental health (Pascoe & Richman, 2009).

Chapter III

Rural Vs. Urban

This present study aims to compare previous research on perceived discrimination and its detrimental effects on mental and physical health, particularly in the context of specific regions in Oklahoma. When contrasting rural and urban areas within the state, the primary objectives of this research are as follows: To extend the scope of research from Project Implicit's race IAT studies by investigating rural and urban areas in Oklahoma, specifically focusing on two historically significant towns, one with a history as a historically Black college (HBCU) and the

other as a previously all-White college. The second focus of the study is to determine whether there are significant or non-significant associations between discrimination against Black people and self-report measurements. The present study will be conducted in both rural and urban regional locations, involving undergraduate student populations from both UCO and Langston University. The research will utilize the Implicit Association Task (IAT) and self-report measurements. Previous race IAT studies on the Project Implicit website have employed a combination of negative and positive words in addition to a mix of pictures depicting individuals from these diverse backgrounds and asked participants to categorize them accordingly.

In the initial phase of the race IAT study, participants will be presented with randomly displayed cropped images of Black and White individuals at the center of the screen. Positioned on either side of these centered photos will be words such as "European American" and "African American", and participants will be instructed to categorize them correctly. For the second part of the IAT, singular words with either positive or negative connotations will be displayed at the center of the screen. Adjacent to these centered words will be attributes such as "Good" and "Bad" on opposite sides of the screen, which participants will categorize accordingly. Further details regarding the procedure of the race IAT will be provided in subsequent paragraphs.

In the initial conduct of the race IAT in both rural and urban areas of Oklahoma, I anticipate several outcomes. First, I expect to observe a significant difference in d scores derived from response times on the Implicit Association Task (IAT) between participants from UCO and Langston. Secondly, in conjunction with the IAT, I will administer a self-report measurement to gauge perceived discrimination. In this regard, I hypothesize that there will be a significant relationship between the d scores from the Implicit Association Task and the responses from the explicit self-report measurements.

Chapter IV

Implicit Association Task

Method

Research Question

This study aims to explore if discrimination is more concentrated in specific regions of Oklahoma.

Hypotheses

The existing hypothesis anticipates a notable difference in d scores between the two schools represented in the sample (UCO, LU). Furthermore, it is predicted that there will be a significant correlation between explicit measurements and d scores.

Participants and Procedure

The study included participants from the undergraduate student populations of the University of Central Oklahoma (UCO) and Langston University (LU). A total of fifty-seven (57) students from UCO and fifty-five (55) students from LU voluntarily participated in the research. UCO students signed up for the study through Sona Systems and received 1 credit upon completion. LU students were recruited from undergraduate classes and, upon successful completion, received extra credit granted by a Langston University professor. Despite variations in recruitment methods between the schools, the testing environment remained consistent for all participants.

Apparatus

The study was conducted using PsyToolkit, with all data recorded electronically. The initial task involved the African American/European American Module, designed to assess the strength of associations using representative pictures for each social category. Upon successful completion of the first module, participants proceeded to the second task, the Good/Bad module, which presented a series of words categorized as either negative or positive. Participants were asked to correctly categorize these words. The final task of the study comprised an extensive self-report measurement using surveys. Specifically, seven Likert-scale surveys were utilized, all obtained from Project Implicit's website. Further details, including in-depth information and scoring algorithms for these surveys, will be provided in subsequent sections.

Independent and Dependent Variables

The independent variable for this study is the tested population, which comprises undergraduate students from UCO and LU. The dependent variables include the response times for the Implicit Association Task and the correct categorization of stimuli. It is important to note that faster response times may suggest a potential bias towards the target of interest in the study.

Materials

Implicit Associated Task (IAT)

The IAT is a computerized task that incorporates both words and pictures for categorization purposes. This specific task, known as the race IAT, is designed to measure the strength of associations towards Black or White individuals through several trials (Nosek & Sriram, 2007). The task typically takes approximately 15 minutes to complete, excluding the self-report measurement that follows shortly after. During the computerized task, participants

are instructed to press specific keys, selecting a response either on the left "E" or the right side of the screen "I", with any incorrect response resulting in a red "X" appearing in the middle of the screen. Response times are recorded after each trial (7 in total) but only the response times for trials 3,4,6,7 are further analyzed to obtain a d score which will be discussed in later detail.

African American/European American

The initial trial of the computerized task aims to evaluate negative or positive associations between target stimuli (Black or White individuals) using cropped depictions sourced from the Project Implicit website. During this trial, participants are presented with a picture of a White or Black male or female, displayed in the center of the screen. Additionally, words such as "African American" or "European American" will appear opposite each other on either the left or right side of the centered stimulus. Participants are then instructed to categorize the presented stimulus into a specific group, with incorrect responses resulting in a red "X" appearing until correct responses are provided.

Good/Bad

For the second part of the computerized task, only words will be presented in a series of trials, and participants will be required to categorize them based on their perceived origin. Words conveying negative or positive meanings, such as "ugly," "disgusting," "beautiful," and "pretty," will be displayed in the center of the screen. Additionally, the words "Good" or "Bad" will appear opposite each other on the left and right sides of the screen. Incorrect responses will prompt a red "X" to appear, which will remain until the correct response is selected.

Explicit Self-Reported Measurements

Self-report measurements served as an explicit source to evaluate discriminatory behavior and attitudes through the administration of surveys. The surveys utilized in the study consisted of Likert scales, all sourced from the Project Implicit website. The initial set of questions was grouped together to form a perceived discrimination scale, querying participants about racial preferences. For instance, questions included statements such as "I prefer African Americans to European Americans." Responses were rated on a 7-point Likert scale, ranging from 1 ("I strongly disagree") to 7 ("I strongly agree"). Furthermore, a Social Dominance Scale (SDO) was employed to examine general inclinations regarding ingroup domination or subordination (Sidanius et al., 2016). This scale, as previously mentioned, utilized a 7-point Likert scale, employing the same order of answer selections as described above. Subsequent to the administration of the SDO scale, another scale utilized was the Belief In A Just World self-report measurement, originally conducted by Lucas, et al., (2011).

The subsequent self-report measurements utilized included the Humanitarian/Egalitarian scale, developed by Katz and Hass in 1988, specifically designed to assess an individual's level of humanitarianism. This scale comprises 10 items and employs a 7-point Likert scale, with 1 indicating "I strongly disagree" and 7 indicating "I strongly agree". Additionally, the Big Five Inventory scale was employed in the study. Originally developed by Goldberg in 1993, the Big Five assesses the five personality traits: extraversion/introversion, lack of direction, neuroticism, openness or closedness, and agreeableness. The Big Five also utilizes a 7-point Likert scale with the same order of answer selections as previously mentioned and consists of 44 items. The Right-Wing Authoritarianism Scale (RWA) was also utilized in the study, examining various social phenomena typically observed in North America. Developed by Altemeyer in 2006, the

scale comprises 12 items and employs a 7-point Likert scale with the same order of answer selections as mentioned above. Examples of questions on the scale include "People should put less attention on religion and focus more on moral standards?"

Concluding the list of self-report measurements, the final scale employed was the Bayesian Racism Scale, used to assess rational and irrational discrimination based on preexisting stereotypes (Uhlmann et al., 2010). The scale consists of 6 items and is measured on a 7-point Likert scale following the same answer selection format as the previously mentioned surveys. Although the different scales used may examine various social components, they are all scored in the same manner by summing the scores together and obtaining an average.

Procedure

The participants in the study were individually placed in a room equipped with a computer monitor, mouse, and keyboard. Upon signing the consent form, participants were presented with the first set of instructions displayed on the monitor in front of them. Following the instructions is essential for successfully completing the trials. The keyboard was predominantly used during the task, as it was necessary for selecting response times throughout the computerized task. On the keyboard, the "E" key denoted the left side of the screen, while the "I" key indicated the right side. During the initial trial, participants encountered the European/African American task. In this trial, a series of pictures depicting both Black and White males and females were centered in the middle of the screen, accompanied by the words "European American" and "African American" on either side of the targeted stimulus. Participants were instructed to accurately and swiftly categorize the stimulus into the correct ethnic background. Incorrect responses triggered a red "X" to appear on the screen, remaining until the correct response was selected. Once the first set of trials is completed, the second set of

trials commences, which involves the categorization of words only. The words, centered in the middle of the screen, can be perceived as either negative or positive, with examples including "beautiful," "gorgeous," "ugly," and "lazy." On the left and right sides of the screen, words such as "bad" and "good" are placed adjacent to the stimulus. Participants are instructed to categorize the words displayed in the middle into the correct category as quickly as possible. Any incorrect answer choices prompt a red "X" to appear on the screen, remaining until the correct answer choice is selected.

To prevent participants from falling into a routine, the trials are counterbalanced, with the words flipping sides. For instance, if "European Americans" appeared on the left side of the screen during the first trial, it would then appear on the right side in subsequent trials, and vice versa, while the stimulus in the middle remains unchanged. Towards the end of the trials, both words and stimuli will alternate appearing in the middle, rather than being exclusive to specific tasks. Additionally, the categories on the left and right sides of the screen will combine to form new categories. For example, phrases like "African American/Good" and "European American/Bad" will appear on either side of the targeted stimulus in the middle of the screen. Once the computerized trials are successfully completed, the task transitions immediately to the self-report measurements outlined previously. Participants will follow the instructions displayed on the monitor to complete the trials. Upon finishing the survey, participants will be presented with a "Thank You" screen confirming their completion of the study

Results

A one-sample t-test was conducted to explore potential differences or similarities among d scores across different populations: Project Implicit state (Oklahoma), Project Implicit, Metropolitan, and HBCU. Note, for the sake of anonymity, descriptors in the sampling population mentioned in previous chapters are omitted and changed to general words. When referring to UCO, the results will say Metropolitan area, and when referring to LU, it will say HBCU.

When comparing the d scores of the Metropolitan population ($M = -.0384$, $SD = .42650$) to those of the Project Implicit state ($M = .154$, $SD = .017$), a significant difference was found $t(56) = -3.406$, $p < .001$. Conversely, the comparison between the HBCU population ($M = .2110$, $SD = .31721$) and the Project Implicit state did not yield a significant difference in d scores $t(54) = 1.333$, $p = .188$. Furthermore, when comparing the d scores of the Metropolitan population with the broader Project Implicit dataset ($M = .153$, $SD = .008$), a significant discrepancy was observed $t(56) = -3.388$, $p < .001$. However, no significant differences were found when comparing the HBCU population with the broader Project Implicit dataset ($M = .2110$, $SD = .31721$), $t(54) = 1.356$, $p = .181$.

Figure 1 shows the mean IAT scores for four data sources a one-sample t-test revealed a significant difference between the present sample and the broader Project Implicit mean d scores ($d = .153$) one sample t-test revealed a non-significant difference between the current overall sample mean d score ($d = .207$) and the state-level (Oklahoma) mean ($d = .154$) from Project Implicit. One-Sample t-test revealed that the Metropolitan sample differed significantly in d scores ($d = -.0384$) for the entire Project Implicit data set, from the HBCU sample ($d = .2110$),

and the overall sample mean. The HBCU sample also differed significantly from the entire Project Implicit mean, the current sample mean, and the state-level mean.

Figure 1.

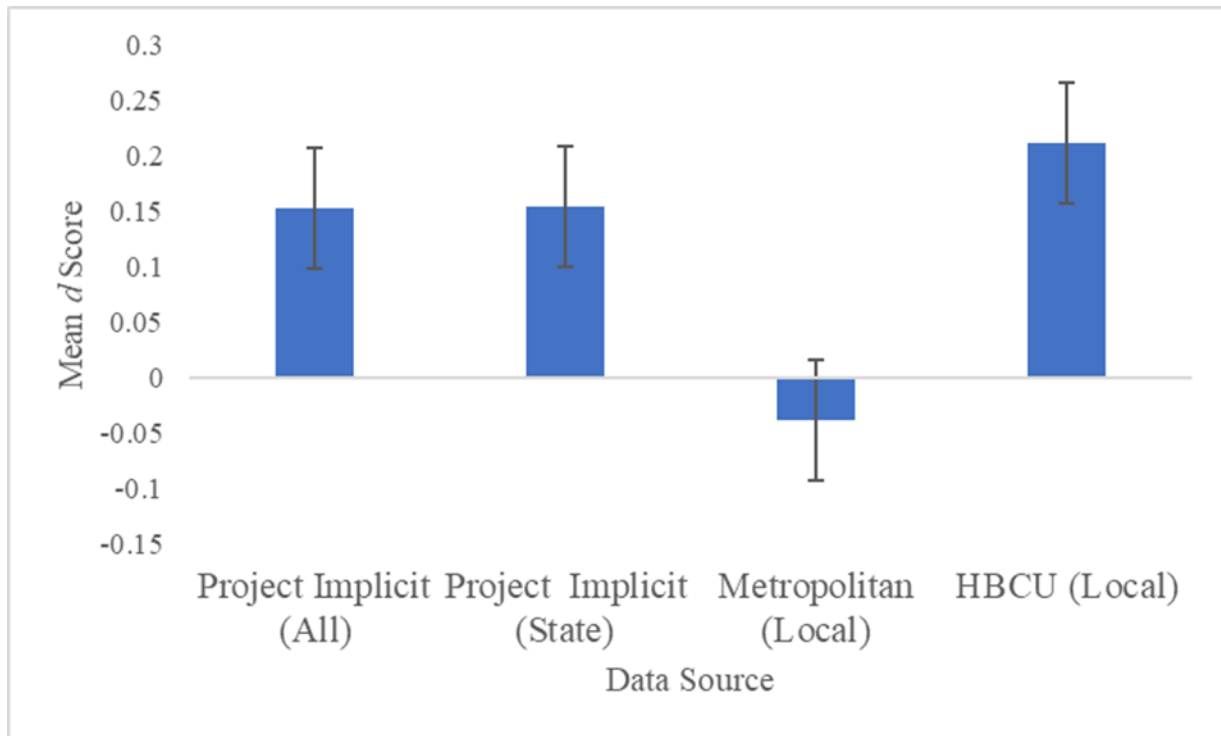
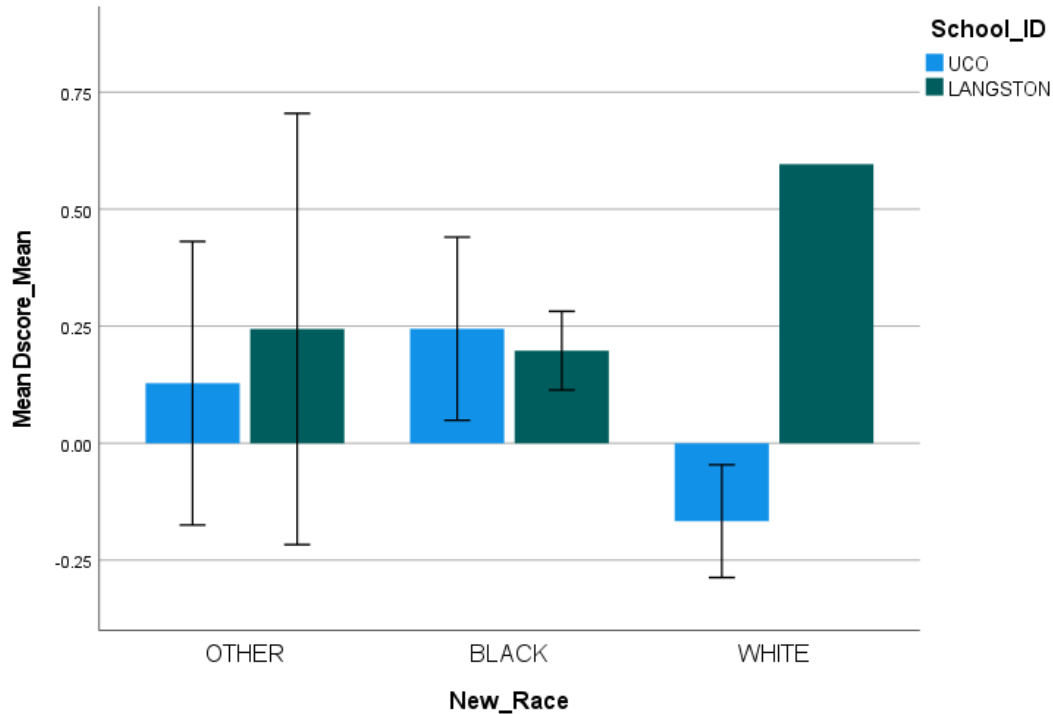


Figure 2



A two-way analysis of variance was conducted to examine the influence of the participants' school affiliation (Metropolitan or HBCU) and their race on d scores. The results revealed a marginal trend effect of school, $F(1, 106) = 3.761, p = .055$. Also, the race of the participants did not yield a significant effect on d scores, $F(2, 106) = .052, p = .950$. Moreover, there was no significant interaction between the race of the participants and the school they attended on d scores, $F(2, 106) = 2.122, p = .125$. Although no significant interactions were found, follow-up tests were conducted to further analyze the patterns in the data.

Bonferroni *post hoc* comparisons revealed one significant difference. The White Metropolitan sample had a significant pro-Black association ($M = -.166, SD = .61; p = .04$) versus the White HBCU sample that showed a pro-White association ($M = .596, SD = .362$).

Also, there were no significant differences between the Black HBCU sample ($M = .198$, $SD = .053$; $p = .75$) versus the Black Metropolitan sample ($M = .245$, $SD = .137$).

Table 1 shows descriptive statistics for the implicit association d scores for Project Implicit across the entire data set, a subset from Project Implicit state level, Metropolitan area, and HBCU.

Table 1

Mean Implicit Association Scores

Data Source	Black		White		Other	
	Mean	Std. Error	Mean	Std. Error	Mean	Std. Error
Project Implicit	-0.064	0.016	0.31	0.014	0.203	0.011
CI	-0.095	-0.032	0.284	0.337	0.181	0.225
N	14501		79956		394991	
Project Implicit State	-0.077	0.047	0.327	0.021	0.213	0.009
CI	-0.17	0.016	0.286	0.368	0.196	0.23
N	3056					
Metro	0.245	0.137	-0.166	0.061	0.128	0.094
CI	-0.027	0.516	-0.288	-0.045	-0.057	0.314
N	57					
HBCU	0.198	0.053	0.596	0.362	0.244	0.137
CI	0.093	0.303	-0.122	1.314	-0.027	0.515
N	55					

Note. CI indicates the 95% confidence interval. N for metro, HBCU, and state represents the total not broken up by race.

Pearson correlations were computed to examine the relationships among various measurements for 112 participants, as shown in Table 2. Several significant correlations were observed. Specifically, a significant negative correlation was found between d scores and Social Dominance Orientation (SDO) ($r = -0.216$, $p = 0.022$). Moreover, Scenario scale questions showed a significant positive correlation with SDO ($r = 0.231$, $p = 0.014$). Additionally, Belief exhibited a positive correlation with SDO ($r = 0.210$, $p = 0.026$). Furthermore, Humanitarian displayed negative correlations with Scenario ($r = -0.430$, $p < .001$), SDO ($r = -0.219$, $p = 0.020$), and Belief ($r = -0.299$, $p = 0.001$). The Big Five exhibited a negative correlation with the Discrimination scale ($r = -0.284$, $p = 0.002$), as well as with Scenario ($r = -0.239$, $p = 0.011$), and

a positive correlation with Humanitarian ($r = 0.523, p < .001$). The Right-Wing Scale showed a positive correlation with the Belief scale ($r = 0.198, p = 0.036$), and a negative correlation with the Big Five ($r = -0.308, p < .001$). Finally, the Bayesian Scale demonstrated a positive correlation with the Scenario scale ($r = 0.216, p = 0.022$), Belief ($r = 0.197, p = 0.037$), and SDO ($r = 0.442, p < .001$), and a negative correlation with Humanitarian ($r = -0.293, p = 0.002$).

In summary, the correlation analysis revealed complex relationships among the measured variables, providing insights into the interplay between implicit bias, discriminatory behaviors, social attitudes, and personality traits among the participants.

Table 2
Correlation Matrix for 112 Participants

Measurements		D_Score_Total	Discrimination_Total	Scenario_Total	SDO_Total	Belief_Total	Humanitarian_Total	BigFive_Total	RightWing_Total	Bayes_Total
Discrimination_Total	Pearson Correlation	0.114								
	Sig. (2-tailed)	0.233								
	N	112								
Scenario_Total	Pearson Correlation	-0.129	-0.062							
	Sig. (2-tailed)	0.175	0.517							
	N	112	112							
SDO_Total	Pearson Correlation	-.216*	0.061	.231*						
	Sig. (2-tailed)	0.022	0.52	0.014						
	N	112	112	112						
Belief_Total	Pearson Correlation	0.041	0.112	0.048	.210*					
	Sig. (2-tailed)	0.664	0.239	0.614	0.026					
	N	112	112	112	112					
Humanitarian_Total	Pearson Correlation	0.013	-0.123	-.430**	-.219*	-.299**				
	Sig. (2-tailed)	0.895	0.195	<.001	0.02	0.001				
	N	112	112	112	112	112				
BigFive_Total	Pearson Correlation	-0.135	-.284**	-.239*	0.003	-0.089	.523**			
	Sig. (2-tailed)	0.156	0.002	0.011	0.978	0.349	<.001			
	N	112	112	112	112	112	112			
RightWing_Total	Pearson Correlation	0.075	-0.013	0.018	-0.104	.198*	-0.104	-.308**		
	Sig. (2-tailed)	0.43	0.893	0.855	0.275	0.036	0.277	<.001		
	N	112	112	112	112	112	112	112		
Bayes_Total	Pearson Correlation	-0.005	-0.067	.216*	.442**	.197*	-.293**	-0.033	0.125	
	Sig. (2-tailed)	0.962	0.483	0.022	<.001	0.037	0.002	0.733	0.189	
	N	112	112	112	112	112	112	112	112	

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

Discussion

Furthermore, discrimination remains a persistent issue worldwide. However, to narrow the focus of this paper, it will concentrate solely on Oklahoma and its rural and urban areas. Oklahoma, renowned for its strong winds and burgeoning cities, also harbors a dark past. Delving deeper into this, the study examines two historical towns within Oklahoma, each with contrasting histories. The University of Central Oklahoma, formerly known as Central State, was situated in an all-White sundown town. Just a short distance away lay an all-Black community that tirelessly fought for their rights as human beings, including their right to proper education, ultimately leading to the establishment of Langston University.

The present study employs the IAT as a valuable measurement tool to assess whether racial discrimination is localized in specific areas of Oklahoma. The IAT serves as a method to gauge the strength of association towards targeted attributes. It generates response times for each trial, which can then be analyzed to calculate d scores. These scores offer researchers an overall numeric value indicating the strength of association. Like any other statistical measurement, the IAT is not without its limitations. Primarily, it only assesses associations that are directly or indirectly influenced by cultural environments. Moreover, the IAT does not directly measure racism or discrimination. Performance on the IAT can also be affected by various environmental factors such as weather conditions, sleep deprivation, participant's mood, etc. Despite these growing limitations, the IAT remains the preferred method for assessing implicit biases. This is mainly because gauging one's unspoken thoughts can be challenging, and some individuals may feel uncomfortable with direct questioning. Hence, indirect forms of measurement, such as the IAT, are deemed the most suitable approach for this study.

The study involved 57 undergraduate students from UCO and 55 undergraduate students from Langston. A brief overview of the procedure described above entails participants undergoing a series of trials, yielding response times for each trial. Initially, participants complete the European American/African American modules, followed by the second module comprising good and bad words. Each set of trials instructs participants to categorize items as quickly as possible. Any incorrect response prompts a red "X" to flash across the screen until the correct response is selected.

The study aimed to address the question of whether racial discrimination is concentrated in specific regions of Oklahoma. The hypothesis posited that there would be a significant difference in d scores between UCO and LU. Additionally, it was hypothesized that there would be a significant correlation between d scores and self-report measurements. Results from a one-sample t -test revealed a notable difference in d scores between UCO (d score = $-.0384$) and LU (d score = $.2110$). Furthermore, a two-way Mixed ANOVA indicated a marginal trend in the tested school variables, although no significant main effects were observed. Additionally, a Pearson correlation was conducted between d scores and self-report measurements. Out of the different scales, only SDO demonstrated a significant correlation with d scores ($p = .022$). It is important to note that significant correlations were also observed among the scales themselves with one another besides d scores.

Interesting Findings

The Metropolitan sample exhibited pro-Black/anti-White preference ($d = -.0384$), whereas the HBCU sample showed pro-White/anti-Black preference ($d = .211$). Further analysis revealed that White participants from the HBCU sample demonstrated an even stronger pro-White/anti-Black preference ($d = .596$) than the overall HBCU mean. In contrast, White

Metropolitan participants exhibited a stronger pro-Black/anti-White preference ($d = -.166$) than the Metropolitan overall mean.

Social Identity Theory

Social Identity Theory, as proposed by Tajfel and Turner (1985), explores how individuals categorize themselves into social groups based on factors such as ethnicity, religious affiliation, and socioeconomic status. Within the social identity framework, several stages are involved. Initially, social categorization occurs, wherein individuals form groups based on factors like social status, race, religion, etc., to comprehend the world around them. This process is rooted in conceptual, social, and perceptual systems (Rhodes & Baron, 2019). Following the formation of social categories, individuals begin to assimilate the identity of their respective groups. In essence, their self-concepts shift to align with the goals and norms of their social groups (Tajfel, 1978; Tajfel & Turner, 1979). Moreover, social comparison plays a crucial role within social groups. Once groups are formed, members of the in-group engage in comparisons with both similarities and differences among out-groups. Individuals not only compare themselves to members of the out-group but also compare their group to the out-group (Hogg, 2000). Leading us into the framework of in-group and out-group bias. Extensive research has investigated in-group favoritism and out-group discrimination, revealing that individuals tend to exhibit a bias towards their own group, favoring them over members of other groups. This phenomenon underscores our tendency to evaluate and treat individuals from our own group more favorably than those from different groups (Carrarini & Mengel, 2016).

Moreover, in the context of conducting an Implicit Association Test (IAT), it's often anticipated to observe some degree of in-group/out-group bias. However, both this study and previous research have demonstrated that this expectation doesn't always hold true. An

illustrative example is an article published in *The Atlantic*, which delved further into the intricacies of deviant race IAT scores. The article went on to mention that Black participants taking an IAT show about an even split from the norm (Johnson, 2014). Additionally, studies have shown that Black participants have a strong pro-Black explicit bias when taking self-report measurements, but when taking a computerized IAT task, a slight pro-White bias for European Americans emerges, leading to conflicting results (Johnson, 2014).

In the context of the current study and its deviant scores, one proposed theory to explain the trend of the data could align with social identity theory. Essentially, through the formation of groups and the adoption of their group's identity, we might assume that students from Metropolitan areas adopt the identity of a Metropolitan student, while HBCU students do the same for their respective institutions. Given the significant cultural differences between the two schools, the results could reflect associations with the school's culture rather than race itself.

Limitations & Implications

One limitation of the study was the difference in recruitment styles. For instance, students from UCO were recruited via SONA, where they could voluntarily sign up for a time slot and receive credit. In contrast, students from LU were recruited from a class by collaborating closely with a professor. This variance in recruitment methods stemmed from the absence of SONA systems or other online recruitment methods at Langston University, leaving the current class-based approach or email blasts as the primary options. Another limitation pertained to the testing environment. Students at UCO were able to undertake the computerized task in a quiet setting devoid of distractions, optimizing their ability to concentrate. In contrast, Langston students, originating from a severely underfunded school, had their sole computer lab situated in a bustling building shared by numerous other classes. Initially, the environment was

very noisy, and amidst the commotion in the hallway and outside, some students struggled to maintain focus, potentially impacting their performance on the computerized task. Future research implications suggest replicating this study in another Metropolitan and HBCU area, while accounting for variations in testing environments. This study bears significant potential to disseminate valuable and much-needed insights into society. While this study focused solely on university students, its methodology could be replicated among minority groups in various contexts such as work environments, healthcare settings, and beyond.

Conclusion

In conclusion, addressing discrimination and racial bias requires proactive measures. It's crucial to reflect before acting and communicate authentically. While this study aimed to illuminate racial inequalities within Oklahoma, it's imperative to recognize that similar issues persist across other states. As Maya Angelou aptly stated, *“Prejudice is a burden that confuses the past, threatens the future, and renders the present inaccessible.”* Change is possible, albeit gradual, and with concerted efforts, we can foster a positive shift in our interactions with one another.

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APPENDIX A

This appendix contains the seven different scales used and their questions. The scales employed include the Discrimination Scale, Scenario Scale, Humanitarian/Egalitarian Scale, The Big Five Scale, Right-Wing Authoritarianism Scale, and Bayesian Racism Scale. Further details regarding each scale are provided in earlier paragraphs. The format of survey questions is formatted for psytoolkit.

Survey Questions

l: age

t: textline

q: How old are you?

- {min=18,max=100}

l: gender

t: radio

q: What do you identify as?

- Man

- Woman

- {other,size=50} Prefer to self-describe (please specify)

l: education

t: radio

q: What is the highest level of education you have completed?

- High-School/ GED

- University undergraduate

- University post-graduate

- Doctoral degree

l: religion

t: radio

q: Do you practice a religion, and if so, which one?

- None (atheism)

- Buddhism

- Christianity

- Hinduism

- Islam

- Judaism

- Paganism

- Sikhism
- {other} Other

l: ethnicity

q: How would you best describe your ethnic origin?

t: radio

- Asian or Asian British
- Black or Black British
- Chinese
- Mixed
- White
- {other,size=80} Other or detailed specific ethnic group name

l: employment

t: radio

q: What best describes your employment status?

- Unemployed
- Student Worker

- Part-time employment within organization/company
- Full-time employment within organization/company

l: Discrimination

t: radio

q: How often do you think people of color are discriminated against because of their skin color?

- Not often
- Often
- Slightly often
- Very often

l: Discrimination1

t: radio

q: How often do you think you are discriminated against because of your skin color?

- Very often
- Slightly often
- Often
- Not often

l: Discrimination2

t: radio

q: Which statement best describes you?

- I strongly prefer European American to African Americans
- I moderately prefer European Americans to African Americans
- I slightly prefer European Americans to African Americans
- I like European Americans and African Americans equally
- I slightly prefer African Americans to European Americans
- I moderately prefer African Americans to European Americans
- I strongly prefer African Americans to European Americans

l: Discrimination3

t: radio

q: Rate on a scale of 1-10 how do you feel your warmth towards African Americans are.

- 1 = Low

- 2

- 3

- 4

- 5

- 6

- 7

- 8

- 9

- 10 = High

l: Discrimination4

t: radio

q: Rate on a scale of 1-10 how do you feel your warmth towards European Americans are.

- 1 = Low

- 2

- 3

- 4

- 5

- 6

- 7

- 8

- 9

- 10 = High

l: Scenario1

t: radio

q: Do cab drivers in big cities who occasionally choose to pass by an African American person seeking a cab ride, but then choose to pick up a nearby European American person, have a reasonable justification for doing this?

- yes they do

- no they do not

l: Scenario2

t: radio

q: Air passenger arriving in the United States must pass through a checkpoint where Customs officers may examine contents of baggage in search of contraband such as illegal drugs. Should Customs officers be more ready to examine contents of baggage for an African American passenger than a European American passenger?

- yes

- no

l: Scenario3

t: radio

q: A college admissions officers considers applications from African American and European American applicants with similar credentials and cannot accept all. Should the admissions officers more often accept African American than European American Applicants?

- yes

- no

l: Scenario4

t: radio

q: A corporate personnel officer is evaluating an African American and a European American job applicant who are identically qualified except that the European American has more prior experience in related work. Is there a reasonable justification for this personnel officers hiring the African American applicant rather than the European American?

- yes

- no

l: SDO5

t: radio

q: Some people are just inferior to others?

- I strongly agree

- I moderately agree

- I slightly agree

- I slightly disagree

- I moderately disagree

- I strongly disagree

l: SDO6

t: radio

q: In getting what you want, it is sometimes necessary to use force against other groups?

- I strongly agree

- I moderately agree

- I slightly agree

- I slightly disagree

- I moderately disagree

- I strongly disagree

l: SDO7

t: radio

q: It is ok if some groups have more of a chance in life than others?

- I strongly agree

- I moderately agree

- I slightly agree

- I slightly disagree

- I moderately disagree

- I strongly disagree

l: SDO8

t: radio

q: To get ahead in life it is sometimes necessary to step on others?

- I strongly agree

- I moderately agree

- I slightly agree

- I slightly disagree

- I moderately disagree

- I strongly disagree

l: SDO9

t: radio

q: If certain groups stayed in their place, we would have fewer problems?

- I strongly agree

- I moderately agree

- I slightly agree

- I slightly disagree

- I moderately disagree

- I strongly disagree

l: SDO10

t: radio

q: It is probably a good thing that certain groups are at the top and other groups are at the bottom?

- I strongly agree

- I moderately agree
- I slightly agree
- I slightly disagree
- I moderately disagree
- I strongly disagree

l: SDO11

t: radio

q: Sometimes other groups must be kept in their place?

- I strongly agree
- I moderately agree
- I slightly agree
- I slightly disagree
- I moderately disagree
- I strongly disagree

l: SDO12

t: radio

q: All groups should be given an equal chance in life?

- I strongly agree
- I moderately agree
- I slightly agree
- I slightly disagree
- I moderately disagree
- I strongly disagree

l: BELIEF13

t: radio

q: Justice always prevails over injustice?

- I strongly disagree
- I moderately disagree
- I slightly disagree
- I slightly agree
- I moderately agree
- I strongly agree

1: BELIEF14

t: radio

q: Injustice in all areas of life (e.g., professional, family, politics) are the exception rather than the rule?

- I strongly disagree
- I moderately disagree
- I slightly disagree
- I slightly agree
- I moderately agree
- I strongly agree

1: BELIEF15

t: radio

q: People try to be fair when making important decisions?

- I strongly disagree
- I moderately disagree
- I slightly disagree
- I slightly agree
- I moderately agree

- I strongly agree

l: BELIEF16

t: radio

q: In the long run people will be compensated for injustices?

- I strongly disagree

- I moderately disagree

- I slightly disagree

- I slightly agree

- I moderately agree

- I strongly agree

l: BELIEF17

t: radio

q: People often get what they deserve?

- I strongly disagree

- I moderately disagree

- I slightly disagree

- I slightly agree

- I moderately agree

- I strongly agree

l: BELIEF18

t: radio

q: Basically the world is a fair place?

- I strongly disagree

- I moderately disagree

- I slightly disagree

- I slightly agree

- I moderately agree

- I strongly agree

l: HUMANITARIAN19

t: radio

q: One should be kind to all people?

- I strongly agree

- I moderately agree
- I slightly agree
- I slightly disagree
- I moderately disagree
- I strongly disagree

l: HUMANITARIAN20

t: radio

q: One should find ways to help others?

- I strongly agree
- I moderately agree
- I slightly agree
- I slightly disagree
- I moderately disagree
- I strongly disagree

l: HUMANITARIAN21

t: radio

q: A person should be concerned about the well-being of others?

- I strongly agree
- I moderately agree
- I slightly agree
- I slightly disagree
- I moderately disagree
- I strongly disagree

l: HUMANITARIAN22

t: radio

q: There should be equality for everyone because we are all human beings?

- I strongly agree
- I moderately agree
- I slightly agree
- I slightly disagree
- I moderately disagree
- I strongly disagree

1: HUMANITARIAN23

t: radio

q: Those who are unable to provide for their basic needs should be helped by others?

- I strongly agree

- I moderately agree

- I slightly agree

- I slightly disagree

- I moderately disagree

- I strongly disagree

1: HUMANITARIAN24

t: radio

q: A good society is one in which people feel responsible for one another?

- I strongly agree

- I moderately agree

- I slightly agree

- I slightly disagree

- I moderately disagree

- I strongly disagree

l: HUMANITARIAN24

t: radio

q: Everyone should have an equal chance and an equal say in most things?

- I strongly agree

- I moderately agree

- I slightly agree

- I slightly disagree

- I moderately disagree

- I strongly disagree

l: HUMANITARIAN25

t: radio

q: Acting to protect the rights and interest of other members of the community is a major obligation for all persons?

- I strongly agree

- I moderately agree

- I slightly agree

- I slightly disagree
- I moderately disagree
- I strongly disagree

l: HUMANITARIAN26

t: radio

q: In dealing with criminals the courts should recognize that many are victims of circumstances?

- I strongly agree
- I moderately agree
- I slightly agree
- I slightly disagree
- I moderately disagree
- I strongly disagree

l: HUMANITARIAN27

t: radio

q: Prosperous nations have a moral obligation to share some of their wealth with the poor nations?

- I strongly agree

- I moderately agree
- I slightly agree
- I slightly disagree
- I moderately disagree
- I strongly disagree

l: BIGFIVE28

t: radio

q: I think of myself as someone who is talkative

- I strongly agree
- I moderately agree
- I slightly agree
- I slightly disagree
- I moderately disagree
- I strongly disagree

l: BIGFIVE29

t: radio

q: I think of myself as someone who is reserved?

- I strongly agree

- I moderately agree

- I slightly agree

- I slightly disagree

- I moderately disagree

- I strongly disagree

l: BIGFIVE30

t: radio

q: I think of myself as someone who is full of energy?

- I strongly agree

- I moderately agree

- I slightly agree

- I slightly disagree

- I moderately disagree

- I strongly disagree

l: BIGFIVE31

t: radio

q: I think of myself as someone who generates a lot of enthusiasm?

- I strongly agree

- I moderately agree

- I slightly agree

- I slightly disagree

- I moderately disagree

- I strongly disagree

l: BIGFIVE32

t: radio

q: I think of myself as someone who tends to be quiet?

- I strongly agree

- I moderately agree

- I slightly agree

- I slightly disagree

- I moderately disagree

- I strongly disagree

l: BIGFIVE33

t: radio

q: I think of myself as someone who has an assertive personality?

- I strongly agree

- I moderately agree

- I slightly agree

- I slightly disagree

- I moderately disagree

- I strongly disagree

l: BIGFIVE34

t: radio

q: I think of myself as someone who is sometimes shy?

- I strongly agree

- I moderately agree

- I slightly agree

- I slightly disagree
- I moderately disagree
- I strongly disagree

l: BIGFIVE35

t: radio

q: I think of myself as someone who is outgoing and sociable?

- I strongly agree
- I moderately agree
- I slightly agree
- I slightly disagree
- I moderately disagree
- I strongly disagree

l: BIGFIVE36

t: radio

q: I think of myself as someone who does a thorough job?

- I strongly agree

- I moderately agree
- I slightly agree
- I slightly disagree
- I moderately disagree
- I strongly disagree

l: BIGFIVE37

t: radio

q: I think of myself as someone who can be somewhat careless?

- I strongly agree
- I moderately agree
- I slightly agree
- I slightly disagree
- I moderately disagree
- I strongly disagree

l: BIGFIVE38

t: radio

q: I think of myself as someone who is a reliable worker?

- I strongly agree
- I moderately agree
- I slightly agree
- I slightly disagree
- I moderately disagree
- I strongly disagree

l: BIGFIVE39

t: radio

q: I think of myself as someone who tends to be disorganized?

- I strongly agree
- I moderately agree
- I slightly agree
- I slightly disagree
- I moderately disagree
- I strongly disagree

l: BIGFIVE40

t: radio

q: I think of myself as someone who tends to be lazy?

- I strongly agree

- I moderately agree

- I slightly agree

- I slightly disagree

- I moderately disagree

- I strongly disagree

l: BIGFIVE41

t: radio

q: I think of myself as someone who perseveres until the task is finished?

- I strongly agree

- I moderately agree

- I slightly agree

- I slightly disagree

- I moderately disagree

- I strongly disagree

l: BIGFIVE42

t: radio

q: I think of myself as someone who does things efficiently?

- I strongly agree

- I moderately agree

- I slightly agree

- I slightly disagree

- I moderately disagree

- I strongly disagree

l: BIGFIVE43

t: radio

q: I think of myself as someone who makes plans and follows through with them?

- I strongly agree

- I moderately agree

- I slightly agree

- I slightly disagree

- I moderately disagree

- I strongly disagree

l: BIGFIVE44

t: radio

q: I think of myself as someone who is easily distracted?

- I strongly agree

- I moderately agree

- I slightly agree

- I slightly disagree

- I moderately disagree

- I strongly disagree

l: BIGFIVE45

t: radio

q: I think of myself as someone who is depressed out of the blue?

- I strongly agree

- I moderately agree
- I slightly agree
- I slightly disagree
- I moderately disagree
- I strongly disagree

l: BIGFIVE46

t: radio

q: I think of myself as someone who is relaxed and handles stress well?

- I strongly agree
- I moderately agree
- I slightly agree
- I slightly disagree
- I moderately disagree
- I strongly disagree

l: BIGFIVE47

t: radio

q: I think of myself as someone who can be tense?

- I strongly agree

- I moderately agree

- I slightly agree

- I slightly disagree

- I moderately disagree

- I strongly disagree

l: BIGFIVE48

t: radio

q: I think of myself as someone who worries a lot?

- I strongly agree

- I moderately agree

- I slightly agree

- I slightly disagree

- I moderately disagree

- I strongly disagree

l: BIGFIVE49

t: radio

q: I think of myself as someone who is emotionally stable, not easily upset?

- I strongly agree

- I moderately agree

- I slightly agree

- I slightly disagree

- I moderately disagree

- I strongly disagree

l: BIGFIVE50

t: radio

q: I think of myself as someone who can be moody?

- I strongly agree

- I moderately agree

- I slightly agree

- I slightly disagree

- I moderately disagree

- I strongly disagree

l: BIGFIVE51

t: radio

q: I think of myself as someone who remains calm in tense situations?

- I strongly agree

- I moderately agree

- I slightly agree

- I slightly disagree

- I moderately disagree

- I strongly disagree

l: BIGFIVE52

t: radio

q: I think of myself as someone who gets nervous easily?

- I strongly agree

- I moderately agree

- I slightly agree

- I slightly disagree

- I moderately disagree

- I strongly disagree

l: BIGFIVE53

t: radio

q: I think of myself as someone who tends to find fault with others?

- I strongly agree

- I moderately agree

- I slightly agree

- I slightly disagree

- I moderately disagree

- I strongly disagree

l: BIGFIVE54

t: radio

q: I think of myself as someone who is helpful and unselfish with others?

- I strongly agree

- I moderately agree
- I slightly agree
- I slightly disagree
- I moderately disagree
- I strongly disagree

l: BIGFIVE55

t: radio

q: I think of myself as someone who starts quarrels with others?

- I strongly agree
- I moderately agree
- I slightly agree
- I slightly disagree
- I moderately disagree
- I strongly disagree

l: BIGFIVE56

t: radio

q: I think of myself as someone who has a forgiving nature?

- I strongly agree
- I moderately agree
- I slightly agree
- I slightly disagree
- I moderately disagree
- I strongly disagree

l: BIGFIVE57

t: radio

q: I think of myself as someone who is generally trusting?

- I strongly agree
- I moderately agree
- I slightly agree
- I slightly disagree
- I moderately disagree
- I strongly disagree

l: BIGFIVE58

t: radio

q: I think of myself as someone who can be cold and aloof?

- I strongly agree

- I moderately agree

- I slightly agree

- I slightly disagree

- I moderately disagree

- I strongly disagree

l: BIGFIVE59

t: radio

q: I think of myself as someone who is considerate and kind to almost everyone?

- I strongly agree

- I moderately agree

- I slightly agree

- I slightly disagree

- I moderately disagree

- I strongly disagree

l: BIGFIVE60

t: radio

q: I think of myself as someone who is sometimes rude to others?

- I strongly agree

- I moderately agree

- I slightly agree

- I slightly disagree

- I moderately disagree

- I strongly disagree

l: BIGFIVE61

t: radio

q: I think of myself as someone who like to cooperate with others?

- I strongly agree

- I moderately agree

- I slightly agree

- I slightly disagree

- I moderately disagree

- I strongly disagree

l: BIGFIVE62

t: radio

q: I think of myself as someone who is original and comes up with new ideas?

- I strongly agree

- I moderately agree

- I slightly agree

- I slightly disagree

- I moderately disagree

- I strongly disagree

l: BIGFIVE63

t: radio

q: I think of myself as someone who is curious about many different things?

- I strongly agree

- I moderately agree
- I slightly agree
- I slightly disagree
- I moderately disagree
- I strongly disagree

l: BIGFIVE64

t: radio

q: I think of myself as someone who is ingenious and a deep thinker?

- I strongly agree
- I moderately agree
- I slightly agree
- I slightly disagree
- I moderately disagree
- I strongly disagree

l: BIGFIVE65

t: radio

q: I think of myself as someone who has an active imagination?

- I strongly agree
- I moderately agree
- I slightly agree
- I slightly disagree
- I moderately disagree
- I strongly disagree

l: BIGFIVE65

t: radio

q: I think of myself as someone who is inventive?

- I strongly agree
- I moderately agree
- I slightly agree
- I slightly disagree
- I moderately disagree
- I strongly disagree

l: BIGFIVE66

t: radio

q: I think of myself as someone who values artistic, aesthetic experiences?

- I strongly agree

- I moderately agree

- I slightly agree

- I slightly disagree

- I moderately disagree

- I strongly disagree

l: BIGFIVE67

t: radio

q: I think of myself as someone who likes routine?

- I strongly agree

- I moderately agree

- I slightly agree

- I slightly disagree

- I moderately disagree

- I strongly disagree

l: BIGFIVE68

t: radio

q: I think of myself as someone who likes to reflect, and play with ideas?

- I strongly agree

- I moderately agree

- I slightly agree

- I slightly disagree

- I moderately disagree

- I strongly disagree

l: BIGFIVE69

t: radio

q: I think of myself as someone who has a few artistic interest?

- I strongly agree

- I moderately agree

- I slightly agree

- I slightly disagree

- I moderately disagree

- I strongly disagree

l: BIGFIVE70

t: radio

q: I think of myself as someone who is sophisticated in art, music, or literature?

- I strongly agree

- I moderately agree

- I slightly agree

- I slightly disagree

- I moderately disagree

- I strongly disagree

l: RIGHTWING71

t: radio

q: Our country needs a powerful leader, in order to destroy the radical and immoral currents prevailing in society today?

- I strongly disagree

- I moderately disagree

- I slightly disagree

- I slightly agree

- I moderately agree

- I strongly agree

l: RIGHTWING72

t: radio

q: Our country needs free thinkers who will have the courage to stand up against traditional ways, even if this upsets many people?

- I strongly disagree

- I moderately disagree

- I slightly disagree

- I slightly agree

- I moderately agree

- I strongly agree

l: RIGHTWING73

t: radio

q: The old fashion ways and old fashion values still show the best ways to live?

- I strongly disagree

- I moderately disagree

- I slightly disagree

- I slightly agree

- I moderately agree

- I strongly agree

l: RIGHTWING74

t: radio

q: Our society would be better off if we showed tolerance and understanding for untraditional values and opinions?

- I strongly disagree

- I moderately disagree

- I slightly disagree

- I slightly agree

- I moderately agree

- I strongly agree

1: RIGHTWING75

t: radio

q: God's laws about abortion, pornography, and marriage must be strictly followed before it is too late, violations must be punished?

- I strongly disagree
- I moderately disagree
- I slightly disagree
- I slightly agree
- I moderately agree
- I strongly agree

1: RIGHTWING76

t: radio

q: The society needs to show openness towards people thinking differently rather than a strong leader, the world is not particularly evil or dangerous?

- I strongly disagree
- I moderately disagree
- I slightly disagree
- I slightly agree

- I moderately agree

- I strongly agree

l: RIGHTWING77

t: radio

q: It would be best if newspapers were censored so that people would not be able to get ahold of destructive and disgusting materials?

- I strongly disagree

- I moderately disagree

- I slightly disagree

- I slightly agree

- I moderately agree

- I strongly agree

l: RIGHTWING78

t: radio

q: Many good people challenge the state, criticize the church and ignore "the normal ways of living"?

- I strongly disagree

- I moderately disagree

- I slightly disagree

- I slightly agree

- I moderately agree

- I strongly agree

l: RIGHTWING79

t: radio

q: Our forefathers ought to be honored more for the way they have built our society, at the same time we ought to put an end to those forces destroying it?

- I strongly disagree

- I moderately disagree

- I slightly disagree

- I slightly agree

- I moderately agree

- I strongly agree

l: RIGHTWING80

t: radio

q: People ought to put less attention to the bible and religion, instead they ought to develop their own moral standards?

- I strongly disagree
- I moderately disagree
- I slightly disagree
- I slightly agree
- I moderately agree
- I strongly agree

l: RIGHTWING81

t: radio

q: There are many radical, immoral people trying to ruin things; the society ought to stop them?

- I strongly disagree
- I moderately disagree
- I slightly disagree
- I slightly agree
- I moderately agree
- I strongly agree

l: RIGHTWING82

t: radio

q: It is better to accept bad literature than to censor it?

- I strongly disagree

- I moderately disagree

- I slightly disagree

- I slightly agree

- I moderately agree

- I strongly agree

l: RIGHTWING83

t: radio

q: Facts show that we have to be harder against crime and sexual immorality in order to uphold law and order?

- I strongly disagree

- I moderately disagree

- I slightly disagree

- I slightly agree

- I moderately agree

- I strongly agree

l: RIGHTWING84

t: radio

q: The situation in the society of today would be improved if troublemakers were treated with reason and humanity?

- I strongly disagree

- I moderately disagree

- I slightly disagree

- I slightly agree

- I moderately agree

- I strongly agree

l: RIGHTWING85

t: radio

q: If the society so wants, it is the duty of every true citizen to help eliminate the evil that poisons our country from within?

- I strongly disagree

- I moderately disagree

- I slightly disagree

- I slightly agree

- I moderately agree

- I strongly agree

l: BAYESIAN86

t: radio

q: When the only thing you know about someone is their race, it makes sense to use your knowledge of their racial group to form an impression of them?

- I strongly disagree

- I moderately disagree

- I slightly disagree

- I slightly agree

- I moderately agree

- I strongly agree

l: BAYESIAN87

t: radio

q: I think it is logical and NOT racist to form my impressions of others using knowledge of their racial group's likely values and behaviors?

- I strongly disagree
- I moderately disagree
- I slightly disagree
- I slightly agree
- I moderately agree
- I strongly agree

l: BAYESIAN88

t: radio

q: If a landlord would prefer not to rent an apartment to Hispanics and Blacks because he's afraid they won't make the rent, that's the landlords own business?

- I strongly disagree
- I moderately disagree
- I slightly disagree
- I slightly agree
- I moderately agree
- I strongly agree

l: BAYESIAN89

t: radio

q: When hiring a math tutor, it makes sense to choose someone from an ethnic group associated with high levels of math achievement-- for example, Asians more so than others?

- I strongly disagree
- I moderately disagree
- I slightly disagree
- I slightly agree
- I moderately agree
- I strongly agree

l: BAYESIAN90

t: radio

q: If you want to make accurate predictions, you should use information about a person's ethnic group when deciding if they will perform well?

- I strongly disagree
- I moderately disagree
- I slightly disagree

- I slightly agree
- I moderately agree
- I strongly agree

l: BAYESIAN91

t: radio

q: If it will increase profits, it makes sense to use statistics about the performance of different racial groups?

- I strongly disagree
- I moderately disagree
- I slightly disagree
- I slightly agree
- I moderately agree
- I strongly agree

l: BAYESIAN92

t: radio

q: When forming an impression of someone, you should consider the general tendencies of the ethnic group to which they belong?

- I strongly disagree
- I moderately disagree
- I slightly disagree
- I slightly agree
- I moderately agree
- I strongly agree

l: BAYESIAN93

t: radio

q: It should be against airport policy to allow airport security to search passenger based on their ethnic group-- for example, Arabs more so than others?

- I strongly disagree
- I moderately disagree
- I slightly disagree
- I slightly agree
- I moderately agree
- I strongly agree

l: BAYESIAN94

t: radio

q: It is wrong to avoid someone because members of their racial group are more likely to commit violent crimes?

- I strongly disagree

- I moderately disagree

- I slightly disagree

- I slightly agree

- I moderately agree

- I strongly agree

l: BAYESIAN95

t: radio

q: Law enforcement officers should pay particular attention to those social groups more heavily involved in crime, even if this means focusing on members of particular ethnic groups?

- I strongly disagree

- I moderately disagree

- I slightly disagree

- I slightly agree

- I moderately agree

- I strongly agree

l: BAYESIAN96

t: radio

q: I would be happier with local law enforcement if they would focus on securing neighborhoods where members of aggressive racial groups live?

- I strongly disagree

- I moderately disagree

- I slightly disagree

- I slightly agree

- I moderately agree

- I strongly agree

l: BAYESIAN97

t: radio

q: Law enforcement officer should act as if members of all racial groups are equally likely to commit crimes?

- I strongly disagree

- I moderately disagree

- I slightly disagree

- I slightly agree

- I moderately agree

- I strongly agree

l: BAYESIAN98

t: radio

q: If your personal safety is at stake, it is sensible to avoid members of ethnic groups known to behave more aggressively?

- I strongly disagree

- I moderately disagree

- I slightly disagree

- I slightly agree

- I moderately agree

- I strongly agree

l: BAYESIAN99

t: radio

q: I would like to hear that government agencies are particularly monitoring people from groups that have been linked to terrorism, like Muslims and Arabs?

- I strongly disagree
- I moderately disagree
- I slightly disagree
- I slightly agree
- I moderately agree
- I strongly agree

l: BAYESIAN100

t: radio

q: It is reasonable for restaurants to refuse delivery service to areas inhabited by ethnic groups thought to be more violent?

- I strongly disagree
- I moderately disagree
- I slightly disagree
- I slightly agree
- I moderately agree
- I strongly agree

APPENDIX B

Stimulus Pictures

This section will show the stimuli used in the study. All materials are derived from the Project Implicit website under the race IAT section.

Instructions

For the next task, you will see two different categories at the top of the screen, and either a word or a picture in the center of the screen.

Put your left finger on the 'E' key, and your right finger on the 'I' key

You will press the 'E' key when the word or picture matches the category on the left, and the 'I' key when the word or picture in the center matches the category on the right.

Here are the words and images, and the categories they apply to:

Category	Items
Good	Joy, Happy, Laughter, Love, Pleasure, Peace, Wonderful, Glorious
Bad	Evil, Agony, Awful, Nasty, Terrible, Horrible, Failure, Hurt
African Americans	
European Americans	

There are seven parts to this task. The instructions change for each part, so you will need to pay attention!

Press the SPACE bar to continue.



Press 'E' for

European American

or

Good

Press 'I' for

African American

or

Bad

Part 3 of 7

Put a left-hand finger on the 'E' key and a right-hand finger on the 'I' key.

Press the 'E' key for items in the category **European American** or **Good**.
 Press the 'I' key for items in the category **African American** or **Bad**.
 Each Item belongs to only one category.

If you make a mistake, a red **X** will appear. Press the correct key to continue. **Go as fast as you can** while also being accurate.

Press the SPACE bar when you are ready to start

Press 'E' for
European American
or
Good

Press 'I' for
African American
or
Bad

Part 4 of 7

Put a left-hand finger on the 'E' key and a right-hand finger on the 'I' key.

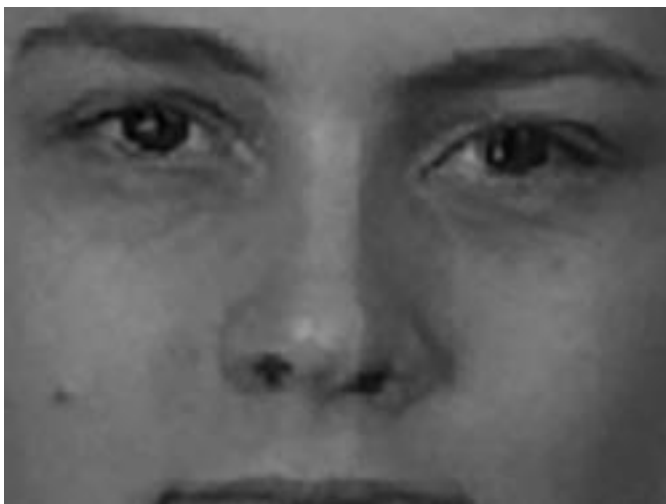
Press the 'E' key for items in the category **European American** or **Good**.

Press the 'I' key for items in the category **African American** or **Bad**.

If you make a mistake, a red **X** will appear. Press the correct key to continue. **Go as fast as you can** while also being accurate.

Press the SPACE bar when you are ready to start







Press 'E' for
European American

Press 'I' for
African American

Part 1 of 7

Put a left-hand finger on the 'E' key and a right-hand finger on the 'I' key.

Press the 'E' key for items in the category **European American**.

Press the 'I' key for items in the category **African American**.

If you make a mistake, a red **X** will appear. Press the correct key to continue. **Go as fast as you can** while also being accurate.

Press the SPACE bar when you are ready to start

Press 'E' for
Good

Press 'I' for
Bad

Part 2 of 7

Put a left-hand finger on the 'E' key and a right-hand finger on the 'I' key.

Press the 'E' key for items in the category **Good**.

Press the 'I' key for items in the category **Bad**.

If you make a mistake, a red **X** will appear. Press the correct key to continue. **Go as fast as you can** while also being accurate.

Press the SPACE bar when you are ready to start







Press 'E' for
African American

Press 'I' for
European American

Part 5 of 7

Notice the categories have switched sides!

Put a left-hand finger on the 'E' key and a right-hand finger on the 'I' key.

Press the 'E' key for items in the category [African American](#).
Press the 'I' key for items in the category [European American](#).
Each item belongs to only one category.

If you make a mistake, a red **X** will appear. Press the correct key to continue. **Go as fast as you can** while also being accurate.

Press the SPACE bar when you are ready to start

Press 'E' for
African American
or
Good

Press 'I' for
European American
or
Bad

Part 6 of 7

Put a left-hand finger on the 'E' key and a right-hand finger on the 'I' key.

Press the 'E' key for items in the category African American or Good.

Press the 'I' key for items in the category European American or Bad.

Each item belongs to only one category.

If you make a mistake, a red X will appear. Press the correct key to continue. **Go as fast as you can** while also being accurate.

Press the SPACE bar when you are ready to start

Press 'E' for
African American
or
Good

Press 'I' for
European American
or
Bad

Part 7 of 7

Put a left-hand finger on the 'E' key and a right-hand finger on the 'I' key.

Press the 'E' key for items in the category African American or Good.

Press the 'I' key for items in the category European American or Bad.

Each item belongs to only one category.

If you make a mistake, a red X will appear. Press the correct key to continue. **Go as fast as you can** while also being accurate.

Press the SPACE bar when you are ready to start

Instructions

For the next task, you will see two different categories at the top of the screen, and either a word or a picture in the center of the screen.

Put your left finger on the 'E' key, and your right finger on the 'I' key

You will press the 'E' key when the word or picture matches the category on the left, and the 'I' key when the word or picture in the center matches the category on the right.

Here are the words and images, and the categories they apply to:

Category	Items
Good	Joy, Happy, Laughter, Love, Pleasure, Peace, Wonderful, Glorious
Bad	Evil, Agony, Awful, Nasty, Terrible, Horrible, Failure, Hurt
African Americans	
European Americans	

There are seven parts to this task. The instructions change for each part, so you will need to pay attention!

Press the SPACE bar to continue.

APPENDIX C

Syntax

This section includes all of the syntax used in the data analysis. This syntax will work on SPSS. There are notes above the syntax used to describe the basis for running the specific analysis.

* Encoding: UTF-8.

*THIS IS LOOKING FOR A SIG DIFFERENCE IN RT BETWEEN UCO AND LANGSTON.

*RESULTS SHOWN THAT THERE IS INDEED A SIG DIFFERENCE BETWEEN THE TWO SCHOOLS.

*RESULTS ALSO SHOW LANGSTON HAVE SLOWER RT THAN UCO.

DATASET ACTIVATE DataSet1.

T-TEST GROUPS=School_Attended(0 1)

/MISSING=ANALYSIS

/VARIABLES=RT

/ES DISPLAY(TRUE)

/CRITERIA=CI(.95).

*THIS IS LOOKING FOR A SIGNIFICANT DIFFERENCE IN D SCORES BETWEEN THE TWO SCHOOLS.

*RESULTS SHOW THAT THERE IS A SIGNIFCANT DIFFERENCE IN D SCORES BETWEEN THE TWO SCHOOLS.

*RESULTS ALSO SHOW LANGSTON HAS A POSITIVE D SCORE COMPARED TO UCO, IN TERMS OF GREENWALD POSITIVE D SCORES INDICATE INCONSISTENT PAIRING.

*LANGSTON HAVING A POSITIVE D SCORE INDICATED THEY VIEW BLACK PEOPLE AS GOOD.

*UCO HAD NEGATIVE D SCORE WHICH IS CONSISTENT PAIRING SO THEY VIEWED WHITE PEOPLE AS GOOD.

DATASET ACTIVATE DataSet2.

T-TEST GROUPS=School_ID(1 2)

/MISSING=ANALYSIS

```
/VARIABLES=D_Score_Toral  
/ES DISPLAY(TRUE)  
/CRITERIA=CI(.95).
```

*THIS IS LOOKING FOR A SIGNIFICANT DIFFERENCE FROM TWO INDEPENDENT VARIABLES WITH ONE DEPENDENT VARIABLE.

*IT IS ALSO LOOKING AT INTERACTIONS BETWEEN TWO INDEPENDENT VARIABLES AND THE DEPENDENT VARIABLE.

*ACCORDING TO THIS DATA SET THERE IS AT LEAST ONE PREDICTOR THAT IS STATISTICALLY SIGNIFICANT TO THE DEPENDENT VARIABLE.

*THERE IS ALSO A SIGNIFICANT OVERALL MEAN WHEN THE PREDICTORS ARE AT ZERO.

*THERE IS NOT A SIGNIFICANT DIFFERENCE BETWEEN SCHOOL AND ETHNICITY ON THE DEPENDENT VARIABLE.

DATASET ACTIVATE DataSet1.

UNIANOVA D_Score_Toral BY School_ID ETHNICITY

```
/METHOD=SSTYPE(3)  
/INTERCEPT=INCLUDE  
/POSTHOC=ETHNICITY(BONFERRONI)  
/PLOT=PROFILE(School_ID*ETHNICITY) TYPE=BAR ERRORBAR=CI  
MEANREFERENCE=NO  
/EMMEANS=TABLES(School_ID*ETHNICITY) COMPARE(School_ID)  
ADJ(BONFERRONI)  
/EMMEANS=TABLES(School_ID*ETHNICITY) COMPARE(ETHNICITY)  
ADJ(BONFERRONI)  
/CRITERIA=ALPHA(0.05)  
/DESIGN=School_ID ETHNICITY School_ID*ETHNICITY.
```

*THIS IS LOOKING FOR OUTLIERS AND NORMALITY BETWEEN RACE AND D SCORE.

*THIS SHOWS NO EXTREME NUMBERS WITHIN LANGSTON BUT THERE IS ONE EXTREME SCORE FOR UCO THAT NEEDS TO BE LOOKED AT FURTHER.

DATASET ACTIVATE DataSet1.

```
EXAMINE VARIABLES=D_Score_Toral  
/PLOT BOXPLOT HISTOGRAM NPLOT  
/COMPARE GROUPS  
/STATISTICS DESCRIPTIVES EXTREME  
/CINTERVAL 95  
/MISSING LISTWISE  
/NOTOTAL.
```

```
EXAMINE VARIABLES=D_Score_Toral BY School_ID New_Race  
/PLOT BOXPLOT HISTOGRAM SPREADLEVEL(1)  
/COMPARE GROUPS  
/STATISTICS EXTREME  
/MISSING LISTWISE  
/NOTOTAL.
```

*THIS WAS THE FIRST DESCRIPTIVES I RAN ON THE SURVEY BEFORE IT WAS RECODED INTO THE SAME VARIABLE.

```
DATASET ACTIVATE DataSet1.
```

```
DESCRIPTIVES VARIABLES=AGE GENDER EDUCATION RELIGION ETHNICITY  
EMPLOYMENT DISCRIMINATION PERCEIVED1
```

```
PERCEIVED2 PERCEIVED3 PERCEIVED4 SCENARIO1 SCENARIO2 SCENARIO3  
SCENARIO4 PERCEIVED5 PERCEIVED6
```

```
PERCEIVED87 PERCEIVED88 PERCEIVED89 PERCEIVED90 PERCEIVED91  
PERCEIVED92 PERCEIVED93 PERCEIVED94
```

```
PERCEIVED95 PERCEIVED96 PERCEIVED97 PERCEIVED98 PERCEIVED99  
PERCEIVED100 PERCEIVED7 PERCEIVED41
```

```
PERCEIVED42 PERCEIVED43 PERCEIVED44 PERCEIVED45 PERCEIVED46  
PERCEIVED47 PERCEIVED48 PERCEIVED49
```

```
PERCEIVED50 PERCEIVED51 PERCEIVED52 PERCEIVED53 PERCEIVED54  
PERCEIVED55 PERCEIVED56 PERCEIVED57
```

```
PERCEIVED58 PERCEIVED59 PERCEIVED60 PERCEIVED61 PERCEIVED62  
PERCEIVED63 PERCEIVED64 PERCEIVED65
```

```
PERCEIVED66 PERCEIVED67 PERCEIVED68 PERCEIVED69 PERCEIVED70  
PERCEIVED71 PERCEIVED72 PERCEIVED73
```

PERCEIVED74 PERCEIVED75 PERCEIVED76 PERCEIVED77 PERCEIVED78
PERCEIVED79 PERCEIVED80 PERCEIVED81

PERCEIVED82 PERCEIVED83 PERCEIVED84 PERCEIVED85 PERCEIVED86
PERCEIVED8 PERCEIVED9 PERCEIVED10

PERCEIVED11 PERCEIVED12 PERCEIVED13 PERCEIVED14 PERCEIVED15
PERCEIVED16 PERCEIVED17 PERCEIVED18

PERCEIVED19 PERCEIVED20 PERCEIVED21 PERCEIVED22 PERCEIVED23
PERCEIVED24 PERCEIVED25 PERCEIVED26

PERCEIVED27 PERCEIVED28 PERCEIVED29 PERCEIVED30 PERCEIVED31
PERCEIVED32 PERCEIVED33 PERCEIVED34

PERCEIVED35 PERCEIVED36 PERCEIVED37 PERCEIVED38 PERCEIVED39
PERCEIVED40 PERCEIVED101 PERCEIVED102

PERCEIVED103

/STATISTICS=MEAN SUM STDDEV MIN MAX KURTOSIS SKEWNESS.

*THIS IS RECODING MY VARIABLES ON THE LIKERT SCALE SO THAT THEY ALL
HAVE THE SAME VALUES. THIS KEEPS THE DATA NEAT SO THAT I AM ABLE TO RUN
ANALYSIS SMOOTHLY.

DATASET ACTIVATE DataSet1.

RECODE PERCEIVED13 PERCEIVED14 PERCEIVED15 PERCEIVED16 PERCEIVED17
PERCEIVED18 PERCEIVED74

PERCEIVED75 PERCEIVED76 PERCEIVED77 PERCEIVED78 PERCEIVED79
PERCEIVED80 PERCEIVED81 PERCEIVED82

PERCEIVED83 PERCEIVED84 PERCEIVED85 PERCEIVED86 PERCEIVED87
PERCEIVED88 PERCEIVED89 PERCEIVED90

PERCEIVED91 PERCEIVED92 PERCEIVED93 PERCEIVED94 PERCEIVED95
PERCEIVED96 PERCEIVED97 PERCEIVED98

PERCEIVED99 PERCEIVED100 PERCEIVED101 PERCEIVED102 PERCEIVED103 (6=1)
(5=2) (4=3) (1=6) (2=5) (3=4).

EXECUTE.

*THIS IS THE SECOND DESCRIPTIVE I RAN ON THE DATA WITH THE NEW
RECODED VARIABLES.

DESCRIPTIVES VARIABLES=AGE GENDER EDUCATION RELIGION New_Race
ETHNICITY EMPLOYMENT DISCRIMINATION

PERCEIVED1 PERCEIVED2 PERCEIVED3 PERCEIVED4 SCENARIO1 SCENARIO2
SCENARIO3 SCENARIO4 PERCEIVED5

PERCEIVED6 PERCEIVED7 PERCEIVED8 PERCEIVED9 PERCEIVED10
PERCEIVED11 PERCEIVED12 PERCEIVED13

PERCEIVED14 PERCEIVED15 PERCEIVED16 PERCEIVED17 PERCEIVED18
PERCEIVED19 PERCEIVED20 PERCEIVED21

PERCEIVED22 PERCEIVED23 PERCEIVED24 PERCEIVED25 PERCEIVED26
PERCEIVED27 PERCEIVED28 PERCEIVED29

PERCEIVED30 PERCEIVED31 PERCEIVED32 PERCEIVED33 PERCEIVED34
PERCEIVED35 PERCEIVED36 PERCEIVED37

PERCEIVED38 PERCEIVED39 PERCEIVED40 PERCEIVED41 PERCEIVED42
PERCEIVED43 PERCEIVED44 PERCEIVED45

PERCEIVED46 PERCEIVED47 PERCEIVED48 PERCEIVED49 PERCEIVED50
PERCEIVED51 PERCEIVED52 PERCEIVED53

PERCEIVED54 PERCEIVED55 PERCEIVED56 PERCEIVED57 PERCEIVED58
PERCEIVED59 PERCEIVED60 PERCEIVED61

PERCEIVED62 PERCEIVED63 PERCEIVED64 PERCEIVED65 PERCEIVED66
PERCEIVED67 PERCEIVED68 PERCEIVED69

PERCEIVED70 PERCEIVED71 PERCEIVED72 PERCEIVED73 PERCEIVED74
PERCEIVED75 PERCEIVED76 PERCEIVED77

PERCEIVED78 PERCEIVED79 PERCEIVED80 PERCEIVED81 PERCEIVED82
PERCEIVED83 PERCEIVED84 PERCEIVED85

PERCEIVED86 PERCEIVED87 PERCEIVED88 PERCEIVED89 PERCEIVED90
PERCEIVED91 PERCEIVED92 PERCEIVED93

PERCEIVED94 PERCEIVED95 PERCEIVED96 PERCEIVED97 PERCEIVED98
PERCEIVED99 PERCEIVED100 PERCEIVED101

PERCEIVED102 PERCEIVED103

/STATISTICS=MEAN SUM STDDEV MIN MAX.

*THIS IS A PEARSON CORRELATION THAT IS RUN TO LOOK FOR POSSIBLE
SIGNIFICANCE BETWEEN SURVEY QUESTIONS AND D SCORES.

*THE NONPAR WAS NOT SUCCESSFULLY RAN BECAUSE TOO MANY VARIABLES
WERE ADDED.

CORRELATIONS

```
/VARIABLES=D_Score_Total DISCRIMINATION PERCEIVED1 PERCEIVED2  
PERCEIVED3 PERCEIVED4 SCENARIO1  
  
SCENARIO2 SCENARIO3 SCENARIO4 PERCEIVED5 PERCEIVED6 PERCEIVED7  
PERCEIVED8 PERCEIVED9 PERCEIVED10  
  
PERCEIVED11 PERCEIVED12 PERCEIVED13 PERCEIVED14 PERCEIVED15  
PERCEIVED16 PERCEIVED17 PERCEIVED18  
  
PERCEIVED19 PERCEIVED20 PERCEIVED21 PERCEIVED22 PERCEIVED23  
PERCEIVED24 PERCEIVED25 PERCEIVED26  
  
PERCEIVED27 PERCEIVED28 PERCEIVED29 PERCEIVED30 PERCEIVED31  
PERCEIVED32 PERCEIVED33 PERCEIVED34  
  
PERCEIVED35 PERCEIVED36 PERCEIVED37 PERCEIVED38 PERCEIVED39  
PERCEIVED40 PERCEIVED41 PERCEIVED42  
  
PERCEIVED43 PERCEIVED44 PERCEIVED45 PERCEIVED46 PERCEIVED47  
PERCEIVED48 PERCEIVED49 PERCEIVED50  
  
PERCEIVED51 PERCEIVED52 PERCEIVED53 PERCEIVED54 PERCEIVED55  
PERCEIVED56 PERCEIVED57 PERCEIVED58  
  
PERCEIVED59 PERCEIVED60 PERCEIVED61 PERCEIVED62 PERCEIVED63  
PERCEIVED64 PERCEIVED65 PERCEIVED66  
  
PERCEIVED67 PERCEIVED68 PERCEIVED69 PERCEIVED70 PERCEIVED71  
PERCEIVED72 PERCEIVED73 PERCEIVED74  
  
PERCEIVED75 PERCEIVED76 PERCEIVED77 PERCEIVED78 PERCEIVED79  
PERCEIVED80 PERCEIVED81 PERCEIVED82  
  
PERCEIVED83 PERCEIVED84 PERCEIVED85 PERCEIVED86 PERCEIVED87  
PERCEIVED88 PERCEIVED89 PERCEIVED90  
  
PERCEIVED91 PERCEIVED92 PERCEIVED93 PERCEIVED94 PERCEIVED95  
PERCEIVED96 PERCEIVED97 PERCEIVED98  
  
PERCEIVED99 PERCEIVED100 PERCEIVED101 PERCEIVED102 PERCEIVED103  
  
/PRINT=TWOTAIL NOSIG FULL  
  
/STATISTICS DESCRIPTIVES /CI CILEVEL(95)  
  
/MISSING=PAIRWISE.  
  
NONPAR CORR  
  
/VARIABLES=D_Score_Total DISCRIMINATION PERCEIVED1 PERCEIVED2  
PERCEIVED3 PERCEIVED4 SCENARIO1
```

SCENARIO2 SCENARIO3 SCENARIO4 PERCEIVED5 PERCEIVED6 PERCEIVED7
PERCEIVED8 PERCEIVED9 PERCEIVED10

PERCEIVED11 PERCEIVED12 PERCEIVED13 PERCEIVED14 PERCEIVED15
PERCEIVED16 PERCEIVED17 PERCEIVED18

PERCEIVED19 PERCEIVED20 PERCEIVED21 PERCEIVED22 PERCEIVED23
PERCEIVED24 PERCEIVED25 PERCEIVED26

PERCEIVED27 PERCEIVED28 PERCEIVED29 PERCEIVED30 PERCEIVED31
PERCEIVED32 PERCEIVED33 PERCEIVED34

PERCEIVED35 PERCEIVED36 PERCEIVED37 PERCEIVED38 PERCEIVED39
PERCEIVED40 PERCEIVED41 PERCEIVED42

PERCEIVED43 PERCEIVED44 PERCEIVED45 PERCEIVED46 PERCEIVED47
PERCEIVED48 PERCEIVED49 PERCEIVED50

PERCEIVED51 PERCEIVED52 PERCEIVED53 PERCEIVED54 PERCEIVED55
PERCEIVED56 PERCEIVED57 PERCEIVED58

PERCEIVED59 PERCEIVED60 PERCEIVED61 PERCEIVED62 PERCEIVED63
PERCEIVED64 PERCEIVED65 PERCEIVED66

PERCEIVED67 PERCEIVED68 PERCEIVED69 PERCEIVED70 PERCEIVED71
PERCEIVED72 PERCEIVED73 PERCEIVED74

PERCEIVED75 PERCEIVED76 PERCEIVED77 PERCEIVED78 PERCEIVED79
PERCEIVED80 PERCEIVED81 PERCEIVED82

PERCEIVED83 PERCEIVED84 PERCEIVED85 PERCEIVED86 PERCEIVED87
PERCEIVED88 PERCEIVED89 PERCEIVED90

PERCEIVED91 PERCEIVED92 PERCEIVED93 PERCEIVED94 PERCEIVED95
PERCEIVED96 PERCEIVED97 PERCEIVED98

PERCEIVED99 PERCEIVED100 PERCEIVED101 PERCEIVED102 PERCEIVED103

/PRINT=SPEARMAN TWOTAIL NOSIG FULL

/CI METHOD(FHP) CILEVEL(95)

/MISSING=PAIRWISE.

COMPUTE RACE_TOTAL=SUM(RACE,RACE1,RACE2,RACE3,RACE4).

EXECUTE.

COMPUTE

BAYES_TOTAL=SUM(BAYES83,BAYES84,BAYES85,BAYES86,BAYES87,BAYES88,BAYES89,BAYES90,BAYES91,

BAYES92,BAYES93,BAYES94,BAYES95,BAYES96,BAYES97,BAYES98,BAYES99,BAYES100,BAYES101,BAYES102,BAYES103)

EXECUTE.

CORRELATIONS

/VARIABLES=D_Score_Total RACE RACE1 RACE2 RACE3 RACE4 SCENARIO1
SCENARIO2 SCENARIO3 SCENARIO4

SDO5 SDO6 SDO7 SDO8 SDO9 SDO10 SDO11 SDO12 BELIEF13 BELIEF14 BELIEF15
BELIEF16 BELIEF17 BELIEF18

HUMANITARIAN19 HUMANITARIAN20 HUMANITARIAN21 HUMANITARIAN22
HUMANITARIAN23 HUMANITARIAN24

HUMANITARIAN25 HUMANITARIAN26 HUMANITARIAN27 HUMANITARIAN28
PERCEIVED29 PERCEIVED30 PERCEIVED31

PERCEIVED32 PERCEIVED33 PERCEIVED34 PERCEIVED35 PERCEIVED36
PERCEIVED37 PERCEIVED38 PERCEIVED39

PERCEIVED40 PERCEIVED41 PERCEIVED42 PERCEIVED43 PERCEIVED44
PERCEIVED45 PERCEIVED46 PERCEIVED47

PERCEIVED48 PERCEIVED49 PERCEIVED50 PERCEIVED51 PERCEIVED52
PERCEIVED53 PERCEIVED54 PERCEIVED55

PERCEIVED56 PERCEIVED57 PERCEIVED58 PERCEIVED59 PERCEIVED60
PERCEIVED61 PERCEIVED62 PERCEIVED63

PERCEIVED64 PERCEIVED65 PERCEIVED66 PERCEIVED67 RIGHTWING68
RIGHTWING69 RIGHTWING70 RIGHTWING71

RIGHTWING72 RIGHTWING73 RIGHTWING74 RIGHTWING75 RIGHTWING76
RIGHTWING77 RIGHTWING78 RIGHTWING79

RIGHTWING80 RIGHTWING81 RIGHTWING82 BAYES83 BAYES84 BAYES85
BAYES86 BAYES87 BAYES88 BAYES89 BAYES90

BAYES91 BAYES92 BAYES93 BAYES94 BAYES95 BAYES96 BAYES97 BAYES98
BAYES99 BAYES100 BAYES101 BAYES102

BAYES103

/PRINT=TWOTAIL NOSIG FULL

/STATISTICS DESCRIPTIVES /CI CILEVEL(95)

/MISSING=PAIRWISE.

NONPAR CORR

/VARIABLES=D_Score_Total RACE RACE1 RACE2 RACE3 RACE4 SCENARIO1
SCENARIO2 SCENARIO3 SCENARIO4

SDO5 SDO6 SDO7 SDO8 SDO9 SDO10 SDO11 SDO12 BELIEF13 BELIEF14 BELIEF15
BELIEF16 BELIEF17 BELIEF18

HUMANITARIAN19 HUMANITARIAN20 HUMANITARIAN21 HUMANITARIAN22
HUMANITARIAN23 HUMANITARIAN24

HUMANITARIAN25 HUMANITARIAN26 HUMANITARIAN27 HUMANITARIAN28
PERCEIVED29 PERCEIVED30 PERCEIVED31

PERCEIVED32 PERCEIVED33 PERCEIVED34 PERCEIVED35 PERCEIVED36
PERCEIVED37 PERCEIVED38 PERCEIVED39

PERCEIVED40 PERCEIVED41 PERCEIVED42 PERCEIVED43 PERCEIVED44
PERCEIVED45 PERCEIVED46 PERCEIVED47

PERCEIVED48 PERCEIVED49 PERCEIVED50 PERCEIVED51 PERCEIVED52
PERCEIVED53 PERCEIVED54 PERCEIVED55

PERCEIVED56 PERCEIVED57 PERCEIVED58 PERCEIVED59 PERCEIVED60
PERCEIVED61 PERCEIVED62 PERCEIVED63

PERCEIVED64 PERCEIVED65 PERCEIVED66 PERCEIVED67 RIGHTWING68
RIGHTWING69 RIGHTWING70 RIGHTWING71

RIGHTWING72 RIGHTWING73 RIGHTWING74 RIGHTWING75 RIGHTWING76
RIGHTWING77 RIGHTWING78 RIGHTWING79

RIGHTWING80 RIGHTWING81 RIGHTWING82 BAYES83 BAYES84 BAYES85
BAYES86 BAYES87 BAYES88 BAYES89 BAYES90

BAYES91 BAYES92 BAYES93 BAYES94 BAYES95 BAYES96 BAYES97 BAYES98
BAYES99 BAYES100 BAYES101 BAYES102

BAYES103

/PRINT=SPEARMAN TWOTAIL NOSIG FULL

/CI METHOD(FHP) CILEVEL(95)

/MISSING=PAIRWISE.

*THIS IS COMPUTING A NEW SCORE THAT SUMS UP TO TOTAL OVERAL SCORE FOR
THE SCALES USED IN THE STUDY.

COMPUTE

Discrimination_Total=SUM(DISCRIMINATION,DISCRIMINATION1,DISCRIMINATION2,DISCRIMINATION3,

DISCRIMINATION4).

EXECUTE.

COMPUTE Scenario_Total=SUM(SCENARIO1,SCENARIO2,SCENARIO3,SCENARIO4).

EXECUTE.

COMPUTE SDO_Total=SUM(SDO5,SDO6,SDO7,SDO8,SDO9,SDO10,SDO11,SDO12).

EXECUTE.

COMPUTE

Belief_Total=SUM(BELIEF13,BELIEF14,BELIEF15,BELIEF16,BELIEF17,BELIEF18).

EXECUTE.

COMPUTE

Humanitarian_Total=SUM(HUMANITARIAN19,HUMANITARIAN20,HUMANITARIAN21,HUMANITARIAN22,

HUMANITARIAN23,HUMANITARIAN24,HUMANITARIAN25,HUMANITARIAN26,HUMANITARIAN27,HUMANITARIAN28).

EXECUTE.

COMPUTE

BigFive_Total=SUM(BIGFIVE29,BIGFIVE30,BIGFIVE31,BIGFIVE32,BIGFIVE33,BIGFIVE34,BIGFIVE35,

BIGFIVE36,BIGFIVE37,BIGFIVE38,BIGFIVE39,BIGFIVE40,BIGFIVE41,BIGFIVE42,BIGFIVE43,BIGFIVE44,BIGFIVE45,

BIGFIVE46,BIGFIVE47,BIGFIVE48,BIGFIVE49,BIGFIVE50,BIGFIVE51,BIGFIVE52,BIGFIVE53,BIGFIVE54,BIGFIVE55,

BIGFIVE56,BIGFIVE57,BIGFIVE58,BIGFIVE59,BIGFIVE60,BIGFIVE61,BIGFIVE62,BIGFIVE63,BIGFIVE64,BIGFIVE65,

BIGFIVE66,BIGFIVE67,BIGFIVE68,BIGFIVE69,BIGFIVE70,BIGFIVE71,BIGFIVE72).

EXECUTE.

COMPUTE

RightWing_Total=SUM(RIGHTWING73,RIGHTWING74,RIGHTWING75,RIGHTWING76,RIGHTWING77,RIGHTWING78,

RIGHTWING79,RIGHTWING80,RIGHTWING81,RIGHTWING82,RIGHTWING83,RIGHTWING84,RIGHTWING85,RIGHTWING86,

RIGHTWING87).

EXECUTE.

COMPUTE

Bayes_Total=SUM(BAYES88,BAYES89,BAYES90,BAYES91,BAYES92,BAYES93,BAYES94,BAYES95,BAYES96,

BAYES97,BAYES98,BAYES99,BAYES100,BAYES101,BAYES102).

EXECUTE.

*THIS IS LOOKING FOR A SIGNIFICANT CORRELATION BETWEEN SURVEY QUESTIONS AND D SCORES BETWEEN THE PARTICIPANTS.

*THIS IS SHOWING A SIG CORRELATION BETWEEN THE BAYES, BELIEF, AND HUMANITARIAN SCALES AND D SCORES. THE OTHER SCALES ARENT SHOWING SIGNIFICANCE.

CORRELATIONS

/VARIABLES=D_Score_Total Discrimination_Total Scenario_Total SDO_Total Belief_Total

Humanitarian_Total BigFive_Total RightWing_Total Bayes_Total

/PRINT=TWOTAIL NOSIG FULL

/STATISTICS DESCRIPTIVES

/MISSING=PAIRWISE.

NONPAR CORR

/VARIABLES=D_Score_Total Discrimination_Total Scenario_Total SDO_Total Belief_Total

Humanitarian_Total BigFive_Total RightWing_Total Bayes_Total

/PRINT=SPEARMAN TWOTAIL NOSIG FULL

/MISSING=PAIRWISE.

*THIS IS GETTING THE MEAN FOR THE D SCORES COLLECTED FROM THE TWO SCHOOLS.

*TRANFORM COMPUTE>MEAN

DATASET ACTIVATE DataSet1.

COMPUTE Dscore_Mean=MEAN(D_Score_Total).

EXECUTE.

*THIS IS RUNNING DESCRIPTIVES EXPLORE ON THE VAIRBALES THAT CHECKS FOR OUTLIERS AS WELL AS GETTING A PRETTY GRAPH.

EXAMINE VARIABLES=Dscore_Mean D_Score_Total BY School_ID New_Race

/PLOT BOXPLOT HISTOGRAM NPLOT

/COMPARE GROUPS

/STATISTICS DESCRIPTIVES EXTREME

/CINTERVAL 95

/MISSING LISTWISE

/NOTOTAL.

*RE-RAN A INDEPENDENT SAMPLES T TEST WITH THE CORRECT SPELLING OF D SCORES TOTAL.

DATASET ACTIVATE DataSet1.

T-TEST GROUPS=School_ID(1 2)

/MISSING=ANALYSIS

/VARIABLES=D_Score_Total

/ES DISPLAY(TRUE)

/CRITERIA=CI(.95).

DESCRIPTIVES VARIABLES=New_Race D_Score_Total School_ID

/STATISTICS=MEAN SUM STDDEV MIN MAX SEMEAN KURTOSIS SKEWNESS.

EXAMINE VARIABLES=D_Score_Total BY School_ID New_Race

/PLOT BOXPLOT STEMLEAF HISTOGRAM NPLOT

/COMPARE GROUPS

/STATISTICS DESCRIPTIVES EXTREME

/CINTERVAL 95

```
/MISSING LISTWISE
```

```
/NOTOTAL.
```

*THIS SHOWS IF THERE IS A SIGNIFICANT INTERACTION BETWEEN THE SCHOOL THE PARTICIPANT WENT TO AND RACE WHICH IS BROKEN UP INTO 3 CATEGORIES

DATASET ACTIVATE DataSet1.

UNIANOVA Dscore_Mean BY School_ID New_Race

```
/METHOD=SSTYPE(3)
```

```
/INTERCEPT=INCLUDE
```

```
/SAVE=PRED
```

```
/POSTHOC=New_Race(BONFERRONI)
```

```
/PLOT=PROFILE(School_ID*New_Race) TYPE=BAR ERRORBAR=CI  
MEANREFERENCE=NO
```

```
/EMMEANS=TABLES(OVERALL)
```

```
/EMMEANS=TABLES(School_ID)
```

```
/EMMEANS=TABLES(New_Race)
```

```
/EMMEANS=TABLES(School_ID*New_Race) COMPARE(School_ID)  
ADJ(BONFERRONI)
```

```
/EMMEANS=TABLES(School_ID*New_Race) COMPARE(New_Race)  
ADJ(BONFERRONI)
```

```
/PRINT ETASQ HOMOGENEITY OPOWER
```

```
/CRITERIA=ALPHA(.05)
```

```
/DESIGN=School_ID New_Race School_ID*New_Race.
```