PROTOTYPICALITY AND INGROUP PERCEPTIONS: THE ROLE OF
IDENTITY DENIAL

by

Leidy D. Trujillo

A Thesis

Submitted to the Faculty of Purdue University
In Partial Fulfillment of the Requirements for the degree of

Master of Science

Department of Psychology at IUPUI
Indianapolis, Indiana
December 2021
THE PURDUE UNIVERSITY GRADUATE SCHOOL
STATEMENT OF COMMITTEE APPROVAL

Dr. Leslie Ashburn-Nardo, Chair
Department of Psychology

Dr. Evava Pietri
Department of Psychology

Dr. Margaret S. Stockdale
Department of Psychology

Approved by:
Dr. Stephen L. Boehm
Dedicated to my mother, por todo.
ACKNOWLEDGMENTS

It takes a village, and in this case, it also took some extra time. Thank you to every single person who was patient with me, listened to my doubts and reassured me of my capabilities. Each of you has had a significant impact in my life forever.

I would first like to thank my advisor and chair, Professor Leslie Ashburn-Nardo, whose expertise was invaluable in formulating the research questions and methodology for this project. Your insightful feedback challenged me intellectually. Your kindness, patience, ongoing support, and encouragement made me feel like I could accomplish anything I set my mind to. I will be forever grateful of your support for my academic curiosity.

I would like to acknowledge my committee members, Professor Peggy Stockdale and Professor Eva Pietri for their enlightening feedback and support. Your unique expertise greatly enriched my research question, and literally taught me the skills needed to complete this project.

I particularly want to single out my forever friend, Deidre, for her constant encouragement and praise. I would not have been able to reach the finish line without you by my side as the loudest cheerleader. I will be forever grateful to this program for allowing me to meet you, and I look forward to being your cheerleader in return.

I’d like to thank my family for their wise counsel and sympathetic ear. To my mother, who gave me the opportunity to reach the American dream, and supported my endeavors to advance in an education system (and a language) she is entirely unfamiliar with. Finally, I could not have completed this thesis without the support of my fiancé, Andrew, who held my hand, and dried my tears every single step of the way. Thank you for always making me feel intelligent, capable, valued, and supported.
# TABLE OF CONTENTS

LIST OF TABLES ........................................................................................................................... 7
LIST OF FIGURES ......................................................................................................................... 8
ABSTRACT ....................................................................................................................................... 9
INTRODUCTION ............................................................................................................................ 10
  Discrimination within the Hispanic/Latinx Community ............................................................. 10
  Prototypicality ............................................................................................................................. 12
  Evidence for Phenotypicality ....................................................................................................... 12
  Colorism ..................................................................................................................................... 14
  Hypodescent ............................................................................................................................... 15
  Identity Denial ............................................................................................................................ 16
  Overview of present research ................................................................................................. 20
METHODS ...................................................................................................................................... 21
  Participants ................................................................................................................................. 21
  Design ....................................................................................................................................... 21
  Procedure ................................................................................................................................... 21
  Measures ................................................................................................................................... 22
    Identity Denial ......................................................................................................................... 22
    Warmth and Competence. ....................................................................................................... 22
    Stereotype Content ................................................................................................................ 22
    Likability ................................................................................................................................ 23
    Demographics .......................................................................................................................... 23
RESULTS ........................................................................................................................................ 23
  Preliminary results .................................................................................................................... 23
  Tests of Hypotheses .................................................................................................................. 24
  Mediation ................................................................................................................................... 25
  Exploratory Moderator .............................................................................................................. 26
DISCUSSION .................................................................................................................................. 27
  Implications ............................................................................................................................... 27
  Limitations and Future Directions .......................................................................................... 28
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conclusion</td>
<td>30</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>32</td>
</tr>
<tr>
<td>APPENDIX A. TABLES</td>
<td>37</td>
</tr>
<tr>
<td>APPENDIX B. FIGURES</td>
<td>41</td>
</tr>
<tr>
<td>APPENDIX C. PROPOSED MODEL</td>
<td>44</td>
</tr>
<tr>
<td>APPENDIX D. SAMPLE MATERIALS</td>
<td>45</td>
</tr>
</tbody>
</table>
LIST OF TABLES

Table 1 Percent of the population identifying as Black (Afro-Latinx) in various Central and South American countries ................................................................. 37
Table 2 Participant Demographics ................................................................. 38
Table 3 One-way ANOVA ........................................................................... 39
Table 4 Correlation Matrix for Key Variables .............................................. 40
LIST OF FIGURES

Figure 1 Main effect of condition on perceptions of warmth .................................................. 41
Figure 2 Main effect of condition on associations with White-exclusive stereotypes .......... 42
Figure 3 Main effect of condition on associations with African-American exclusive stereotypes ................................................................................................................................................................................................. 43
Figure 4 Proposed Mediation Model .......................................................................................... 44
Figure 5 Proposed Moderation Model .......................................................................................... 44
ABSTRACT

Hispanics are the fastest growing minority group within the United States, and the present work studies the existence of intragroup biases within this community due to violations of prototypicality and the existence of colorism. The present work also explores identity denial as a possible mediator of the relationship between target prototypicality and negative social consequences. Specially, when presented with lighter-skin or darker-skin targets, Hispanic/Latinx individuals are more likely to see them as less likable, and less warm when compared to a prototypical target. There was no evidence to support that identity denial mediated this relationship. Additionally, this research extends previous literature on the content of stereotypes faced by individuals of differing skin colors and finds conflicting results using an intragroup sample. Unexpected results suggest prototypicality may trump phenotypic variations within this unique population.
INTRODUCTION

Hispanics are one of the fastest growing minority groups in the United States, showing a 43% population increase between 2000 and 2010 (U.S. Census Bureau, 2010). Approximately half of the Hispanic population identified as White, yet 1.3 million Hispanics in the U.S. (or 3% of the Hispanic population) identified their race as Black. Afro-Latinx are “individual[s] of Hispanic or Latin American origins, who also have African ancestry” (Bryc, et al., 2015). According to the 2015 Survey of Hispanics by Pew Research Center (2016), up to 24% of Hispanics living in the United States could be Afro-Latinx. Research outside of psychology has explored the negative consequences arising from the intersection of race (i.e., Black) and ethnicity (i.e., Latinx) for Afro-Latinx individuals, revealing that these individuals can experience poor health, more depressive symptoms, and lower educational attainments compared to other Latinx individuals (see Cuevas, Dawson, & Williams 2016; Chavez-Duenas, Adames, & Organista, 2014; Ramos, Jaccard, & Guilamo-Ramos, 2003). However, there is a dearth of empirical literature studying this population and the mechanisms that explain the negative social consequences they face. The present research explores possible biases present within this population by using a solely Hispanic/Latinx sample. Specifically, this work is concerned with whether or not less-prototypical ingroup members face identity denial by other ingroup members; in other words, whether or not their Latinx group membership will be questioned due to “not looking the part.” Lastly, this work will assess some potential social consequences that stem from violation of group prototypes, such as perceived warmth, competence, likability, and stereotype content.

Discrimination within the Hispanic/Latinx Community

The year 2020 was the first time that Mexican citizens of African descent were able to select “Black” as an option on the national census. In Mexico, some preliminary survey data demonstrate that approximately 1.38 million citizens consider themselves Black or Afro-Mexican (LAPOP, 2017). Mexico was one of two Central and South American countries that entirely failed to recognize this category and the citizens that fall into it. Chile is the remaining country not to include Black as a category. Although rarely discussed in the media,
Hispanic/Latinx individuals of African descent make up a significant part of the population of various countries. For example, in Puerto Rico and the Dominican Republic, over 12% of the population identifies as Afro-Latinx. Table 1, (available in Appendix A) shows the percentage of national populations identifying as Black in several Central and South American countries according to the latest census statistics available.

A study released in 2017 by the Mexican National Institute of Statistics (INEGI) used a color palette and asked respondents to report their skin color. Mexicans of darker skin placed lower economically and academically when compared to citizens of lighter skin. For example, Mexicans of “very dark skin” achieved 6 years of education on average, compared to 10-12 years for their lighter skin counterparts. Discrepancies in education can eventually lead to worse jobs and create a permanent lower class comprised of darker skin Mexican citizens. To say that discrimination instead occurs due to class or education is to ignore that the disparities in both are perpetuated by a system intrinsically based on individuals’ appearance.

Similar work has been done within Hispanic/Latinx individuals in the United States, finding similar results. In 2003, social science researchers found that Latinos who identified as White earned about $5000 more per year than those who identified as Black, and about $2500 more per year than those identifying as ‘some other race’ (Fears 2003). Additionally, Latinos who identified as ‘White” also had lower unemployment and poverty rates than Black Latinos (Fears 2003). Elaborating on White Hispanic/Latinx individuals specifically, research has found that individuals of lighter skin tones also face disadvantages. For these individuals, their light skin may be viewed as a disadvantage with regard to ethnic legitimacy or authenticity. In many ethnic communities, people with lighter skin often report feeling left out (Brunsma & Rockquemore, 2001).

Although there are countless anecdotes of Hispanic/Latinx individuals of both lighter and darker skin experiencing discrimination from other ingroup members due to their non-prototypical appearance (Gregorius, 2016), to date, no empirical work documents the phenomenon, known as identity denial, as it occurs within this population. Identity denial, as defined by Cheryan and Monin (2005) refers to “the process through which an individual who does not match the prototype of an ingroup sees that identity called into question or unrecognized by fellow group members.” The present work proposes that non-prototypical ingroup members such as Hispanic/Latinx individuals of lighter or darker skin, will experience
identity denial to a greater extent compared to more prototypical ingroup members due to their deviation from prototypicality.

**Prototypicality**

The broad concept of prototypicality emerges from self-categorization theory and refers to the degree to which individuals match a set of characteristics strongly associated with the group (Turner, 1987). The more individuals fit these characteristics, the more prototypical they are. According to Hogg and Reid (2006), prototypes tend to be shared and reinforced by ingroup members such that they reflect an established social reality of what group members should be. In order to establish group norms, these prototypes are therefore used to categorize people and view them through the lens of the relevant prototype and how well they embody it (Moscovici, 1976). According to prototypicality research, individuals who diverge from the prototypical concept of the ingroup are more likely to be judged by other ingroup members or fail to be recognized as members of the group altogether. This idea relates to identity denial in that members of a particular group, although strongly identified with that group, may still be denied their membership if they do not fit this pre-established norm.

**Evidence for Phenotypicality**

One of the most salient ways through which group members can violate prototypicality is by surface-level characteristics such as physical appearance and looking different from the standard. Previous work has demonstrated that people judge others on the basis of physical appearance, as it provides evolutionarily valuable information about them (McArthur & Baron, 1983; Zebrowitz, 1996; Zebrowitz & Collins, 1997). Reliance on physical appearance to make judgments about people results in individuals who look similar to one another being perceived in similar terms, while those who deviate in appearance are attributed more extreme qualities (Zebrowitz, 1996).

Maddox (2004) describes how racial group members whose appearance most closely resembles the “typical” category member are more likely to be perceived as belonging to the group while others are not recognized as group members—a phenomenon known as the racial phenotypicality bias. The primacy of the phenotypicality bias revolves around the combination
of 1) an *Afrocentric bias*, where the presence of Afrocentric features contributes to social perceptions and individuals who possess these features are seen through the broad lens of Black American stereotypes (Blair, Judd, Sadler & Jenkins, 2002), and 2) a *skin-tone bias*, which is the tendency to perceive members of a racial category based on the lightness or darkness of their skin tone (Maddox & Gray, 2002). A study by Blair and colleagues (2002) found evidence of an Afrocentric bias by presenting participants with descriptions of a target and varying the degree to which the target was described using stereotypic African American characteristics. Participants were then presented with various photographs of male faces and asked to indicate how much each face looked like it matched the presented description. Consistent with an Afrocentric bias, targets described as being from Detroit or having received a basketball scholarship were more associated with faces that possessed more Afrocentric features (e.g., coarse hair, bigger lips, etc.). This supports the idea that faces who possess these features tend to be judged as more likely to have attributes stereotypic of African Americans. This may be particularly consequential for Afro-Latinx individuals who possess more Afrocentric traits because even if they do not identify with the broader “African American” identity, their features may lead to them being seen through this lens, inevitably denying them their ethnic identity as Hispanic/Latinx.

Further evidence of the racial phenotypicality bias is the existence of skin-tone bias, which often benefits the lighter end of the spectrum. This bias has been found to be present within African American and Hispanic/Latinx communities alike. Maddox & Gray (2002) found evidence that lighter-skin Blacks were associated with more positive and counter-stereotypic traits (i.e., educated, superior, wealthy) while darker-skin Blacks were associated with negative and stereotypic traits (i.e., aggressive, smelly, criminal). Skin-tone biases have also been documented within the Hispanic/Latinx community, with stronger preference for light skin and prejudice against dark skin in Latin America (Wade, 1997; Winant, 1994), and in the United States to a lesser extent (Graham, 1990; Oboler, 1995; Shorris, 1992). Research by Uhlman and colleagues, Dasgupta et al., (2002) found that both light-skin American Hispanics (“Blancos”) and darker-skinned American Hispanics (“Morenos”) demonstrated a strong implicit preference for the lighter complexioned White (“Blanco”) subgroup over the darker complexioned “Moreno” subgroup. Their study also specifically addressed the skin-tone bias present in Latin/South America by including a Chilean sample, which exhibited an explicit preference for
Blancos over Morenos. A review by Maddox in 2004 expanded on the positive associations attached to lighter skin. These positive associations have very real and tangible consequences, such as creating a socioeconomic status gap between darker and lighter skinned African Americans (Keith & Herring, 1991). The 2017 INEGI survey conducted in Mexico revealed a similar pattern of academic and economic stratification on the basis on skin color, demonstrating that this phenomenon is still taking place 15 years later.

This skin-tone bias model (Maddox & Gray, 2002) suggests the existence of phenotype-based subcategories. This subtyping of group members based on how well they confirm or disconfirm stereotypes has been linked to broader perceptions of typicality, where less phenotypical targets are more likely to be subcategorized (Maurer, Park, & Rothbart, 1995; Park, Wolsko, & Judd, 2001). The present research will explore the extent to which subcategorizations of Afro-Latinx individuals due to their violations of phenotypicality affect their experiences of identity denial, and, in turn, other social and organizational outcomes.

**Colorism**

Stemming from a racial phenotypicality bias (Maddox, 2004), colorism refers to a process through which individuals discriminate against others based on the lightness or darkness of their skin tone. Specifically, colorism is characterized by granting more privileges to individuals of lighter skin than to their darker skin counterparts (Hunter, 2005). Colorism research within a Hispanic/Latinx sample has consistently shown that those of lighter skin tones attain higher incomes, more prestigious occupations, and experience less discrimination compared to their darker skinned counterparts (Espino & Franz, 2002; Klonoff & Landrine, 2000).

Ronald Hall (1994, 1995, 1997) suggests that the existence of a ‘bleaching syndrome’ leads to the internalization of a White aesthetic ideal. This ideal can be held by African Americans, Latinos, and Asian Americans alike, thus allowing them to value light skin tones over darker ones. Within Latin American popular culture, the media serves to reinforce this bleaching syndrome by showcasing a majority of actors who look white and possess Anglican features, unless they are the portrayed as maids or other lower-level occupations, where they can then have darker skin (Jones, 2004). Over time, this deep-rooted ideal manifests itself in various forms of discrimination against those who violate it and thus reinforces the existence of
socioeconomic stratification. It is therefore important to further explore the manifestations of colorism within this fast-growing minority group as it can have lasting psychological and economic consequences.

Lastly, a call for research specifically called for I/O psychologists to advance research on colorism due to the unique implications colorism has that are “capable of cutting across categories such as race, religion, gender, age, sexuality, nationality, and occupation” (Marira & Mitra, 2013). Answering this call, the present work will flesh out the nuances of colorism within the Hispanic/Latinx community by exposing a Hispanic/Latinx sample to Hispanic/Latinx targets varying in skin color and examining if the consequences faced differ according to a color hierarchy.

**Hypodescent**

There is strong reason to believe that Afro-Latinx individuals will be perceived as Black rather than as Hispanic/Latinx. The categorization of multiple race individuals has been historically governed by the rule of hypodescent (Hickman, 1997). The “one drop” rule has more notably been applied to Black and White biracial individuals to claim that because they have “one drop” of “Black blood” in them, they are automatically categorized as Black. Later work by Ho and colleagues (2011) extended this hypodescent to the social categorization of Black-White and Asian-White biracials and determined the extent to which decisions about their minority status are made following the rule of hypodescent. Results demonstrated that when targets were half-White and half-minority (Asian or Black, respectively), the Asian and Black labels were accepted more often than the White label. In other words, people were more likely to categorize multi-race faces as the minority rather than majority group.

Work by Peery and Bodenhausen (2008) further reinforced this idea by presenting participants with racially ambiguous faces and asking them to rapidly categorize them as either Black/not Black, or White/not White. Results showed that when a racially ambiguous target is described as having both Black and White parents, it is significantly more likely that the target will be categorized as Black. Only when participants were given explicit information about the presented target’s multiracial ancestry, as well as given the time to engage in thoughtful deliberation, were they more likely to use the term “multiracial” to categorize the presented face.
Given that individuals of both much lighter, or much darker skin that the Hispanic/Latinx prototype would qualify for this rule, it is of interest to explore how categorization functions within this population.

**Identity Denial**

Additionally, the present work will address identity denial, a term coined by Cheryan and Monin (2005) to describe instances in which individuals who do not fit the prototype of their ingroup are denied their identity as a part of that group. Their research revealed that Asian Americans are constantly subjected to questions like “where are you really from?” because they do not fit the prototype people imagine when thinking “American.” Asian Americans in this research were denied their American identity regardless of how strongly they identified as American themselves.

To test this, Cheryan and Monin (2005) conducted several studies to investigate how identity denial manifests for multiple minority groups. They demonstrated that White Americans found European features as more “American” than Asian features, but that Asian Americans do not consider themselves as any less American than White Americans. Additionally, they found that Asian Americans and Hispanic Americans reported many instances of identity denial on a daily basis, with self-reports showing that they are often asked questions that question their ability to speak English and their nationality. Finally, they explored how Asian Americans react to having their American identity denied, and found that they do so by engaging in more identity assertion (i.e., displaying more knowledge of American pop culture) and declaring their engagement in American practices.

Overall, Cheryan and Monin (2005) established that individuals who deviate from the prototype of “American”, typically pictured as Caucasian, can experience identity denial to a greater extent. In this case, Asian Americans have their American identity questioned daily regardless of how strongly they identify and value it themselves. Although not directly focused on identifying how Hispanic/Latinx Americans or African-Americans experience identity denial, Cheryan and Monin (2005) revealed that Hispanic/Latinx Americans are asked similar questions as Asian Americans, as well as being perceived as being “from another country”.

While most previous work has looked at identity denial from out-group members, some research suggests that it can come from ingroup members as well. Ingroup identity denial, as
conceptualized by Johnson and colleagues (2013; 2014), refers to violating ingroup prototypes based on stereotypes and expected social connections. Specifically, because Blacks are stereotyped to be lower socio-economic status and to have mostly Black friends, those who are wealthy and who have mostly White friends are violating ingroup prototypes. Johnson and Kaiser (2013) were interested in whether socioeconomic status (SES) would impact perceived identity as well as ingroup member’s empathy when a presented target experienced racism. They presented participants with a Black target and manipulated whether this target experienced ambiguous or blatant racism, as well as whether they were low versus high SES. They found that wealthy Blacks were perceived to be weakly racially identified relative to lower SES Blacks. Wealthy Blacks were found to be non-prototypical, due to deviating from the “poor Blacks” stereotype, and thus were seen as less strongly identified with their race. Consistent with identity denial, wealthy Blacks were denied their racial identity, and thus even when they were thought to have experienced blatant racism, other ingroup members felt less empathy and were less likely to rally around them in support. These results could be due to the fact that wealthy Blacks are seen as more privileged than more prototypic low SES group members, and as being possibly immune to experiences of racism. However, this can have very real consequences given that racism can still affect these individuals regardless of their economic status.

Later work by Johnson and Ashburn-Nardo (2014) examined perceptions of African American targets with more White friends than Black friends in their social network. Identity denial was assessed by asking participants to complete a commonly used measure of racial identity from the target’s perspective, asking how much they thought the target identified with their race. This study found that Black targets with more White friends in their social network were perceived to have weaker racial identities. Johnson and Ashburn-Nardo (2014) also considered empathy as a function of social network composition and found lower empathy for Black targets with more White friends. Black targets who included more White friends in their close social groups appeared to be violating these pre-determined group norms and were then deemed “black sheep” by ingroup members. Consistent with previous work on identity denial, more prototypical Hispanic/Latinx ingroup members should see Afro-Latinx individuals as violating group prototype and will be more likely to deny them their Hispanic/Latinx identity:
Hypothesis 1: Hispanic/Latinx individuals will perceive light-skin Latinx and Afro-Latinx targets as more weakly identified with their Hispanic/Latinx identity, as compared to a prototypical target.

Beyond perceptions of group-membership, the present work addresses the social consequences of identity denial for light-skin or Afro-Latinx individuals. Previous research has found that Hispanic/Latinx individuals in general are rated lower on the competence and warmth dimensions of the stereotype content model (Cuddy, Fiske, & Glick, 2008) but these same stereotypes have not been looked at within the population in order differentiate between Hispanics/Latinx of lighter or darker skin. The present work explores how ingroup members perceive these individuals on dimensions of warmth and competence. Previous work has established that perceptions of warmth affect the likability of the target (Fiske, Xu, Cuddy, & Glick, 1999). The current work will also assess how violations of prototypicality affect liking of the presented target. I hypothesize that as the less prototypic lighter skin or darker skin Afro-Latinx targets will be seen as less warm and less likable than the prototypical Hispanic/Latinx target.

Hypothesis 2: Both the lighter skin, and darker skin Latinx targets will be rated lower in warmth, competence and likability, compared to the prototypical target.

Hypothesis 3: Identity denial will mediate the relationships between target prototypicality and warmth, competence, and likability.

Recently, a study by Zou & Cheryan (2017) looked at differences in the stereotype content of Latinx and African-American populations. Their work found mixed results that African Americans and Latinx sometimes experienced similar forms of discrimination, but other times experienced mutually exclusive stereotypes. For example, African-Americans tended to experience discrimination due to their perceived inferiority, while Latinx tended to experience discrimination due to perceived foreignness. This work produced a detailed list of unique stereotypes associated with Latinx and African-Americans. For example, African-American exclusive stereotypes include aggressive, athletic, and confident; while Latinx exclusive stereotypes include hardworking, having accents, and being unassimilated. By comparison,
White-exclusive stereotype examples include: privileged, ambitious, rich. The current research hopes to extend this work by exploring how stereotype content manifests within the population, specifically how it applies to ingroup members varying in skin color. This work aims to understand whether a less prototypical light skin targets will be associated with more White exclusive stereotypes, or if the less prototypical darker skin target will be associated with more African American-exclusive stereotypes, given their phenotypicality violations. This novel component would shed light on how stereotypes manifest in an intragroup context.

*Hypothesis 4a:* Light-skin targets will be associated with more White exclusive stereotypes, compared to the prototypical target.

*Hypothesis 4b:* Dark-skin targets will be associated with more African American exclusive stereotypes, compared to the prototypical target.

Lastly, the current work will look at potential moderators of this phenomenon on an exploratory basis. Given their own phenotypic prototypicality, it is possible that Latinx participants who do not identify as Afro-Latinx will be more likely to deny the identity of less prototypic targets. Therefore, one would expect more prototypical group members to be more likely to engage in the identity denial of less-prototypical targets. I anticipate that the degree to which participants themselves are prototypical (or not) will moderate the degree to which they engage in identity denial of the Afro-Latinx target. Specifically, we are interested in exploring if more prototypical participants will engage in identity denial to a greater extent.

*Exploratory:* Participant’s own prototypicality will moderate the relationship between target prototypicality and identity denial.
Overview of present research

This research will explore how Hispanics/Latinx of African descent, as well as Hispanics/Latinx individuals possessing lighter skin are denied their “Hispanic/Latinx” identity because they do not fit the prototype embraced by ingroup members. These studies will provide foundational evidence for the existence of identity denial within the Hispanic/Latinx ingroup. Additionally, this work contributes to the limited empirical research by offering insight as to how ingroup members categorize each other based on perceptions of prototypicality.
METHODS

Participants

Participants (N = 415) were recruited from Amazon’s Mechanical Turk marketplace. Only those who self-identified as Hispanic/Latinx were eligible to participate in this study. A TurkPrime Panel Service was used to allow for the recruitment of participants who had previously identified as Hispanic/Latinx in prescreening. Participants received $1.50 for compensation.

Design

A within-subjects design with one independent variable with three categories (Target prototypicality: Afro-Latinx vs. Prototypical vs. light-skin Latinx) was used. In addition, an exploratory moderator, participant skin type, was examined.

Procedure

Participants completed an online survey developed using Qualtrics. The initial survey screen provided participants with a study information sheet (per IRB requirements) detailing the purpose, procedure, instructions, and contact information for the study. Study information materials explicitly highlight the confidential nature of participant responses. Instructions informed the participants that they would be seeing a profile of a person in order to form a first impression of them. Participants were asked to remember the information included in this profile so they could answer questions about this person at a later point in the survey. All participants were presented with identical profiles of an male that outlined the man’s name, age, hometown, ethnicity, and a fun fact. These profiles were created to represent an average male and did not include any unique characteristics. Along with the profile, participants viewed an image of a Hispanic/Latinx man that was ostensibly described in the profile. These images were obtained from the Chicago Face Database (Ma et al. 2017), and were matched on variables such as likability, attractiveness, masculinity and prototypicality to ensure equivalence between them.
The independent variable of target prototypicality was manipulated through different photographs of the man described in the profile. Participants were randomly assigned to one of three conditions, where the Hispanic/Latinx man in the image was (1) phenotypically light-skinned, (2) prototypical as Latinx, or (3) Afro-Latinx. In order for results to be generalizable and not due to a particular image, each condition had two separate images that were counterbalanced across participants. These images were matched on many important characteristics like age, likability, and attractiveness. After reading the profile, participants were asked to respond to measures assessing their reactions to the presented target. Lastly, participants were asked to provide demographic information.

Measures

Identity Denial. Participants were asked the extent to which the presented target’s Latinx identity is of importance to them. This identity denial scale has been adapted from the Collective Self-Esteem scale (Luhtanen, & Crocker, 1992) and used by Johnson and colleagues (2013; 2014) and shown to be reliable, $\alpha = .71$. Participants answered 4 items, rated on a 7-point scale from 1 (strongly disagree), to 7 (strongly agree). A sample item includes “overall, being Hispanic/Latinx has very little to do with how this person feels about themselves.”

Warmth and Competence. Participants were asked to report their perceptions of the competence and warmth of the presented targets in order to assess the social penalties of violating prototypicality (adapted from Fiske, Cuddy, Glick, & Xu, 2002). For the perceived competence subscale, participants rated the targets on the following items: competent, confident, independent, competitive, and intelligent. For the warmth subscale, participants rated the presented targets based on the following items: tolerant, warm, good natured, and sincere. Warmth and competence are typically included in similar empirical works and were very reliable measures with warmth, $\alpha = .81$, and competence, $\alpha = .71$.

Stereotype Content. To assess the stereotype content of Latinx and Afro-Latinx individuals, participants were presented with a list of stereotypes and asked to rate the extent to which the presented items exemplify the target. Some items pertained to African American-exclusive stereotypes including: aggressive, athletic, and confident. Others reflected Latinx-exclusive stereotypes such as: hardworking, having accents, and being unassimilated. Lastly,
White-exclusive stereotypes were included, such as: courteous, ambitious, and privileged (Zou & Cheryan, 2017). These items were rated on a seven-point scale (1 = not at all, to 7 = extremely), and demonstrated reliabilities ranging from $\alpha = .63 - .86$.

**Likability.** Participants were asked about the likability of the presented target based on five-item questions adapted from Abrams et al. (2000) and Pattyn and Bracke (2013). Sample items included: “How much would you like this person?” “How much do you think you could work together?” “How willing would you be to make friends with this person?” and “How much would you have in common with this person?” These items were rated on a seven-point scale (1 = not at all, to 7 = extremely). Reliability for this scale was $\alpha = 0.85$.

**Demographics.** At the end of the study, participants provided demographic information including gender, age, ethnicity, race, country of origin, and education. A measure of skin color was added to assess participant prototypicality. The Fitzpatrick Skin Type inventory was used, which is a dermatological tool used to establish skin type. Participants were also asked if they identified as Afro-Latinx themselves. The survey also included two open-ended responses to allow the researchers to evaluate the quality of responses and check for potential bots (i.e., automated responses). All materials can be found in Appendix D.

**Results**

**Preliminary results**

Data were cleaned and prepared prior to conducting tests of hypotheses. Items for key variables of interest were recoded so that higher scores represented higher levels of the construct being measured. Items one, and three of the Perceived Racial Identification Scale were reverse-scored. No other items in any of the other scales were reverse-scored. Furthermore, we screened the entire sample (N = 450) to confirm that participants observed the experimental manipulation (i.e., they passed the manipulation checks) and remained paying attention throughout the course of the survey (i.e., they passed the attention checks). The manipulation check explicitly asked participants to report the ethnicity of the person they had seen, and needed to identify them as Hispanic/Latinx in order to pass. An initial screening of open-ended responses revealed that 16 participants included unintelligible responses or copy-pasted direct study instructions instead of
writing their own responses; these participants were excluded from the final sample. To establish the Hispanic/Latinx ingroup, only participants who selected “Hispanic/Latinx” as their race were included (N=277); further analyses include only these participants. The four scales measuring the constructs of interest all showed adequate reliability (all αs > .70; see Table 4). Table 4 shows the descriptive statistics and correlations, between all variables.

To test for the equivalence of manipulation across the two different images within each condition, independent sample t-tests were conducted comparing each image within conditions on all measures, and no significant differences were found between them. For the two light-skin stimulus images used, there were no significant differences found on any of the measures of interest, all p > .468. For the two dark-skin stimulus images used, no significant differences were found, all p > .158. For the two prototypical stimulus images used, no significant differences were found, all p > .314. Therefore, we assumed both images were equivalent and combined them to create the three conditions: prototypical, light-skin, and dark-skin Latinx.

**Tests of Hypotheses**

For Hypotheses 1 and 2, a one-way between subjects ANOVA was conducted to test for the effect of target prototypicality (prototypical vs. light-skin vs. dark-skin) on the dependent variables: identity denial (perceived racial identity), warmth, competence, likability, and group specific stereotypes (Latinx, African-American, and White). Pertaining to Hypothesis 1, results demonstrated a main effect of target prototypicality on perceived racial identity, $F(2,273) = 5.83$, $p=0.003$. Post hoc comparisons using the Tukey’s LSD test indicated that participants viewed the prototypical target ($M = 15.29$, $SD = 3.21$) as significantly more identified with their race than the light-skin target ($M = 13.75$, $SD = 3.08$). However, the dark-skin target ($M = 14.42$, $SD = 3.16$) did not significantly differ from the prototypical and light-skin conditions. Taken together, these results partially support Hypothesis 1, in that prototypical targets are seen as more strongly associated with their Latinx identity than less prototypical targets, specifically those with light skin. (See Appendix B).

For Hypothesis 2, results indicated no significant differences between conditions on perceptions of competence or likability, suggesting that for this particular sample, target prototypicality did not affect perceptions of competence or likability. However, there was a significant main effect of target on perceptions of warmth, $F(2, 274) = 8.22$, $p < .001$. Tukey’s
HSD post hoc test revealed that the prototypical target ($M = 15.05, SD = 2.99$) was perceived as significantly warmer than both the light-skin target ($M = 13.38, SD = 3.00$) and the dark-skin target ($M = 13.80, SD = 3.03$), but the light- and dark-skin targets were not significantly different from each other. This partially supports Hypothesis 2 in that the prototypical target was perceived as significantly warmer than both the light-skin and dark-skin targets. However, it was unexpected to discover that the light-skin and dark-skin targets did not differ from each other on warmth, competence, or likability. (See Appendix B).

Hypotheses 4a examined whether the light-skin target would be associated with more White-exclusive stereotypes, when compared to the dark-skin target, and Hypothesis 4b examined whether the dark-skin target would be associated with more African-American exclusive stereotypes, compared to the prototypical targets. When testing for Hypothesis 4, there was a main effect of condition on associations with White-exclusive stereotypes approaching significance, $F (2, 274) = 2.92, p = 0.056$. Additionally, there was also a significant main effect of condition on associations with African-American exclusive stereotypes, $F (2, 274) = 4.32, p < 0.01$. Relative to those in the prototypical condition, participants who saw a light-skin or dark-skin non-prototypical target were more likely to associate these targets with more White-exclusive or African-American exclusive stereotypes, therefore Hypotheses 4a and 4b were only partially supported. The unexpected finding here is that the light-skin and dark-skin targets were both equally likely to be associated with either White-Exclusive or African-American exclusive stereotypes, when compared to the prototypical target.

**Mediation**

Hypotheses 3 examined whether there was an indirect effect of condition on perceptions of warmth, competence, likability through identity denial. To test for this, I dummy coded the target condition with the prototypical target as the reference group (i.e. prototypical = 0, light skin = 1, dark-skin = 1). I ran a simple mediation model using Hayes (2018) PROCESS macro Model 4, and 10,000 bootstrap samples. There were no significant indirect effects of condition on warmth (i.e. the confidence interval crossed 0) for the prototypical condition versus light-skin condition (-.11; 95% CI: [-.33, .06]) or the prototypical condition versus dark-skin condition (-.06; 95% CI: [-.22, .04]) via identity denial. There were also no significant indirect effects of
condition on competence via identity denial for the prototypical condition versus light-skin condition (-.08; 95% CI: [-.27, .07]) or the prototypical condition versus dark-skin condition (-.04; 95% CI: [-.19, .04]). Lastly, there were no significant effects of condition on likability for the prototypical condition versus light-skin condition (.01; 95% CI: [-.29, .28]) or the prototypical condition versus dark-skin condition (.004; 95% CI: [-.18, .19]) via identity denial. Therefore, Hypothesis 3 was not supported as identity denial did not mediate the relationship between conditions and perceptions of warmth, competence or likability.

**Exploratory Moderator**

On an exploratory basis, I wanted to know whether participant’s prototypicality would moderate the effects of condition on the dependent variables via identity denial. To test for this, I dummy coded the target condition with the prototypical target as the reference group (i.e. prototypical = 0, light skin = 1, dark-skin = 1). I ran a moderation model using Hayes (2018) PROCESS macro Model 1, and 10,000 bootstrap samples, with skin type moderating the effect of condition on perceived racial identity. There was no significant interaction effect for prototypical condition versus light-skin condition (b = .05, 95% CI [-1.2, .13], t = .08, p = .935) or for prototypical condition versus dark-skin condition (b = -.66, 95% CI [-1.9, .59], t = -1.04, p = .301), indicating that the relationship between condition and identity denial is not moderated by participant’s own prototypicality. Therefore, this exploratory hypothesis was not supported.
DISCUSSION

The current study extends present literature on identity denial to a Hispanic/Latinx population and explores potential social penalties for prototypicality violations within a Hispanic/Latinx-identifying sample. As hypothesized, there was a main effect of condition on perceived racial identity, such that prototypical targets were seen as more racially identified with their race than non-prototypical light- or dark-skin targets. Additionally, hypothesis 2 was partially supported as there was a main effect of condition on perceptions of warmth, such that prototypical target was seen as warmer than non-prototypical targets. However, an unexpected finding was that there was no difference found between the light- and dark-skin targets. There was no evidence to support the idea that identity denial mediates the relationship between target prototypicality and warmth, competence, or likability. A novel contribution the present work offers is the extension of previously established group stereotypes to a within group sample. Hypothesis 4 was partially supported in that there was a main effect of condition on associations with White- or African-American exclusive stereotypes. An unexpected finding here is that both light- and dark-skin targets were more likely to be associated with White- or African-American exclusive stereotypes, suggesting that skin color may not be the determining factor, but rather that prototypicality is most important for ingroup members.

Implications

As a foundational step in the literature, the present work demonstrates that there are clear differences in the way that an ingroup sample categorizes prototypical and non-prototypical targets. Consistent with previous work on ingroup prototypicality (Maddox & Gray, 2002; Maddox, 2004), the present findings demonstrate that non-prototypical targets are still seen as less likable, and less warm than prototypical targets within an all Hispanic/Latinx identifying sample. Pertaining to the exploration of stereotype content, this work offers insight into the way that broadly recognized stereotypes associated with specific groups of people actually manifest within the ingroup. The present research used previously established White exclusive, Latinx exclusive, and African-American exclusive stereotypes and allowed Hispani/Latinx ingroup
members to freely associate different presented targets with these stereotypes. The pattern of results demonstrates a more complicated manifestation of stereotypes within group, such that what is normally associated with “White” individuals from a societal perspective, is associated with darker-skin Hispanic/Latinx targets, suggesting that broadly accepted stereotypes do not function in a similar pattern within a population.

Overall, these results suggest that regardless of skin color, both the lighter and darker targets were penalized for not being prototypic. Consistent with work by Brunsma & Rocquemore (2001), the light-skin targets faced a similar level of penalty due to being seen as equally non-prototypical, compared to the dark-skin target. This suggests there is a clear image that ingroup members consider as the ideal group prototype, and future research should work to clearly identify what this prototype looks like and what physical/non-physical characteristics are most important. Additionally, the present results suggest potential employment consequences for non-prototypical targets as well. Given that the Hispanic/Latinx population is the fastest growing minority group in the U.S, it would lead us to believe that Hispanic/Latinx leaders in a position of power would give preference to their ingroup, yet these results suggest that this would depend on the individual’s prototypicality.

Lastly, this work expands prior research on identity denial to a Hispanic/Latinx population, and explores how our understanding of phenotypicality and colorism within this population functions to deny the identity of non-prototypic group members. Within this population, it is interesting to note that not only the darker target was penalized, but the lighter skin was denied aspects of their Hispanic/Latinx identity to a similar extent. These results suggest that the combination of skin color and identity denial is important to explore within populations that vary greatly in their phenotypic manifestation.

Limitations and Future Directions

The current study specially examined the perceptions and reactions of Hispanic/Latinx participants toward either a prototypical, or non-prototypical target they were told was also Hispanic/Latinx. To establish the Hispanic/Latinx ingroup, participants were required to identify as Hispanic/Latinx, however only a small portion of the sample (n=277, N=415) actually identified as such, thus limiting the power available for hypotheses testing. Additionally, it was
difficult to draw conclusion between the lighter and darker skin targets, as results showed no significant differences between them. This led to these conditions being combined into a prototypical, and a non-prototypical group, further limiting any distinctions that could have been made between them. To correct for this, future research can replicate this work with a stronger, and larger, ingroup sample to strengthen our understanding of this phenomenon. In this study, only photos of male targets were used, so the results cannot be generalized to female targets who violate prototypicality. More research is needed to understand the dynamics of prototypicality violations as it pertains to female targets specifically. Previous work on intersectionality (Purdie-Vaughns & Eibach, 2008; Sesko & Biernat, 2010), suggests that Black women are often invisible when compared to White Women, and White/Black men with their photos less likely to be recognized, and their contributions more likely to be overlooked or misattributed. Future research could explore if intersectionality functions in a similar pattern within a Hispanic/Latinx sample. Given the complexities of gender, as well as the existence of multiple stigmatized identities if photos of female targets are used, future research is needed to address how gender affects this phenomenon.

Another potential criticism is that the present work leveraged "paper people" with very little information from which to draw accurate conclusions. However, prior work has demonstrated time and again that people can still form gut reactions on the basis of relatively little information (Murphy et al., 1986; Willis & Todorov, 2006), which can also be seen here. To account for this concern, the present work used two photo sets to ensure findings were not limited to just one image representing each level of the independent variable.

Additionally, this work used target images obtained from the Chicago Face Database (Ma et al, 2017), using varying degrees of skin tones in order to establish phenotypic variations. However, results suggest that both the light-skin and dark-skin targets significantly deviate from the group prototype. Yet, to date, no exact prototype of the Hispanic/Latinx population exists. Future work should take a step back to establish these prototypes, perhaps using the Reverse Correlation Image Classification task (Brown-Iannuzzi, Dotsch, Cooley, & Payne, 2016). We cannot claim for certain what the prototypic Hispanic/Latinx individual looks like, and this task would allow researchers to capture this mental representation enough to create a composite image to use in future research.
Contributing to the recent work on stereotype content, a deeper exploration of the specific stereotypic words could reveal why more aggressive, or threatening words are actually associated with the lighter-skin targets within a Hispanic/Latinx population. Future work should consider the role that realistic threat plays in this phenomenon, such that to the extent that Hispanic/Latinx ingroup members perceive lighter-skin or darker-skin targets are more threatening to their group status or opportunities for advancement, they are more likely to associate the threatening group with the more demeaning stereotypes, regardless of how these manifest within the broader population.

This work was a foundational step in the future exploration of the intricacies of this population, and future researchers should look at additional consequences of prototypicality violations. The present research could open doors for future work to explore how best to recruit and retain non-prototypical Hispanic/Latinx individuals, as well as identifying who serves as role-models for this population within organizations. Lastly, future research can continue to identify potential mediators and moderators to this relationship between perceived prototypicality and various social/occupational outcomes.

Conclusion

The goal of this research was to better understand the consequences of violating prototypicality within a Hispanic/Latinx population. This work was specifically interested in advancing our understanding of how colorism and a phenotypical bias work together to influence the experiences of non-prototypical ingroup members, in this case lighter and darker skin Latinx targets. Results demonstrate penalties for non-prototypical targets, by being seen as less likable and less warm than prototypical targets. Additionally, this work found no differences between the light-skin and dark-skin targets as hypothesized, suggesting that both experienced penalties due to violating the group prototype. This suggests that prototypicality plays a bigger role than phenotypicality in how this Hispanic/Latinx sample categorized and penalized the presented targets. This work contributes to the dearth in the psychological literature exploring a Hispanic/Latinx population, as well as encourages that future researchers explore the nuances of gender and intersectionality as they relate to how identity denial manifests within this group of people. Lastly, I echo the call of Marira & Mitra (2013) in requesting that IO psychologists
concern themselves with this fast-growing population and continue to study the potential employment effects of prototypicality violations and colorism. Specifically, future research can address if this bias for the prototypical extends to job applicants, mentorship, advancement opportunities, and performance appraisals.
REFERENCES


Gregorius, A. The black people 'erased from history'. *BBC News*. April, 2016.


APPENDIX A. TABLES

Table 1 Percent of the population identifying as Black (Afro-Latinx) in various Central and South American countries.

<table>
<thead>
<tr>
<th>Country</th>
<th>% of Population Identifying as Black</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecuador</td>
<td>5</td>
</tr>
<tr>
<td>Colombia</td>
<td>2.3</td>
</tr>
<tr>
<td>Mexico</td>
<td>2</td>
</tr>
<tr>
<td>Puerto Rico</td>
<td>12.4</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>15.8</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>7.2</td>
</tr>
<tr>
<td>Cuba</td>
<td>9.26</td>
</tr>
<tr>
<td>Honduras</td>
<td>6</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>9</td>
</tr>
<tr>
<td>Panama</td>
<td>14</td>
</tr>
</tbody>
</table>
Table 2 Participant Demographics

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>141</td>
<td>50.9</td>
</tr>
<tr>
<td>Female</td>
<td>135</td>
<td>48.7</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>.4</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did not complete high school</td>
<td>2</td>
<td>.5</td>
</tr>
<tr>
<td>High School/GED</td>
<td>33</td>
<td>11.9</td>
</tr>
<tr>
<td>2-year college degree</td>
<td>43</td>
<td>15.5</td>
</tr>
<tr>
<td>4-year college degree</td>
<td>102</td>
<td>36.8</td>
</tr>
<tr>
<td>Master’s degree</td>
<td>25</td>
<td>9.0</td>
</tr>
<tr>
<td>Doctorate Degree</td>
<td>4</td>
<td>1.4</td>
</tr>
<tr>
<td>Prof. Degree (JD, MD)</td>
<td>4</td>
<td>1.4</td>
</tr>
<tr>
<td>Some College</td>
<td>64</td>
<td>23.1</td>
</tr>
<tr>
<td><strong>Afro-Latinx</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>30</td>
<td>10.8</td>
</tr>
<tr>
<td>No</td>
<td>247</td>
<td>89.2</td>
</tr>
</tbody>
</table>
Table 3 One-way ANOVA

<table>
<thead>
<tr>
<th>Measure</th>
<th>$M_{\text{Light-skin}}$</th>
<th>$M_{\text{Prototypical}}$</th>
<th>$M_{\text{Dark-skin}}$</th>
<th>$F$</th>
<th>$df$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warmth</td>
<td>13.28</td>
<td>15.06</td>
<td>13.81</td>
<td>8.22</td>
<td>2, 274</td>
<td>.000**</td>
</tr>
<tr>
<td>Competence</td>
<td>10.40</td>
<td>10.76</td>
<td>10.51</td>
<td>0.61</td>
<td>2, 274</td>
<td>.542</td>
</tr>
<tr>
<td>Likability</td>
<td>18.10</td>
<td>18.80</td>
<td>18.98</td>
<td>1.42</td>
<td>2, 274</td>
<td>.242</td>
</tr>
<tr>
<td>Identity Denial</td>
<td>13.75</td>
<td>15.30</td>
<td>14.42</td>
<td>5.83</td>
<td>2, 273</td>
<td>.003**</td>
</tr>
<tr>
<td>White Stereotypes</td>
<td>15.60</td>
<td>14.34</td>
<td>15.04</td>
<td>2.92</td>
<td>2, 274</td>
<td>.056</td>
</tr>
<tr>
<td>Latinx Stereotypes</td>
<td>18.40</td>
<td>19.64</td>
<td>18.60</td>
<td>1.95</td>
<td>2, 274</td>
<td>.145</td>
</tr>
<tr>
<td>AA. Stereotypes</td>
<td>16.04</td>
<td>13.74</td>
<td>14.70</td>
<td>4.32</td>
<td>2, 274</td>
<td>.014*</td>
</tr>
</tbody>
</table>

* $p < .05$ ** $p < .01$
<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Age</td>
<td>-</td>
<td>-0.074</td>
<td>-0.031</td>
<td>0.023</td>
<td>0.004</td>
<td>-0.057</td>
<td>-0.034</td>
<td>-0.018</td>
<td>0.054</td>
<td>0.025</td>
</tr>
<tr>
<td>2. Education</td>
<td>-</td>
<td>0.062</td>
<td>0.089</td>
<td>0.073</td>
<td>0.029</td>
<td>-0.013</td>
<td>-0.010</td>
<td>-0.120*</td>
<td>-0.153*</td>
<td></td>
</tr>
<tr>
<td>3. Gender</td>
<td>-</td>
<td>0.077</td>
<td>0.124*</td>
<td>0.026</td>
<td>0.036</td>
<td>0.067</td>
<td>-0.132*</td>
<td>-0.218**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Warmth</td>
<td>-</td>
<td>-</td>
<td>0.671**</td>
<td>0.500**</td>
<td>0.116</td>
<td>0.464**</td>
<td>0.265**</td>
<td>-0.159**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Competence</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.459**</td>
<td>0.079</td>
<td>0.548**</td>
<td>0.223**</td>
<td>-0.085</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Likability</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.011</td>
<td>0.275**</td>
<td>0.017</td>
<td>-0.303**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Identity Denial</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-0.183**</td>
<td>0.034</td>
<td>-0.139**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. White Stereotypes</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.407**</td>
<td>0.342**</td>
</tr>
<tr>
<td>9. Latinx Stereotypes</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.560**</td>
</tr>
<tr>
<td>10. African American Stereotypes</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td><strong>Mean Score</strong></td>
<td>32.8</td>
<td>4.67</td>
<td>1.49</td>
<td>3.53</td>
<td>3.52</td>
<td>3.73</td>
<td>3.63</td>
<td>2.49</td>
<td>2.37</td>
<td>1.85</td>
</tr>
<tr>
<td><strong>SD</strong></td>
<td>9.88</td>
<td>2.06</td>
<td>.508</td>
<td>.772</td>
<td>.776</td>
<td>.763</td>
<td>.803</td>
<td>.608</td>
<td>.594</td>
<td>.690</td>
</tr>
<tr>
<td><strong>Range</strong></td>
<td>1-5</td>
<td>1-5</td>
<td>1-5</td>
<td>1-5</td>
<td>1-5</td>
<td>1-4.33</td>
<td>1-4.25</td>
<td>1-4.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sum Score</strong></td>
<td>14.14</td>
<td>10.57</td>
<td>18.61</td>
<td>14.54</td>
<td>14.96</td>
<td>18.93</td>
<td>14.78</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SD</strong></td>
<td>3.09</td>
<td>2.33</td>
<td>1.21</td>
<td>3.21</td>
<td>3.65</td>
<td>4.75</td>
<td>5.52</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Range</strong></td>
<td>18-71</td>
<td>1-8</td>
<td>1-2</td>
<td>4-20</td>
<td>3-15</td>
<td>5-25</td>
<td>4-20</td>
<td>6-26</td>
<td>8-34</td>
<td>8-34</td>
</tr>
<tr>
<td><strong>Reliability (a)</strong></td>
<td>.813</td>
<td>.711</td>
<td>.854</td>
<td>.709</td>
<td>.631</td>
<td>.718</td>
<td>.860</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N= 277, * p < .05 (two-tailed). ** p < .01 (two-tailed)
Main effect of condition on perceptions of warmth, $F (2, 274) = 8.22, p < .001$. The prototypical target was perceived as significantly warmer than both the light-skin and dark-skin targets.
Main effect of condition on associations with White-exclusive stereotypes approaching significance, $F(2, 274) = 2.92, p = 0.056$. Relative to those in the prototypical condition, participants who saw a light-skin non-prototypical target were more likely to associate these targets with more White-exclusive stereotypes.
Main effect of condition on associations with African-American exclusive stereotypes, $F(2, 274) = 4.32, p < 0.01$. Relative to those in the prototypical condition, participants who saw a light-skin target were more likely to associate these targets with
APPENDIX C. PROPOSED MODEL

Figure 4

This model represents the relationship between prototypicality and negative social and occupational consequences with identity denial as a mediator. As the image is less prototypical, participants will deny their identity more, leading to lower ratings on likability, and warmth/competence.

Figure 5

The above model represents participant’s own prototypicality as a moderator of the relationship between prototypicality and identity denial, such that the more prototypical participants are, they will be more likely to deny the identity of the Afro-Latin
APPENDIX D. SAMPLE MATERIALS

Do First Impressions Matter

Study Instructions:
Thank you for agreeing to take part in this study. We are interested in how people form first impressions of others. First impressions can tell us a lot about people, can inform we feel about them, and whether or not we want to talk to them. We will be presenting you with a profile of a person and you will be asked to rate them on a variety of questions regarding your first impressions about them.

Example Images
You will read the profile of: Mateo Rodrigues.

Name: Mateo Rodrigues
Hometown: Miami, FL
Personal: Enjoys salsa dancing, movies, spending time with my girlfriend

The above profile information will be accompanied by one of the following images:
After viewing a profile, participants will be asked to complete the following items

**Quality Checks**

What is the name of the employee who’s profile you read?
- Mateo Rodrigues
- Jason Garcia

What is the candidate’s race?
- Hispanic/Latinx
- White/Caucasian
- Black/African-American

**Perceived Racial Identification**


Now consider your more general impressions of Mateo. Please indicate the extent to which you agree or disagree with the following statements about Mateo.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Somewhat Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Somewhat Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall, being Hispanic/Latinx has very little to do with how Mateo feels about himself. (r)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Being a Hispanic/Latinx person is an important reflection of who Mateo is.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Being a Hispanic/Latinx person is unimportant to Mateo’s sense of what kind of a person he is. (r)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In general, being a Hispanic/Latinx person is an important part of Mateo’s self-image.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Warmth and Competence

To what extent do you think each of the following attributes describes Mateo? Please rate Mateo on each of the following, using the scale provided.

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>Slightly</th>
<th>Somewhat</th>
<th>Moderately</th>
<th>Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tolerant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Warm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good-Natured</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sincere</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Confident</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competitive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intelligent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Likability
To what extent do you think each of the following attributes describes Mateo? Please rate Mateo on each of the following, using the scale provided. The five-items are rated on a 5-point scale.

**Stereotype Content**

To what extent do you think each of the following attributes describes Mateo? Please rate Mateo on each of the following, using the scale provided. The five-items are rated on a 5-point scale.

<table>
<thead>
<tr>
<th><strong>Latinx Stereotypes</strong></th>
<th>Not at all 1</th>
<th>Slightly 2</th>
<th>Somewhat 3</th>
<th>Moderately 4</th>
<th>Extremely 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family oriented</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hardworking</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has accent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illegal immigrant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does not speak English well</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Takes jobs from Americans</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traditional</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unassimilated</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>African American Stereotypes</strong></th>
<th>Not at all 1</th>
<th>Slightly 2</th>
<th>Somewhat 3</th>
<th>Moderately 4</th>
<th>Extremely 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggressive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Athletic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Confident</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dishonest</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hypersexual</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Irresponsible</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lacking ambition</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Undisciplined

<table>
<thead>
<tr>
<th><strong>White American Stereotypes</strong></th>
<th>Not at all 1</th>
<th>Slightly 2</th>
<th>Somewhat 3</th>
<th>Moderately 4</th>
<th>Extremely 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Privileged</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rich</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competitive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambitious</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surfer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tall</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Courteous</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greedy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Fitzpatrick Skin Type Inventory**


**How does your skin respond to the sun?**

<table>
<thead>
<tr>
<th>Response</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Always burns, blisters and peels = 0</td>
<td>0</td>
</tr>
<tr>
<td>Often burns, blisters and peels = 1 point</td>
<td>1</td>
</tr>
<tr>
<td>Burns moderately = 2</td>
<td>2</td>
</tr>
<tr>
<td>Burns rarely, if at all = 3</td>
<td>3</td>
</tr>
<tr>
<td>Never burns = 4</td>
<td>4</td>
</tr>
</tbody>
</table>

**How sensitive is your face to the sun?**

<table>
<thead>
<tr>
<th>Sensitivity</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very sensitive = 0</td>
<td>0</td>
</tr>
<tr>
<td>Sensitive = 1 point</td>
<td>1</td>
</tr>
<tr>
<td>Normal = 2 point</td>
<td>2</td>
</tr>
<tr>
<td>Resistant = 3</td>
<td>3</td>
</tr>
<tr>
<td>Very resistant/Never had a problem =</td>
<td></td>
</tr>
</tbody>
</table>

**Does your skin tan?**

<table>
<thead>
<tr>
<th>Response</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never -- I always burn = 0</td>
<td>0</td>
</tr>
<tr>
<td>Seldom = 1 point</td>
<td>1</td>
</tr>
<tr>
<td>Sometimes = 2</td>
<td>2</td>
</tr>
<tr>
<td>Often = 3</td>
<td>3</td>
</tr>
<tr>
<td>Always = 4</td>
<td>4</td>
</tr>
</tbody>
</table>

**How deeply do you tan?**

<table>
<thead>
<tr>
<th>Response</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all or very little = 0</td>
<td>0</td>
</tr>
<tr>
<td>Lightly = 1 point</td>
<td>1</td>
</tr>
<tr>
<td>Moderately = 2</td>
<td>2</td>
</tr>
</tbody>
</table>
Demographics
Please answer the following demographic questions so that we can better understand the degree
to which our sample is representative of the US population.

With which gender do you identify?
   Male
   Female
   Other (_____)

What is your age (in years)? ______

What is your race/ethnicity?
   White/Caucasian
   African American
   Hispanic/Latinx
   East Asian
   South Asian
   Middle Eastern
   American Indian or Alaska Native
   Native Hawaiian or Pacific Islander
   Other or more than one race (please specify)_____

Do you identify as Afro-Latinx?
   Yes
   No

What is the highest level of education you have completed?
   Less than High School
   High School/ GED
   Some College
   2-year college degree
   4-year college degree
   Master’s degree
   Doctorate degree
   Professional degree (JD, MD)

Additional Educational Information
*Image-Based First Impressions*
You engaged in multiple tasks in this study to help us understand how first impressions of others
are formed based on their photographs. Previous research has shown that people assume a lot of
information about others based only on their physical appearance. We wanted to learn more
about your assumptions about other people based on the presented photo. The information
obtained in this study will allow for future work exploring first impressions of others.
Thank you for participating in this study. It would not be possible to continue research without the help of people like you. If you would like to learn more about this research, you may contact the investigator, Dr. Leslie Ashburn-Nardo (lashburn@iupui.edu), or you may consult the references below.


Final Thoughts
In your own words, please describe what you did during this study? ______