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The Development and Testing of "The Goldilocks Effect": Do Contrastive Racial Stereotyping Processes Uphold Social Hierarchies?

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THE DEVELOPMENT AND TESTING OF “THE GOLDBLOCKS EFFECT”:
DO CONTRASTIVE RACIAL STEREOTYPING PROCESSES
UPHOLD SOCIAL HIERARCHIES?

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Abstract

Stereotypes of racial groups do not exist in a vacuum, and psychologists have previously detailed the stereotype content and social positionings of racial groups in relation to one another (Fiske, Cuddy, Glick, & Xu, 2002; Zou & Cheryan, 2017). However, psychology does not have a theoretical framework that explains the highly heterogeneous distribution of granular, trait-specific racial group stereotypes, including some stereotypes that are viewed as “positive” or “flattering” (Czopp, Kay, & Cheryan, 2015). In this dissertation, I propose that stereotypes of racial minority groups may be dynamically constructed in direct contrast to each other, where one minority’s ascribed traits are consistently patterned to contrast with another minority’s ascribed traits—e.g., in the domain of intellectual competence, Black Americans are stereotyped as very creative but not hard-working, while Asian Americans are stereotyped as very hard-working but not creative; in the domain of physicality, Black Americans are stereotyped as hyper-athletic, while Asian Americans are stereotyped as not athletic enough. I argue that this contrastive distribution of racial minority stereotypes allows the dominant majority group, White Americans, to position themselves as possessing the optimal and idealized “Goldilocks” form of the trait: for example, they can be positioned as *ideally* intellectually competent, not too high and not too low in any one trait or trait facet. I propose that this is psychologically motivated and serves to affirm and protect the self and the in-group: it allows the majority group to account for favorable perceptions of racial out-groups, without positioning their own in-group as inferior to either group. These contrastive racial stereotyping processes may serve to uphold social hierarchies, and perpetuate the inequality between racial majority and minority groups.

Dedicated to the memory of my loving, brilliant, and beautiful mother Tien Do

March 1965 - December 2021

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Chapter 1: Introduction

In 2014, the inclusion of race in holistic university admissions policies—also referred to as “affirmative action”—made national headlines (Nelson, 2014). Abigail Fisher, a White applicant, had sued the University of Texas at Austin, alleging that she was denied admission because the university had racially discriminated against her. Her claim was that less qualified minority applicants were unfairly favored over White applicants in the admissions process, which she in turn argued was a violation of her Fourteenth Amendment right to equal protection. Although Abigail Fisher was for most intents and purposes the “face” of this case, the strategist behind this lawsuit was in fact the conservative strategist Edward Blum, who by 2013 had already amassed decades of experience attempting to legally overturn policies designed to protect racial equality (Hannah-Jones, 2016). In backing Fisher’s lawsuit, Blum sought to challenge the constitutionality of affirmative action in college and university admissions. *Fisher v. University of Texas*, however, was unsuccessful in striking down affirmative action: after reaching the Supreme Court twice, a 4-3 decision in 2016 ruled that universities may continue to use race as one of many factors in college admissions, in part to achieve the goal of ensuring diversity in their admitted classes (Liptak, 2016).

The Supreme Court’s affirmation of universities’ right to use race-conscious admissions policies, however, was short-lived. In 2023, in two lawsuits also headed by Edward Blum—*Students for Fair Admission (SFFA) v. Harvard* and *SFFA v. University of North Carolina*—the Supreme Court ruled 6-3 that the use of race in admissions violated the Fourteenth Amendment, effectively ending 50 years of legal precedent and striking down affirmative action on college campuses (Liptak, 2023).

What could have accounted for this change? Though these lawsuits were spearheaded by the same conservative strategist, and though they used many of the same legal arguments, *SFFA v. Harvard* and *SFFA v. UNC* diverged from *Fisher v. UT* in at least one important way: rather than using a White applicant as the face of the lawsuit, *SFFA v. Harvard* and *SFFA v. UNC* used Asian plaintiffs. Instead of arguing that affirmative action benefitted Black and Latino applicants at the expense of White applicants, the more recent lawsuits argued that affirmative action harmed both White and Asian applicants (600 U.S. 181, 2022). There was a notable emphasis on the latter racial group: two websites created by SFFA, harvardnotfair.org and uncnotfair.org, exclusively featured photos of Asian students, with a headline reading, “Were you denied admission to [this college]? It may be because you’re the wrong race.” In a 2015 speech given to the Houston Chinese Alliance, Edward Blum stated about his anti-affirmative action lawsuits, “I needed Asian plaintiffs” (Poon, 2015).

This strategy of explicitly or implicitly contrasting Asian people against other racial minorities, particularly Black people, has a long history. The “model minority” narrative of Asian Americans—that Asian Americans, despite being racial minorities, are hard-working, diligent, and law-abiding enough to succeed in the United States—was integral to many political attempts to suppress the Civil Rights movement (Wu, 2013). The field of social psychology, specifically the psychological study of racial stereotype content (and the model minority stereotype of Asian Americans), can shed light on the psychological factors that likely made an anti-affirmative action lawsuit featuring Asian plaintiffs more effective than the same lawsuit featuring a White plaintiff.

Background

Psychologists have been documenting racial stereotype content since the 1930's, and have been revisiting and revising them ever since (Fiske, Dupree, Nicolas, & Swencionis, 2016; Devine & Elliot, 1995; Gilbert, 1951; Karlins, Coffman, & Walters, 1969; Allport, Clark, & Pettigrew, 1954; Katz & Braly, 1933). Stereotyping is a complex psychological phenomenon that shapes how racial groups are perceived, treated by others, and positioned relative to one another. Two major models of stereotype content that are of particular relevance to the current research are the Stereotype Content Model (Fiske, Cuddy, Glick, & Xu, 2002) and the Two Axes of Subordination model of racial position (Zou & Cheryan, 2017).

The Stereotype Content Model hypothesizes that social stereotypes are formed along the fundamental dimensions of warmth and competence. Warmth pertains to another group's intention to help or to harm us, and includes traits like kindness or trustworthiness, while competence refers to the group's ability to act on those intentions, and includes traits like intelligence and agency. In this model, we can map the relative positions of various social groups: the high-warmth/high-competence quadrant of the map consists of groups like the middle class, Americans, or White people, and elicits feelings of admiration, while the low-warmth/low-competence quadrant contains groups like the homeless and Black Americans, and elicits feelings of contempt (Lee & Fiske, 2006; Lin, Kwan, Cheung, & Fiske, 2005).

Importantly, a social group can be associated with ambivalent stereotypes, and can be high in one dimension but low in the other. For example, the high-warmth/low-competence quadrant of the Stereotype Content Model contains groups like the elderly and disabled, and elicits feelings of pity; the low-warmth/high-competence quadrant consists of groups like Asians and the wealthy, and elicits feelings of envy. From such a mapping, we can observe how the

dominant majority group is most often viewed as warm, competent, and admirable, while minority and out-groups are systematically denigrated on one or both of the fundamental dimensions. Moreover, compensation effects—wherein people ascribe higher competence to groups that are lower in warmth, and vice versa—may further serve to uphold group inequality by rationalizing and justifying the spread of such stereotypes (Durante et al., 2017; Holoien & Fiske, 2013; Kay & Jost, 2003; Kervyn, Yzerbyt, Demoulin, & Judd, 2008).

Another recent model of racial position proposes that racial and ethnic minorities are disadvantaged along one or both of two dimensions: perceived inferiority (vs. superiority) and perceived cultural foreignness (vs. being culturally American) (Zou & Cheryan, 2017). In this model, inferiority refers to a group's perceived intellectual, economic, and occupational prestige, while foreignness refers to the extent to which a group is perceived as culturally American. Mapping the relative positioning of racial groups, the authors show that White people are positioned in the superior/American quadrant, while Asian people are positioned in the superior/foreign quadrant, Latino people are positioned in the inferior/foreign quadrant, and Black people are positioned in the inferior/American quadrant. This model, too, provides a framework through which we can interpret motivations to (and the outcomes of) upholding Whites as the dominant majority group.

Zou and Cheryan (2017)'s findings are consistent with a framework proposed by the political scientist Claire Jean Kim called the Racial Triangulation Theory. Kim theorized that Asian Americans and Black Americans have been strategically positioned along the axes of inferiority/superiority and foreigner/insider status (Kim, 1999), such that Asian Americans are positioned as inferior to Whites, but superior to Black Americans; conversely, Black Americans are positioned as American insiders, while Asian Americans are seen as foreigners. Kim uses this

framework to argue that Asian Americans are racially triangulated: they are relatively valorized compared to Black Americans, but civically ostracized compared to White Americans. The relative valorization of Asian Americans—for example, the “model minority” narrative that Asian Americans are hard-working and therefore successful—can serve to further marginalize Black Americans by eliciting comparisons between the two groups. Such comparisons have led to the demonization of Black Americans for not achieving similar levels of economic success, though importantly, these criticisms of Black Americans ignore incomparable discriminatory histories and current systemic barriers to such success (Lee & Zhou, 2015; Hsu, 2015; Wu, 2014).

Other research, including research on so-called “positive” racial stereotypes, has explored highly trait- and domain-specific stereotypes of some racial groups. For example, the stereotype that Asians excel in math and science (Cheryan & Bodenhausen, 2000), or that Black Americans are naturally athletic (Stone, Lynch, Sjomeling, & Darley, 1999) or have innate musical talent (Czopp & Monteith, 2006) are so domain-specific that although they are positive, they may confine individuals to such pigeonholed areas that it limits the recognition of their potential in other areas. Applied research on stereotypes—for example, research revealing the stereotype of Muslim or Arab people as terrorists (Avery, Oh, Feldman, Cooper, & Cooper, 2022; Saleem & Anderson, 2013)—also points to the prevalence of trait- and domain-specific negative stereotypes.

The models described above establish major and fundamental dimensions along which racial groups are positioned, and which consistently show that the majority group—White Americans—benefit from being stereotyped as high in both of these positive, fundamental dimensions, while minority groups are stereotyped as being low in at least one of the dimensions.

Additional research, including research on so-called “positive” stereotypes, has revealed the prevalence of some highly trait- and domain-specific racial stereotypes. However, the field of social psychology does not currently have a theoretical framework that can explain the highly heterogeneous distribution of *specific, trait-level stereotypes of racial groups*. In my dissertation, I ask: why might the dominant majority group (White Americans) stereotype two historically major racial minority groups in the United States (Asian Americans and Black Americans) in consistently contrastive ways? For example, why are Black men consistently stereotyped as hyper-masculine, while Asian men are consistently stereotyped as hypo-masculine? Why are Black Americans stereotyped as being *too* politically active and radical, while Asian Americans are stereotyped as not being politically active enough? Why are Black Americans stereotyped as creative, but not hard-working, while Asian Americans are stereotyped as hard-working, but not creative? A number of social psychological theories could help scaffold an explanation for these contrastive trait-level racial stereotypes: the compensation effect, social identity theory, optimal distinctiveness theory, and extremeness aversion.

Research on the compensation effect shows a trade-off between perceived warmth and competence when individuals evaluate others (Kervyn, Yzerbyt, & Judd, 2011). When negative information is provided about a person or group on one dimension, be it warmth or competence, people tend to compensate by rating another target more favorably on the other dimension. For example, the higher a participant rates Germans on competence, the higher they will likely rate Italians on warmth (Kervyn, Yzerbyt, Demoulin, & Judd, 2008). Further, when participants are rating targets in a comparative context and are presented with one target embodying mixed stereotype content (e.g., high in competence but low in warmth), participants show a compensatory effect. For example, when comparing Belgians to Germans, participants rate

Belgians as warmer; however, when participants compare Belgians to Italians, they rate Belgians as more competent. These findings suggest that people may dynamically adjust their judgments of social groups, specifically when thinking *contrastively* about those groups.

Integrating Psychological Theories into Contrastive Stereotyping

While research on the compensation effect focuses on evaluations of out-groups, my dissertation asks whether a similar phenomenon may also affect how Whites evaluate and view *themselves*. One body of work that implicates the role of the self in the evaluation of out-groups is social identity theory, which states that people derive part of their self-esteem from their group memberships, and thus are motivated to elevate their own esteem by derogating outgroups (Tajfel & Turner, 1986). For instance, when White Americans engage in contrastive evaluations of racial out-groups, the motivation to uphold a positive self identity might drive more favorable evaluations of their in-group and less favorable evaluations of out-groups. Related to self identity theory is the concept of self-enhancement, where individuals are motivated to view themselves in a positive light; importantly, this motivation is often entwined with group-serving biases, where favorable attributions are made towards one's in-group (Heine & Lehman, 1997). When thinking contrastively about racial groups, self-enhancement and group-serving biases may drive individuals to shift their evaluations in a manner that bolsters and affirms the in-group.

Another foundational social psychological theory is optimal distinctiveness theory, which posits that there is a tension between an individual's desire for inclusion within a group and their simultaneous desire for uniqueness or differentiation (Brewer, 2012). Individuals are thus motivated to achieve a balance between these two opposing needs: they are driven to seek group affiliations that provide enough assimilation to satisfy the need for belonging, and enough

differentiation to satisfy the need for uniqueness. This theory can also be extended to understand racial group evaluations in contrastive contexts: while desiring to maintain a favorable in-group identity, White Americans may seek a level of distinctiveness from other racial groups. For instance, White Americans may perceive another group such as Asian Americans as high in intellectual ability, but may desire to differentiate themselves in terms of the *type* of intellectual ability in question. White Americans who wish to view themselves as intellectually “brilliant” may stereotype Asian Americans as number-crunching machines—intellectually competent, still, but in a notably different way.

Finally, research on extremeness aversion finds that people try to avoid choosing extreme alternatives, instead favoring more moderate options (Simonson & Tversky, 1992). This psychological tendency might have implications for how racial groups are evaluated in a contrastive context. If contrastive processes lead individuals to perceive racial minorities as more extremely situated on far ends of a spectrum, then they might view their own group as more moderately positioned, and hence, more favorably.

When synthesized alongside research on stereotype content, the theories detailed above work together to scaffold a “Goldilocks” theory of stereotyping—the idea that racial minority stereotypes are not only distinct but often constructed in direct opposition to each other, thus enabling the dominant majority group (White Americans) to position themselves as embodying an idealized, “Goldilocks” form of various traits: not too extreme in any dimension, but just right. The compensation effect reveals how people dynamically adjust their judgments of social groups, specifically when thinking *contrastively* about those groups; social identity theory explains how we are motivated to uphold a positive self-view by more favorably evaluating the in-group (compared to out-group); optimal distinctiveness theory accounts for social group

members' motivation to seek a level of distinctiveness from other groups; and extremeness aversion suggests that people may be motivated to view their own group as more moderately positioned and therefore more favorably. Taken together, these extant theories underscore how the dominant group, through an interplay of compensatory judgments, social identity maintenance, the pursuit of optimal distinctiveness, and extremeness aversion, may construct and perpetuate a social hierarchy where their relative positioning is in the ideal "middle" of any given trait distribution.

Current Work

I propose that trait-level stereotypes of racial minority groups are dynamically constructed in direct relation to one another, where one racial minority's ascribed traits are consistently patterned to contrast with another racial minority's ascribed traits. For the dominant majority group—in present-day America, White Americans—this process functions to uphold the current racial hierarchy by consistently situating the dominant group as epitomizing the "true" and idealized version of the trait in question, while racial minority groups are consistently situated as being too high or too low in that trait (on opposing poles). I propose that trait-level stereotypes of racial minority groups are directly contrasted with each other *so that* stereotypes of White Americans remain in the idealized stereotypic space.

Consider racialized stereotypes of intellectual/cognitive competence and ability. Researchers have identified several possible facets of this broad trait; for example, this trait could consist of sub-facets of skill and agency (Abele et al., 2016). Additional conceptions of intelligence posit that intelligence might be divided into the sub-facets of diligence (whether one is hard-working) and intellectual creativity (whether one can generate novel ideas or insight). In

one set of my dissertation studies, I found that Asian Americans—while stereotyped as generally intelligent or intellectually high in competence—are actually *over*-stereotyped as very hard-working and diligent, and as possessing more superficial, “rote” forms of cognitive ability, such as the ability to memorize and regurgitate facts. Importantly, however, my studies found that Asian Americans are *not* stereotyped as being intellectually creative, insightful, or good at critical thinking. Other researchers have found the inverse pattern for stereotypes of Black Americans: Black Americans are perceived as highly creative (Kaufman, 2006), but not hard-working (Aronson et al., 2002; Reyna, 2008). This suggests that Asian and Black Americans are subject to contrastive stereotypes about intelligence: Black Americans are stereotyped as being creative at the expense of hard-working, and Asian Americans are stereotyped as being hard-working at the expense of being creative. I hypothesize similar patterns for a number of other trait domains, including traits that do not themselves contain sub-facets—for example, in stereotypic representations of masculinity, Black American men are stereotyped as being hyper-masculine, while Asian American men are stereotyped as not being masculine enough.

I argue that the dynamic construction of such a distribution of stereotypes—where various racial minority groups are stereotyped as, contrastively, high vs. low on a range of characteristics—may be psychologically motivated by the majority group (White Americans), and that this motivation likely serves to affirm and protect the self and the in-group. In order to account for evidence that various racial minority outgroups are “successful” or viewed favorably in some dimensions, White Americans may be motivated to find ways to denigrate those groups and their characteristics. Constructing their distribution of stereotypes so that one group is *too high* in a trait, while another group is *too low* in that trait, would allow White Americans to position themselves as the optimal embodiment of those traits, by virtue of being perfectly in the

middle: a Goldilocks effect. This way, White Americans would be able to account for favorable perceptions of one group as creative, and another group as hard-working, *without* positioning their own in-group as inferior to either group within the domain of intelligence. By stereotyping Black Americans as creative at the expense of being hard-working, and stereotyping Asian Americans as hard-working at the expense of being creative, White Americans can maintain the view of their in-group as embodying the idealized, optimal, balanced “Goldilocks” form of intelligence: unlike the racial minority groups in question, they can continue to view themselves as sufficient in both sub-facets, and deficient in neither. One highly salient policy issue that draws directly on the intelligence/competence stereotype example above is that of affirmative action: in 2023, the Supreme Court’s decision to strike down race-conscious admissions policies was a response to a legal case that used Asian plaintiffs—and the narrative that they are hard-working and academically high-achieving—as a way to dismantle a policy aimed at redressing inequality for racial minorities, especially Black and Latino Americans.

My dissertation proposes this “Goldilocks” framework to explain the highly heterogeneous and contrastive distribution of White Americans’ out-group stereotypes, and aims to elucidate a possible psychological mechanism underlying this effect, as well as its implications for social policy.

Overview of the Dissertation

Chapter 2, the first empirical chapter of this dissertation, will serve as the basis for the following experiments by unpacking and describing the stereotype content of racial groups, with a particular focus on Asian Americans as the group that has historically been used as a “racial wedge” against other minority groups.

Chapter 3 will provide the first empirical study of the “Goldilocks” effect. This experiment will test whether White participants, when given the opportunity, position White targets in the “ideal middle” on various stereotypic traits, compared to Asian and Black American targets.

Chapter 4 will highlight the implications of such contrastive racial stereotyping processes on public policy. These experiments will explore whether the model minority myth of Asian Americans has adverse effects on attitudes towards Black Americans, and whether contrastive racial stereotyping negatively influences attitudes towards the highly politically salient topic of affirmative action.

Taken together, I hope the studies in this dissertation will explain why and how majority group members may be motivated to construct a wide distribution of out-group stereotypes, where different minority out-groups are positioned in contrast to one another, so that the majority group (Whites) may position itself as the “ideal” version of the stereotyped trait. This psychological mechanism could function to uphold social hierarchies, where racial minorities’ stereotypic characteristics are “pitted against” each other so that the dominant majority group can retain its high status and social power. Investigating these dynamics and processes will contribute to the social sciences’ understanding of racial inequality, and the mechanisms that perpetuate it, as well as illuminate mechanisms that play a role in policy-relevant attitudes, such as those towards affirmative action.

Chapter 2: The Stereotype Content of Racial Groups

This chapter presents a series of studies designed to describe sub-facets of the stereotype content of various racial groups, including African, Latino, and White Americans, while focusing on Asian Americans as the group that has historically been used as the “racial wedge” against other minority groups. The sub-facets explored here aim to build on and extend established models like the Stereotype Content Model (which center warmth and competence) and the Two Axes of Racial Subordination (which focus on superiority and foreignness), as their major stereotype dimensions.

Asian Americans are frequently perceived as high in competence; however, notions of competence or intelligence can vary significantly. This variability is evident in academic disciplines that distinguish “brilliance” and “genius” from “hard work,” which Leslie et al. (2015) found to predict gender gaps across academic fields. Furthermore, the work of Abele et al. (2016) situate assertiveness and competence within the broader content dimension of “agency,” which argues for additional differentiations of competence. A telling example of the nuanced perception of intelligence in Asian targets, specifically, is the implicit association of Asian faces with robot-related words (Bain et al., 2009), indicating a perception of Asians as mechanically efficient but lacking in more “human” cognitive abilities. Given these multidimensional views of intelligence and the tendency to selectively attribute traits to other social groups, the first study in this chapter, Study 2.1, experimentally disentangles the competence stereotype of Asian Americans. This study specifically aims to differentiate between superficial forms of intellectual competence, such as rote memorization and regurgitating facts,

and deeper forms of intelligence, like novel ideas and critical thinking. This differentiation is crucial in understanding the full spectrum of how competence is attributed to Asian Americans.

Study 2.2 provides a descriptive analysis of the stereotypes of Asian Americans, building upon the findings of Study 2.1. Study 2.3 extends this analysis to include four major racial groups (Asian, Black, Latino, and White Americans) and employs a streamlined step procedure to compare stereotypes across these groups. Together, these studies on the stereotype content of major racial groups in the United States will serve as the basis for the following chapters in this dissertation, which will experimentally leverage these traits to test for contrastive processes in racial group stereotyping.

Study 2.1: Experimentally Disentangling the Model Minority (Competence) Stereotype of Asian Americans

This experiment leveraged perceptions of Asian Americans as skilled in math/science, but not skilled in the humanities, in order to identify sub-facets of the broader stereotypic traits “intelligence” and “competence.” Specifically, this experiment is designed to disentangle more superficial forms of intellectual competence (e.g., rote memorization, regurgitating facts, being a number-crunching machine) from deeper forms of intelligence (e.g., novel ideas, critical thinking, intellectual creativity).

Participants

Data was collected in January of 2018. 96 participants were recruited from Princeton University’s subject pool and received course credit for their participation. Participants’ ages ranged from 18 to 23; the mean age was 19.51 ($SD = 1.26$). Participants described themselves as White/Caucasian ($n = 50$, 52%), Black/African American ($n = 3$, 3.1%), Hispanic/Latino ($n = 11$,

11.5%), Asian ($n = 21$, 21.9%), Pacific Islander ($n = 1$, 1%), Middle Eastern/North African ($n = 1$, 1%), and Multi-racial ($n = 7$, 7.3%), and 2 (2%) selected “Other.” 35 (36.5%) participants were men, 59 (61.5%) were women, 1 (1%) selected “Other,” and 1 (1%) selected “Prefer not to say.” 65 participants (67.7%) identified as Democrats, 7 (7.3%) as Republican, 16 (16.7%) identified as “Other,” and 8 (8.3%) selected “Prefer not to say.” With 1 representing the most liberal, 7 representing the most conservative, and 4 representing moderate, participants reported their views on social issues to be liberal-leaning ($M = 2.57$, $SD = 1.30$), and their views on economic issues to be slightly liberal-leaning ($M = 3.45$, $SD = 1.46$).

Methods

Participants completed the study online. After providing their consent to participate in the study, 48 participants were randomly assigned to the baseline condition, and 48 were randomly assigned to the framed condition. Participants who were randomly assigned to the baseline condition received the following instructions: “You'll be asked to indicate which academic discipline(s) below are associated with Asian Americans, according to society's view of Asian Americans. Note that this may or may not reflect your own personal beliefs. Please make your selections according to society's views of Asian Americans, regardless of your own personal beliefs.”

Participants who were randomly assigned to the framed condition received the same instructions as in the baseline condition, but with the following paragraph added: “Success at higher levels of math/science necessitates a great deal of intellectual creativity. Succeeding in math/science requires the ability to come up with original, insightful solutions to old problems. In contrast, succeeding in the humanities requires the ability to read, process, and synthesize a large volume of information from various articles and book sources, and to memorize rote facts

about these articles.”

This additional paragraph in the framed condition was the only difference between the two conditions. After reading the instructions for the condition to which they were assigned, all participants read the following question: “According to society’s views of Asian Americans, Asian Americans would be expected to excel in which of these disciplines?” All participants provided answers to two items (“Math/science (e.g. biology, physics)” and “Humanities (e.g. literature, philosophy)”), with a Likert scale ranging from 1 (“not at all expected to excel”) to 7 (“very much expected to excel”).

Finally, participants provided answers to some demographic questions and were debriefed.

Results

A two-way ANOVA was conducted to examine the effects of condition (framed vs. baseline) and discipline (math/science vs. humanities), as well as their interaction. The main effect of condition was not statistically significant, $F(1,188) = 1.673$, $p = .197$; there was, however, a significant main effect of discipline, $F(1,188) = 133.109$, $p < .001$. Notably, there was a significant interaction between condition and discipline, $F(1,188) = 15.870$, $p < .001$ ¹.

Post-hoc analyses were conducted to further understand the relationship between framing condition and discipline. For math and science, participants assigned to the framed condition (that is, those who received information framing math/science as requiring creativity) reported a lower expectation that Asian Americans would succeed in the discipline ($M = 5.63$, $SD = 1.68$), while participants in the baseline condition (those who received no information about the

¹ The results presented here include participants of every racial background, as there were not enough participants in each racial minority group to conduct analyses with sufficient statistical power.

academic disciplines) reported a higher expectation that Asian Americans would succeed ($M = 6.71$, $SD = 0.91$), and this difference was statistically significant, $t(74.09) = 3.96$, $p < .001$, $d = 0.80$.

For the humanities, participants in the framed condition (i.e., participants who received information framing the humanities as requiring rote cognitive skills) reported a higher expectation that Asian Americans would succeed in the field ($M = 4.14$, $SD = 1.47$), while participants in the baseline condition reported a lower expectation that Asian Americans would succeed ($M = 3.57$, $SD = 1.35$), and this difference was also statistically significant, though the effect size was smaller, $t(95.34) = -2.00$, $p = .048$, $d = -0.40$.

These results suggest that the intellectual stereotype of Asian Americans is not simply that they are “intelligent” or “competent,” but rather that they were stereotyped as high in one facet of the “competent” trait, and low in another. If “intelligence” encompasses at least two facets—one facet containing “rote, surface-level cognitive skills,” and another facet containing “intellectual creativity, novel thinking, and insight,” Asian Americans are stereotyped as high in the former and low in the latter. That is, Asian Americans are stereotyped as excelling at rote tasks requiring more superficial forms of cognitive skill, while they are stereotyped as *not* excelling at tasks requiring intellectual creativity, novel thinking, or insight. This is the inverse of the pattern for Black Americans, as shown in previous studies (Kaufman, 2006; Aronson et al., 2002; Reyna, 2008).

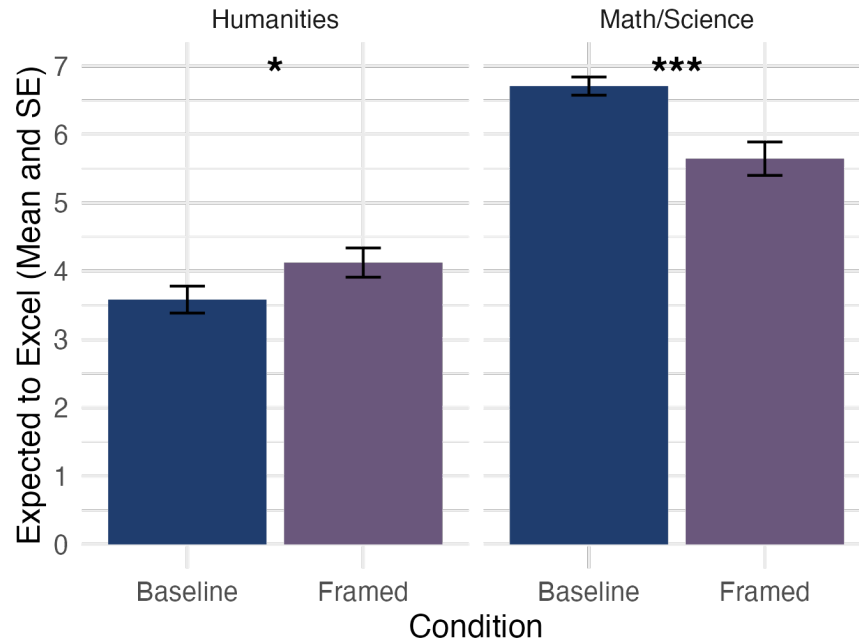


Figure 2.1. Participants’ expectations that Asian Americans will excel at math/science vs. the humanities, when math and science are framed as requiring creativity and novel thinking, and the humanities are framed as requiring more rote skills (framed condition), or when no information is given (baseline condition).

Interim Discussion

Consistent with predictions, participants reported lower expectations that Asian Americans would succeed in math/science when that discipline was framed as requiring intellectual creativity, insight, and novel-thinking (when compared to a baseline condition in which participants received no information about the discipline). In contrast, participants reported higher expectations that Asian Americans would succeed in the humanities when that discipline was framed as requiring the ability to memorize rote facts about articles. This experiment complements the descriptive data presented next in this chapter and suggests that stereotypes of Asian American intelligence and academic success may be constrained by a belief that Asian Americans merely possess “rote” forms of intellectual competence, rather than possessing “deeper” forms of intellectual competence like insight or novel thinking.

Study 2.2: Descriptive Stereotypes of Asian Americans

Prior research has shown that Asian Americans are stereotyped as highly competent, low in warmth, and culturally foreign. The previous study in this chapter complicated the stereotype of Asian Americans as merely “competent” by revealing meaningful sub-facets of more superficial versus deeper forms of intelligence. However, descriptive explorations of the Asian American stereotype have been largely missing from the social psychology literature. The following study draws inspiration from studies like Katz & Braly (1933), which have conducted thorough descriptive explorations of the stereotype of African Americans, to examine many societal stereotypes of Asian Americans.

Participants

Data was collected in March of 2018. 122 participants were recruited from Amazon’s Mechanical Turk. Participants’ mean age was 35.09 ($SD = 10.39$), and they described themselves as White ($n = 84$, 68.9%), Black ($n = 13$, 10.7%), Latino, ($n = 7$, 5.7%), Asian, ($n = 13$, 10.7%), and Native American ($n = 3$, 2.5%), and 2 (1.6%) selected “Other / Prefer not to say.” 74 (60.66%) participants were men, 47 (38.52%) were women, and 1 (0.82%) selected “Prefer not to say.” 55 (45.08%) identified as Democrats, 29 (23.77%) as Republicans, and 38 (31.15%) identified as “Independent/Other.” With 1 representing the most liberal, 7 representing the most conservative, and 4 representing moderate, participants reported their views on social issues to be relatively liberal-leaning ($M = 3.34$, $SD = 1.76$), and their views on economic issues to be slightly liberal-leaning ($M = 3.75$, $SD = 1.86$).

Methods

Participants gave their consent and completed the survey online. Adapting methods used in Devine and Elliot (1995) and Katz and Braly (1933), I provided participants with instructions

to click and drag 103 descriptors into one of three boxes, representing descriptors that are consistent with the stereotype of Asian Americans, inconsistent with the stereotype of Asian Americans, or irrelevant to the stereotype of Asian Americans. This adaptation of the Katz and Braly (1933) method allowed me to explore the top traits are most stereotypic of the group, as well as the top traits that are most *counter-stereotypic* of the group. This multi-step method also avoided some differentiation issues related to standard Likert ratings in stereotype research: for example, Likert ratings of a group's stereotyped trait may be low because the trait is irrelevant to the stereotype of the group (for example, "girls like pizza" would not be rated as highly stereotypic of the group because liking pizza has nothing to do with stereotypes of girls). Conversely, ratings might be low because the trait is *counter-stereotypic* to the group (for example, "girls like action figures" would not be rated as highly stereotypic of the group because girls are stereotyped as disliking action figures in favor of dolls). Asking participants to sort traits as consistent, inconsistent, or irrelevant to the stereotype as the first step in the method bypasses the issue of ambiguous low ratings: disambiguating low ratings because the trait is counter-stereotypic, versus irrelevant to the group, is already accounted for.

Trait selection was based on the adjectives used in studies conducted by Prentice and Carranza (2002), Devine and Elliot (1995), and Katz and Braly (1933). After dragging the 103 presented traits (full list included in the appendix) into one of the three boxes, participants advanced to the next page in the survey. Here, participants were presented with all the traits they had previously indicated were consistent with the stereotype of Asian Americans, and were asked to select the 10 traits that are most stereotypic of Asian Americans, again according to American society. Then participants advanced to the next page, where they were asked to complete the same task, but selecting the 10 traits that are most counter-stereotypic of Asian

Americans.

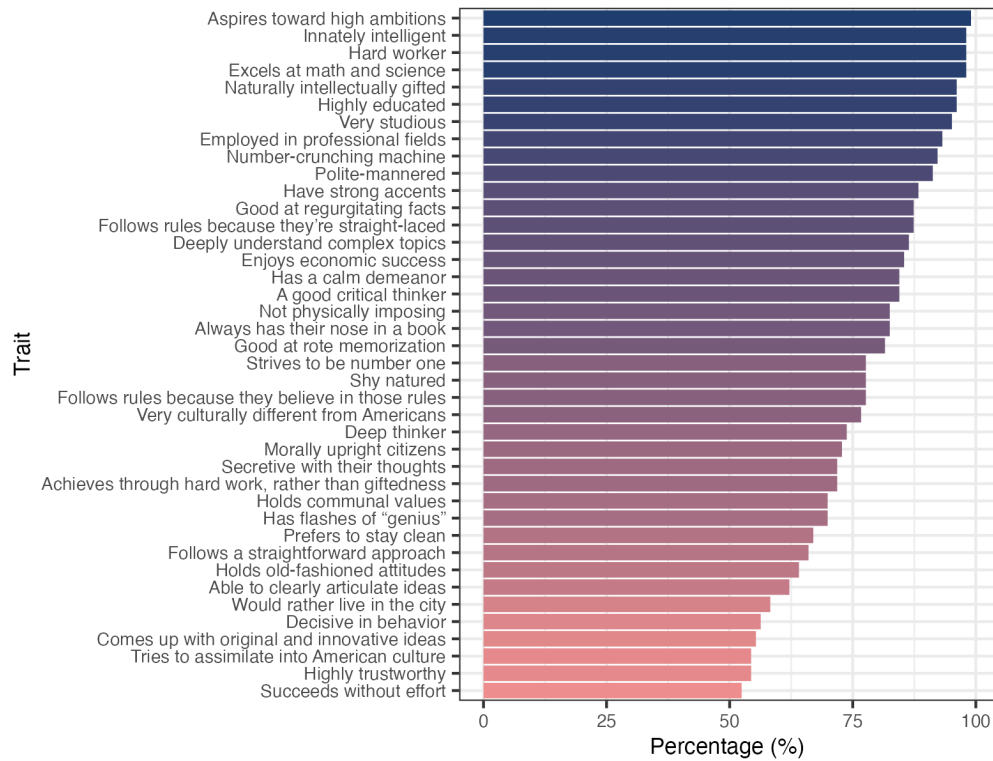
Finally, participants answered some demographic items.

Results

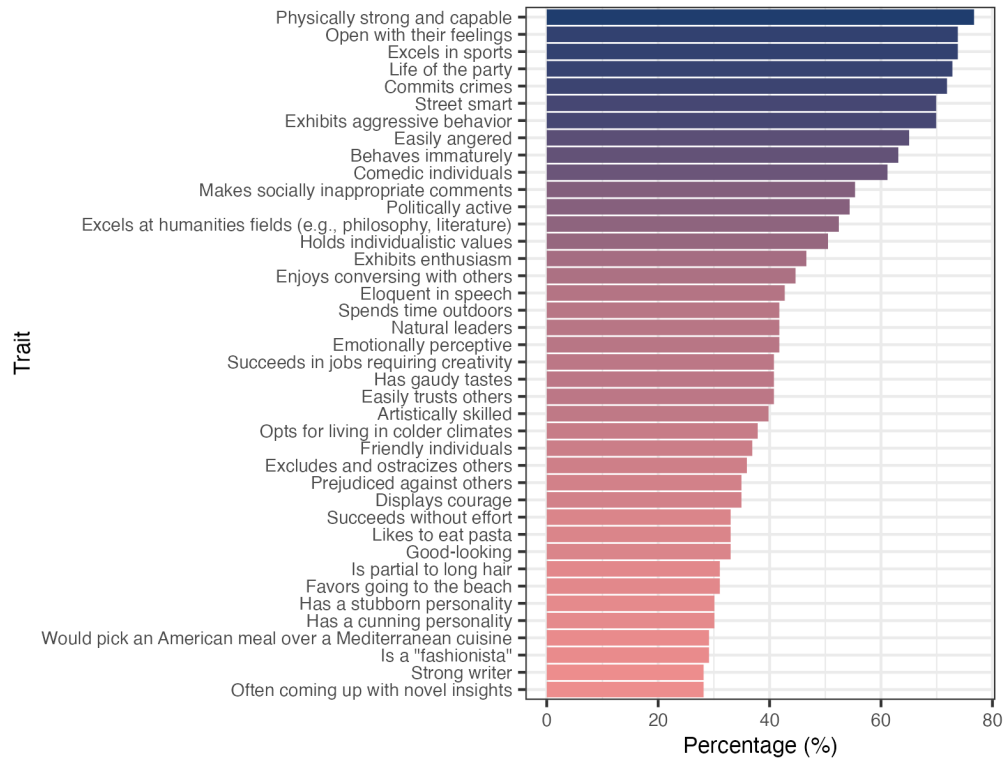
Traits that participants indicated as consistent, inconsistent, and irrelevant to the stereotype of Asian Americans are shown as tables below.

First, to show how participants interpreted the instructions (which defined “consistent,” “inconsistent,” and “irrelevant” as they related to stereotypic traits), I’ll show tables of the most commonly selected consistent, inconsistent, and irrelevant traits in participants’ initial categorizations. Indeed, demonstrating that this study’s method teased apart meaningful differences between counter-stereotypes and irrelevant traits, there was a marked difference in the traits that participants marked inconsistent versus irrelevant. Participants indicated that traits like “physically strong,” “open with their feelings,” and “excels at humanities” were inconsistent with the stereotype, whereas they indicated that traits like “dislikes rainy weather,” “is a night owl,” and “good-looking” were irrelevant to the stereotype.

Initial Categorizations: Consistent Traits



Initial Categorizations: Inconsistent Traits



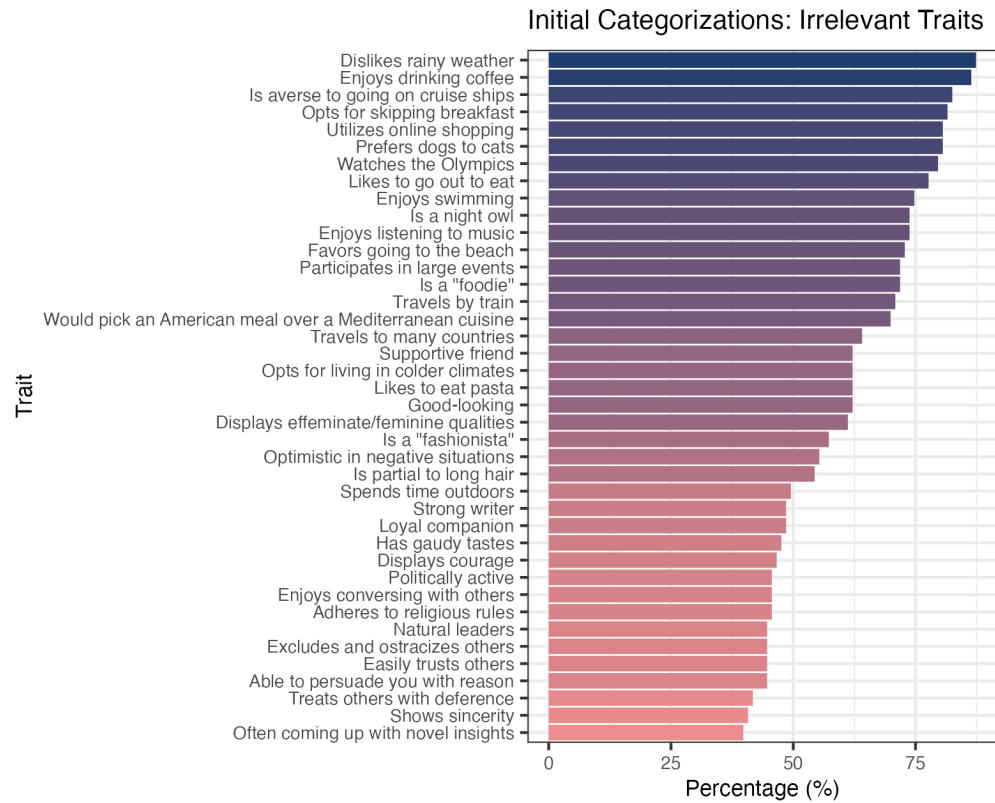
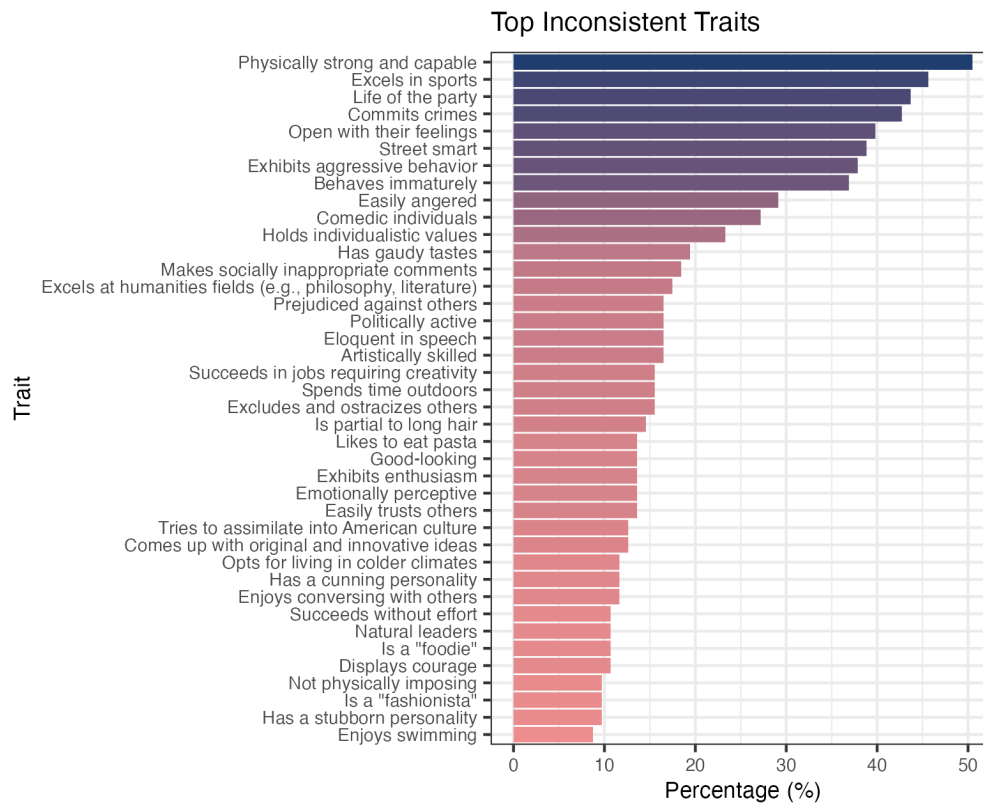
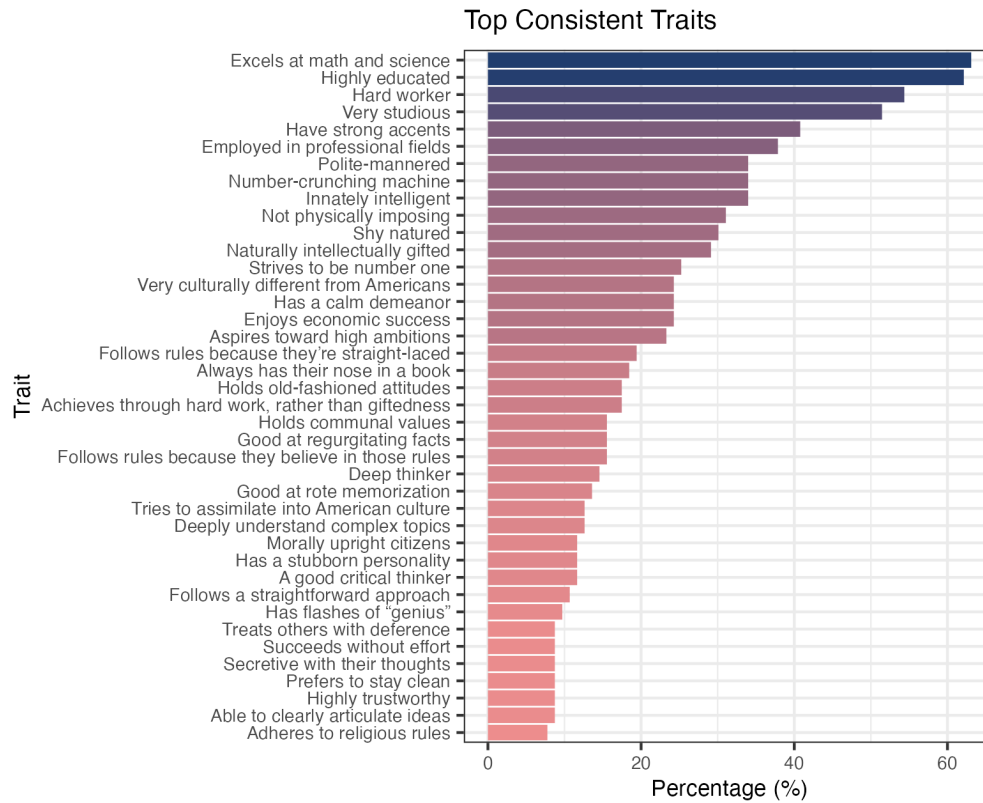
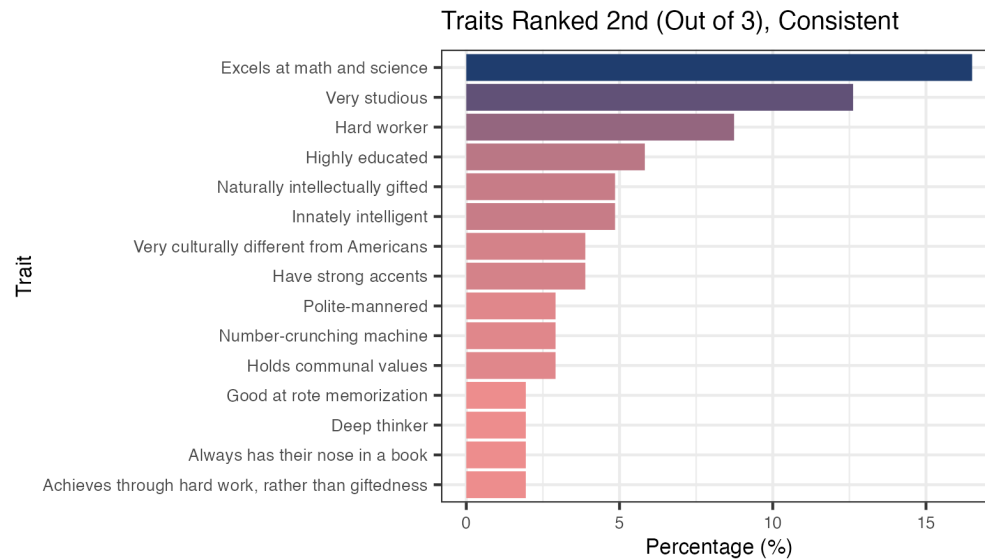
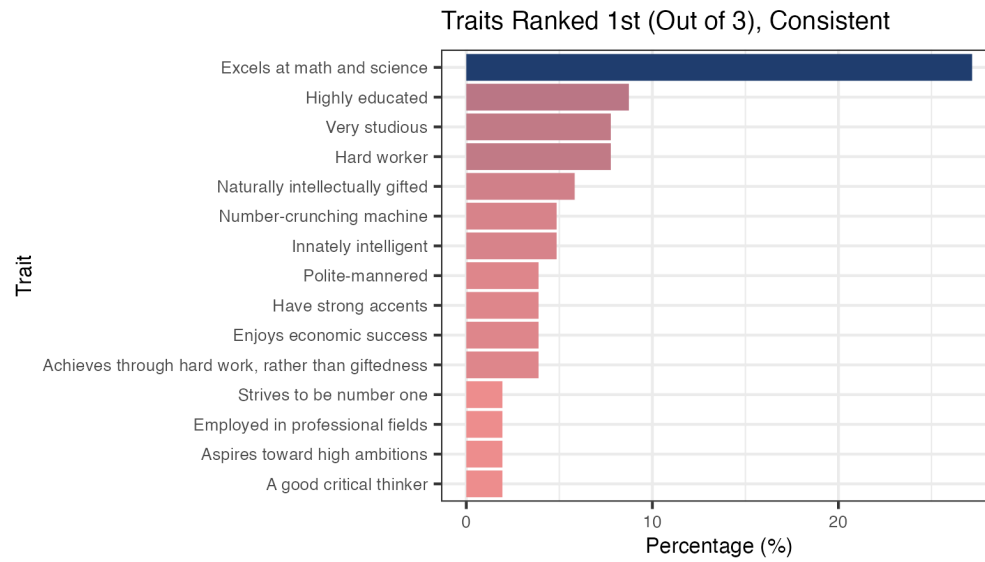
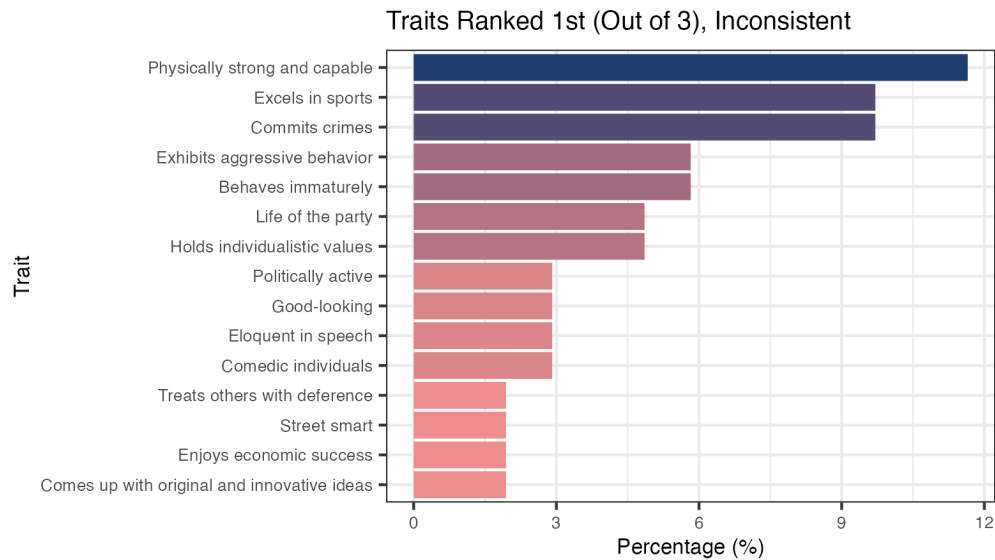
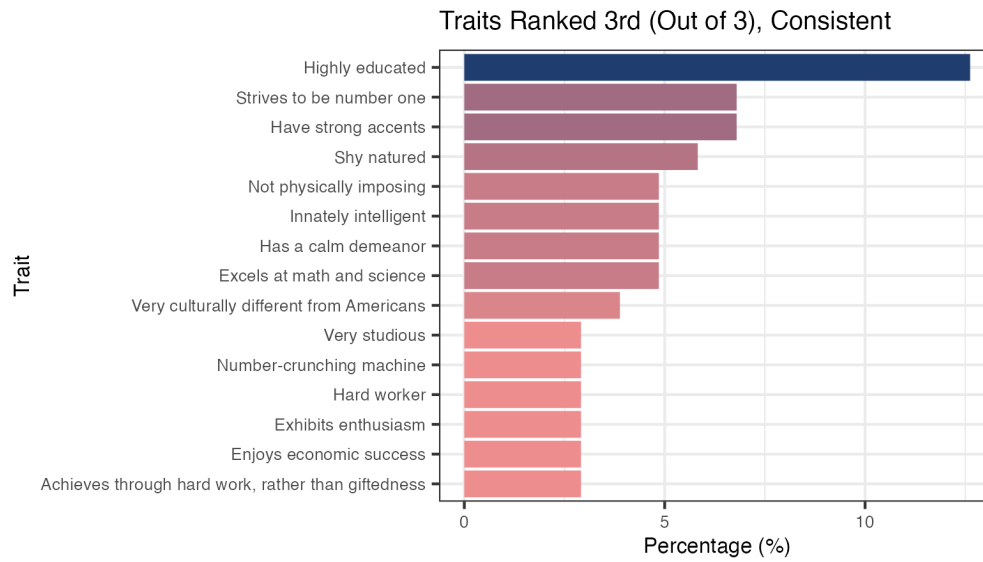


Figure 2.2a. Initial categorizations of consistent, inconsistent, and irrelevant traits.

Next, I'll show the overall top consistent and inconsistent traits that participants selected, as well as the traits that participants most often ranked as first, second, and third in the consistent and inconsistent categories. These tables show especially highly stereotypic traits, like "excels at math and science," "hard worker," and "polite-mannered," as well as especially highly counter-stereotypic traits, like "physically strong," "life of the party," and "excels at humanities."







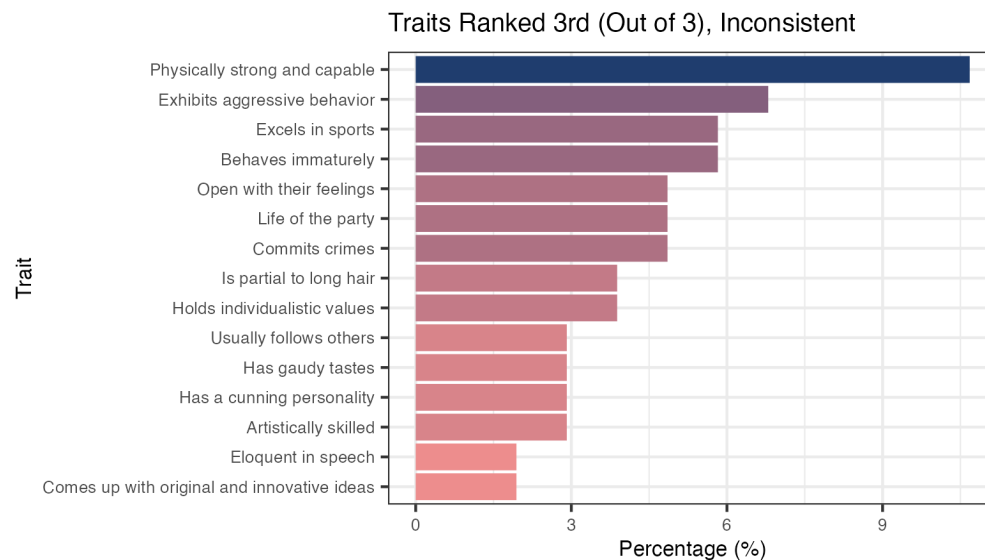
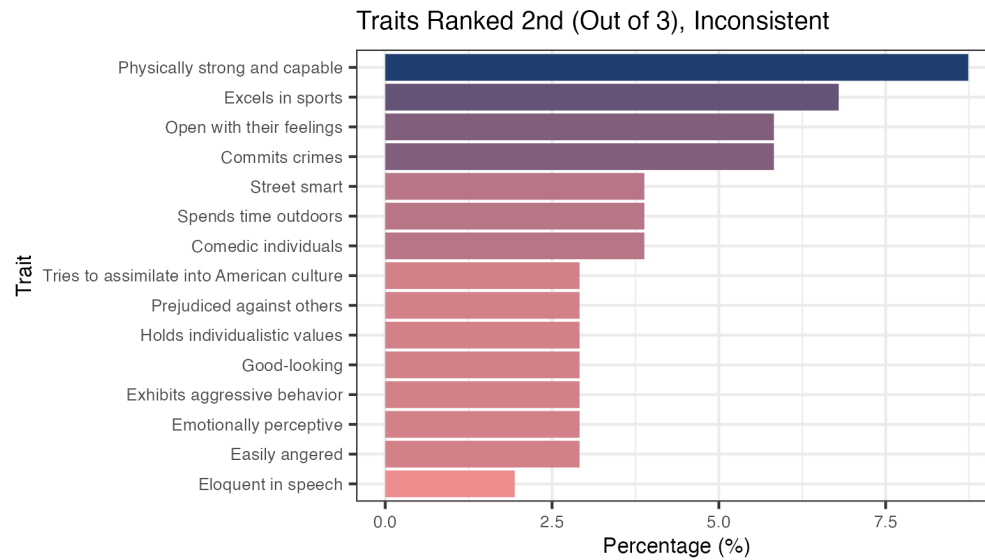


Figure 2.2b. Top consistent (stereotypic) and inconsistent (counter-stereotypic) traits for Asian Americans.

Interim Discussion

Though the results presented here are descriptive rather than inferential, this study suggests that Asian Americans are more likely to be stereotyped as excelling at math and science (rather than the humanities), and are more likely to be stereotyped as “studious,” “hard workers,” “number-crunching machines,” “good at rote memorization,” and “good at regurgitating facts,”

rather than being stereotyped as “creative,” or able to “come up with original and innovative ideas.”

This study generated rich descriptive data on the content of the Asian American stereotype, which has been largely missing from the literature. This novel multi-step method also avoids issues related to more common Likert ratings in stereotype research, wherein low ratings on the scale may either indicate that a trait is *counter-stereotypic* or is *irrelevant* to the stereotype of the target group.

Study 2.3: Descriptive Stereotypes of Four Major Racial Groups

This close replication of Study 2.2 extends the study to include four major racial groups in the United States (Asian, Black, Latino, and White Americans), and includes a streamlined step procedure as the method.

Participants

Data was collected in March of 2018. 124 participants were recruited from Mechanical Turk. 72 (58.1%) identified as a man and 52 (41.9%) identified as a woman. The average age was 36.7 years (SD = 11.1). 89 (71.8%) participants identified as White/Caucasian, 13 (10.5%) identified as Black/African American, 11 (8.9%) identified as Asian/Pacific Islander, 9 (7.3%) identified as Hispanic/Latino, 1 (.8%) as Middle Eastern, and 1 (.8%) selected “Other / Prefer not to say.” 28 (22.6%) identified as Republican, 61 (49.2%) identified as Democrat, and 35 (28.2%) identified as Independent/Other.

Methods

First, I presented participants with 60 traits and asked them to mark in a check box which racial groups (Asian American, Black/African American, Latino American, and White

American) are consistent with each stereotypic descriptor. Participants could select more than one racial group per trait. Of those traits that participants selected for each racial group, participants then indicated the top 10 *most* typical traits for Asian, Black, Latino, and White Americans. As the final step in this procedure, participants again received the traits they selected as most typical for each racial group, and rated on a 1-7 scale how socially desirable these traits are. Finally, participants answered some demographic items.

Results

A heat map of traits by racial group is presented below. This heatmap shows the percentage of participants who selected each trait as consistent with the referenced racial group. The figure suggests that African Americans and Latino Americans share much of the same stereotype content, and that this stereotype content is in stark contrast to stereotypes of Asian Americans and White Americans.

Within the competence domain, African and Latino Americans are not stereotyped as high in competence-related traits; conversely, Asian Americans are stereotyped as highly competent, as are White Americans. Of note, it appears that Asian and White Americans are not stereotyped as competent in the same ways. For instance, Asian Americans are stereotyped as excelling in math and science, being number-crunching machines, always having their nose in a book, and being very studious, while White Americans are not stereotyped as high in these traits. In contrast, White Americans are stereotyped as excelling in the humanities, succeeding in jobs requiring creativity, being artistically skilled, and being eloquent in speech.

Similarly, African and Latino Americans share many stereotypes within the warmth domain. They are not stereotyped with traits such as shy-natured, polite-mannered, or following rules, while they are stereotyped as committing crimes and having street smarts. Asian

Americans' stereotyped traits showed the reverse pattern. White Americans were highly stereotyped as prejudiced against others; they were also stereotyped as displaying courage and being emotionally perceptive, and were not stereotyped as having street smarts or committing crimes.

In the physicality domain, African Americans were stereotyped as being physically strong and excelling in sports. Asian Americans were stereotyped as not physically strong or imposing. White and Latino Americans did not show strong patterns in this domain.

With regard to cultural traits, Asian and Latino Americans were stereotyped more similarly to each other than to the other two racial groups: they were stereotyped as having strong accents and being culturally different from Americans. This is consistent with Zou & Cheryan (2017)'s research showing that Asian and Latino Americans are perceived as high in foreignness.

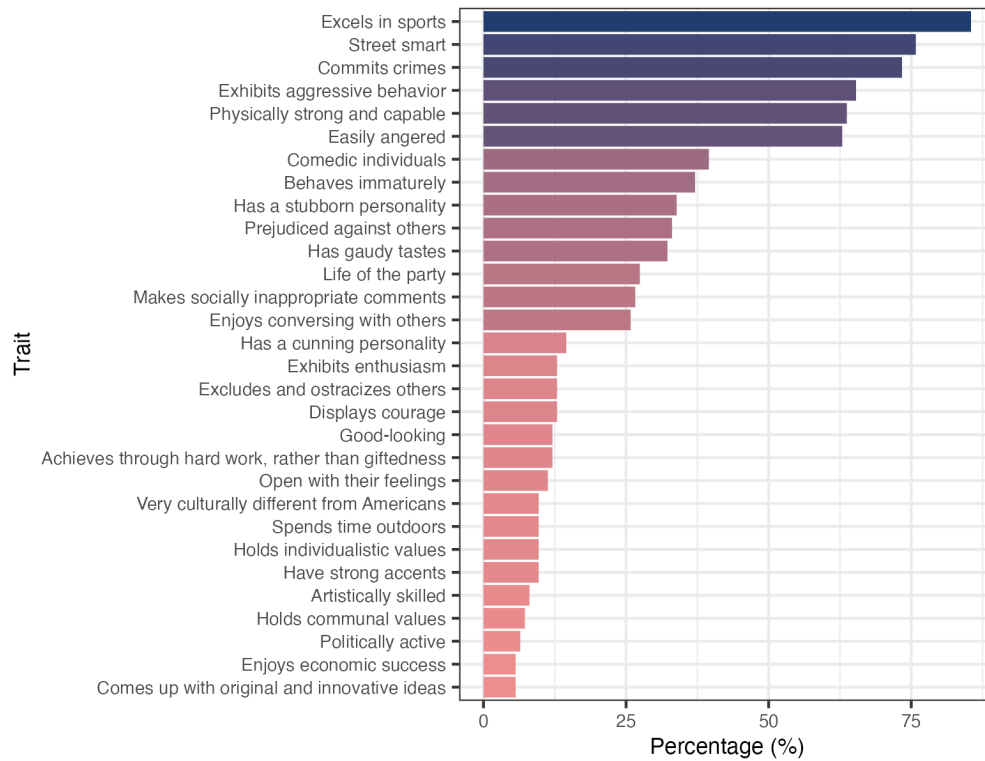
Finally, White Americans were highly stereotyped in the few traits that did not belong to a clear category: for example, they were stereotyped as politically active, enjoying spending time outdoors, and being good-looking.



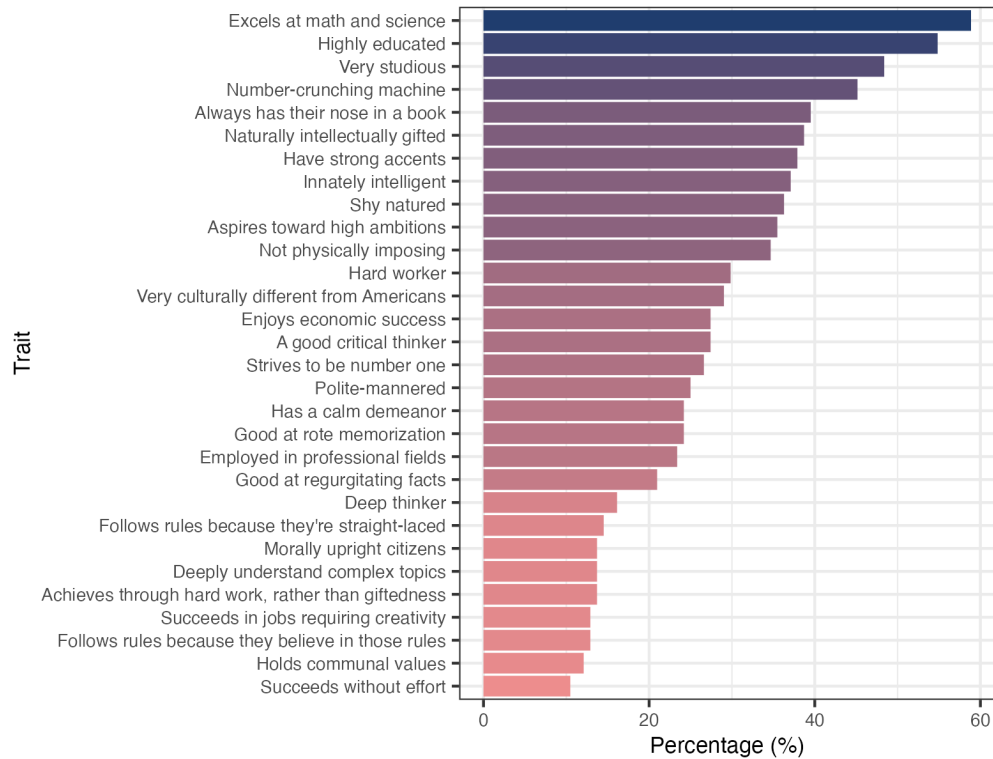
Figure 2.3a. Heatmap of stereotype-consistent traits by racial group.

To more easily compare with the results of Study 2.2, top traits by racial group are also presented below.

Top Traits: African American



Top Traits: Asian American



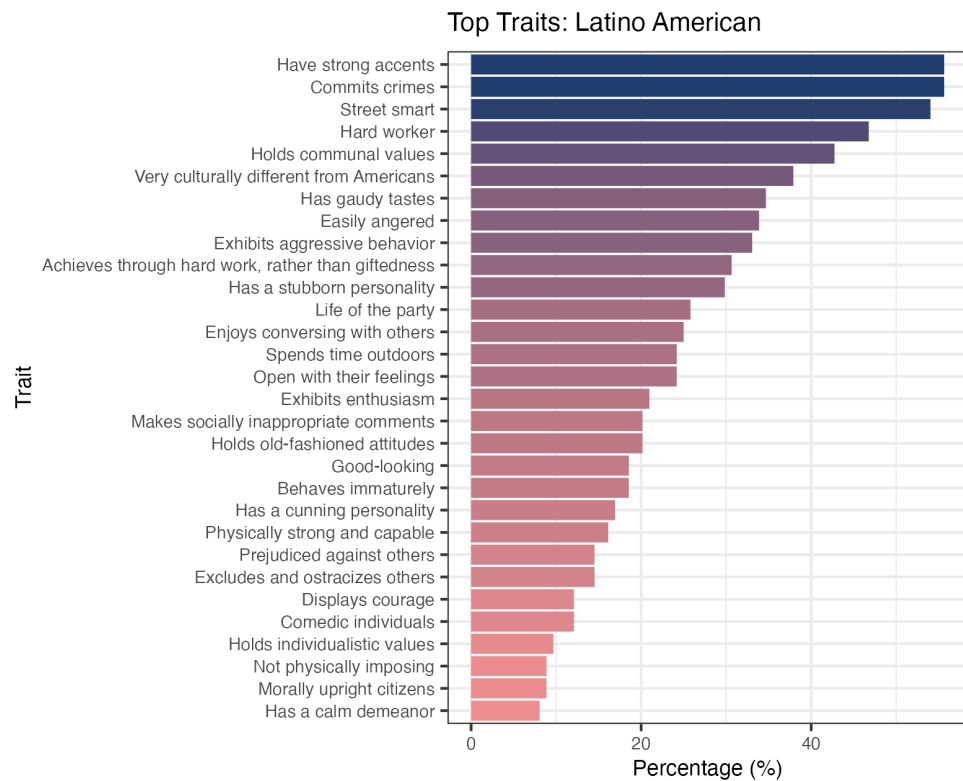
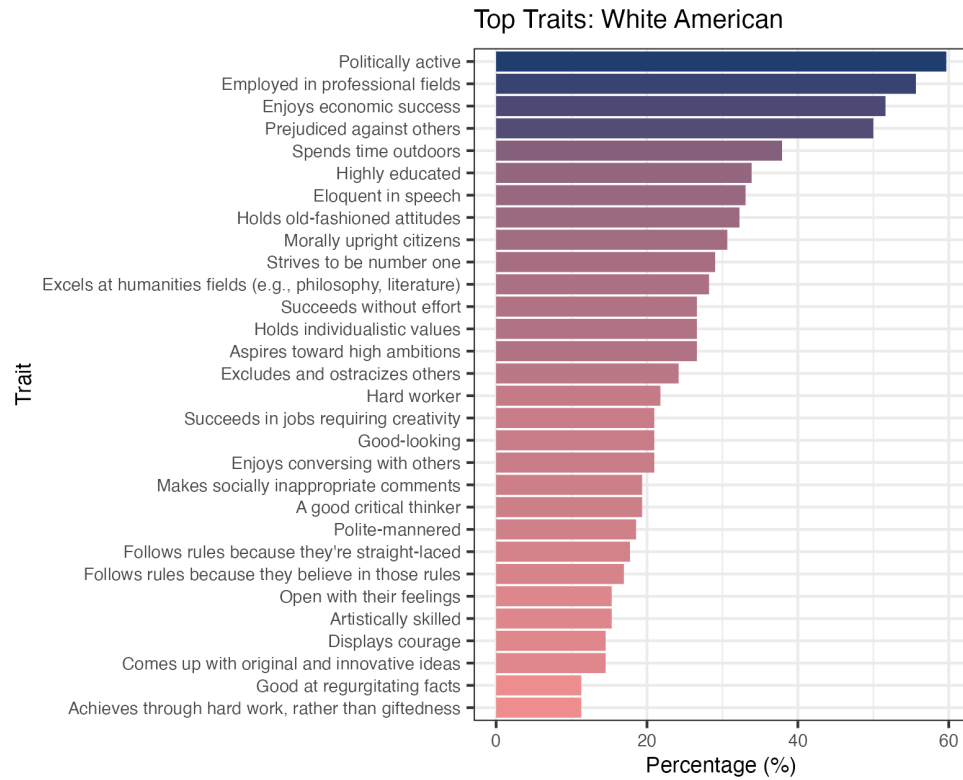


Figure 2.3b. Top consistent (stereotypic) traits for African, Asian, White, and Latino Americans.

Interim Discussion

This study descriptively charts stereotype content for four major racial groups in the United States: African Americans, Asian Americans, Latino Americans, and White Americans. The results suggest that African and Latino Americans are stereotyped similarly in the competence and warmth domains, while Asian Americans show the opposite pattern in stereotype content. Interestingly, Asian and White Americans have complementary stereotype content within the competence domain: Asian Americans are stereotyped as excelling in math and science but not being eloquent in speech, for example, while White Americans are stereotyped as being eloquent but not excelling in math and science. African and Latino Americans were stereotyped similarly to one another in the warmth domain, with Asian Americans being stereotyped very differently, and White Americans showing more variation depending on the trait. Together, these results suggest that there is great variation within stereotype trait domains: though competence and warmth are major fundamental dimensions of stereotype content, within-dimension differentiations are meaningful and informative.

General Discussion

In one experiment and two descriptive studies, this chapter explored the stereotype content of Black, Asian, Latino, and White Americans. Findings showed parallels between the stereotype content of Black and Latino Americans, and revealed some parallels in stereotypes of Asian and White Americans. Of particular note were the patterns revealed *within* the larger categories of warmth and competence. In the heatmap from Study 2.3, Asian and White American stereotypes were inversely patterned within the competence category: Asians were most stereotyped as “excelling in math and science,” “always having their nose in a book,” and being “number-crunching machines,” while Whites were not stereotyped highly on these traits.

Instead, Whites were highly stereotyped as “eloquent in speech” and “artistically skilled,” while Asian Americans were not stereotyped with these traits. Similarly, within the warmth domain, meaningful differentiations also emerged: Asian Americans were highly stereotyped as “polite-mannered,” while other racial groups were not, and White Americans were highly stereotyped as “enjoying conversing with others,” while other racial groups were not. This suggests that there are sub-facets within their broader stereotype dimensions that could differentiate the stereotype content of various racial groups.

The studies presented here also expand and complicate prevailing notions of the “model minority” stereotype of Asian Americans. While largely perceived to be “intelligent” and “competent,” this data suggests that Asian Americans’ intelligence may actually be denigrated and reduced to more rote, superficial forms of intellectual ability. Future research should explore whether such “rote” forms of intellectual ability are perceived to be less meaningful indicators of “true intelligence” than are “intellectual creativity” or “innovation,” which comprise the intellectual domain that Asian Americans are not expected to possess. Future research should also seek to uncover the motivational mechanisms underlying this phenomenon; it is possible, for example, that certain facets of Asian American competence are motivationally denigrated in an effort to protect and elevate the status of the dominant racial minority (Whites), who can, in contrast, be perceived as the “truly intelligent” racial group. This motivational process may serve to reduce perceived threat and competition from a racial minority group that is often portrayed as out-performing Whites on academic and professional outcomes. Finally, the finding that Asian Americans are unlikely to be perceived as creative, novel-thinking, and innovative could explain Asian Americans’ marked under-representation in leadership roles (Varma, 2004).

Chapter 2 Appendix: Full List of Included Traits

Study 2.2

1. Eloquent in speech
2. Able to clearly articulate ideas
3. Often coming up with novel insights
4. Comes up with original and innovative ideas
5. A good critical thinker
6. Able to persuade you with reason
7. Strong writer
8. Succeeds without effort
9. Has flashes of “genius”
10. Achieves through hard work, rather than giftedness
11. Good at rote memorization
12. Good at regurgitating facts
13. Deeply understand complex topics
14. Number-crunching machine
15. Deep thinker
16. Innately intelligent
17. Naturally intellectually gifted
18. Succeeds in jobs requiring creativity
19. Very studious
20. Always has their nose in a book
21. Artistically skilled
22. Strives to be number one
23. Street smart
24. Enjoys economic success
25. Aspires toward high ambitions
26. Employed in professional fields
27. Highly educated
28. Hard worker
29. Has a cunning personality
30. Excels at math and science
31. Excels at humanities fields (e.g., philosophy, literature)
32. Emotionally perceptive
33. Treats others with deference
34. Shows sincerity
35. Polite-mannered
36. Life of the party
37. Loyal companion
38. Supportive friend
39. Friendly individuals
40. Displays courage
41. Comedic individuals
42. Exhibits enthusiasm

43. Optimistic in negative situations
44. Secretive with their thoughts
45. Open with their feelings
46. Easily trusts others
47. Highly trustworthy
48. Enjoys conversing with others
49. Excludes and ostracizes others
50. Makes socially inappropriate comments
51. Holds communal values
52. Holds individualistic values
53. Morally upright citizens
54. Commits crimes
55. Follows rules because they believe in those rules
56. Follows rules because they're straight-laced
57. Tries to assimilate into American culture
58. Politically active
59. Displays effeminate/feminine qualities
60. Not physically imposing
61. Has a calm demeanor
62. Prejudiced against others
63. Adheres to religious rules
64. Has gaudy tastes
65. Easily angered
66. Exhibits aggressive behavior
67. Has a stubborn personality
68. Follows a straightforward approach
69. Decisive in behavior
70. Prefers to stay clean
71. Good-looking
72. Usually follows others
73. Natural leaders
74. Behaves immaturely
75. Shy natured
76. Holds old-fashioned attitudes
77. Very culturally different from Americans
78. Excels in sports
79. Physically strong and capable
80. Have strong accents
81. Enjoys swimming
82. Likes to eat pasta
83. Utilizes online shopping
84. Spends time outdoors
85. Enjoys listening to music
86. Travels to many countries
87. Prefers dogs to cats
88. Opts for living in colder climates

- 89. Favors going to the beach
- 90. Likes to go out to eat
- 91. Is partial to long hair
- 92. Opts for skipping breakfast
- 93. Is a night owl
- 94. Dislikes rainy weather
- 95. Watches the Olympics
- 96. Would pick an American meal over a Mediterranean cuisine
- 97. Is averse to going on cruise ships
- 98. Travels by train
- 99. Would rather live in the city
- 100. Enjoys drinking coffee
- 101. Is a "foodie"
- 102. Is a "fashionista"
- 103. Participates in large events

Study 2.3

1. Excels at math and science
2. Physically strong and capable
3. Highly educated
4. Excels in sports
5. Hard worker
6. Life of the party
7. Very studious
8. Commits crimes
9. Have strong accents
10. Open with their feelings
11. Employed in professional fields
12. Street smart
13. Number-crunching machine
14. Exhibits aggressive behavior
15. Innately intelligent
16. Behaves immaturely
17. Polite-mannered
18. Easily angered
19. Not physically imposing
20. Comedic individuals
21. Shy natured
22. Holds individualistic values
23. Naturally intellectually gifted
24. Has gaudy tastes
25. Strives to be number one
26. Makes socially inappropriate comments
27. Enjoys economic success
28. Excels at humanities fields (e.g., philosophy, literature)
29. Aspires toward high ambitions
30. Eloquent in speech
31. Has a calm demeanor
32. Artistically skilled
33. Very culturally different from Americans
34. Politically active
35. Follows rules because they're straight-laced
36. Prejudiced against others
37. Always has their nose in a book
38. Succeeds in jobs requiring creativity
39. Achieves through hard work, rather than giftedness
40. Excludes and ostracizes others
41. Holds old-fashioned attitudes
42. Spends time outdoors
43. Good at regurgitating facts
44. Exhibits enthusiasm

45. Holds communal values
46. Enjoys conversing with others
47. Follows rules because they believe in those rules
48. Emotionally perceptive
49. Deep thinker
50. Easily trusts others
51. Good at rote memorization
52. Good-looking
53. Deeply understand complex topics
54. A good critical thinker
55. Has a cunning personality
56. Morally upright citizens
57. Has a stubborn personality
58. Comes up with original and innovative ideas
59. Succeeds without effort
60. Displays courage

Chapter 3: The Goldilocks Effect

The previous chapter showed that racial minority stereotypes are often held in direct contrast to each other. I argue that this contrastive positioning of racial groups allows White Americans, the majority group, to maintain and protect their status by appearing as the standard-bearer of a wide array of traits. Consequently, racial minority groups are placed at extremes that are either too high or too low on said traits. The present experiment was designed to test whether White participants are inclined to distribute stereotypic trait ratings across multiple racial target groups in a way that allows White targets to be positioned as desirably “in the middle” compared to the other racial groups being rated. Participants were asked to continuously place racial groups on an axis after receiving two or three target groups (rating White and Black Americans together; rating White and Asian Americans together; or rating White, Black, and Asian Americans together) on a wide range of stereotypic traits. The goal of this study was to test whether, across many stereotype trait dimensions, White participants would be consistently motivated to distribute racial minority groups such that these groups’ stereotypes complement each other and thus allow Whites to elevate their in-groups’ status by virtue of being ideally and desirably in the middle—that is, in the Goldilocks position.

Study 3: A Method to Test the “Goldilocks Effect”

Participants

Data was collected in March of 2021. 348 White participants were recruited from Prolific. 99 (28.4%) were women, 243 (69.8%) were men, 5 (1.4%) selected Other, and 1 (0.3%) selected “Prefer not to say.” The range of participant ages was 18 – 68 years old; the mean age

was 24.9 (SD = 8.2). 145 (41.7%) identified as Democrat, 31 (8.9%) identified as Republican, 104 (29.9%) identified as Other, and 67 (19.3%) selected “Prefer not to say.”

Methods

Following the informed consent, participants were told that they would participate in a survey about how people in the United States perceive various social groups. They were instructed to answer how our society perceives these groups, not whether they themselves share or believe these perceptions.

Participants were presented with 24 traits in a randomized order. For each trait, each participant was randomly assigned to one of three conditions: a condition in which they rated Asian and White targets simultaneously; a condition in which they rated White and Black targets simultaneously; and a key contrastive 3-group condition in which they rated Asian, White, and Black targets simultaneously. Participants were asked to make these ratings by dragging a continuous slider, with “too low/too little” on one end of the slider, “too high/too much” on the opposite end, and “ideal” in the middle. Participants could not view the numbers associated with the slider, but it ranged from -100 to +100, with 0 representing “ideal.” Examples of the three possible comparison conditions are shown below.

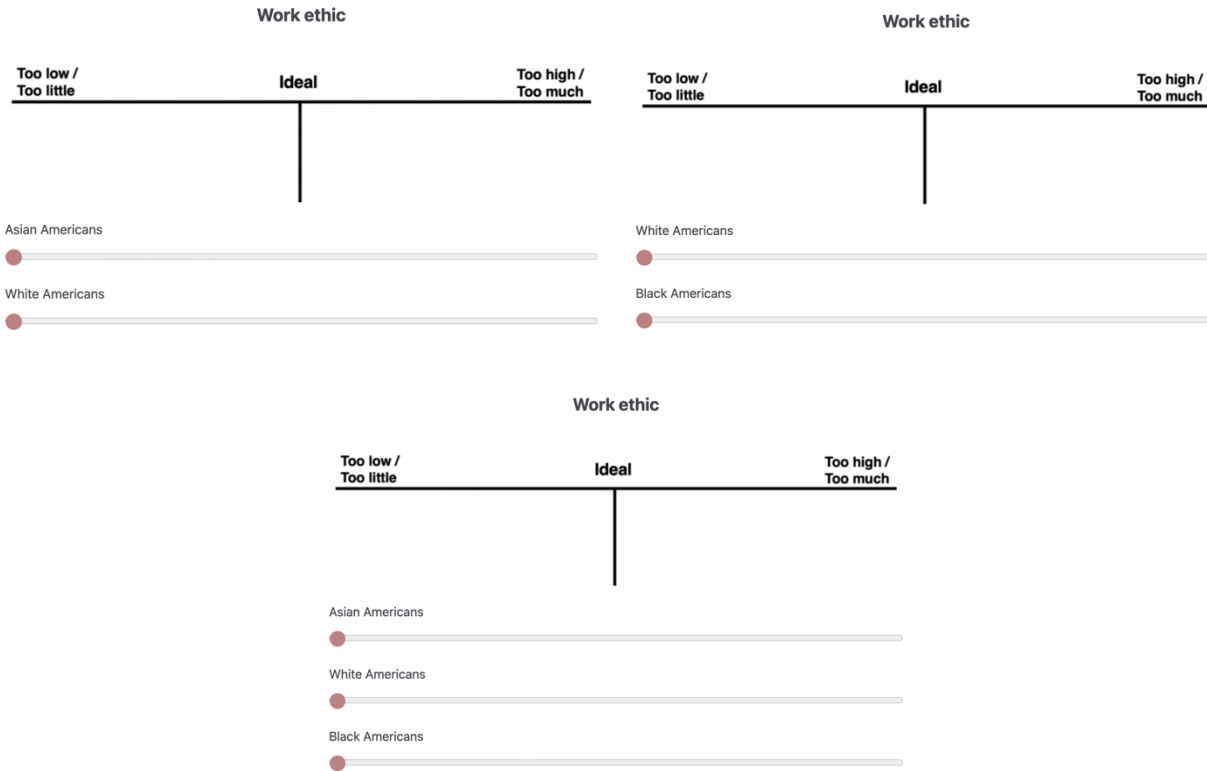


Figure 3a. Example of the three possible conditions participants might have seen for the trait “Work Ethic”: 1) rating Asian and White targets simultaneously, 2) rating White and Black targets simultaneously, and 3) rating Asian, White, and Black targets simultaneously.

The 24 traits represented a range of stereotype-relevant domains. Within the domain of competence, the traits were work ethic, intelligence, creativity, artistic, good at math and science, educated, studious, likely to succeed in professional fields, ambitious, competitive, enjoys economic success, originality, and good at memorizing facts. Within the warmth domain, the traits were outgoing, assertive, politically radical, polite, popular, funny, and shy. Within the physicality domain, the traits were strong and athletic. Within the gendered domain, the traits were feminine and masculine.

Finally, participants answered some demographic questions.

Results

Racial Group Positions by Trait

Examples of the pattern of results are visualized in the figures below. In the first figure, mean ratings (with 95% confidence intervals) for the first six competence-related traits are grouped in columns by comparison condition (rating White & Asian targets together; rating Asian, Black, & White targets together; or rating White & Black targets together), with the target racial group being rated (Asian, White, and Black) on the x-axis. This visual organization of the data suggests that Black and Asian targets are placed on opposing poles, with White targets being placed somewhere in the middle of Asian and Black targets.

In the subsequent figure, mean ratings are arranged by target racial group in columns, with comparison condition marked on the x-axis. This visual organization of the data highlights that ratings of White targets change depending on the racial groups to which they are being compared. Specifically, rating White targets alongside both Black and Asian targets leads participants to position Whites in between the positions of White targets in the other two comparison conditions. In other words, for many of the traits, White targets tend to be pushed *more* towards the ideal middle when they are being rated alongside both Black and Asian Americans (rather than when White targets are only rated alongside Asian targets, or only rated alongside Black targets).

To understand the distribution of ratings for one illustrative trait, consider the results for the trait “Work Ethic,” shown below. Here, Black Americans are rated as too low in the trait, while Asian Americans are rated as too high in the trait. White Americans are rated somewhere in between Black and Asian Americans. Moreover, in the maximal comparison condition—where participants are rating Black, White, and Asian Americans simultaneously—White

Americans are again positioned in the middle, and are placed the closest to the “ideal” middle line. Thus, rating these three racial groups in a comparative context seems to allow White participants to better place their own group in the “Goldilocks” position on a wide range of traits.

For illustration purposes, the first six competence-related traits (in both visual organization layouts) are shown in the figures below. Figures for all 24 traits—organized both by comparison condition, and by target racial group—are included in the appendix.

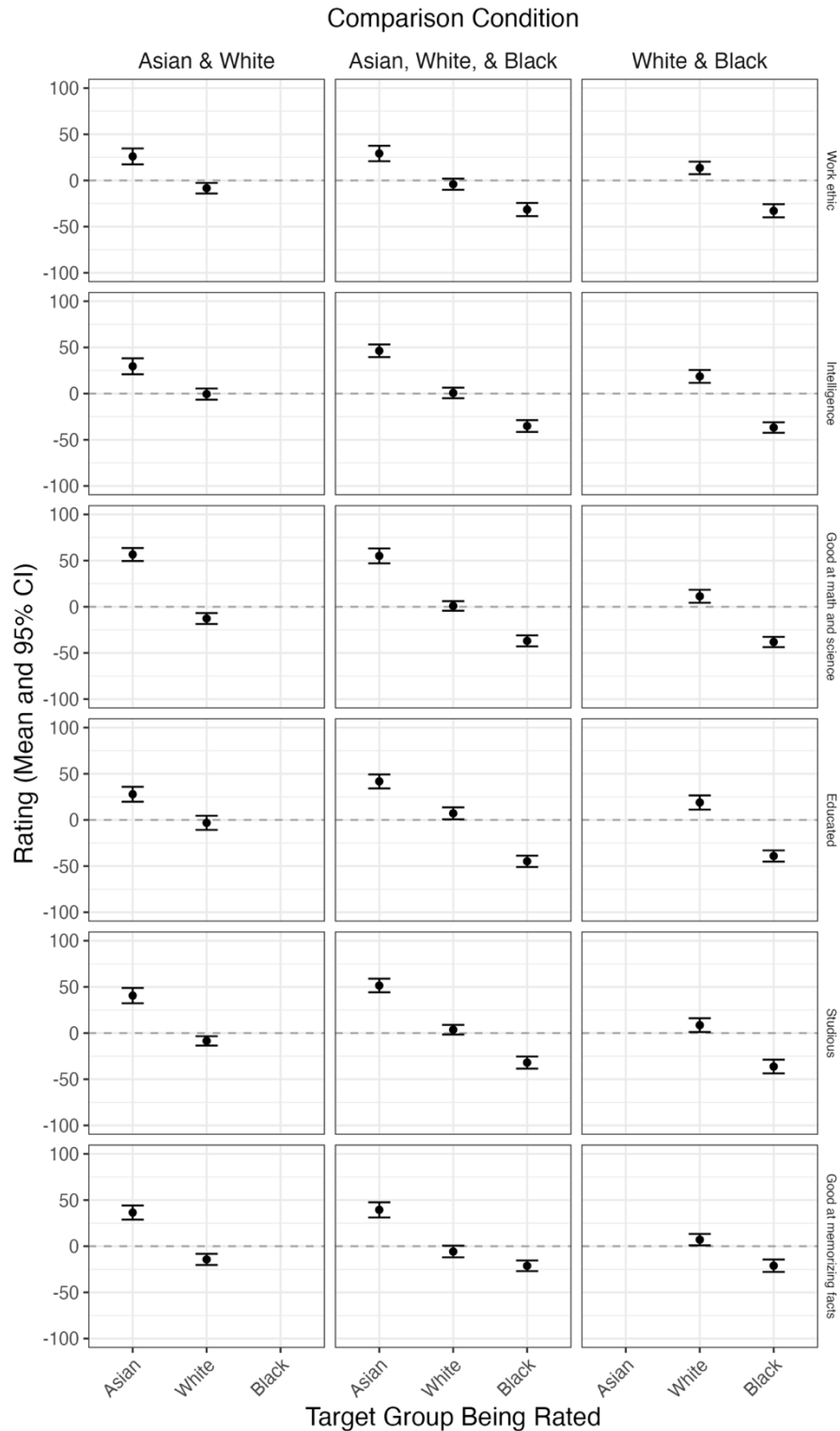


Figure 3b. Ratings for the first six competence-related traits, grouped by comparison condition (whether participants were rating White and Black Americans together; Black, White, and Asian Americans together; or White and Asians together), with racial target (White, Black, and Asian Americans) marked on the x-axis.

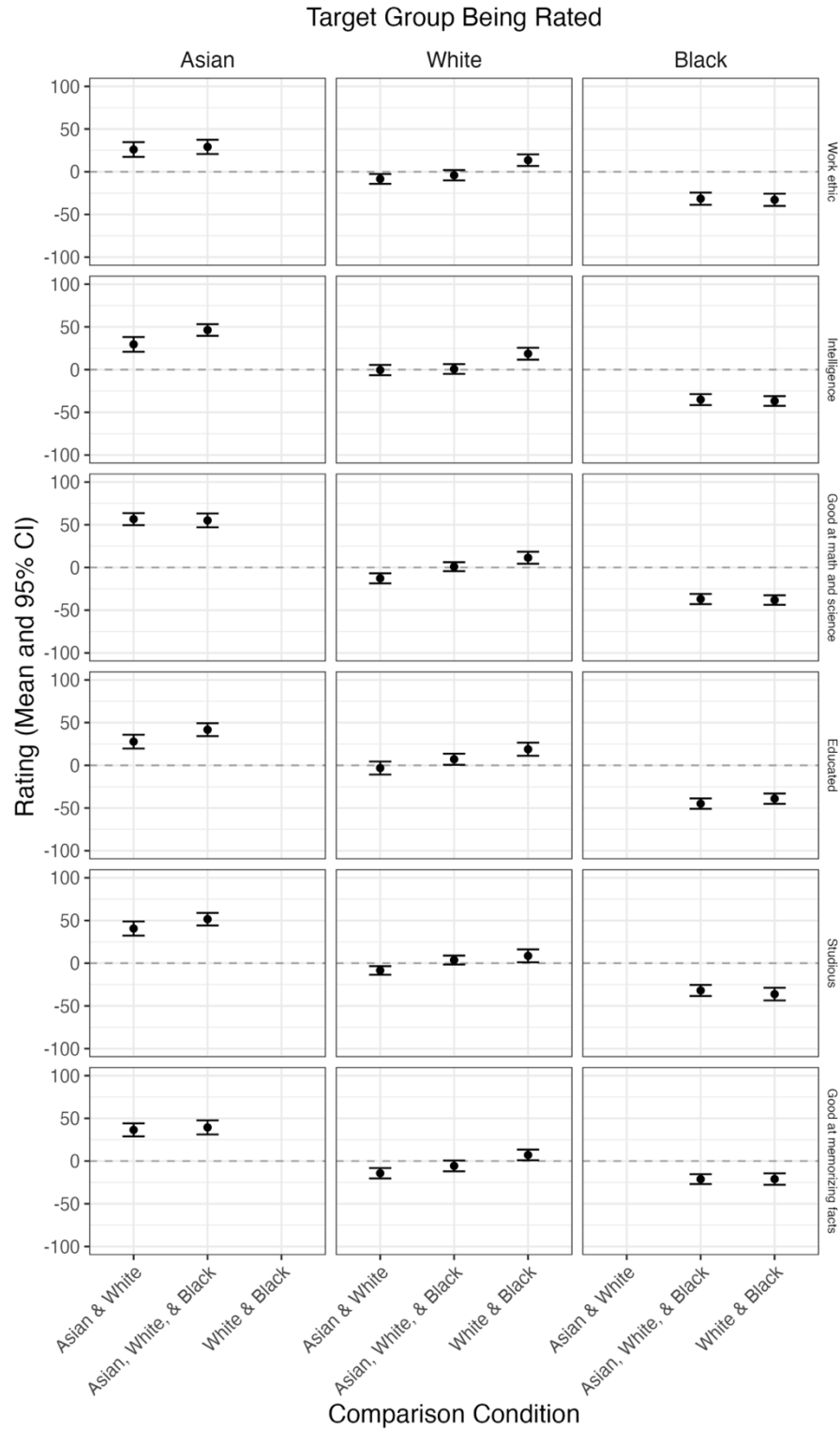


Figure 3c. Ratings for the first six competence-related traits are grouped by racial target, while comparison condition is marked on the x-axis.

Linear Mixed Effects Model

I fit a linear mixed effects model to test the effects of target racial group, comparison condition, and target by condition interaction on trait rating. One key advantage of using a linear mixed model is that I could specify random effects in the model. In this case, I specified participants and traits as random effects (per Judd, Westfall, & Kenny, 2012). Because participants are expected to have individual differences in their responses to the study, and because the 24 traits chosen for this study are selected from a much larger set of possible traits that might have been used (Westfall, Kenny, & Judd, 2014), treating participants and traits as random effects allowed me to explicitly partition the variances that are associated with these differences (rather than bundling this variance into an error term). I included rating as the dependent variable and added fixed effects of target, condition, and the target by condition interaction. I specified the model as follows in R using the lme4 package, and using the lmerTest and emmeans packages for additional tests: $\text{rating} \sim \text{target} * \text{condition} + (1|\text{Participant}) + (1|\text{trait})$. Within the model, “White” was set as the reference group for target, and “Asian, Black, & White” was set as the reference group for comparison condition. Because ratings of White targets and the 3-group comparison condition are of the highest theoretical interest, setting these as the reference groups allowed me to assess effects relative to the target and condition group most central to the research question.

Before the model was run, I transformed the data to account for the fact that some of the traits used in the study were expected to be negatively correlated with each other. For example, one might predict that the trait “studious” would be negatively correlated with the traits “popular” or “athletic.” Collapsing across such traits during data analysis could lead to the “canceling out” of effects or patterns in the data. To determine which traits were negatively

correlated with each other, I created a correlation matrix of the 24 traits, using trait rating as the dependent variable, and reverse-scored the traits that were negatively correlated with the trait “studious.” Those traits were outgoing, popular, funny, politically radical, strong, athletic, and masculine. Because the traits were rated on a -100 to +100 scale, these items were reverse-scored by flipping the $-/+$ sign of the value: for example, scores of 80 on the trait “strong” were changed to -80. Reverse-scoring these items maintained rating differences by racial target and condition, but helped to ensure that any rating differences across traits were in the same direction, thus reducing statistical noise associated with the traits themselves and preventing effects from canceling each other out simply by virtue of trait rating directionality.

Within this model, there was a main effect of comparison condition: the effect of the Asian & White comparison condition relative to the 3-group comparison condition of interest was significant ($b = -7.22$, $t = -6.45$, $p < .001$), as was the effect of the White & Black comparison condition relative to the Asian, White, & Black condition ($b = 6.14$, $t = 5.49$, $p < .001$). There was also a main effect of the racial target group being rated: the effects of the Asian and Black target variables both showed significant effects ($b_{\text{Asian}} = 26.47$, $t = 23.75$, $p < .001$; $b_{\text{Black}} = -26.35$, $t = -23.65$, $p < .001$). Finally, the interaction terms Asian & White condition * Asian target, and White & Black condition * Black target were both significant: $b_{\text{Asian\&White} * A} = 5.05$, $t = 3.21$, $p = .001$; $b_{\text{White\&Black} * B} = -3.97$, $t = -2.52$, $p = .012$). These results suggest that both comparison condition and racial group target have significant effects on trait ratings, and that the effect of target depends on the level of comparison condition. The results are plotted in the forest plot below.

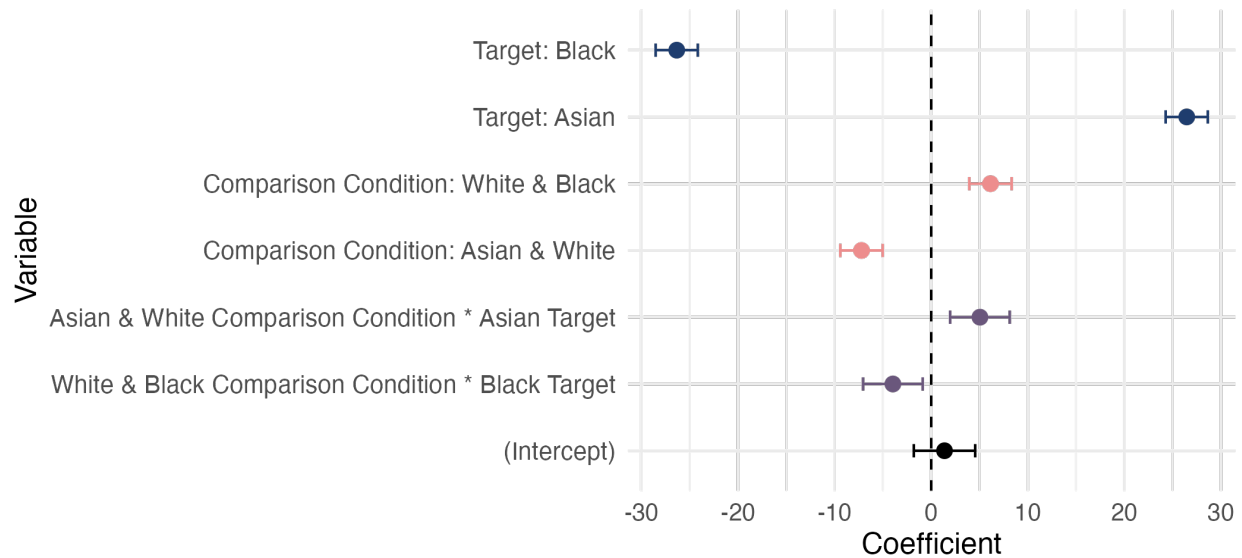


Figure 3d. Forest plot of coefficients for the linear mixed effects model. Note that White targets are the reference group for target racial group, and the 3-group (Asian, White, & Black) comparison condition is the reference group for condition.

Pairwise Comparisons

Pairwise comparisons further revealed relationships between racial target and comparison condition, and clarified conclusions that can be drawn about this chapter's two primary research questions.

Question 1: Are White targets positioned in the middle of Asian and Black targets?

Within the 3-group (Asian, White, & Black) comparison condition, pairwise comparisons were made between White and Asian targets, between White and Black targets, and between Asian and Black targets. There was a significant difference between White and Asian targets (estimated difference = -26.47, $z = -23.75$, $p < .0001$), between White and Black targets (estimated difference = 26.35, $z = 23.65$, $p < .0001$), and between Asian and Black targets (estimated difference = 52.82, $z = 47.40$, $p < .0001$). As predicted, White targets were in fact positioned in between Asian and Black targets.

Question 2: How do ratings of White targets change depending on which other racial groups they are being compared to? Examining White targets, pairwise comparisons were made between the Asian & White and the White & Black conditions, between the Asian, White, & Black and the Asian & White conditions, and between the Asian, White, & Black and White & Black conditions. There was a significant difference for White targets in the 3-group condition and the Asian & White condition (estimated difference = 7.22, $z = 6.45$, $p < .0001$), in the 3-group condition and the White & Black condition (estimated difference = -6.14, $z = -5.49$, $p < .0001$), and in the Asian & White and the White & Black conditions (estimated difference = -13.36, $z = -11.95$, $p < .0001$). As predicted, participants did shift ratings of White targets according to the other racial groups to which they were being compared. Specifically, the Asian, White, & Black comparison condition led participants to push ratings of White targets in between ratings of White targets in the other two conditions. Put another way, rating White targets alongside Black and Asian targets brought White targets higher on the scale compared to rating White targets solely alongside Asian targets. Conversely, rating White targets alongside both other racial groups brought White targets lower on the scale compared to rating White targets solely alongside Black targets.

An additional exploratory question is whether comparison condition also causes shifts in the positions of Asian and Black targets. Pairwise tests comparing Asian targets in the 3-group condition and the Asian & White condition did not show a difference (estimated difference = 2.17, $z = 1.94$, $p = .59$), nor between Black targets in the 3-group condition and the White & Black condition (estimated difference = -2.17, $z = 1.94$, $p = .58$).

These results are plotted in the figure of estimated marginal means below.

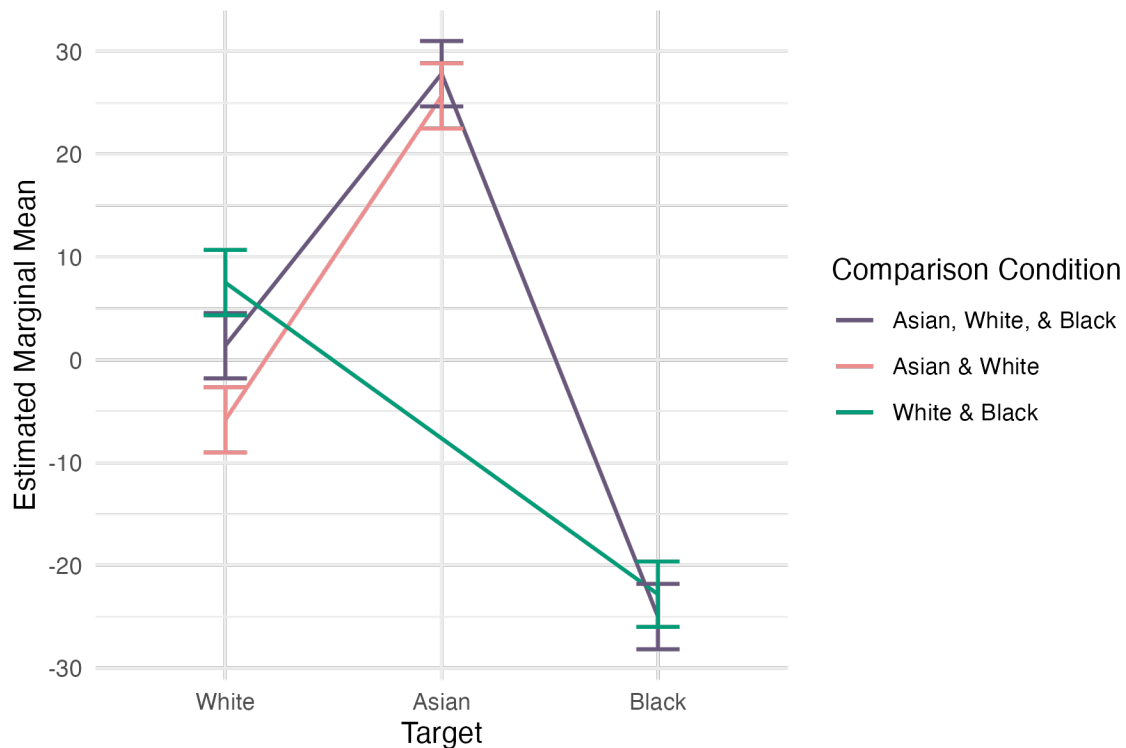


Figure 3e. Estimated marginal means by comparison condition and target racial group on the x-axis. Within the 3-group (Asian, White, & Black) comparison condition White targets are rated in between Asian and Black targets. Moreover, when comparing White target ratings across conditions, White targets in the 3-group comparison condition are positioned in between White targets in the other two conditions. White targets in the 3-group comparison condition are also rated closest to “ideal” zero.

Discussion

This study was the first test of the “Goldilocks” hypothesis: Do White people strategically position White Americans in between Asian and Black Americans, in order to protect and elevate White Americans’ status? As hypothesized, in the three-group comparison condition, participants positioned White targets in the middle of Asian and Black targets, effectively placing White targets in the “Goldilocks” position. This effect also held in a more conservative version of the Goldilocks test: participants placed White targets from the three-group condition in between the positions of White targets from the other two conditions. This suggests that being able to compare Whites to both Asian and Black targets simultaneously

allowed participants to push White targets closer to the middle than when comparisons were limited to one other racial group.

Furthermore, as seen in the estimated marginal means figure, White targets in the three-group comparison condition were rated closest to the “ideal zero” midpoint on the rating scale. This reinforces the idea that the availability of multiple comparative racial groups allows White participants to more comfortably position their in-group closer to the ideal middle.

Interestingly, the study found no evidence that comparison condition influenced ratings of Asian or Black targets. This raises questions about the motivations and mechanisms underlying these rating shifts. It is not simply the case that comparing one racial target group to another (or to others) influenced trait ratings of that target group — in other words, there is not solely a motivation to engage in the compensation effect. Instead, the results of this study suggest that among White participants, there is a particular motive to adjust the position of in-group (White) targets, and this motive’s direction appears oriented towards the middle (rather than simply “higher” or “lower”).

These findings raise additional questions and avenues for future research. One future study should explore mechanism. If the Goldilocks effect is indeed motivated by a desire for Whites to elevate and protect their in-group status, the effect might be intensified following a group threat prime. Researchers could present participants with data stating that racial minorities will outnumber Whites by 2050 and assess the strength of the effect (Craig & Richeson, 2014) to investigate this possibility.

There are also potential limitations to consider. Although the traits used in this study spanned categories of competence, warmth, physicality, and gendered associations, the trait selection was not necessarily data-driven. The selection of these traits was influenced by

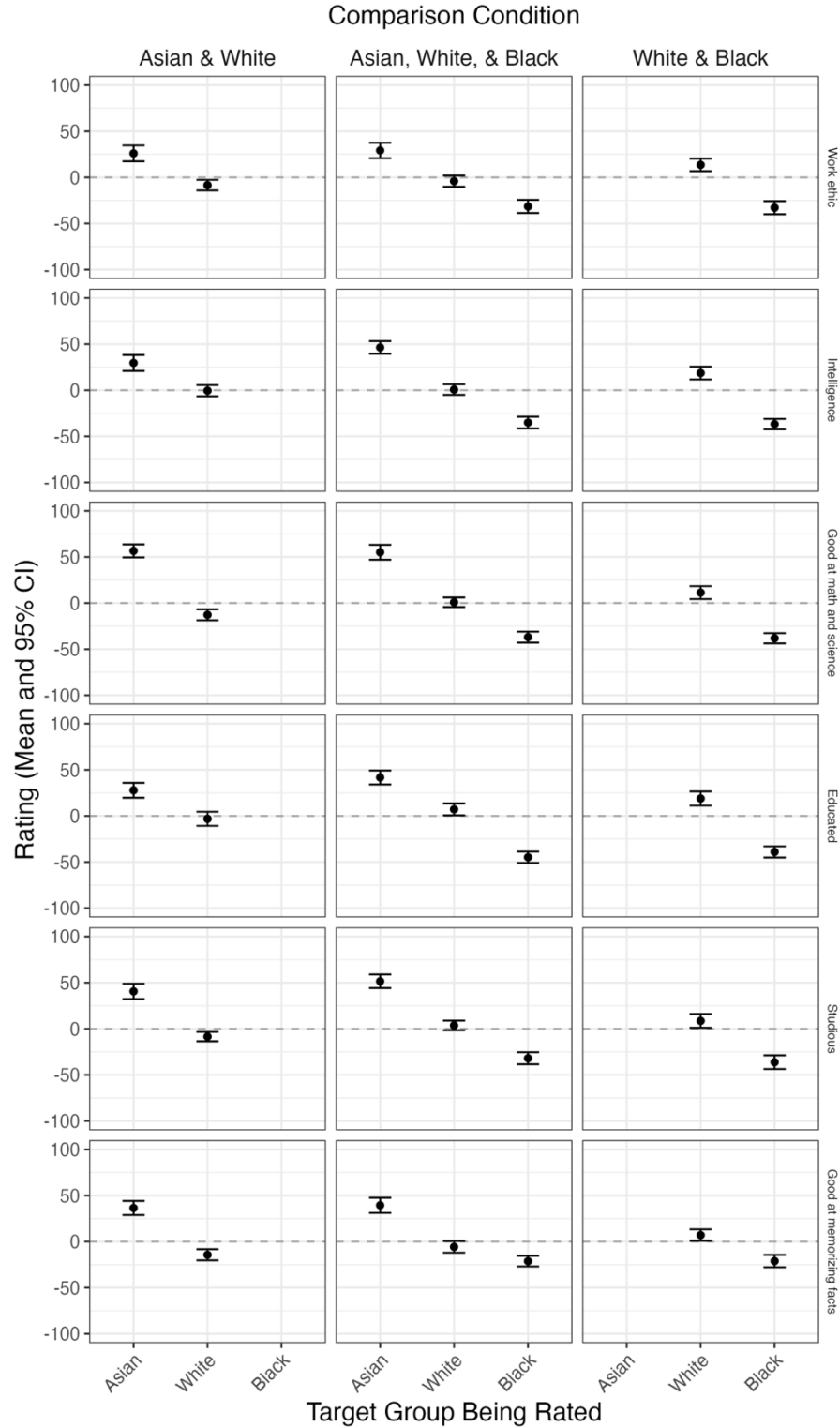
previous descriptive studies on stereotype content, rather than based on a free association task (Nicolas, Bai, & Fiske, 2022) or a factor analysis. Alternative methods of trait selection may result in a more representative set of traits.

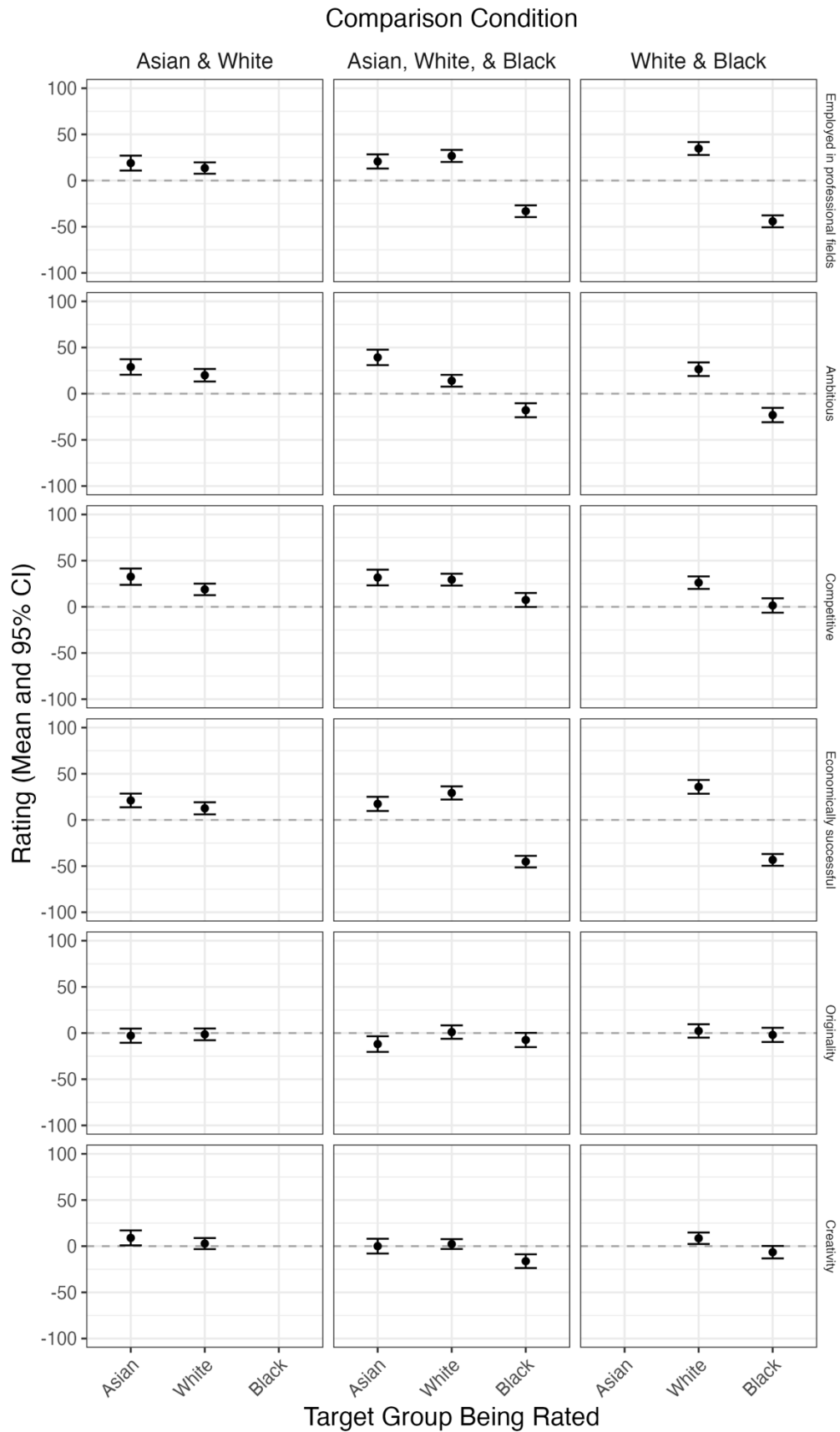
Finally, future replications of this research could seek to diversify the sample to include participants of color. Future research should test whether people of color similarly adjust ratings of their in-group members, or if they show the same pattern as White participants and adjust the positions of White targets. If the latter scenario is true, this would suggest that people of color may have internalized similar biases to those held by Whites.

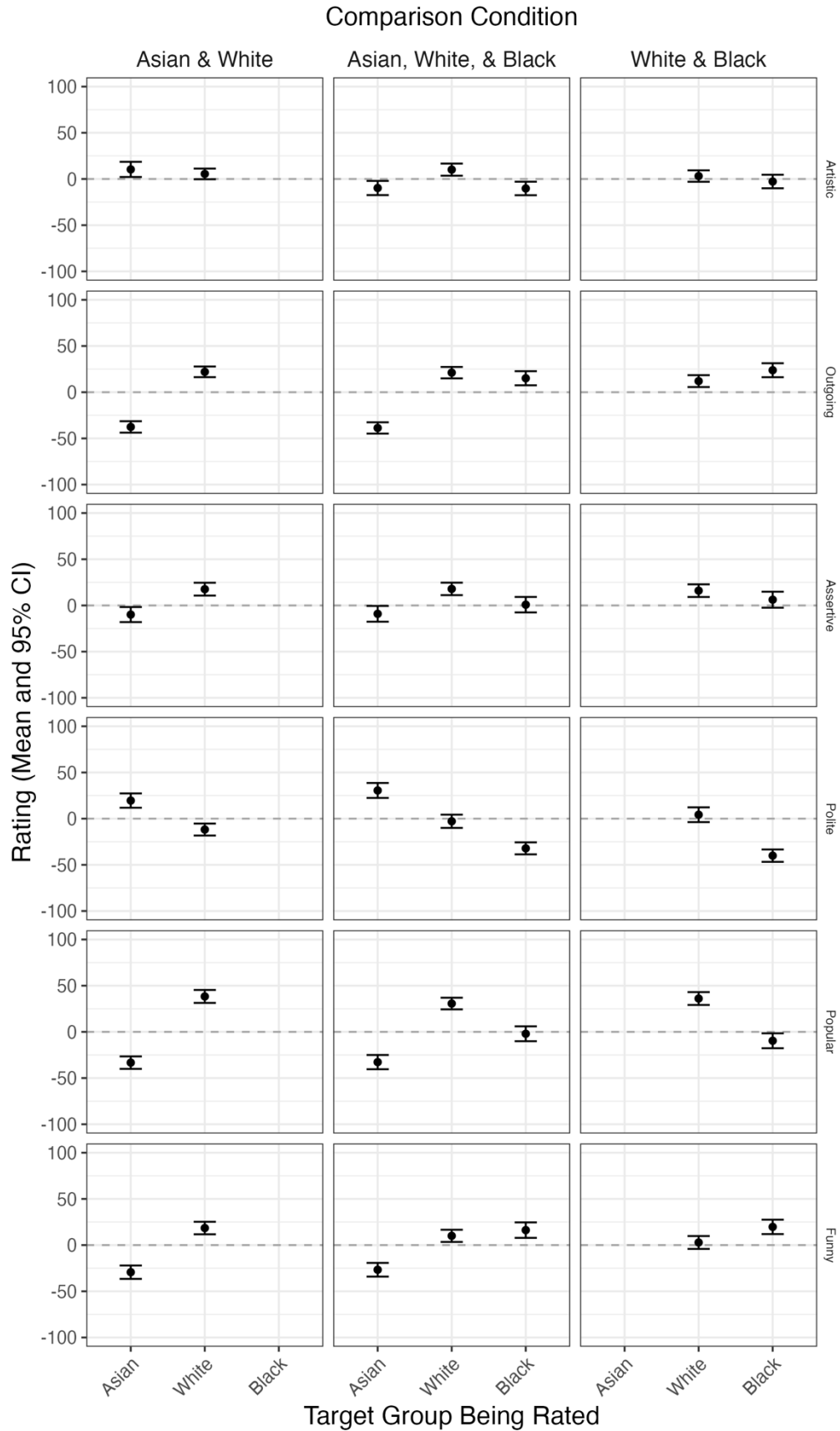
This study ultimately provides the first evidence testing the Goldilocks theory of contrastive racial stereotyping, and provides a foundation for future investigations into the factors that shape racial stereotyping.

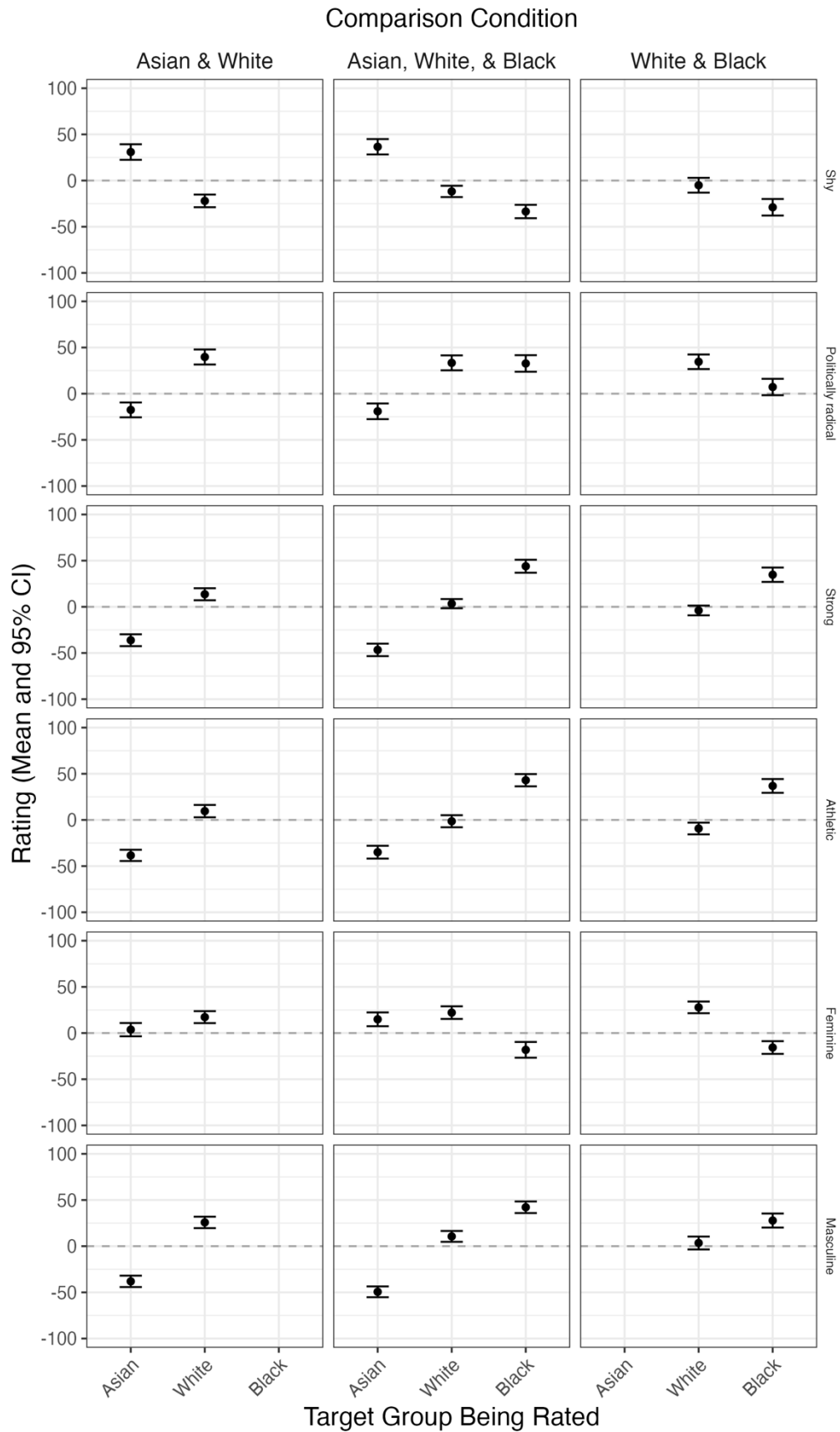
Chapter 3 Appendix (A): Ratings for All Traits by Comparison Condition.

Target racial group is plotted on the x-axis. This visual organization of the data highlights that, in the 3-group (Asian, White, & Black) comparison condition, participant ratings usually position White targets in between Asian and Black targets.



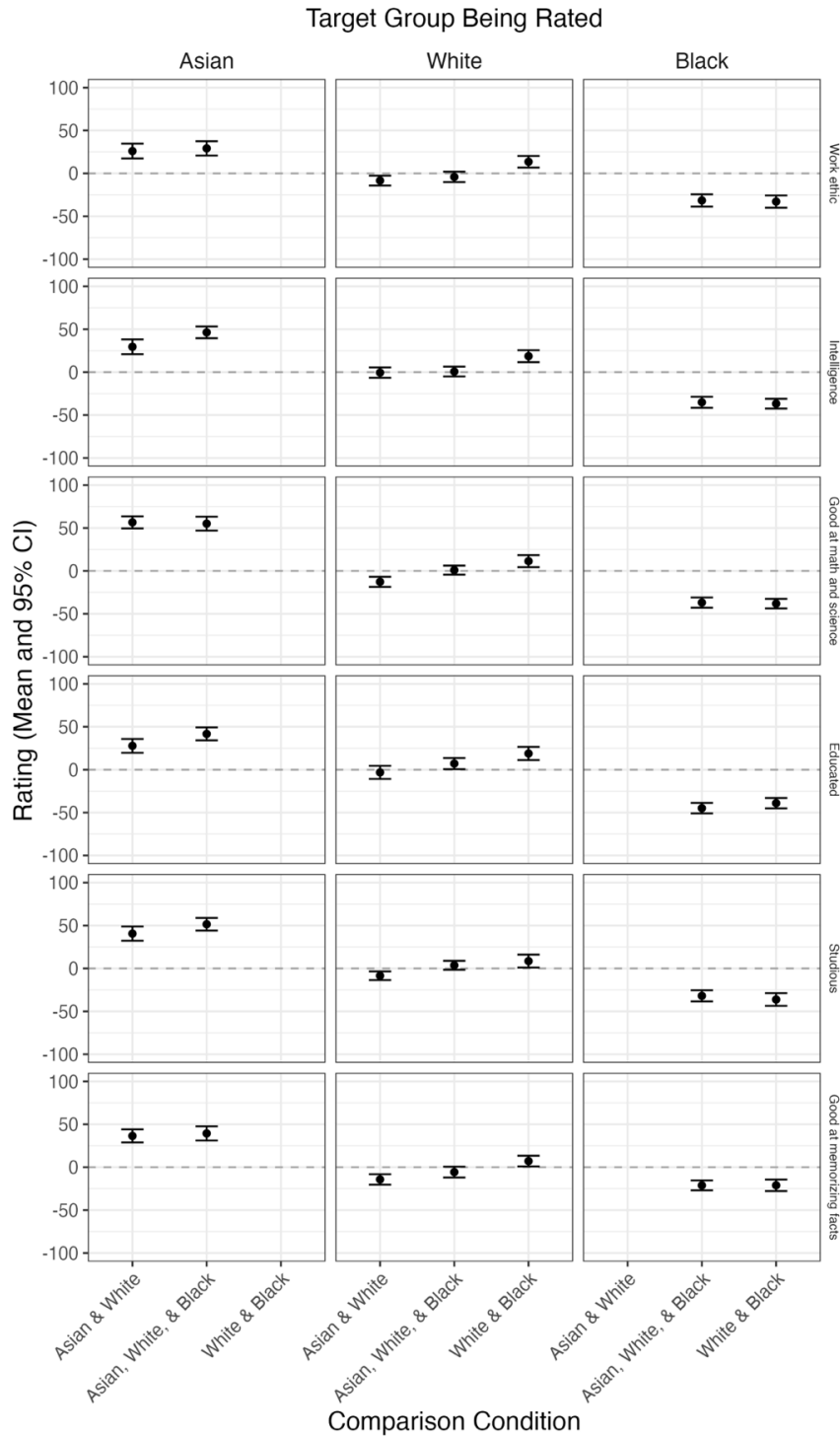


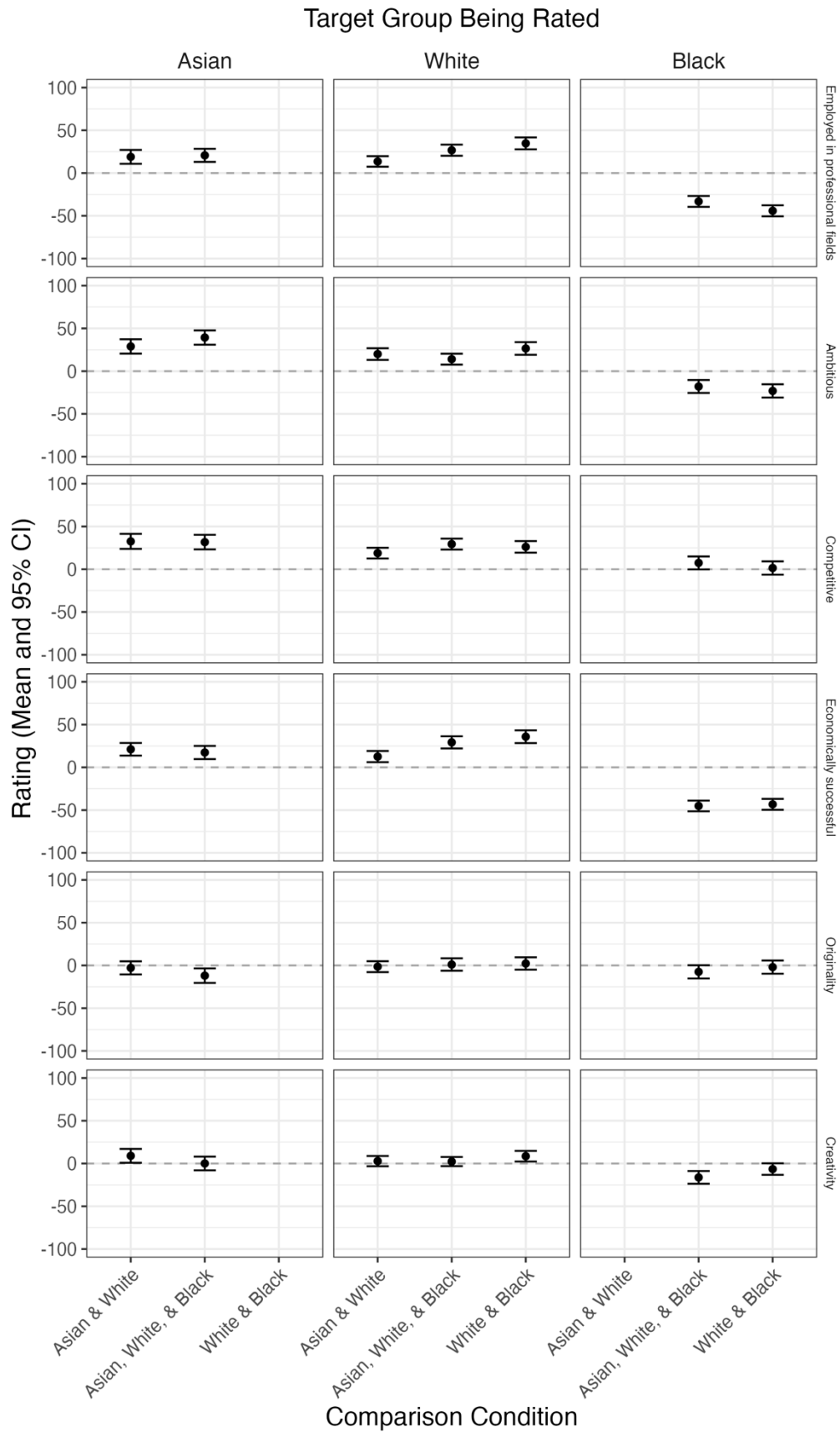


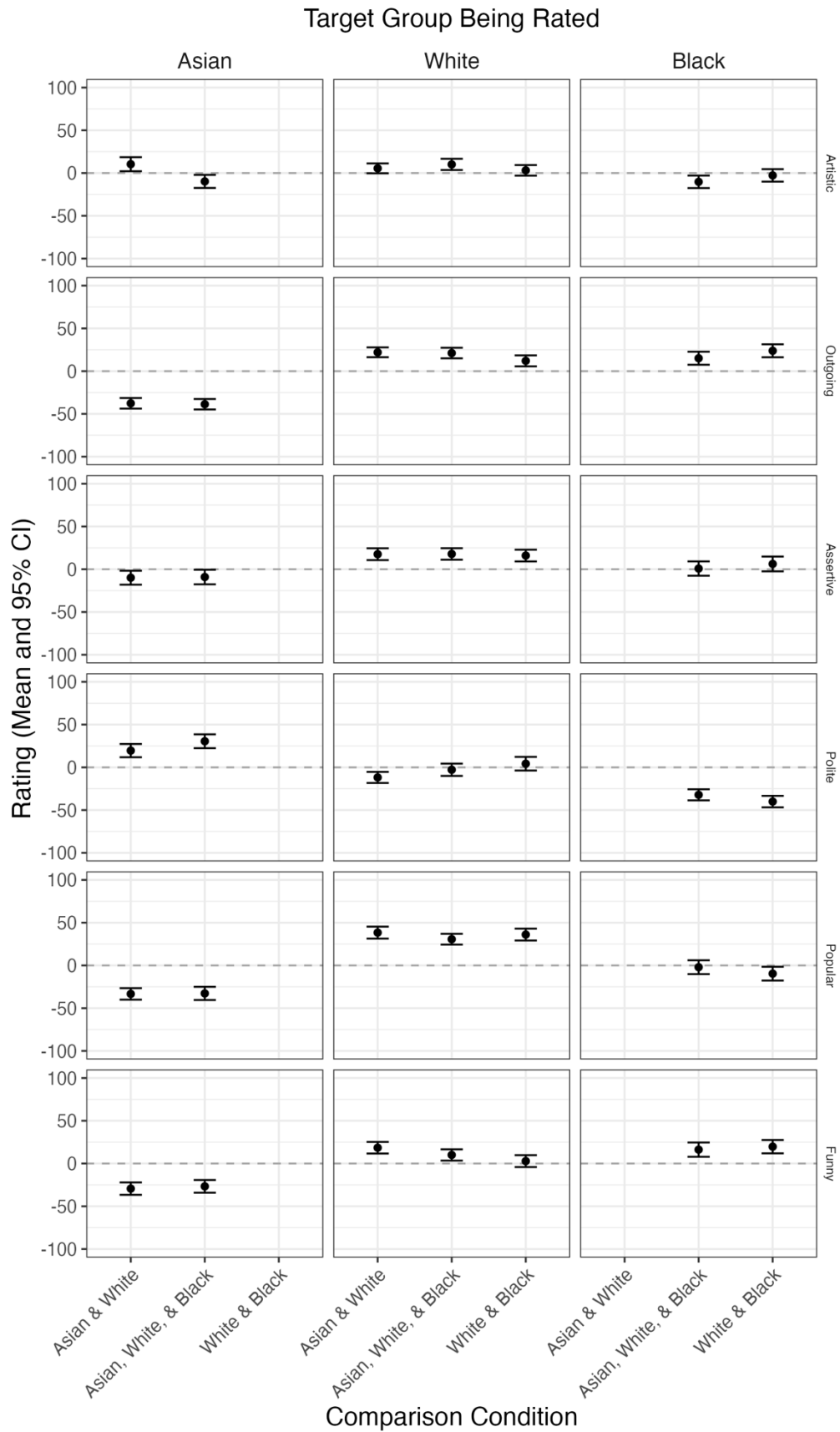


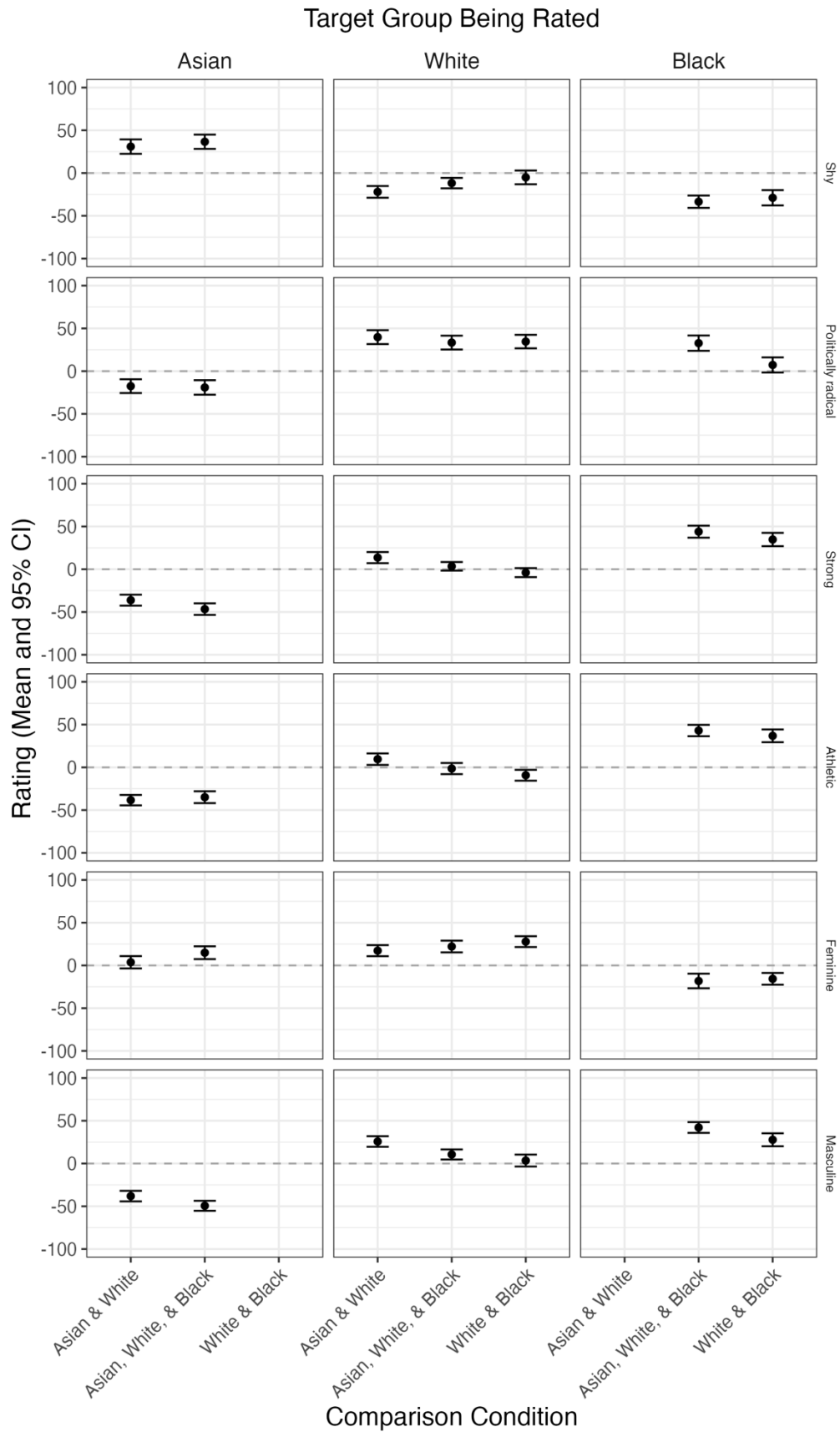
Chapter 3 Appendix (B): Ratings for All Traits by Target Racial Group.

Comparison condition is plotted on the x-axis. This visual organization of the data highlights that ratings of White targets change depending on the racial groups to which they are being compared. Specifically, rating White targets alongside both Black and Asian targets leads participants to position Whites in between the positions of White targets in the other two comparison conditions.









Chapter 4: Implications for Intergroup Relations and Public Policy

The previous studies in this dissertation are designed to show that people are motivated to construct a distribution of out-group stereotypes such that those out-groups (e.g., Asian and Black Americans) complement each other on a wide range of dimensions, thus enabling the in-group (White Americans) to emerge as the “ideal middle” on a wide range of traits. While the previous studies illustrate the spread of these stereotype distributions, Studies 4 and 5 in this chapter explore the attitudinal and intergroup effects of having such distant points in these distributions. Specifically, this chapter explores the consequences of a distribution of stereotypes with Black Americans on one far side of the distribution, with Asian Americans on the other far side, consequently serving as a “model minority.”

Study 4.1: Attitudes Towards Redistribution and Perceived Discrimination

This experiment explored the effects of the “model minority” stereotype of Asian Americans on attitudes towards African Americans. I predicted that exposure to the model minority stereotype of Asian Americans—compared to the same information about European Americans—would lead participants to report more negative attitudes toward Black Americans.

Participants

Data was collected in March of 2019. 255 participants were recruited from Mechanical Turk. 162 (63.5%) of participants identified as a man, 93 (36.5%) identified as a woman, and no one selected “other” or “prefer not to say.” Participant ages ranged from 19 to 70; the average age was 36.64 (SD = 11.9). 196 (76.9%) of participants identified as White/Caucasian, 19 (7.5%) identified as Asian, 14 (5.5%) identified as Hispanic/Latino, 13 (5.1%) identified as

Black/African American, 7 (2.8%) identified as multi-racial, 5 (2%) identified as Native American/Indigenous, and 1 responded “prefer not to say.” 139 (54.5%) identified as Democrat, 63 (24.7%) identified as Republican, 47 (18.4%) identified as Other, and 6 (2.4%) answered “prefer not to say.”

Methods

After completing the informed consent, participants were randomly assigned to either the Model Minority or the Control condition. 135 participants were randomly assigned to the Model Minority condition, and 120 participants were randomly assigned to the Control condition. Participants in both conditions were told that they would read a report from a non-partisan, non-profit organization that annually surveys American residents on a range of topical issues. Participants in the Model Minority condition read the following excerpt: “A recent report found that Asian Americans have relatively high incomes and high professional statuses, relative to other racial groups in the US. In fact, Asian Americans have a median household income that is among the highest of any group in America. Additionally, Asian Americans tend to have greater academic achievement than other groups... The report's results indicated that Asian Americans’ success—including their high incomes and high professional statuses—were attributed to their strong work ethic, ambition, intelligence, self-discipline, and law-abiding character.” Participants in the Control condition read the same excerpt, with the exception that “Asian Americans” was replaced with “European Americans.”

Participants then completed adapted items from the Symbolic Racism Scale (Sears, 2000), about their endorsement of the bootstrap myth, the amount of discrimination that Black Americans face, and Black Americans’ deservingness of resources. On a 1 – 7 Likert scale, participants indicated their agreement with the following items: “It’s really a matter of some

people not trying hard enough; if Black Americans would only try harder they could be just as well off as other groups,” “How much discrimination against Black Americans do you feel there is in the United States today, limiting their chances to get ahead?”, and “Over the past few years, Black Americans have gotten more economically than they deserve.”

Finally, participants completed demographic items about their gender, age, ethnicity, and political beliefs.

Results

The key dependent variables were participants’ attitudes toward Black Americans, as measured by the three items from the Symbolic Racism Scale. For bootstrap myth endorsement, participants in the Model Minority condition ($M = 3.91$, $SD = 2.08$) scored significantly higher than participants in the Control condition ($M = 3.39$, $SD = 1.84$), $t(251.97) = 2.11$, $p = .036$, 95% CI [0.035, 1.003]; Cohen's $d = -0.26$, 95% CI [-0.51, -0.01]. The pattern was the same for perceptions of the amount of discrimination that Black Americans face; scores were significantly higher (with higher scores indicating greater anti-Blackness, or lower perceived discrimination) in the Model Minority condition ($M = 4.02$, $SD = 1.7$) than in the Control condition ($M = 3.57$, $SD = 1.7$), $t(249.51) = 2.09$, $p = .037$, 95% CI [0.03, 0.87]; Cohen's $d = -0.26$, 95% CI [-0.51, -0.01]. Finally, the pattern was again the same for Black Americans’ deservingness of resources. With higher scores indicating greater anti-Blackness, or lower ratings of Black Americans’ deservingness of resources, scores were significantly higher in the Model Minority condition ($M = 3.12$, $SD = 1.79$) than in the Control condition ($M = 2.67$, $SD = 1.59$), $t(253) = 2.13$, $p = .034$, 95% CI [0.04, 0.87]; Cohen's $d = -0.27$ [-0.51, -0.02]².

² The results presented here include participants of every racial background, as there were not enough participants in each racial minority group to conduct analyses with sufficient statistical power.

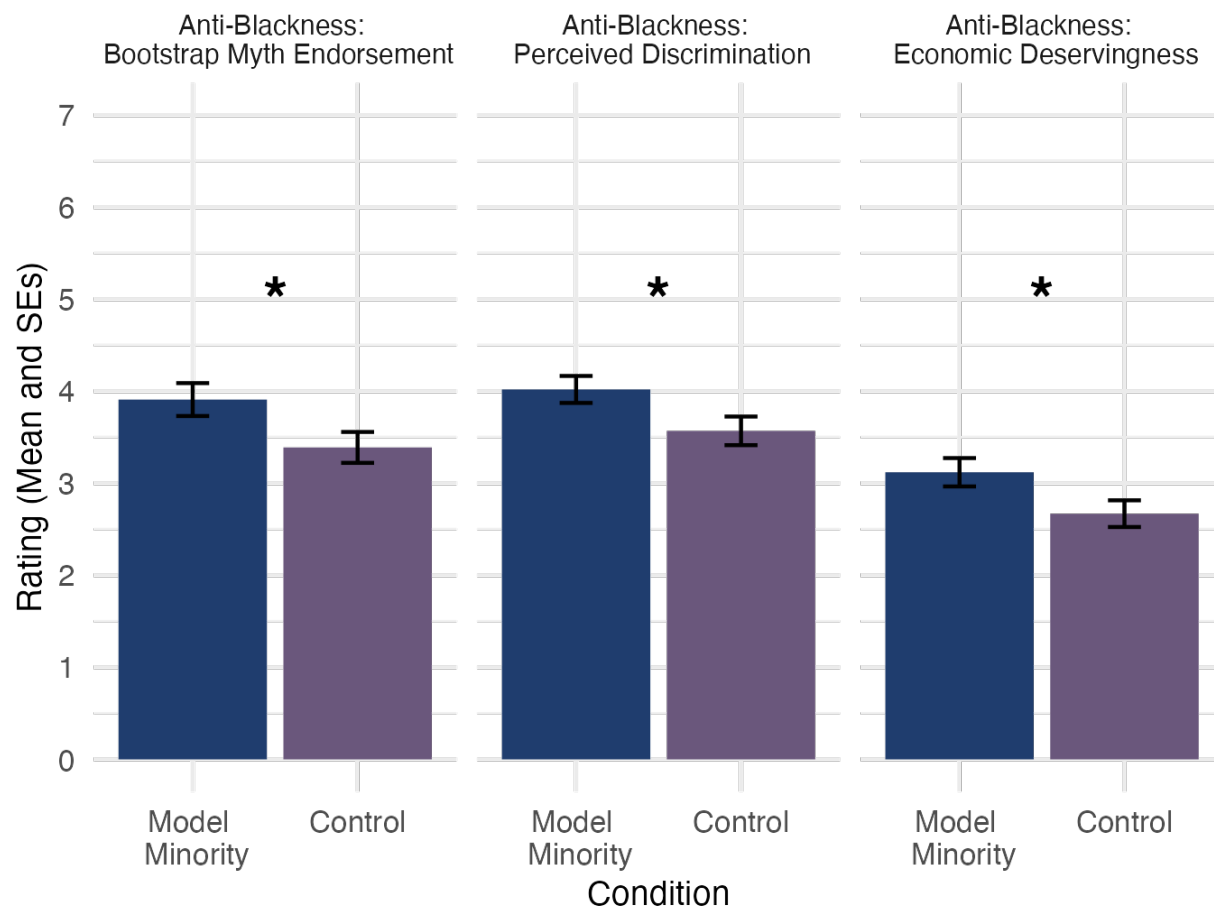


Figure 4.1a. Reported Anti-Blackness following exposure to either a model minority or to a control condition. Note that higher values indicate greater Anti-Blackness.

Exploratory Tests

A number of exploratory tests assessed whether the model minority manipulation had an effect on warmth and competence stereotypes of Black and Asian Americans.

For competence stereotypes of Black Americans, no significant difference was detected between the Model Minority condition ($M = 4.01$, $SD = 1.44$) and the Control condition ($M = 4.19$, $SD = 1.40$), $t(250.95) = -1.04$, $p = 0.30$, 95% CI $[-0.53, 0.17]$; Cohen's $d = -0.13$, 95% CI $[-0.38, 0.12]$. Similarly, no difference was found for perceptions of Black Americans as capable

between the Model Minority ($M = 4.30$, $SD = 1.46$) and Control conditions ($M = 4.25$, $SD = 1.46$), $t(249.3) = 0.29$, $p = 0.77$, 95% CI $[-0.31, 0.41]$; Cohen's $d = 0.04$, 95% CI $[-0.21, 0.28]$.

For warmth perceptions, there was no significant difference for friendliness in the Model Minority ($M = 4.07$, $SD = 1.54$) and Control conditions ($M = 4.05$, $SD = 1.38$), $t(252.99) = 0.13$, $p = 0.90$, 95% CI $[-0.34, 0.38]$; Cohen's $d = 0.02$, 95% CI $[-0.23, 0.26]$, nor was there a difference for trustworthiness in the Model Minority ($M = 3.83$, $SD = 1.54$) and Control conditions ($M = 3.79$, $SD = 1.38$), $t(252.96) = 0.21$, $p = 0.84$, 95% CI $[-0.32, 0.40]$; Cohen's $d = 0.03$, 95% CI $[-0.22, 0.27]$.

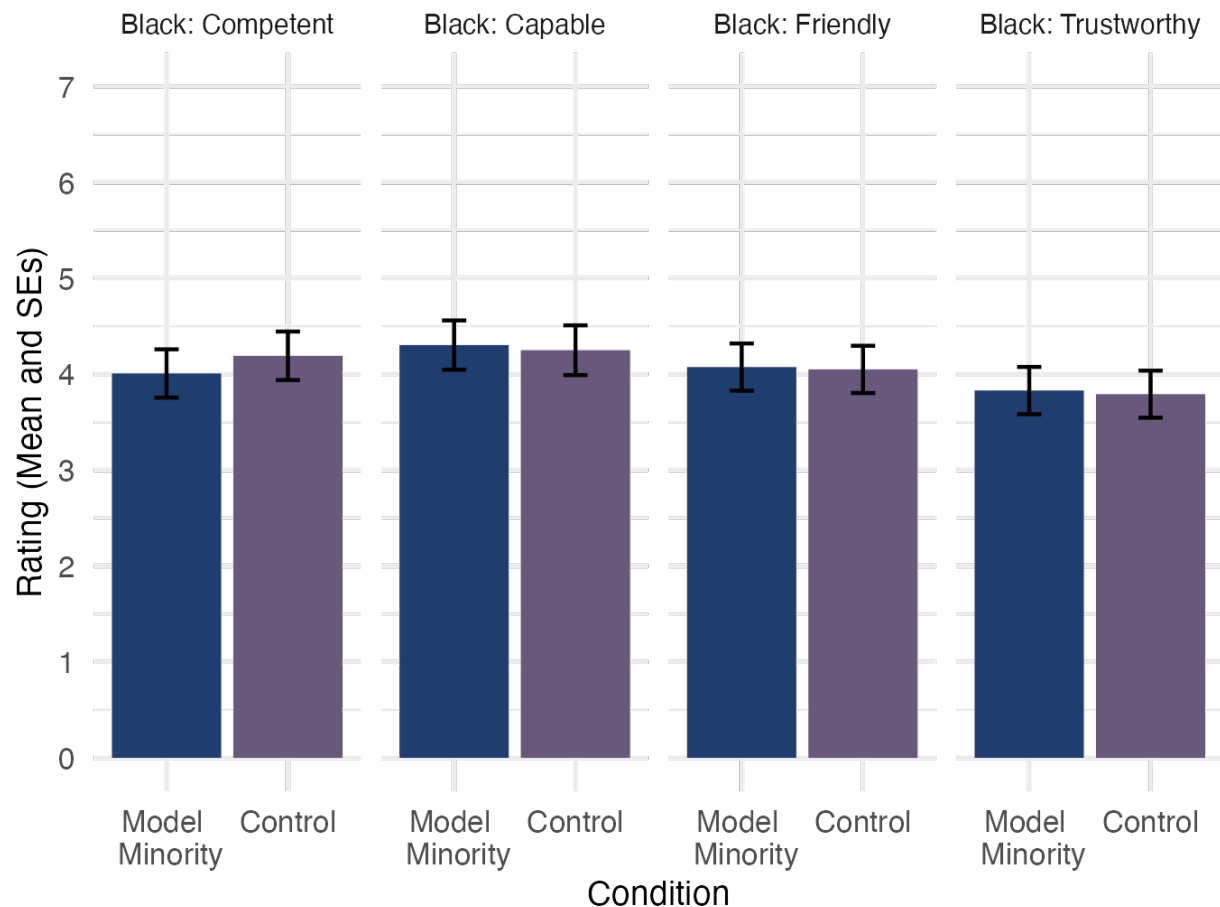


Figure 4.1b. Participants' stereotype endorsements of Black Americans.

The pattern of no significant difference between conditions also held for reported feelings about Black Americans. There were no differences in admiration towards Black Americans by condition ($M_{\text{Model Minority}} = 3.70$, $SD_{\text{Model Minority}} = 1.72$; $M_{\text{Control}} = 3.48$, $SD_{\text{Control}} = 1.65$; $t(251.43) = 1.05$, $p = 0.30$, 95% CI [-0.19, 0.64]; Cohen's $d = 0.13$, 95% CI [-0.12, 0.38]). Similarly, there were no differences for contempt ($M_{\text{Model Minority}} = 2.87$, $SD_{\text{Model Minority}} = 1.88$; $M_{\text{Control}} = 2.78$, $SD_{\text{Control}} = 1.68$; $t(251) = 0.37$, $p = 0.71$, 95% CI [-0.36, 0.52]; Cohen's $d = 0.05$, 95% CI [-0.20, 0.29]), nor for envy ($M_{\text{Model Minority}} = 2.11$, $SD_{\text{Model Minority}} = 1.50$; $M_{\text{Control}} = 1.97$, $SD_{\text{Control}} = 1.33$; $t(251.78) = 0.81$, $p = 0.42$, 95% CI [-0.20, 0.49]; Cohen's $d = 0.10$, 95% CI [-0.15, 0.35]), nor for pity ($M_{\text{Model Minority}} = 3.21$, $SD_{\text{Model Minority}} = 1.67$; $M_{\text{Control}} = 3.15$, $SD_{\text{Control}} = 1.64$; $t(250.46) = 0.31$, $p = 0.76$, 95% CI [-0.34, 0.47]; Cohen's $d = 0.04$, 95% CI [-0.21, 0.29]).

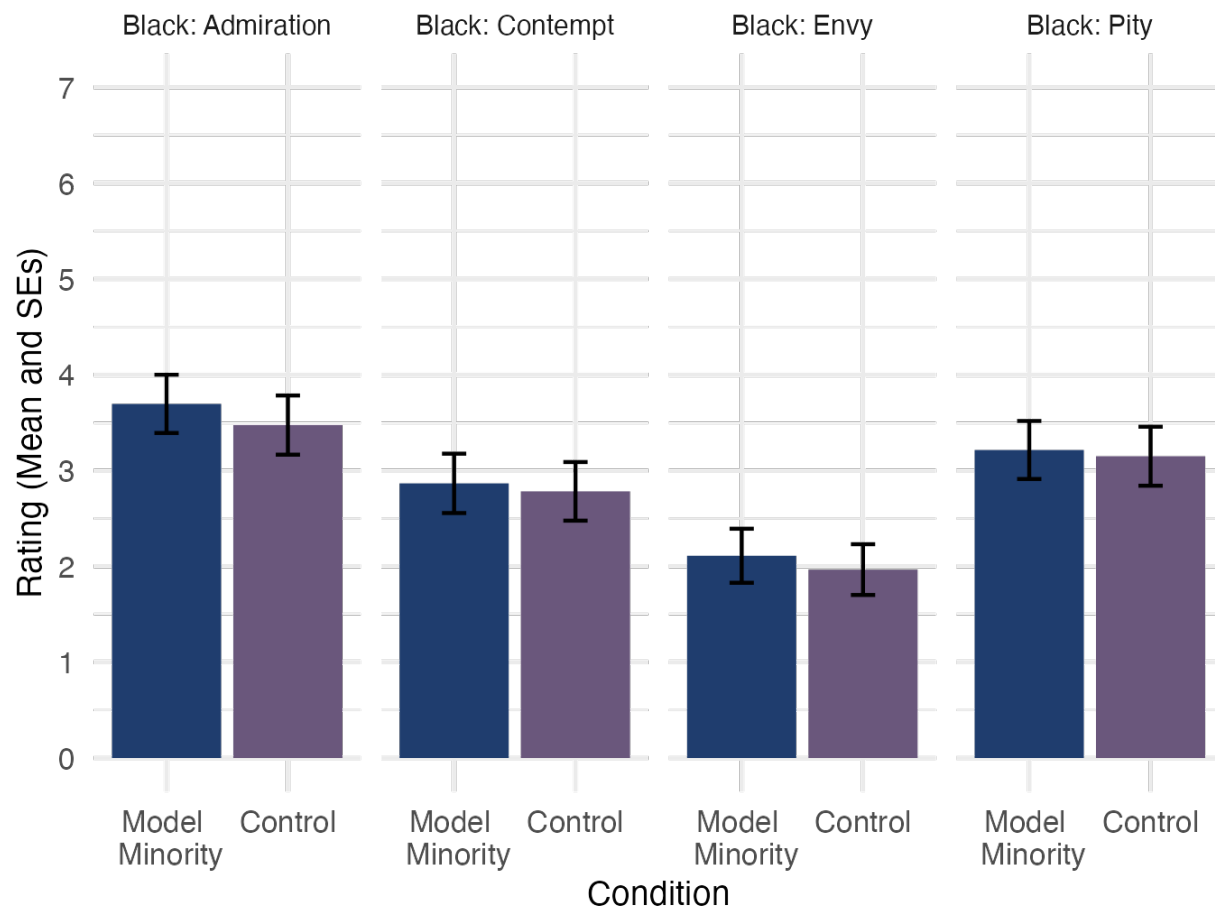


Figure 4.1c. Participants' reported feelings toward Black Americans.

There were, however, significant differences by condition in competence and warmth stereotypes of Asian Americans. For competence, there was a significant difference between the Model Minority condition ($M = 6.03$, $SD = 0.92$) and the Control condition ($M = 5.74$, $SD = 1.10$), $t(233.65) = 2.25$, $p = 0.03$, 95% CI [0.04, 0.54]; Cohen's $d = 0.29$, 95% CI [0.04, 0.53]. There were also significant differences for capability ($M_{\text{Model Minority}} = 6.05$, $SD_{\text{Model Minority}} = 1.06$; $M_{\text{Control}} = 5.74$, $SD_{\text{Control}} = 1.06$; $t(246.81) = 2.28$, $p = 0.02$, 95% CI [0.04, 0.58]; Cohen's $d = 0.29$, 95% CI [0.04, 0.54]), friendliness ($M_{\text{Model Minority}} = 4.76$, $SD_{\text{Model Minority}} = 1.30$; $M_{\text{Control}} = 4.28$, $SD_{\text{Control}} = 1.28$; $t(250.43) = 2.97$, $p = 0.003$, 95% CI [0.16, 0.80]; Cohen's $d = 0.37$, 95%

CI [0.12, 0.62]), and for trustworthiness ($M_{\text{Model Minority}} = 5.19$, $SD_{\text{Model Minority}} = 1.20$; $M_{\text{Control}} = 4.86$, $SD_{\text{Control}} = 1.14$; $t(251.82) = 2.23$, $p = 0.03$, 95% CI [0.04, 0.62]; Cohen's $d = 0.28$, 95% CI [0.03, 0.53]).

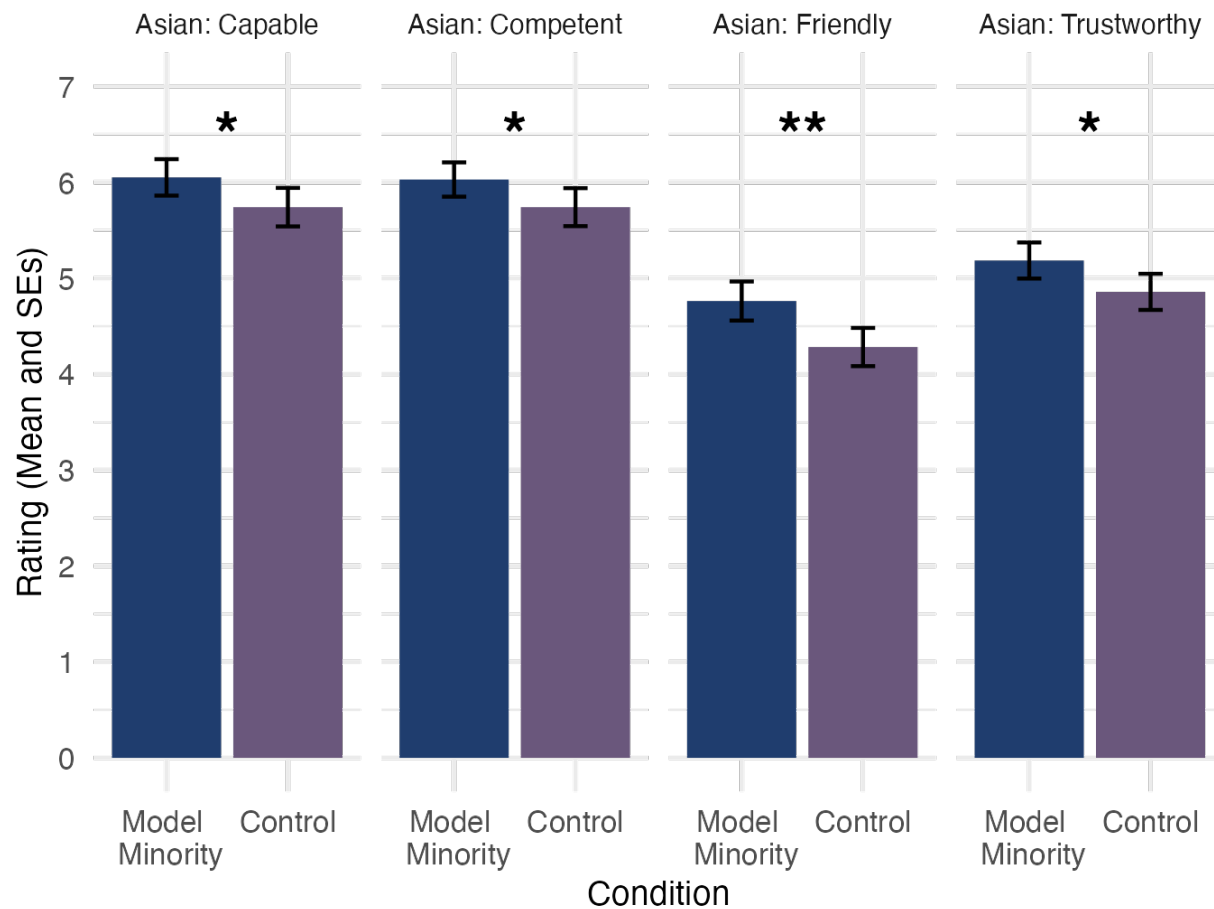


Figure 4.1d. Participants' stereotype endorsements of Asian Americans.

There were mixed results in terms of differences by condition for feelings toward Asian Americans. There was a significant difference by condition for admiration ($M_{\text{Model Minority}} = 4.81$, $SD_{\text{Model Minority}} = 1.58$; $M_{\text{Control}} = 4.40$, $SD_{\text{Control}} = 1.49$; $t(252.09) = 2.12$, $p = 0.04$, 95% CI [0.03, 0.79]; Cohen's $d = 0.26$, 95% CI [0.02, 0.51]). However, there were no differences for contempt ($M_{\text{Model Minority}} = 2.67$, $SD_{\text{Model Minority}} = 1.74$; $M_{\text{Control}} = 2.29$, $SD_{\text{Control}} = 1.42$; $t(251) = 1.89$, $p =$

0.06, 95% CI [-0.02, 0.77]; Cohen's $d = 0.23$, 95% CI [-0.01, 0.48]), nor for envy ($M_{\text{Model Minority}} = 3.10$, $SD_{\text{Model Minority}} = 1.65$; $M_{\text{Control}} = 2.85$, $SD_{\text{Control}} = 1.58$;), $t(251.78) = 1.25$, $p = 0.21$, 95% CI [-0.14, 0.65]; Cohen's $d = 0.16$, 95% CI [-0.09, 0.40]), nor for pity ($M_{\text{Model Minority}} = 2.17$, $SD_{\text{Model Minority}} = 1.59$; $M_{\text{Control}} = 1.98$, $SD_{\text{Control}} = 1.18$; $t(245.89) = 1.12$, $p = 0.26$, 95% CI [-0.15, 0.54]; Cohen's $d = 0.14$, 95% CI [-0.11, 0.39]).

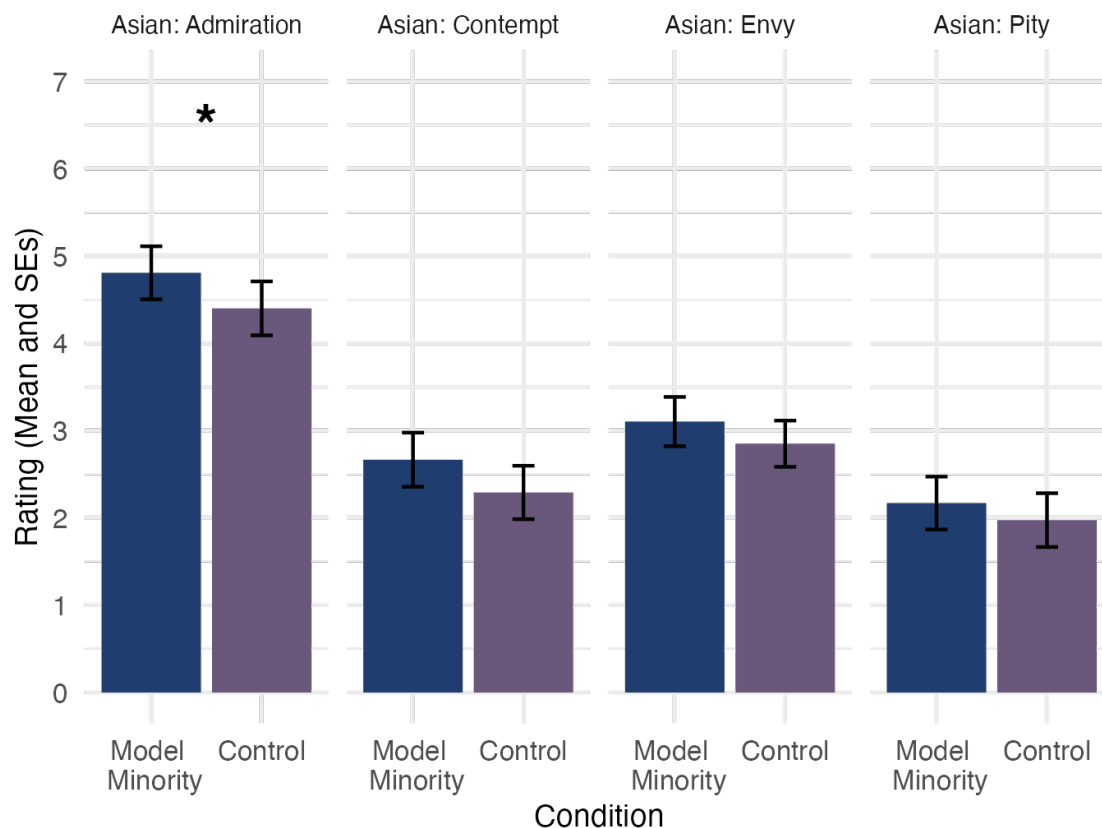


Figure 4.1e. Participants' reported feelings toward Asian Americans.

Interim Discussion

Consistent with predictions, exposure to the model minority stereotype of Asian Americans led participants to denigrate Black Americans: the model minority condition led to greater bootstrap myth endorsement, lower perceived discrimination faced by African Americans, and lower ratings of African Americans' deservingness of resources. Because the

control condition contained the same information about the non-Black group (and simply substituted European American for Asian American), these results suggests that it is not the mere presentation of a relatively high-status group that can lead to denigration of a lower-status group; instead, there is something unique about the “minority” status of the “model” high-status group in question.

Of note, in the exploratory analyses, there were mixed results with regard to competence and warmth stereotypes of Black and Asian Americans. For Black Americans, there were no differences by condition for perceived competence, capability, friendliness, or trustworthiness, nor were there differences in associated feelings with those traits (admiration, contempt, envy, and pity). Interestingly, there were some significant differences for stereotypic traits and associated feelings for Asian Americans. For all four traits (competence, capability, friendliness, and trustworthiness) participants rated Asian Americans higher in the Model Minority condition than in the Control condition. This may be due to the fact that in the Model Minority condition, participants read an article praising Asian Americans specifically; however, Black Americans were not specifically mentioned in either condition version of the article, and this may explain why condition did not affect stereotype ratings of Black Americans, even though the key dependent measures—the anti-Blackness items from the Symbolic Racism Scale—did show significant differences.

Study 4.2: The Case of Affirmative Action

This experiment was designed to apply contrastive racial stereotyping to a “real-world,” policy-relevant issue: affirmative action. In particular, this experiment aimed to approximate the social effects of a high-profile national court case: *Students for Fair Admission (SFFA) v.*

Harvard and v. University of North Carolina. This study was conducted February of 2023, four months before the Supreme Court issued the decision to rule in favor of SFFA, effectively striking down affirmative action in college admissions. The lawsuit, led by conservative strategist Edward Blum, relied on a narrative that “pitted” Asian Americans and other students of color against each other, by arguing that race-conscious affirmative action policies (that benefit Black, Latino, and Indigenous applicants) unfairly harm Asian American applicants’ chances at earning college acceptances. Edward Blum was the same conservative strategist who designed Abigail Fisher’s UT Austin case, which argued that Fisher was only rejected from UT Austin because of the university’s use of race as a factor in its holistic approach to admissions. Blum and Fisher argued at the Supreme Court that Fisher’s rejection was due to her Whiteness, while applicants of color unfairly benefitted from the holistic admissions process—and therefore called for the elimination of all race-conscious affirmative action policies. Fisher’s lawsuit had failed at the level of the Supreme Court, and in SFFA vs. Harvard and UNC, Blum had retooled his approach by attempting to leverage Asian American plaintiffs in lieu of a White plaintiff.

In this experiment, I presented participants with (fake) newspaper articles about the SFFA v. Harvard Supreme Court case. This experiment tested whether leveraging the model minority myth of Asian Americans in this context would lead to the denigration of other racial minorities (e.g. Black Americans, which would be consistent with findings from Study 4). This study also tested whether that denigration would consequently lead to lower support for policies that benefit those other minority groups—specifically, affirmative action. The results suggest that “model minority” stereotypes may not only affect stereotypic representations of racial groups as well as attitudes towards those groups, but may in fact predict highly topical and salient policy-relevant attitudes such as those related to affirmative action.

Participants

Data was collected in February of 2023. 309 White American participants were recruited from Prolific. 155 participants (50.2%) identified as a woman, 144 (46.6%) identified as a man, 7 (2.3%) identified as non-binary, 1 (0.32%) identified as “other,” and 2 (0.65%) answered “prefer not to say.” Participants’ ages ranged from 18 to 77, with an average age of 39.7 years ($SD = 14.02$). 179 (57.9%) of participants identified as Democrat, 46 (14.9%) identified as Republican, 71 (23.0%) identified as Other, and 13 (4.2%) answered “prefer not to say.”

Methods

Following reading and signing the informed consent, participants read an article printed in the style of an online news website titled “Affirmative Action Case to Be Heard at the Supreme Court.” Participants were randomly assigned to either the Model Minority or the Structural condition. The first several paragraphs of the article were identical in both the Model Minority and Structural conditions, and described in a neutral, non-partisan manner the Students for Fair Admission v. Harvard and University of North Carolina Supreme Court case.

The only difference between the two conditions’ articles was the final paragraph. In the Model Minority condition, participants read the following quote from an Asian American student’s interview about the case: “Asian American students work hard to achieve the right to enter elite colleges and universities. They demonstrate the work ethic, diligence, and self-discipline that lead to their academic success.” In the Structural condition, participants read instead: “It’s not that Asian Americans are smarter or more hard-working than other students, but rather that Asian Americans have received advantages in the immigration system that other groups have not received.” The entire text of the two articles can be read in the appendix.

Next, participants completed measures of their attitudes towards affirmative action and the Supreme Court case. They were asked to indicate their attitude about how the Supreme Court should rule in this case on a sliding scale from “The Supreme Court should definitely rule to END affirmative action” to “The Supreme Court should definitely rule to UPHOLD affirmative action,” with “Neutral” in the middle. Participants were also asked about their personal views; this item ranged from “Extremely OPPOSED to affirmative action” to “Extremely IN FAVOR of affirmative action,” again with Neutral in the middle.

Next, participants were asked to consider the top universities in the United States. They were asked what they think the average make-up of an admitted class at a top university is; they gave responses for White, Asian, Black, Latino, and Other students, and were instructed to enter numerical percentages for each group that would sum to 100%. Participants then completed this same measure, but were asked, “what do you think the make-up of an admitted class at a top university SHOULD be?”

Participants then completed the same Goldilocks procedure from Chapter 3. They were given the Goldilocks measure for three traits—intelligence, work ethic, and self-discipline—and for each trait, they were randomly assigned to one of three possible conditions (rating Asian and White targets together, rating White and Black targets together, or rating Asian, White, and Black targets together in the key 3-group contrastive condition).

Finally, participants completed demographic items about their gender, age, and political beliefs.

Results

The key dependent variable was participants' attitudes about how the Supreme Court should rule in this case. Participants were asked to indicate their response by moving a slider on a sliding scale. Though the numbers were invisible to participants, the scale ranged from -100 on one pole (labeled "the Supreme Court should definitely rule to END affirmative action") to 100 on the other pole (labeled "the Supreme Court should definitely rule to UPHOLD affirmative action"), with 0 in the middle (labeled "Neutral"). There was a significant difference between the two conditions, with participants in the Model Minority condition reporting more strongly that the Supreme Court should rule to END affirmative action ($M = -20.0$, $SD = 65.4$), while participants in the Structural condition reported an average rating closer to zero or neutral ($M = 0.632$, $SD = 66.6$), $t(307) = -2.75$, $p = .006$, 95% CI $[-35.4, -5.85]$; Cohen's $d = -0.312$, 95% CI $[-0.538, -0.0863]$.

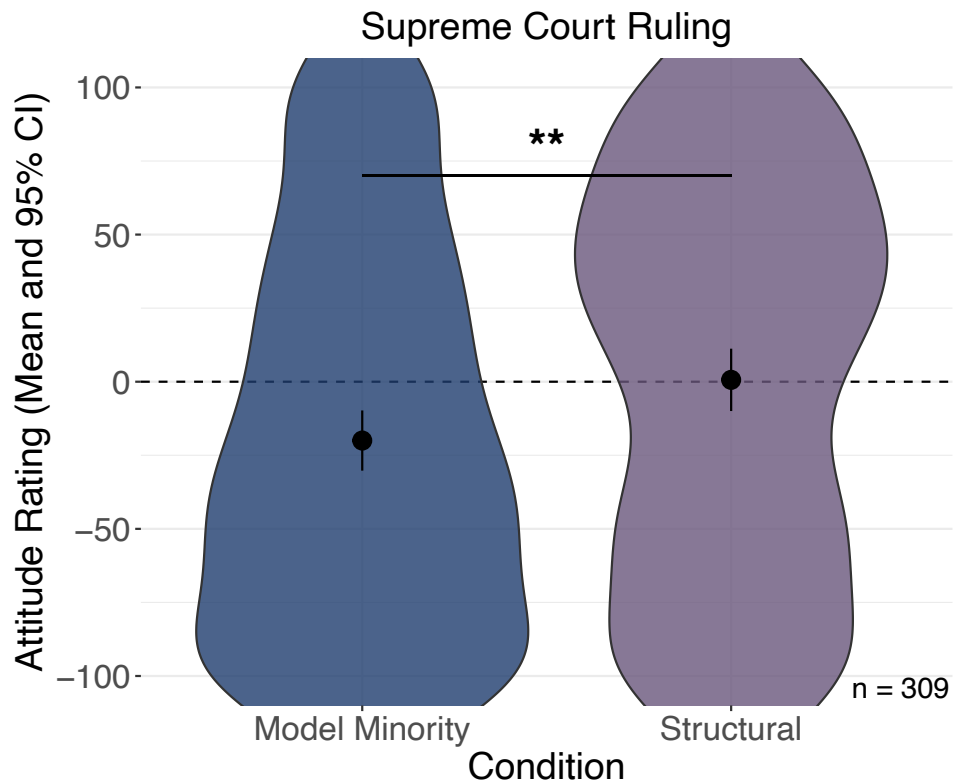


Figure 4.2a. Participant attitudes about how the Supreme Court should rule on affirmative action. Higher ratings are favorable to affirmative action and indicate that the Supreme Court should *uphold* affirmative action; lower ratings indicate that the Supreme Court should *end* affirmative action.

Participants were also asked the extent to which they personally were in favor of, or opposed to, affirmative action. Participants used the same sliding scale, with one pole labeled “Extremely OPPOSED to affirmative action” and the other pole labeled “Extremely IN FAVOR of affirmative action.” Again, the numbers on the scale were invisible to participants, but ranged from -100 to 100. The Model Minority condition had a mean of -13.2 (SD = 63.2), and the Structural condition had a mean of 2.97 (SD = 62.2). Here, too, an independent samples t-test revealed a significant difference between the two groups, albeit with a smaller effect size, $t(307) = -2.26$, $p = .025$, 95% CI [-30.2, -2.07]; Cohen's $d = -0.257$, 95% CI [-0.481, -0.0317].

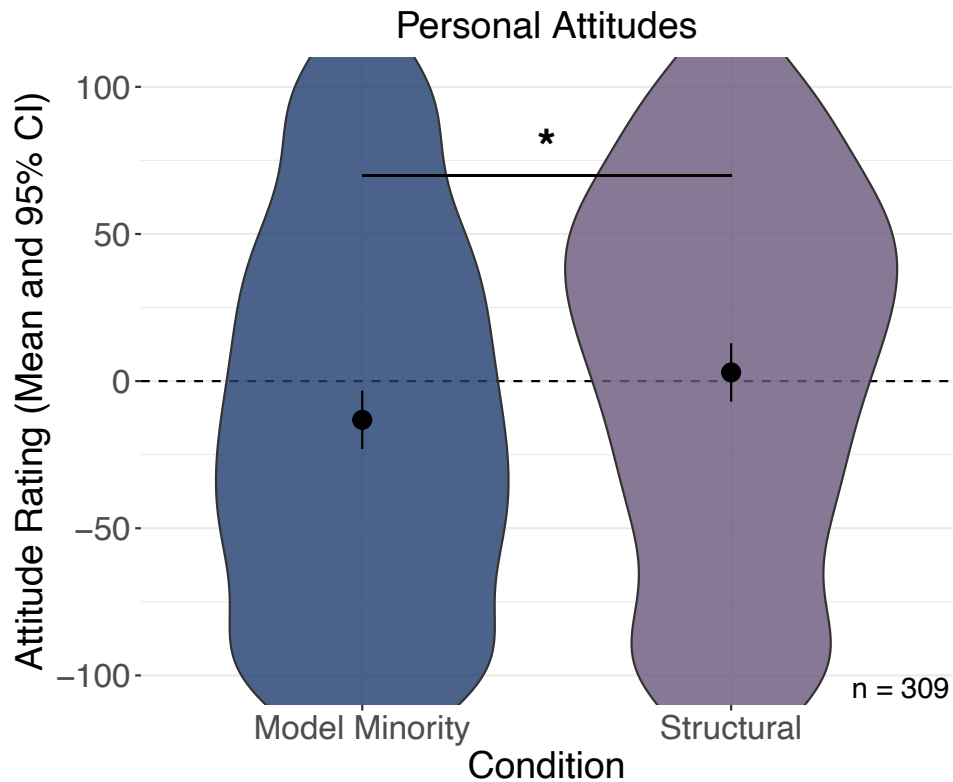


Figure 4.2b. Personal attitudes about affirmative action. Higher ratings indicate that the participant is more in favor of affirmative action; lower ratings indicate that the participant is more opposed.

Goldilocks Effect

Participants were given the same “Goldilocks” procedure from Chapter 3 to assess their stereotypes for Asian, White, and Black targets in three comparison conditions: rating Asian and White targets together; rating White and Black targets together; and in the key contrastive condition, rating Asian, White, and Black targets together. Participants were randomly assigned to one comparison condition for three key traits within the context of college admissions: intelligence, work ethic, and self-discipline.

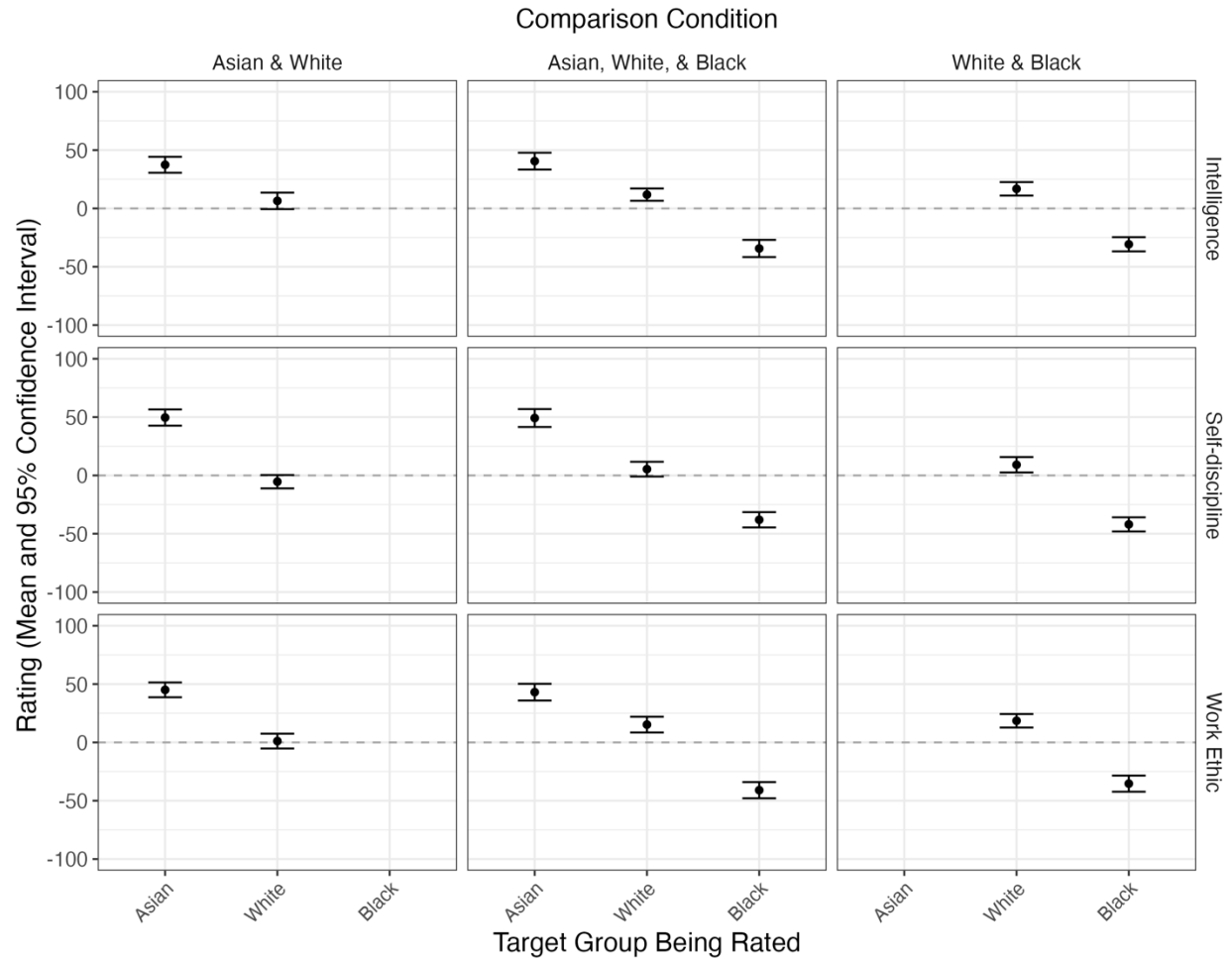


Figure 4.2c. Goldilocks measures for the Supreme Court study.

The spread of participants' ratings replicates the effect from Chapter 3. White American participants tended to situate White targets in between Black and Asian targets in the contrastive (3 group) condition.

Goldilocks x Condition Interaction

To assess a possible interaction between Condition and the Goldilocks Effect, participants were assigned a binary Goldilocks score of 1 if they situated White targets in between Asian and Black targets in the 3-group contrastive Goldilocks condition. They were

assigned a score of 0 if they did not situate White targets in between Asian and Black targets.

The majority of participants did show a Goldilocks effect: 160 (or 73.5% of) participants had a binary Goldilocks score of 1, while 58 (or 26.5%) had a binary Goldilocks score of 0.

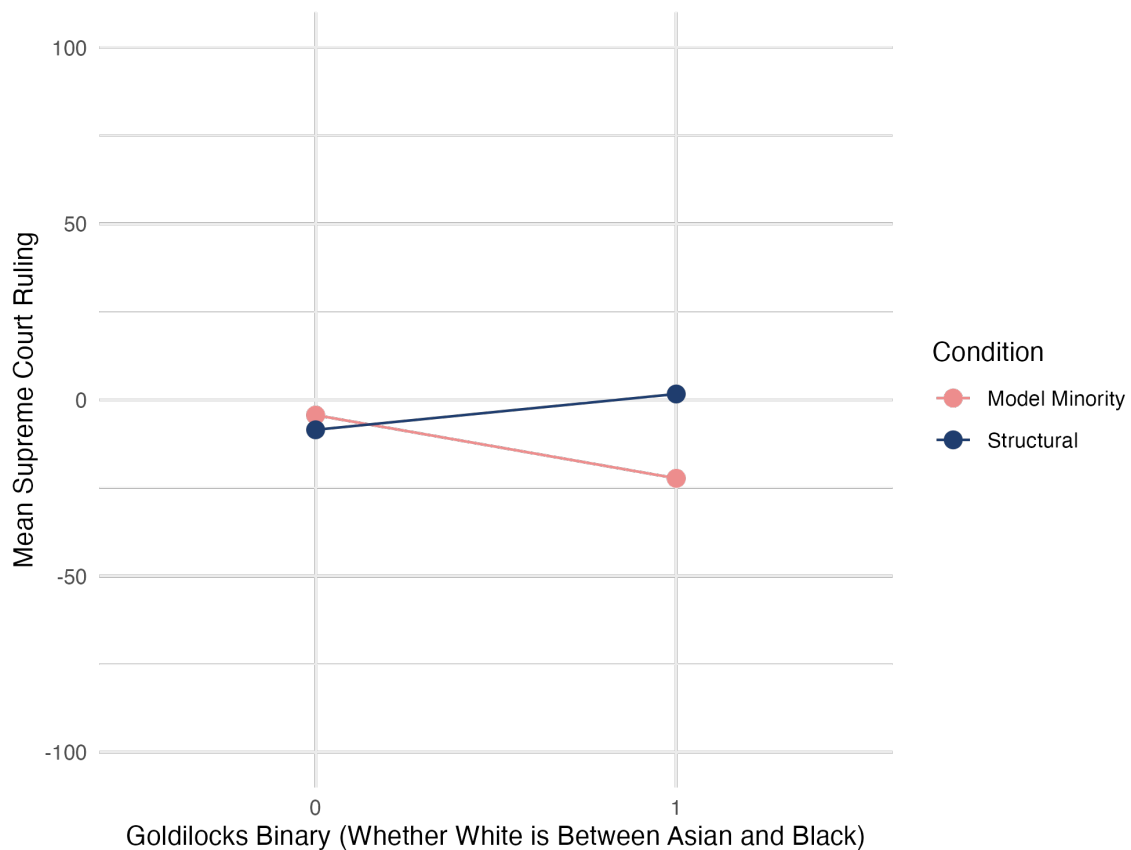


Figure 4.2d. The Goldilocks Effect interacts with Condition by exacerbating the effect of the Model Minority condition on Supreme Court attitudes.

In a 2 x 2 analysis of variance examining the impact of condition and participants' binary Goldilocks score on their attitudes towards the Supreme Court ruling, there was a significant main effects for condition, $F(1, 902) = 14.28$, $p < .001$, but no significant main effect for binary Goldilocks score, $F(1, 902) = 0.36$, $p = .548$. Notably, there was a significant interaction between condition and binary Goldilocks score on Supreme Court ruling, $F(1, 902) = 7.99$, $p = .005$.

In analyzing the simple slope of the Model Minority condition, there was a statistically significant difference in Supreme Court attitudes when the binary Goldilocks score was 0 versus when it was 1. Participants who showed a Goldilocks Effect (i.e., binary score = 1) scored an average of 17.9 units lower than participants who did not show a Goldilocks Effect (binary score = 0), $t(902) = 2.473$, $p = .014$. The simple slope of the Structural condition, however, was not statistically significant, $t(902) = -1.494$, $p = .136$.

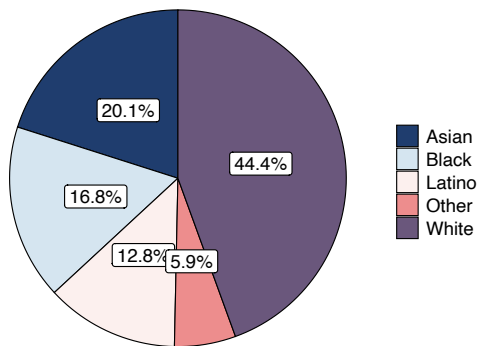
Exploratory Tests

A number of exploratory tests were also conducted. Participants were first asked to indicate what they think is the average make-up of an admitted class at a top university, in terms of racial demographics. Participants were asked to give a percentage estimate for White students, Asian students, Black students, Latino students, and Other students. They were required to give numbers that would sum to 100 percent. Next, participants were asked to indicate what they think the make-up of an admitted class at a top university SHOULD be. Participants were given the same racial groups with the same instructions.

There were no differences by condition for any of the estimates of the average make-up of an incoming class. There was no difference for the proportion of the average incoming class made up by White students between the Model Minority condition ($M = 44.45$, $SD = 11.45$) and the Structural condition ($M = 45.89$, $SD = 11.43$), $t(307) = -1.113$, $p = .267$, 95% CI $[-4.0102, 1.112]$. Neither was there a difference for the proportion of Asian students ($M_{\text{ModelMinority}} = 20.08$, $SD_{\text{ModelMinority}} = 8.28$; $M_{\text{Structural}} = 19.93$, $SD_{\text{Structural}} = 7.10$); $t(307) = 0.169$, $p = .866$, 95% CI $[-1.5808, 1.878]$); nor for the proportion of Black students ($M_{\text{ModelMinority}} = 16.80$, $SD_{\text{ModelMinority}} = 6.36$; $M_{\text{Structural}} = 15.93$, $SD_{\text{Structural}} = 8.16$); $t(307) = 1.045$, $p = .297$, 95% CI $[-0.7667, 2.504]$); nor

for the proportion of Latino students, ($M_{\text{ModelMinority}} = 12.79$, $SD_{\text{ModelMinority}} = 5.45$; $M_{\text{Structural}} = 12.90$, $SD_{\text{Structural}} = 4.86$), $t(307) = -0.190$, $p = .850$, 95% CI [-1.2690, 1.046], and nor for the proportion of Other students, ($M_{\text{ModelMinority}} = 5.89$, $SD_{\text{ModelMinority}} = 5.24$; $M_{\text{Structural}} = 5.34$, $SD_{\text{Structural}} = 4.84$), $t(307) = 0.946$, $p = .345$, 95% CI [-0.5870, 1.673].

What is the average make-up of an incoming class?
(Model Minority Condition)



What is the average make-up of an incoming class?
(Structural Condition)

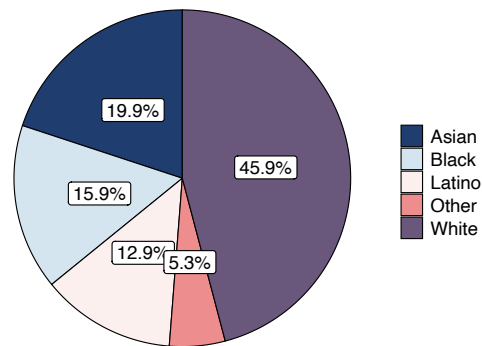


Figure 4.2e. Estimates of the average proportions of racial groups in an incoming university class, by condition.

For the estimates of the proportions that should make up an incoming class, only estimates for Asian students were significantly different by condition ($M_{\text{ModelMinority}} = 21.49$, $SD_{\text{ModelMinority}} = 6.07$; $M_{\text{Structural}} = 20.03$, $SD_{\text{Structural}} = 6.18$), $t(307) = 2.092$, $p = .037$, 95% CI [0.0869, 2.828]; Cohen's $d = 0.2381$, 95% CI [0.0131, 0.4623].

There were no differences for any other group. There was no difference for estimates of White students that should make up an incoming class ($M_{\text{ModelMinority}} = 31.04$, $SD_{\text{ModelMinority}} = 13.45$; $M_{\text{Structural}} = 31.53$, $SD_{\text{Structural}} = 12.92$), $t(307) = -0.324$, $p = .746$, 95% CI [-3.4400, 2.468]; Cohen's $d = -0.0369$, 95% CI [-0.2599, 0.1863]; nor for Black students ($M_{\text{ModelMinority}} = 18.41$, $SD_{\text{ModelMinority}} = 5.29$; $M_{\text{Structural}} = 17.98$, $SD_{\text{Structural}} = 5.45$), $t(307) = 0.715$, $p = .475$, 95% CI [-0.7653, 1.638]; Cohen's $d = 0.0813$, 95% CI [-0.1420, 0.3044]; nor for the proportion of Latino

students ($M_{\text{ModelMinority}} = 17.35$, $SD_{\text{ModelMinority}} = 5.30$; $M_{\text{Structural}} = 17.92$, $SD_{\text{Structural}} = 5.41$), $t(307) = -0.942$, $p = .347$, 95% CI [-1.7732, 0.625]; Cohen's $d = -0.1072$, 95% CI [-0.3304, 0.1163]; nor for the proportion of Other students ($M_{\text{ModelMinority}} = 11.71$, $SD_{\text{ModelMinority}} = 10.31$; $M_{\text{Structural}} = 12.54$, $SD_{\text{Structural}} = 12.71$, $t(307) = -0.634$, $p = .526$, 95% CI [-3.4208, 1.753]; Cohen's $d = -0.0722$, 95% CI [-0.2952, 0.1511].

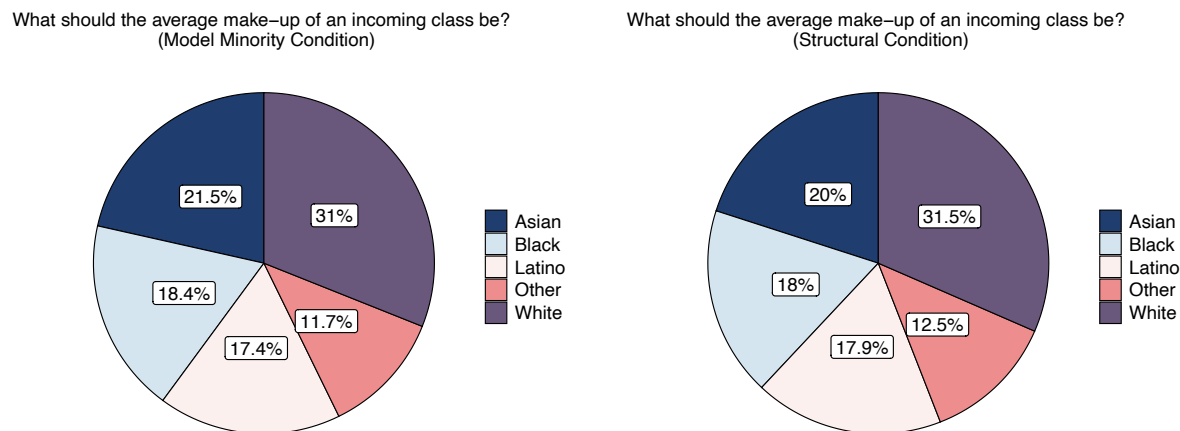


Figure 4.2f. Proportions of racial groups that should make up an incoming university class, by condition.

Interim Discussion

In this study, I explored how different explanations for Asian American academic achievement impacted attitudes towards affirmative action. The findings revealed that participants who were exposed to the model minority explanation, which attributes Asian American academic success to cultural values and work ethic, reported more negative attitudes toward affirmative action. In contrast, participants exposed to structural explanations, which account for Asian American achievement by highlighting systematic advantages and access to resources, reported less negative attitudes toward affirmative action.

I also replicated the general Goldilocks Effect in this study, and linked the Goldilocks Effect to participants' policy attitudes about affirmative action. Participants who endorsed a Goldilocks Effect and who were exposed to the model minority explanation intensified their negative attitudes towards affirmative action, whereas participants who did not endorse a Goldilocks Effect showed no such difference. This suggests that Goldilocks Effect exacerbates the adverse impact of the model minority explanation on affirmative action attitudes.

Lastly, it is noteworthy that participants' racial estimates of incoming university classes (both estimates of what these racial group proportions are, and what they ought to be) were largely unaffected by condition. This suggests that, while differential explanations for Asian American achievement swayed attitudes towards affirmative action, they did not significantly alter participants' perceptions of the racial demographics of admitted students, nor did they change participants' beliefs about what these “quotas” ought to be.

General Discussion

The stereotype content underpinning the Goldilocks Effect—that is, having a societal distribution of racial stereotypes where Asian targets are perceived at one extreme, Black targets at the other, and White targets occupying the middle ground—appears to play a consequential role in shaping participants' attitudes towards racial minorities and towards race-related policies.

The current studies offer the first experimental evidence I'm aware of that demonstrates the adverse effects of the (stereotypic trait-based) model minority myth on attitudes towards other racial minority members, specifically Black Americans. Scholars from various disciplines have theorized that the status of Asian Americans can function to contrast against and suppress the status of other racial minority groups, as argued by Kim's Racial Triangulation Theory

(1999). Furthermore, previous research in psychology has found that emphasizing Asian Americans' high median household incomes can lower estimations of Black Americans' economic statuses and reduce attitudes towards affirmative action (Lee & Outten, 2020). However, no prior research I'm aware of has experimentally manipulated exposure to the model minority stereotype by differentially emphasizing the trait-based stereotypes that underpin the model minority myth and subsequently measured these effects on the denigration of another racial minority group. The current findings suggest that the so-called "positive" stereotypes of Asian Americans may exacerbate racial inequalities by acting as a racial wedge between Asian Americans and other racial minority groups.

The evidence presented in this chapter underscores the danger of narratives that pit Asian Americans against other underserved and underrepresented minority groups. As found in these studies, such narratives can contribute to negative attitudes toward minority groups, as well as social policies aimed at redressing social inequality. Indeed, the Supreme Court's June 2023 decision to strike down race-conscious policies in college admissions is the latest national consequence of this regressive racial narrative.

Chapter 4 Appendix: Newspaper Article Stimuli for Study 4.2.

NEWS ADMISSIONS



Affirmative Action Case to Be Heard at the Supreme Court

Published February 6, 2023

In October of 2021, the Supreme Court heard oral arguments for two cases that the organization Students for Fair Admission filed against Harvard University and the University of North Carolina. The Supreme Court's ruling on these cases could eliminate affirmative action – that is, the inclusion of race and ethnicity as a factor in college admissions – and end decades of legal precedent. To date, legal precedent has upheld race-conscious admissions as a way for universities to ensure that they are admitting diverse student bodies. Now, these race-conscious admissions policies are under fire.



(U.S. Supreme Court)

The Supreme Court lawsuits allege that race-conscious admissions discriminate against Asian American students by giving preference to Black and Latino students. Specifically, the lawsuits argue that although Asian American students are the highest-scoring group on nearly every measure of academic achievement, including SAT scores and GPA, they are less likely to earn admission to competitive, elite schools like Harvard than similarly high-performing Black or Latino students. Specifically, Black and Latino students – who together are categorized as “under-represented minorities” – made up 28% of Harvard's admitted class of 2019, while Asian American students made up 24% of the admitted class. That year, White students made up 40% of the admitted class.¹

The lawsuit filed against Harvard argues that Asian American students are admitted to Harvard in lower numbers than expected because Harvard gives a “boost” to Black and Latino applicants. If that “boost” were eliminated – that is, by eliminating all race-conscious admission policies – the percentage of Black and Latino students in the incoming class would likely decrease.

One Asian American college student with a vested interest in the case attended the oral arguments at the Supreme Court. The student agreed to be interviewed for this piece and gave the following statement:

“Asian American students work hard to achieve the right to enter elite colleges and universities. They demonstrate the work ethic, intelligence, diligence, and self-discipline that lead to their academic success. These students have worked hard towards this goal their entire lives — they have enrolled in advanced courses in school, they have studied long hours, and they have committed themselves to their extracurricular activities. From a young age, they have aspired to high test scores, impressive report cards, and lengthy resumes. It makes sense that Asian American students from this background would be academically high-achieving, as a result of their hard work and self-discipline, which would prime them for academic success. What, then, is a fair admission policy when it comes to race-conscious affirmative action? Should the Supreme Court strike down affirmative action and end all considerations of race in college admissions, and treat all racial groups exactly the same?”

The Supreme Court could rule at any time, but most expect a decision in June.

3 of 5 articles left this month. [Sign up for a free account](#) or [Login](#).

The model minority condition of the newspaper article presented to participants. The last paragraph contains the key manipulation.

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One Asian American college student with a vested interest in the case attended the oral arguments at the Supreme Court. The student agreed to be interviewed for this piece and gave the following statement:

“It's not that Asian Americans are smarter or more hard-working than other students, but rather that Asian Americans have received advantages in the immigration system that other groups have not received. Historically, the United States has over-selected the Asian immigrants it allows to come into the country by mainly admitting the most highly-educated people from their original countries. These immigrants came to the US already having a higher education level than most American citizens, and many Asian American students now are the children and descendants of these highly-selected immigrants. It makes sense that Asian American students from this background would be academically high-achieving, as a result of the structural advantages they and their ancestors have had, which would prime them for academic success. What, then, is a fair admission policy when it comes to race-conscious affirmative action? Should the Supreme Court strike down affirmative action and end all considerations of race in college admissions, and treat all racial groups exactly the same?”

The Supreme Court could rule at any time, but most expect a decision in June.

3 of 5 articles left this month. [Sign up for a free account or Login.](#)

The structural condition of the newspaper article presented to participants. The last paragraph contains the key manipulation.

Chapter 5: Conclusion

The dissertation set out to explore the dynamic and contrastive construction of racial stereotypes. The central hypothesis of this dissertation is that stereotypes of racial minority groups, specifically Asian Americans and Black Americans (two historically significant groups in the United States), are constructed to be in direct contrast to each other. This contrastive stereotyping, I argue, serves a critical function: it allows White Americans to position themselves in an idealized “Goldilocks” position, possessing a balanced and optimal form of various traits. This theory challenges and extends traditional views on racial stereotypes, moving beyond a simple binary of positive and negative stereotypes—and exploring with more granularity warmth and competence stereotypes—to study the dynamic and contrastive construction of different racial groups’ stereotype content.

Chapter 2, the first empirical chapter of this dissertation, served as the basis for the following experiments by exploring the stereotype content of various racial groups. It revealed complex sub-facets of the competence stereotype, wherein Asian Americans were shown to be viewed as possessing rote, superficial intellectual abilities, rather than deeper, generative forms of intelligence, which were instead ascribed to other racial groups. The findings also showed parallels between African and Latino Americans in stereotypic traits comprising sub-facets of competence and warmth, while Asian Americans showed the inverse. Moreover, stereotypes regarding sub-facets of competence for Asian and White Americans were also inversely aligned. This pattern implies that aspects of the competence stereotype of Asian Americans may serve to safeguard the status of White Americans by mitigating threat or competition.

Chapter 3 tested the “Goldilocks” hypothesis, and found that White people strategically positioned themselves between Asian and Black Americans on a wide range of stereotypic trait ratings, thus allowing White Americans to maintain a favorable status. The study found that in a three-group comparison, White participants not only positioned White targets in-between the other groups, but also closer to an “ideal zero” absolute midpoint. This study provides initial evidence supporting the Goldilocks theory of contrastive racial stereotyping.

Chapter 4 bridged the gap between theoretical tests of the Goldilocks hypothesis and its real-world implications. It explored how these contrastive stereotypes affect policy-relevant attitudes towards other racial minority groups, and influence perspectives on salient political issues. The first study in this chapter showed that exposure to the model minority stereotype led to increased endorsement of the bootstrap myth, reduced perceptions of discrimination faced by African Americans, and lower ratings of their deservingness of resources. This effect was unique to the model minority status of Asian Americans and did not generalize to high-status groups in general. The second study in this chapter found that attributing Asian American academic success to cultural values and work ethic—the model minority explanation—resulted in more negative attitudes toward affirmative action, compared to structural explanations highlighting systemic advantages. In this study, endorsement of the Goldilocks effect interacted with condition by exacerbating the negative effect of the model minority condition on affirmative action attitudes. This chapter underscored the ways in which stereotypes can be leveraged in policy debates, often to the detriment of vulnerable minority groups, particularly when one minority group is used as a comparative wedge. Indeed, in line with findings from the studies in this chapter, the 2023 Supreme Court ruling to strike down affirmative action in college admissions served as a profound example of the potential consequences of such contrastive racial

stereotyping, wherein Asian Americans were used as a racial wedge against other minority groups.

Theoretical and Policy-Based Implications

The findings of this dissertation offer significant contributions to the field's theoretical understanding of racial stereotyping. By introducing and validating the Goldilocks hypothesis, this work extends beyond and builds upon frameworks like the Stereotype Content Model and the Two Axes of Subordination, offering an explanation for how racial stereotypes are dynamically constructed in relation to one another. This research underscores the complexity and multi-dimensionality of stereotype content, and addresses how even so-called "positive" stereotypes can serve to undermine minority groups in the service of upholding the majority group.

The integration of theories like the compensation effect, social identity theory, optimal distinctiveness theory, and extremeness aversion into the understanding of stereotyping provides a psychological motivation underlying stereotype formation and maintenance. These theories collectively show how various psychological motives and tendencies already established in the literature contribute to the formation of contrastive stereotypes.

The implications of this research for intergroup relations and public policy are profound. The demonstration of the Goldilocks Effect in racial stereotyping has direct implications for how racial minority groups are perceived and treated in various social, academic, and professional contexts. In the realm of public policy, this research is particularly relevant to the discourse on affirmative action and other initiatives meant to redress racial inequality, and reveals how contrastive racial stereotypes can be leveraged to influence public opinion and policy decisions

to the detriment of minority groups. The findings suggest a need for policymakers and social advocates to be cognizant of the subtle ways in which even “positive” stereotypes can be used to pit minority groups against each other, potentially undermining efforts to achieve racial equity.

Limitations and Future Directions

While this dissertation offers new insights into racial stereotyping, it also has limitations. One limitation is that the key studies in this dissertation included only three racial target groups: White, Black, and Asian Americans. These groups were chosen because of their particular historical significance in the United States, and because of extant scholarship in other disciplines that have revealed the political use of Asian Americans as a “racial wedge” against other minority groups. Future research should include other racial groups to gain a more comprehensive view of the full cultural distribution of racial stereotypes.

Another limitation pertains to the stereotypic traits that were presented across the studies in this dissertation. The traits used here were derived from previous research on stereotype content, but using free-response methods to generate spontaneous stereotype content may produce a more representative set of stereotypic traits on which to test the Goldilocks hypothesis (Nicolas, Bai, & Fiske, 2022).

Another limitation is that most of the study samples in this dissertation were White Americans. Extending this research to capture the attitudes of participants of color may show that people of color engage in similar “Goldilocks” forms of contrastive stereotyping to elevate *their own in-group* rather than White Americans. A competing prediction may replicate the Goldilocks effect as shown in this dissertation and would suggest that people of color internalize

stereotypes from the broader culture, including stereotypes that are unfavorable to them but elevate the dominant majority group.

Another avenue for future research would uncover the psychological mechanism underlying the Goldilocks effect. To test whether White Americans engage in Goldilocks thinking to alleviate perceived threat from minority groups, a future study might expose participants to a racial group threat prime before the key Goldilocks measures. For example, participants may first receive Craig and Richeson's (2014) threat manipulation: a news article stating that racial minorities will outnumber White people in the United States by the year 2050. Developing a contrastive distribution of racial minority stereotypes could reduce the perceived threat from such a demographic shift, by allowing participants to move the position of the majority group closer to the "ideal" position.

Finally, future directions could include explorations of these stereotyping processes in actual policy makers (rather than lay people's attitudes about policies), and develop interventions to mitigate the negative effects of contrastive racial stereotyping.

Concluding Remarks

This dissertation has explored the ways in which racial stereotypes are dynamically constructed in direct contrast to one another, and has unveiled their far-reaching implications for intergroup relations and public policy. The findings from these studies suggest that contrastive racial stereotyping serves a key role in maintaining social hierarchies. By positioning racial minorities in opposition to each other and themselves as embodying the "Goldilocks" position on a wide range of stereotypic traits, White Americans can maintain a stereotypic trait distribution

that favors them. This phenomenon demonstrates how stereotypes are not merely reflections of social perceptions, but active constructions in the maintenance of social hierarchies.

References

- Abele, A. E., Ellemers, N., Fiske, S. T., Koch, A., & Yzerbyt, V. (2021). Navigating the social world: Toward an integrated framework for evaluating self, individuals, and groups. *Psychological Review*, 128(2), 290–314.
- Abele, A. E., Hauke, N., Peters, K., Louvet, E., Szymkow, A., & Duan, Y. (2016). Facets of the Fundamental Content Dimensions: Agency with Competence and Assertiveness—Communion with Warmth and Morality. *Frontiers in Psychology*, 7.
- Allport, G. W., Clark, K., & Pettigrew, T. (1954). *The nature of prejudice*.
- Aronson, J., Fried, C. B., & Good, C. (2002). Reducing the Effects of Stereotype Threat on African American College Students by Shaping Theories of Intelligence. *Journal of Experimental Social Psychology*, 38(2), 113–125.
- Avery, J. J., Oh, D., Feldman, L., Cooper, R., & Cooper, J. (2022). Criminal Stereotypes of Muslim and Arab Americans and the Impact on Evaluations of Ambiguous Criminal Evidence. *The Journal of Legal Studies*, 51(1), 177–208.
- Bain, P., Park, J., Kwok, C., & Haslam, N. (2009). Attributing Human Uniqueness and Human Nature to Cultural Groups: Distinct Forms of Subtle Dehumanization. *Group Processes & Intergroup Relations: GPIR*, 12(6), 789–805.

Brewer, M. B. (2012). Optimal distinctiveness theory: Its history and development. *Handbook of Theories of Social Psychology*, 2, 81–98.

Cheryan, S., & Bodenhausen, G. V. (2000). When Positive Stereotypes Threaten Intellectual Performance: The Psychological Hazards of “Model Minority” Status. *Psychological Science*, 11(5), 399–402.

Craig, M. A., & Richeson, J. A. (2014). On the precipice of a “majority-minority” America: perceived status threat from the racial demographic shift affects White Americans’ political ideology. *Psychological Science*, 25(6), 1189–1197.

Czopp, A. M., Kay, A. C., & Cheryan, S. (2015). Positive Stereotypes Are Pervasive and Powerful. *Perspectives on Psychological Science: A Journal of the Association for Psychological Science*, 10(4), 451–463.

Czopp, A. M., & Monteith, M. J. (2006). Thinking Well of African Americans: Measuring Complimentary Stereotypes and Negative Prejudice. *Basic and Applied Social Psychology*, 28(3), 233–250.

Devine, P. G., & Elliot, A. J. (1995). Are Racial Stereotypes Really Fading? The Princeton Trilogy Revisited. *Personality & Social Psychology Bulletin*, 21(11), 1139–1150.

Durante, F., Fiske, S. T., Gelfand, M. J., Crippa, F., Suttora, C., Stillwell, A., Asbrock, F., Aycan, Z., Bye, H. H., Carlsson, R., Björklund, F., Dagher, M., Geller, A., Larsen, C. A., Latif, A.-H. A., Mähönen, T. A., Jasinskaja-Lahti, I., & Teymoori, A. (2017). Ambivalent stereotypes link to peace, conflict, and inequality across 38 nations. *Proceedings of the National Academy of Sciences of the United States of America*, 114(4), 669–674.

Fiske, S. T., Cuddy, A. J. C., Glick, P., & Xu, J. (2002). A model of (often mixed) stereotype content: competence and warmth respectively follow from perceived status and competition. *Journal of Personality and Social Psychology*, 82(6), 878–902.

Fiske, S. T., Dupree, C. H., Nicolas, G., & Swencionis, J. K. (2016). Status, Power, and Intergroup Relations: The Personal Is the Societal. *Current Opinion in Psychology*, 11, 44–48.

Gilbert, G. M. (1951). Stereotype persistence and change among college students. *Journal of Abnormal Psychology*, 46(2), 245–254.

Hannah-Jones, N. (2016, June 23). *What Abigail fisher's affirmative action case was really about*. ProPublica. <https://www.propublica.org/article/a-colorblind-constitution-what-abigail-fishers-affirmative-action-case-is-r>

Heine, S. J., & Lehman, D. R. (1997). The cultural construction of self-enhancement: an examination of group-serving biases. *Journal of Personality and Social Psychology*, 72(6), 1268–1283.

Henry, P. J., & Sears, D. O. (2002). The Symbolic Racism 2000 Scale. *Political Psychology*, 23(2), 253–283.

Holoien, D. S., & Fiske, S. T. (2013). Downplaying Positive Impressions: Compensation Between Warmth and Competence in Impression Management. *Journal of Experimental Social Psychology*, 49(1), 33–41.

Hsu, M. Y. (2017). *The Good Immigrants: How the Yellow Peril Became the Model Minority*. Princeton University Press.

Judd, C. M., Westfall, J., & Kenny, D. A. (2012). Treating stimuli as a random factor in social psychology: a new and comprehensive solution to a pervasive but largely ignored problem. *Journal of Personality and Social Psychology*, 103(1), 54–69.

Karlins, M., Coffman, T. L., & Walters, G. (1969). On the fading of social stereotypes: studies in three generations of college students. *Journal of Personality and Social Psychology*, 13(1), 1–16.

Katz, D., & Braly, K. (1933). Racial stereotypes of one hundred college students. *Journal of Abnormal and Social Psychology*, 28(3), 280.

Kaufman, J. C. (2006). Self-reported differences in creativity by ethnicity and gender. *Applied Cognitive Psychology*, 20(8), 1065–1082.

Kay, A. C., & Jost, J. T. (2003). Complementary justice: effects of “poor but happy” and “poor but honest” stereotype exemplars on system justification and implicit activation of the justice motive. *Journal of Personality and Social Psychology*, 85(5), 823.

Kervyn, N., Yzerbyt, V. Y., Demoulin, S., & Judd, C. M. (2008a). Competence and warmth in context: The compensatory nature of stereotypic views of national groups. *European Journal of Social Psychology*, 38(7), 1175–1183.

Kervyn, N., Yzerbyt, V. Y., Demoulin, S., & Judd, C. M. (2008b). Competence and warmth in context: The compensatory nature of stereotypic views of national groups. *European Journal of Social Psychology*, 38(7), 1175–1183.

Kervyn, N., Yzerbyt, V. Y., & Judd, C. M. (2011). When compensation guides inferences: Indirect and implicit measures of the compensation effect. *European Journal of Social Psychology*, 41(2), 144–150.

Kim, C. J. (1999). The Racial Triangulation of Asian Americans. *Politics & Society*, 27(1), 105–138.

Lee, J., & Zhou, M. (2015). *The Asian American Achievement Paradox*. Russell Sage Foundation.

Lee, T. L., & Fiske, S. T. (2006). Not an outgroup, not yet an ingroup: Immigrants in the Stereotype Content Model. *International Journal of Intercultural Relations: IJIR*, 30(6), 751–768.

Lee, T., & Outten, H. R. (2020). The effect of model minority myth salience on white Americans' perceptions of black Americans and their support for affirmative action. *Psi Chi Journal of Psychological Research*, 25(1), 2–13.

Leslie, S.-J., Cimpian, A., Meyer, M., & Freeland, E. (2015). Expectations of brilliance underlie gender distributions across academic disciplines. *Science*, 347(6219), 262–265.

Lin, M. H., Kwan, V. S. Y., Cheung, A., & Fiske, S. T. (2005). Stereotype content model explains prejudice for an envied outgroup: Scale of anti-Asian American Stereotypes. *Personality & Social Psychology Bulletin*, 31(1), 34–47.

Liptak, A. (2016, June 23). Supreme Court Upholds Affirmative Action Program at University of Texas. *The New York Times*. <https://www.nytimes.com/2016/06/24/us/politics/supreme-court-affirmative-action-university-of-texas.html>

Liptak, A. (2023). Supreme Court rejects affirmative action programs at Harvard and UNC. *The New York Times*.

Nelson, L. (2014, July 15). *Fisher v. Texas, the affirmative action case that will not die*,

explained. Vox. <https://www.vox.com/2014/7/15/5902791/fisher-v-texas-supreme-court-affirmative-action-fifth-circuit>

Nicolas, G., Bai, X., & Fiske, S. T. (2022). A spontaneous stereotype content model: Taxonomy, properties, and prediction. *Journal of Personality and Social Psychology*.
<https://doi.org/10.1037/pspa0000312>

Poon, O. (2018, July 30). *Edward Blum: "I needed Asian plaintiffs."* Youtube.
<https://www.youtube.com/watch?v=DiBvo-05JRg>

Reyna, C. (2008). Ian is intelligent but Leshawn is lazy: Antecedents and consequences of attributional stereotypes in the classroom. In *European Journal of Psychology of Education* (Vol. 23, Issue 4, pp. 439–458).

Simonson, I., & Tversky, A. (1992). Choice in context: Tradeoff contrast and extremeness aversion. *JMR, Journal of Marketing Research*.

Stone, J., Lynch, C. I., Sjomeling, M., & Darley, J. M. (1999). Stereotype threat effects on Black and White athletic performance. *Journal of Personality and Social Psychology*, 77(6), 1213–1227.

Supplemental material for Arabs as terrorists: Effects of stereotypes within violent contexts on attitudes, perceptions, and affect. (2013). *Psychology of Violence*.

Tajfel, H., & Turner, J. C. (1986). An integrative theory of intergroup relations. *Psychology of Intergroup Relations*, 7–24.

Varma, R. (2004). Asian Americans: Achievements Mask Challenges. *Southeast Asian Journal of Social Science*, 32(2), 290–307.

Westfall, J., Kenny, D. A., & Judd, C. M. (2014). Statistical power and optimal design in experiments in which samples of participants respond to samples of stimuli. *Journal of Experimental Psychology. General*, 143(5), 2020–2045.

Wu, E. D. (2013). *The Color of Success: Asian Americans and the Origins of the Model Minority*. Princeton University Press.

Zou, L. X., & Cheryan, S. (2017). Two axes of subordination: A new model of racial position. *Journal of Personality and Social Psychology*, 112(5), 696–717.

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