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A Taxonomy of Discriminatory Behavior

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Discrimination is the behavior through which bias is expressed and enacted, but social psychology has focused much more on prejudice than on discrimination. This may be due, in part, to the broad conceptualization of discrimination, in which heterogeneous behaviors with different causes are considered together. To map the landscape of discrimination and provide a foundation for developing theoretical and predictive models of discrimination, the present work develops a taxonomy of discriminatory behavior. After establishing the conceptual framework on which to build a taxonomy, we denote 11 distinct clusters of discrimination. Drawing from theory and empirical evidence, we then consider the psychological variables that are most likely to predict such behavior. This taxonomy makes unique predictions and advances the study of discrimination toward more predictive models of behavior. This will enable a more precise understanding of the causes of discrimination, thereby laying the foundation necessary to reduce it.

Keywords: discrimination, prejudice, behavior, attitudes, intergroup

The study of prejudice is a highly productive and important area of social science, with roughly 25,000 citations in Web of Science abstracts or keywords to date. Prejudice has received so much empirical attention because, at its core, it is theorized to be the attitude most strongly associated with discriminatory behaviors. Yet while science abounds with research focusing on prejudice, studies empirically observing discrimination are far rarer (Brauer, 2024; Paluck et al., 2021). Because it is directly through behavior, not attitudes, that targeted groups are affected, discrimination merits much more investigation. Furthermore, available evidence suggests only a weak relationship between prejudice and discrimination (Greenwald et al., 2009; Kurdi et al., 2019; Oswald et al., 2013). The current research posits this is partly due to an inadequate conceptualization. The field currently lacks a comprehensive framework for considering the many different types of discriminatory behaviors and for predicting when individuals will engage in one form of discrimination versus another. To advance the field and guide future research, we propose a taxonomy of the broad array of discriminatory behaviors.

Prejudice and Discrimination

Many researchers studying intergroup relations likely care more about discriminatory behaviors than prejudice, yet prejudice receives the bulk of empirical attention due to its theorized causal link with behavior and better established measurement practices. However, links between attitudes and behavior are notoriously weaker than intuition suggests, as many other factors influence engaging in a behavior (Ajzen & Fishbein, 1977). For example, whether people behave consistently with their own attitudes depends, in part, on subjective norms and what others think about the behavior (Albarracín et al., 2001; Sheeran & Taylor, 1999).

Evidence confirms that the link between prejudice and discrimination is weak. For example, an early meta-analysis with a small sample ($k = 60$ reports) found a moderate relationship with discrimination ($r = .36$; Schütz & Six, 1996). Several larger studies in the early 2000s found relationships in the $r = .1$–$.2$ range (Greenwald et al., 2009; Oswald et al., 2013; Talaska et al., 2008). The largest and most recent meta-analysis ($n = 36{,}071$; $k = 217$) found relationships between "intergroup behavior" and implicitly and explicitly measured prejudice to be small (βs = .14 and .11, respectively; Kurdi et al., 2019). Such results are consistent with modern theorizing that much of human behavior is multiply determined, perhaps the result of many smaller effects in conjunction. Furthermore, individual-level factors have been shown to be only weakly associated with behavior in general (Albarracín et al., 2024). Partly for these reasons, there have been numerous calls for researchers in this area to focus on discriminatory outcomes rather than prejudice (Brauer, 2024; Dixon et al., 2012; Paluck et al., 2021).

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A Historical Focus on Prejudice

One possible reason why researchers in social psychology have historically focused more on prejudice is that it is easier to measure than discrimination. Indeed, social scientists have developed sophisticated measurements of attitudes that are convenient and quick to assess, either with a wide variety of self-report measures (Axt, 2017; Hester et al., 2023) or tasks like the Implicit Association Test (Gaertner & McLaughlin, 1983; Greenwald et al., 1998; Payne et al., 2005). In contrast, empirical observation of actual discrimination is often harder. Assessing discriminatory behaviors is difficult to do for ethical reasons, such as the dubiousness of allowing people to actually discriminate, and for ecological validity concerns, such as the need to construct reasonable scenarios in the lab or field in which people might act in a discriminatory manner. Further, such studies are often costly both in terms of time and financial resources. Finally, while social scientists have generally converged on what a singular (or limited array of) latent construct of prejudice is and how to interpret it (Cottrell & Neuberg, 2005; Dovidio et al., 2010; Hehman & Neel, 2024), the study of behaviors presents some unique interpretive difficulties.

Discriminatory Behavior

Discrimination has been defined in a variety of ways, but for purposes of the present taxonomy, we define it as differential behavior by group membership (Dovidio et al., 2010). We focus on interpersonal discrimination (Hebl et al., 2002), which includes verbal, nonverbal, and paraverbal behaviors and can range from those as mundane as not holding the door open for someone to as extreme as hate crimes and physical assault (Campbell & Brauer, 2021). Whereas researchers have converged on a definition of the latent construct of prejudice (Bodenhausen & Cheryan, 2025), the theoretical universe of discriminatory behaviors is infinite. There are discriminatory behaviors that once existed that are no longer possible (or common) in the modern world, and there will be discriminatory behaviors in the future that do not yet exist.

When might two discriminatory behaviors be considered the same? Even slight differences in context and target might make seemingly similar discriminatory behaviors qualitatively distinct. Thus, when one conducts research examining discrimination, it is unclear to what extent findings will generalize to other types of discrimination or in other settings. In sum, any one study on discrimination is likely to be costly and time-intensive yet provide only a small contribution to humanity's body of knowledge.

The wide variability of discriminatory behaviors suggests several possible sources for the weak link between prejudice and discrimination. First, prejudice may predict some types of behaviors well, but not others. Alternatively, prejudice (or different types of prejudice) may have different relationships with different types of behaviors. More broadly, different types of discriminatory behaviors might have distinct causes. To properly describe the prejudice–discrimination link, to predict when people will engage in discriminatory behaviors, and to properly characterize how discrimination affects targeted groups, a better understanding of discrimination is first necessary. Accordingly, we aimed to create a taxonomy to enable a more systematic and organized pursuit of the study of discriminatory behavior via facilitating the identification of factors that predict or precede such behaviors.

Conceptual Approach

Necessarily subjective and conceptual decisions guided our process, and other groups of researchers with different backgrounds and positionality may have made different decisions. We describe them here for transparency. We consider that discrimination can occur to any member of any group and examine it in a manner independent of any specific social identities. We focus on discriminatory behavior from the perpetrator's perspective and the theorized psychological causes underlying each cluster of behaviors. The outcomes of discrimination can certainly differ by group (Swim et al., 2003). For example, discrimination may be more frequently targeted toward lower status groups (Pratto et al., 2006), and its impacts may be disproportionately harmful to such groups due to their lower power in society, relevant negative stereotypes in a domain, and vulnerability in general. But to include outcomes in the definition of discrimination is to define a behavior by its consequence. A better understanding of discrimination will help set the stage for understanding its causes. We return to how perceptions and effects of behavior might vary across social groups in the General Discussion.

It is also important to clarify what we are not including in the present research. There are important types of discrimination we have purposely excluded. One is systemic or structural discrimination, which is thought to occur "indirectly" from systems or organizations within a society and is the cumulative outcome of interactions over time and across domains such as health care and policing (Bohren et al., 2022; Pincus, 1996). Systemic discrimination undoubtedly impacts people's lives (Galvan et al., 2026). Types of discrimination that we consider systemic include algorithmic bias and disparate policies and practices within health, judicial, or carceral systems. Systems certainly contribute to individual acts of discrimination, for example, by establishing interpersonal and group hierarchies (Sidanius & Pratto, 1999) or setting norms regarding what discriminatory actions are acceptable or unacceptable (Crandall et al., 2002). But systemic discrimination may be caused by factors distinct from those causing interpersonal discrimination and operates at a different level of analysis entirely (Rucker & Richeson, 2021; Skinner-Dorkenoo et al., 2023), supporting our focus on interpersonal discrimination. That said, individuals sometimes act in discriminatory ways because their role in a system mandates them to do so, as when bankers, judges, and health care workers enact discriminatory policies sanctioned by or normative within their institutions. Below, we propose that individuals acting on behalf of a system constitute one of the 11 clusters of discriminatory behaviors.

Organizing Principles

A taxonomy entails a classification and ordering system, and in considering what behaviors to classify similarly, questions of ontology naturally arise. How to determine the extent to which two qualitatively distinct behaviors are similar or different? The approach adopted here focuses on theorized causal predictive modeling, in which behaviors are considered similar to the extent they would be equivalently predicted by the same model (i.e., the same causes lead to the behavior). Specifically, we use "model" to refer to the independent variables predicting discriminatory behaviors, the coefficients of those variables, and the ways in which those effects are combined (e.g., linearly; Crockett, 2016; Jolly & Chang, 2019).

Should any of these characteristics be meaningfully changed, it would be considered a different model.

Having distinct causal predictors is evidence that two things are different (Grossmann et al., 2024). For example, should two qualitatively distinct behaviors, such as not sitting next to someone on a bus and not inviting someone to a party, be predicted to the same extent by the same model, we could consider the causal psychological motivations of these two behaviors to be highly similar and group them in the taxonomy. Further, to the extent that two behaviors are not predicted equally by the same model, we would consider the underlying psychological motivations of those behaviors to be different.

For the purposes of the present research, there are two broad categories of variables we consider to predict any type of behavior. The first category consists of psychological constructs that cause whether a person does a behavior or not. It is on this category that we aim and base the present taxonomy. The second category of variables are those that are extraneous to psychology (hereinafter, extraneous predictors) but that nonetheless are important for predicting a given behavior. We expect these variables to vary more widely across behaviors. As a concrete example, consider the behaviors of "hanging a hate flag" and "getting a hate tattoo." Psychologically, we might consider the forces that motivate a person to do each of these behaviors to be quite similar, and the psychological portion of a predictive model would include the same variables. However, the extraneous predictors might be quite distinct. If a person has nothing from which to hang a flag, they will not hang a flag. Maybe another person with a phobia of needles is averse to getting tattoos of any kind. These variables would be highly predictive in a model of these behaviors but are unrelated to the psychological motivations of discrimination. That said, situational characteristics—the psychological, rather than physical, aspects of a situation (Rauthmann et al., 2015)—are considered potential predictors in models of discriminatory behaviors. For example, being on the internet would be an extraneous variable, but an anonymous situation would be a situational characteristic and potentially included in a model predicting discrimination.

To organize the behaviors, we drew from several theoretical foundations. To start, we considered the possible functions of each behavior. A functional perspective posits that people think, feel, and act in ways that aim to serve their goals and needs—whether those be belonging, self-protection, status, family care, or any number of other goals (Cook et al., 2021; Neel et al., 2016; Neuberg et al., 2011). That these behaviors are functional does not imply they are morally right or justified, only that the behaviors serve a purpose. Functional perspectives have been fruitfully applied to understand stereotyping and prejudice (Neuberg et al., 2020; Schaller & Neuberg, 2012). A key insight from these perspectives is that specific types of prejudice (e.g., those characterized by fear vs. disgust vs. pity) are driven by specific and shared causes, such as perceptions of danger, contamination, or neediness (Cottrell & Neuberg, 2005; Cuddy et al., 2007).

Applied to discrimination, functional perspectives suggest that behaviors serving similar functions likely share similar psychological causes (Filip-Crawford & Neuberg, 2016; Pirlott & Cook, 2018). If true, such an organizing principle should give rise to more accurate clustering than more superficial characteristics like the behavior's modality. For example, discriminatory speech could serve multiple functions. Sometimes it may serve no function and be purely accidental (e.g., an older person unknowingly using a dated term regarding a group). Other times discriminatory speech could be used to signal group membership or be used with the intent to upset outgroup members. Although all verbal displays, we think the psychological models predicting these behaviors would be different. In contrast, organizing by underlying function can cluster behaviors that are superficially different on their face, such as having a hate tattoo or chanting at a rally, and yet serve the same function (e.g., value signaling).

In addition to functions, we also incorporated several dominant theoretical frameworks, with the logic that the classifications from these frameworks might aid in the clustering. First, we consider whether each behavior is likely to be more intentional versus automatic or, relatedly, whether perpetrators might be aware versus unaware of their behaviors (Bargh, 2014). Further, a large body of research has used approach and avoidance mechanisms as a broad organizing structure for clustering different types of behavior (Carver & White, 1994). We mention these characteristics when they seem particularly relevant to classifying the behaviors.

Like any approach attempting to create categories from a continuous space, the overall number of clusters we include will depend on conceptual resolution. If one "zooms out" to a greater extent and allows for greater dissimilarity in behaviors within the same cluster, there will be fewer clusters in the taxonomy. The extreme version of this is one all-encompassing cluster called "behavior," and the reverse, when being more sensitive to differences between behaviors, more clusters will emerge. This end of the extreme would be every single behavior comprising its own cluster. Such a range in resolution has been observed with factor analysis and in the personality literature. For example, depending on the conceptual resolution, there are two personality metatraits (DeYoung, 2006), the Big Five factors (John & Srivastava, 1999), 10 aspects (DeYoung et al., 2007), 30 facets (Costa & McCrae, 1995), and innumerable characteristics below facets (Mõttus et al., 2019).

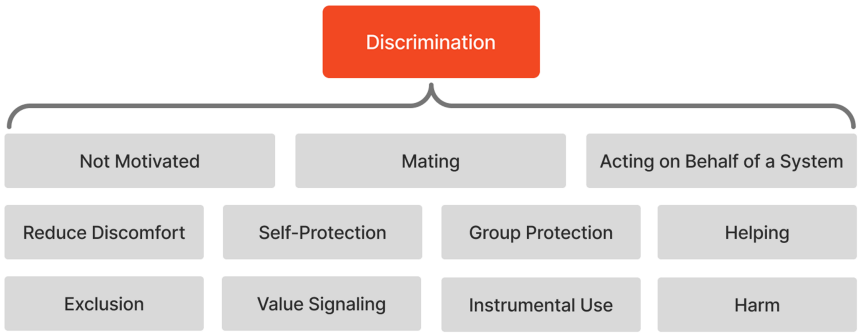
However, "Taxonomy is always a contentious issue because the world does not come to us in neat little packages" (Gould, 1981, p. 158). One cannot "carve nature at its joints" when there is no veridical boundary between categories. The value of a particular model is based on the researcher's priorities, such as parsimony, variance explained, synthesis, or generalizability (Srivastava, 2020), and how useful the model is toward those goals. Here, we aimed for a "medium" resolution of discriminatory behavior, settling on a level we believe will be most useful for researchers seeking to predict discrimination.

A Taxonomy of Discriminatory Behavior

Using this conceptual approach, we propose a taxonomy of discriminatory behavior (Figure 1).

The behaviors serving as the basis for organization were derived from a variety of sources. First, we consulted the literature on the types of discriminatory behavior that have been studied by researchers in the social sciences for the past 80 years, both in terms of published research and specific items from various prejudice and perceived discrimination scales (Bastos et al., 2010; Hester et al., 2023; Morrison et al., 2016). Further, some of the authors have conducted a variety of daily diary studies asking people to describe their personal experiences of being discriminated against. These descriptions were consulted to inspire the review. Finally, some discriminatory behaviors are not frequently studied by researchers nor experienced by most participants due to their extremity (e.g., hate crimes, lynching), but they have clear impacts for targets and

Figure 1
A Taxonomy of Discriminatory Behavior



Note. The organization of the clusters in this figure is random and reflects no meaningful structure. See the online article for the color version of this figure.

are historically well-documented and so are contained within the universe of discriminatory behavior.

Within each cluster, we first consider characteristics of the behavior and the functions it may serve, then review literature examining such behaviors or, alternatively, note when the evidence for an area is sparse. Next, we speculate on some of the likely psychological causes of such behaviors, first discussing the role of prejudice due to its historical focus, then moving to other likely variables traditionally studied in the intergroup domain and finally novel predictors that may be understudied as causes of particular discriminatory behaviors. Specifically, reviews of behavioral change interventions have estimated the relationship between knowledge, beliefs, attitudes, emotions, skills, habits, and injunctive and descriptive norms (among other higher level societal factors) with behavior (Albarracín et al., 2024; Axt & To, 2025), finding that most have small or negligible relationships with behavior. We discuss and mention these specific factors in discrimination clusters for which we believe they might be valuable predictors. Table 1 summarizes the clusters, functions, examples of discriminatory behavior, and model predictors and nonpredictors of such behaviors.

We consider discriminatory behaviors to constitute a large multidimensional space, with possible "distances" between these theoretical clusters of behavior not yet quantifiable. While we necessarily discuss some clusters before others, this presentation order does not reflect any meaningful organization. Behavior is truly a multidimensional space, and readers should consider these clusters independent and not necessarily organized in a linear manner.

Not Motivated

We define the first cluster of discrimination as differential treatment that is not motivated because the discrimination serves no function for the perpetrator. These behaviors are nonconscious and unintentional in that the perpetrator is unaware they are acting in a biased manner. This form of discrimination could reflect a genuine mistake, wherein someone discriminates in a way they would not consciously endorse. However, it need not reflect a mistake—if a person perceives a social group as irrelevant to their own concerns and thus is more likely to ignore and forget members of that group, we would also include that here as not motivated discrimination. The behavior does not depend on the perpetrator's intentions or values; it merely needs to emerge as a byproduct of the person's social perception, attention, interpretation, or behavior, rather than being a goal unto itself.

Existing findings in this cluster would include the cross-race recognition effect, in which perpetrators better remember faces for members of their own than other races (Hugenberg et al., 2010; Meissner & Brigham, 2001; Rhodes et al., 2006; Sporer, 2001), cases of mistaken identity in legal domains and police line-ups, and failing to notice or engage with others perceived as irrelevant, treating them as "invisible" (Brown-Iannuzzi et al., 2014; Dietze & Knowles, 2016; Neel & Lassetter, 2019; Sesko & Biernat, 2010).

Some forms of behavior categorized as microaggressions (Sue et al., 2007), such as asking an Asian Canadian person where they are from or mistaking a person of color for a service worker, would also belong in this cluster as long as the behavior is not serving any motivated purpose. Indeed, not motivated discriminatory behaviors may emerge from interpreting and using the same cues differently based on the target's group membership. For example, medical professionals give people of different social groups varying amounts of medication and attention in stereotype-consistent ways (Dovidio et al., 2008; Lloyd et al., 2020; Penner et al., 2014). When differential medical treatment is driven by a misinterpretation of cues across groups, such as less accurately detecting pain expressions from Black versus White patients (Deska et al., 2020; Lloyd et al., 2021; Summers et al., 2021, 2024), it would fall into the not motivated discrimination cluster. Similarly, studies have found that teachers discipline Black children more than White children for the same infraction, potentially due to differences in interpretation of the child's behavior, contributing to disparities in disciplinary rates within schools (Okonofua & Eberhardt, 2015; Okonofua et al., 2016). Importantly, we note that if the medical professionals or teachers in these examples were enacting such behaviors purposefully and knowingly, they would not belong in this cluster (see below).

Model

First, what might be notably absent from models predicting these types of behaviors is prejudice. Perpetrators in this category are not intentionally discriminating, and thus, prejudice is unlikely to be strongly related. Indeed, although it has been tested many times, prejudice is not associated with other-race recognition (Lavrakas et al., 1976; Meissner & Brigham, 2001; Slone et al., 2000). Likewise,

Table 1
Summary of Taxonomy Clusters of Discrimination

Cluster	Function	Example	Theorized cause	
			Person factor	Situational factor
Not motivated	Serves no function, byproduct of other processes	Cross-race recognition effect, asking someone where they are from, erroneously perceiving someone in a stereotype-consistent way	Stereotype endorsement, intergroup contact, motivation or habits to individuate, group knowledge	Cognitive load, stereotype accessibility
Mating	Maximize probability of desirable characteristics in a romantic partner	Only dating people of a certain race, avoiding dating people of a certain race	Stereotype endorsement, intergroup contact, prejudice, attraction	Sex ratio, segregation, mating norms
Acting on behalf of a system	Obey authorities, maintain sense of order, avoid punishment	Denying a bank loan, setting bail at a rate that is affordable to one group but not another	System justification, social dominance orientation, respect for hierarchy, rule following, right-wing authoritarianism, conscientiousness	Obedience norms, hierarchical organizational structures, low individual autonomy, clear benefits of obedience, and costs of disobedience
Reduce discomfort	Indicator of anxiety, seek to decrease anxiety	Nonverbal behavior, seating distance, avoiding intergroup contact	Anxiety, intergroup contact, behavioral control	Availability of alternative explanations for discrimination, social scripts for behavior
Self-protection	Reduce the possibility of physical harm to oneself	Crossing the street when seeing outgroup member, avoiding certain group members due to disease concerns, aggressive behavior to defend against certain group members	Stereotypes associating groups with danger; feelings of threat, anxiety, fear, and disgust	Perceived vulnerability to harm, prevalence of crime or disease in an area
Group protection	Protect group resources, protect one group against another group	Security guards following racial minorities at a store, airport security profiling certain groups	Stereotypes associating groups with danger or threat to resources, ingroup identification, social dominance orientation, Machiavellianism, zero-sum mindset	Perceived resource scarcity, competition between groups
Helping	Prioritize ingroup members to maximize ingroup resources	Greater allocation of resources to ingroup members, differences in hiring or promotions, greater likelihood of intervening in emergency for ingroup members	Stereotypes about outgroup posing a threat to resources, ingroup love, ingroup identification, social dominance orientation, zero-sum mindset	Perceived resource scarcity, competition between groups, situational risks, and costs to helping
Exclusion	Shun, avoid association with undesirable people, protect group boundaries	Inviting people from only one group to an event, pretending not to see or engage with members of another group, refusing to serve members of some social groups	Stereotypes that a group is low in power, status, resources, or domain-specific abilities, prejudice	Norms of inclusion and exclusion, competition between groups
Value signaling	Communicate one's beliefs	Displays of negative outgroup attitudes, attending hate gatherings, hate speech	Ingroup identification, prejudice, basic psychological needs (autonomy, competence, relatedness), need to belong	Uncertainty of one's group status, entering or interacting with new group members
Instrumental use	Use resources from a target group for one's own benefit	Enslaving group members for economic gain, bias in recruiting of group members to benefit business	Accessible stereotypes that a group has characteristics to advance perpetrator's goals, perceiving a group as low power or status, Machiavellianism	Norms of instrumental use
Harm	Hurt members of another group	Physical assault, relational aggression, property damage	Prejudice, anxiety, fear, disgust, moral outrage, agreeableness, frustration	Perceived anonymity, norms, reduced inhibition, threatened self-esteem, uncomfortable environmental conditions

invisibility-based discrimination (i.e., ignoring and overlooking someone) is theorized to emerge in the absence of prejudicial feelings (Neel & Lassetter, 2019).

A model successfully predicting not motivated discriminatory behavior might instead focus on stereotype accessibility and measures of experience with outgroups, such as intergroup contact. Measures of stereotype accessibility could tap the extent to which a person harbors associations between different social groups and valued attributes or relevant behaviors. Because holding stereotyped expectations leads people to interpret events in stereotype-confirming ways (Dunning & Sherman, 1997; Sagar & Schofield, 1980), the same behaviors enacted by members of different groups may be interpreted differently, leading to discriminatory responses toward those groups. Stereotypes may also shape not motivated discrimination by influencing who is deemed socially relevant and worth paying attention to and, consequently, who is irrelevant. Holding stereotypes that a group is low in power, competence, or relevance to a situation may lead to decreased attention to that group, compared to a group that is high in power and competence or is situationally relevant (Cheng et al., 2013; Neel & Lassetter, 2019).

Intergroup contact is a measure of one's experience with another group. Greater experience would theoretically increase the familiarity one has with different cultural practices and values, as well as more accurate interpretation of cues to different feelings, such as pain. Similarly, contact has long been shown to be associated with reduced cross-category face recognition deficits, presumably because people gain experience with processing different configurations of cues, which can vary across racial groups (Hugenberg et al., 2010; Sporer, 2001).

Even for those who have experience with a particular group, they may still engage in discrimination when not motivated to attend to the unique identity-diagnostic characteristics of individuals (Macrae & Bodenhausen, 2000), and thus, motivation to individuate may be an important predictor of not motivated discrimination as well. Situational factors that make stereotypes more accessible, such as recent exposure to a stereotypic portrayal, or that increase reliance on stereotype-consistent information or reduce accuracy motivations, such as distraction or cognitive load (Sherman et al., 2000), may also predict not motivated discriminatory behaviors.

Familiarity with the social group, being aware of some of the microaggressions above and how they are received, would likely reduce some not motivated behaviors that are a product of ignorance. Thus, knowledge of the discriminatory behavior is a possibly useful predictor (Albarracín et al., 2024). Further, habits, defined as repeated, automated behaviors, have medium-strength associations with engaging in the behavior (Albarracín et al., 2024), and those that facilitate individuation and motivated processing might predict discrimination in this cluster. For example, habits to consciously attend to every person in a room or to keep track of who is not speaking and ask for their perspective would reduce outcomes related to invisibility.

Mating

Expressing romantic interest or engaging in mating behaviors differentially across social groups constitutes discrimination. It serves the function of maximizing the perceived probability of desirable characteristics in a romantic partner. For example, this might include seeking out or avoiding members of a particular group for dating. Mating discrimination could be either unconscious or intentional and approach or avoidance-oriented. Evidence for mating discrimination certainly exists in both self-reports of interest and in observations of behavior. Some straight men pay preferential sexual and romantic attention to certain groups of people, such as Asian and Pacific Islander women, based on stereotypic perceptions that they are sexually desirable, feminine, and submissive (Azhar et al., 2021). Separately, many people explicitly state a preference to date members of their own racial group (Anant, 1975; Triandis & Davis, 1965), baking discrimination into their search for a romantic partner. Further, certain patterns of mating across racial groups map onto differential perceptions of masculinity, femininity, and physical attractiveness. For example, Black people are perceived as more masculine than White people, who are in turn perceived as more masculine than Asian people (Axt et al., 2022; Johnson et al., 2012), and these patterns of masculinity-femininity perceptions map on to interracial marriage patterns in the United States. There are far more marriages between Black men and White women and White men and Asian women than the reverse (Galinsky et al., 2013).

What is slightly unique about this cluster of discrimination is the perceived justifiability and normativity of such preferences (Song, 2023). Mating discrimination is widespread and commonplace, is typically framed as a preference for some groups (rather than a dislike of other groups), and may be perceived as legitimate (Crandall et al., 2002; Phillips & Jun, 2022). In fact, similar to preferences for attractive people (Jaeger et al., 2025; Roy et al., 2025), it may be so normative as to not be considered discrimination at all. Yet, by definition, it constitutes differential behavior as a function of social group membership and warrants inclusion.

Model

Prejudice certainly would reduce people's interest in dating members of targeted groups (Motzny et al., 2024). Stereotypes, however, may play a particularly large role in differential mating behaviors. Different social groups have attributes associated with them that may seem more or less desirable to potential partners, whether they be religious values, physical attributes, or personality characteristics. To the extent that people endorse such stereotypes, they are likely to engage in greater mating discrimination.

Separately, there is the complex issue of attraction. There is wide idiosyncrasy in what people consider physically attractive (Hehman et al., 2017; Hönekopp, 2006). While some characteristics, such as symmetry, may be universally considered attractive, there are many individual differences in preference for hair color, eye shape, and face shape, among innumerable other characteristics (Holzleitner et al., 2019). Exactly why these different preferences exist is not fully known but is thought to be partly determined by familiarity and experience with people of different appearances over time (Correll et al., 2025; Valentine, 1991). Indeed, White men who had more friendships with Black people felt more attracted to Black women (Brooks & Neville, 2016). Different social groups have varying probabilities of different appearances that others might be more or less attracted to.

Accordingly, other useful predictors might be situational variables upstream of intergroup contact as a proxy for people's experience with individuals of different appearances. This might include the presence of other social groups in an area, local levels of segregation, and the sex ratio. For example, if local men are a scarce resource, people interested in men may be less choosy in their partners (Moss & Maner, 2016).

Injunctive norms regarding dating between groups also may play a strong role. Between 1959 and 2013 in the United States, support for interracial marriage changed from 4% to 87% (Newport, 2013), with a corresponding change in the number of interracial marriages.

Acting on Behalf of a System

People may at times discriminate while acting on behalf of a larger system or organization, such as a government, court of law, or workplace. In these instances, perpetrators are essentially acting as cogs in a broader, structurally discriminatory machine. An archetypical example is the Nazi Adolf Eichmann, whose court defense of his war crimes in organizing the Holocaust centered on that he was doing his duty, obeying orders, and obeying the law (Arendt, 1963). The function of this cluster may be to maintain a sense of security, stability, and predictability in the social order (Gächter et al., 2025) while receiving the benefits of a system or avoiding its punishments for noncompliance. Although the present taxonomy focuses on individual behavior, this type of discrimination could serve as the hinge point between individual and structural levels of discrimination. Specifically, there may be individual and contextual variability in how much people in these positions act on behalf of a system and discriminate. When the structure itself is discriminatory (e.g., U.S. bank loans based on real estate evaluations in red-lined housing areas), some people may be willing to bend the rules to be more egalitarian (or for other reasons), while others may seek to stick as closely to the rules as possible. Likewise, people may be more likely to act on behalf of systems that are strongly hierarchical, with clear costs and benefits for obedience, like a military or police force. Thus, individual and contextual variation here provides traction for models predicting discriminatory behavior.

Model

We do not anticipate prejudice to play a strong role in predicting this type of discrimination. Perpetrators are following a strong social script, sometimes explicit rules or laws, and can use this as justification for their behavior. Instead, we expect a constellation of variables broadly orbiting "trust in a system" or "rule following" to predict such behavior more strongly. This might include measures of system justification or social dominance orientation (Jost et al., 2004; Sidanius & Pratto, 1999), both of which are associated with an endorsement of hierarchy. Strong norms of respecting and following (or not) such rules might channel this behavior (Gächter et al., 2025), as might individual differences in conscientiousness (John & Srivastava, 1999), which is related to compliance and adherence to norms and rules (Götz et al., 2021), and right-wing authoritarianism, which reflects rigid adherence to conventional norms and authorities and disdain toward those who threaten such values (Altemeyer, 1988).

Identification or desire for acceptance among those perceived to be represented by the system would predict greater discrimination in this domain. Alternatively, measures of egalitarianism here may be predictive, as people in such positions who feel a strong need for being fair beyond the strictures of the system may be more willing to bend the rules. Situational factors may also differentially predict acting on behalf of a system discrimination. For example, a strongly hierarchical institution that prioritizes obedience, has strong behavioral norms, allows little autonomy in decision making, and has clear benefits of obedience with certain consequences for disobedience may be more likely to produce discrimination of this type. Similarly, cultures that are characterized by tightness (vs. looseness) have strong norms and little tolerance for norm violations (Gelfand et al., 2011), and in organizations or cultures that are high in power distance, people are more likely to defer to rules and authorities (Daniels & Greguras, 2014), potentially increasing this type of discrimination.

Reduce Discomfort

Behaviors in the reduce discomfort cluster emerge when a perpetrator feels discomfort interacting with the target of discrimination. Some of these behaviors have no function and are rather an indicator of the perpetrator's anxiety or discomfort. Such behaviors are distinguished from the not motivated cluster because they suggest the perpetrator is attending to, and to some extent anxious about, the target of discrimination. Other behaviors in this cluster could serve the function of reducing the perpetrator's discomfort, though the perpetrator may not be consciously aware of doing so for this purpose. Behaviors in this cluster may be consciously accessible but more automatic than other clusters.

We believe many behaviors in this cluster will be nonverbal, as discomfort interacting with other groups often manifests in this way. Some behaviors labeled as microaggressions (Sue et al., 2007; M. T. Williams, 2020), or subtle (relative to blatant or overt) discrimination (Gaertner & Dovidio, 1977), would be captured by this category. In general, there has been a great deal of research on behaviors in this cluster. Interactions between members of different groups are often shorter (Plant & Butz, 2006) and can feature averted eye-gaze, facial expressions, and body posture (Corrington et al., 2017; Dovidio et al., 2002; Shelton, 2003; Shelton et al., 2005), all of which may lead to a less pleasant interaction or decisions to end the interaction sooner (Gaertner, 1973; Plant & Butz, 2006; Word et al., 1974). Field-based research demonstrates differences in the amount of time spent providing directions when asked (Campbell & Brauer, 2021), conversing with a job applicant (Hebl et al., 2002), or interacting and talking with patients (Dovidio et al., 2008; Hagiwara et al., 2013; Penner et al., 2016), depending on the target's race, weight, or other features.

Behaviors in this cluster can also occur outside of one-on-one interactions, such as staring or other signals of unease. For example, outgroup confederates in one study spontaneously reported, "Because we are chatting in Spanish, they look at us. I don't think it is common to hear people speaking in Spanish on this route" (Enos, 2014, p. 3701). Both lab-based and real-world studies have measured physical proximity to capture discrimination based on a sense of anxiety and uneasiness. For example, in one lab paradigm, participants sit on wheeled chairs, and after an interaction, the distance of the two chairs operationalizes comfort (Goff et al., 2008). On a bus, sitting next to a member of another social group (or not) can indicate comfort with that social group (Campbell & Brauer, 2021). Discrimination is evident when people sit further from members of one social group than another (Er-rafiy et al., 2010; Macrae et al., 1994). For example, one research paradigm assesses discomfort with people with disabilities by giving participants the option to watch a film either in the same room as a person with a visible physical disability or in a different room (Snyder et al., 1979). Only when the two films being shown are different (rather than the same film) does the participant have a readily available attribution of film preference for avoiding the person with a disability, and they do so at higher rates than when the film is the same.

This cluster also encompasses avoiding situations of group contact for the purpose of minimizing discomfort. For example, contact-focused research examined behavior in a soccer league (Mousa, 2020). Those randomly assigned to a "no contact" condition, in which no outgroup members had been placed on their soccer team, were less likely to register for a mixed team in the following season or train with outgroup members 6 months after the intervention, which could reflect participants' discomfort interacting with outgroup members.

Model

Like the not motivated cluster, we would not expect prejudice to play a strong predictive role with such behaviors, as people with no negative attitude toward an outgroup can still feel uncomfortable during intergroup interactions. And anxiety is thus likely to be a prime predictor in this cluster. Some theoretical frameworks identify anxiety as a critical ingredient in discriminatory behavior (Stephan & Stephan, 1985). For example, aversive racism theory posits that most people endorse egalitarian ideals, and discriminatory behaviors (and prejudices) are driven more by discomfort than outgroup hatred (Dovidio & Gaertner, 1986). Some of the theorized anxiety in these contexts is caused not by fears of danger but of embarrassment, such as making a group-related *faux pas*. Thus, people carefully self-monitor, contributing to a more wooden exchange, and seek to escape the conversation sooner (Shelton, 2003).

Accordingly, a model predicting these types of behaviors would emphasize anxiety and contact experience with members of the other group. One of the main purported effects of contact is to reduce anxiety about interacting with outgroup members (MacInnis & Page-Gould, 2015; Pettigrew, 1998), and those who regularly navigate such contact would be expected to show these behaviors less. Relatedly, people's feelings of self-efficacy or behavioral control in interacting with members of other groups may be a strong predictor here. Meta-analyses revealed that feelings of behavioral control are strongly associated with both recycling behaviors (Geiger et al., 2019) and reduced consumption of alcohol (Gómez Plata et al., 2022), with a medium-sized relationship across a broad variety of behaviors (Albarracín et al., 2024). In intergroup interactions, specifically, believing that prejudice can change may increase majority-group members' sense of efficacy by reducing concerns about appearing prejudiced and thereby reducing feelings of discomfort (Carr et al., 2012; Neel & Shapiro, 2012).

Further, reduce discomfort discrimination is thought to occur when there are plausible alternative explanations available for the behavior, but not when bias is obvious to oneself or to others (Dovidio & Gaertner, 2000; Snyder et al., 1979). We therefore expect that the availability of alternative explanations for a behavior, or factors that could serve to "justify" discrimination (Crandall & Eshleman, 2003), will predict behaviors aimed at reducing discomfort, especially when there are strong norms against discriminating toward the group. Situations with clear social scripts for interaction may reduce intergroup anxiety and thus make this kind of discrimination less common (Avery et al., 2009).

Self-Protection

The self-protection cluster comprises discriminatory behaviors serving the function of protecting oneself from harm. Whereas reducing discomfort is primarily about alleviating negative emotions such as anxiety caused by the presence of outgroup members, self-protection is motivated by the desire to avoid the possibility of harm to one's physical self. Some of these behaviors might be broadly construed as avoidant. For example, people may avoid members of social groups to reduce or mitigate the risk of possible harm.

This is another cluster of behaviors in which there has been a good deal of research. For example, people may avoid large outgroup men (relative to smaller outgroup women) who have the capacity for physical harm, such as crossing a street to avoid passing them on the sidewalk (Steele, 2011). Evolutionary models of intersexual competition similarly focus on the dangers of sexual coercion for women and the resulting avoidance of outgroup men in particular (McDonald et al., 2015; Navarrete et al., 2010). Harm-based threats can come in other forms, such as disease threats (Neuberg et al., 2011). For instance, at the height of the first COVID-19 outbreak, Asian people were stereotyped to pose a threat of disease, and many sought to avoid contact with them to mitigate that potential threat (Mandalaywala et al., 2023; Schaller et al., 2021). Similarly, both U.S. Democrats and Republicans who felt more vulnerable to disease were more likely to avoid Republicans (Ko et al., 2025), as this group was challenging contagion-prevention strategies like masks and vaccines.

However, there may be other behaviors that are self-protective in function yet approach-oriented. For example, classic fight-or-flight models show that animals will attempt to flee when encountering certain threats but will aggress if unable to (McCarty, 2016). Similarly, when situational factors dictate that aggression is the most appropriate response serving self-protection, aggressive behaviors would fall in this cluster.

Model

We anticipate that prejudice plays a significant role in self-protection discrimination. For example, intergroup emotions stemming from perceived threats might predict self-protection discrimination, such as anxiety, fear, and disgust toward the group posing the perceived threat (Cottrell & Neuberg, 2005; Talaska et al., 2008). Discriminatory behaviors that serve a self-protective function may be more likely to occur when perpetrators endorse stereotypes associating groups of people with danger, especially threats of violence or disease (Correll et al., 2014; Todd et al., 2021).

Finally, situational and ecological factors that increase perceived vulnerability to harm, such as being alone in an unfamiliar place, in an area with high crime rates (for safety threats), or in a crowded area with other people or high pathogen prevalence (Sng et al., 2018), may also predict self-protective behaviors. Societies where institutions are weak, or in honor cultures in which retaliation for threats is perceived as normative and appropriate (A. Nowak et al., 2016), may also make self-protection discrimination more likely.

Group Protection

This cluster includes behaviors that serve to protect the ingroup both from outgroups and from threats within the group itself. While similar, we have demarcated this from self-protection because people may perceive threats to the self as distinct from threats to their ingroup (Shapiro, 2011; Shapiro & Neuberg, 2007) and because threats to the group, unlike threats to the self, may uniquely affect group functioning and thus jeopardize all the benefits of belonging to groups.

Group protection can be aimed at resources, such as tangible goods of material value, but also status and power (Tajfel et al., 1971), as well as protecting those resources from other members of the ingroup. Uniting all these various aims is the effort to maintain and protect the resources and functioning of a group.

Generally, we consider behaviors derived from greater suspicion to fall in this category. For example, the oft-reported event of racial minorities being followed by security guards around a store, presumably due to the stereotype-derived perceived threat of theft, would belong here. Similarly, police officers disproportionately stopping and frisking members of certain groups (Hester & Gray, 2018), or pulling them over (Ekstrom et al., 2022; Stelter et al., 2022), and airport security targeting certain groups may share a similar intention to protect the public (and ingroup) from danger. To the extent that these behaviors result from individual judgments motivated to protect the group, rather than from institutional policies established to try to protect the group, this would reflect group protection discrimination rather than acting on behalf of a system.

While the above examples all include members of security forces, behaviors aimed to protect resources can appear in more mundane situations as well, such as having one's work more closely monitored by one's boss or associates than others to prevent suspected theft. Family members often weigh in on mate choices (Buunk et al., 2009). To the extent they discourage a child from dating members of a certain race or religion with the aim of protecting the child or family resources (Shenhav et al., 2016), these efforts might constitute group protection discrimination as well.

Further, behaviors in the group protection cluster may be focused on protecting group status or keeping members of other groups "in their place" in an existing social hierarchy (Sidanius & Pratto, 1999). For example, research analyzing police body camera footage found that police officers in the United States used less respectful language and tone (Camp et al., 2021; Voigt et al., 2017) when interacting with Black relative to White people. Such behavior would fit into this cluster to the extent that officers do it to reinforce their status in the interaction. Behaviors in this cluster might manifest in different domains as well, such as homeowners associations or aspects of the real estate market making it more difficult for members of one social group to move into a neighborhood due to stereotype-related fears, for example, that the group's presence may bring down property values.

There may also be behaviors in the group protection cluster that serve to protect the ingroup's symbolic resources from the outgroup. For example, young adults may avoid or disparage older adults who use language, dress, or symbols of youth culture (North & Fiske, 2013). More generally, ingroup members may seek to protect valued group symbols (flags, accents, clothing, slang, etc.) from being coopted by outgroup members and respond in discriminatory ways toward those who do so (Kirby et al., 2023).

Furthermore, discriminatory behaviors in this cluster might protect ingroup resources from other members of the ingroup. For example, when resources are threatened, people may be particularly sensitive to "free riders" who are consuming resources but not perceived as contributing to the broader group (Shinada & Yamagishi, 2007). Similarly, the black sheep effect, in which deviant ingroup members are judged more harshly, is thought to be due to attempts to maintain group identity and cohesion (Marques et al., 1988).

Model

We anticipate that behaviors in this cluster will be caused by perceptions, often fueled by stereotypes, that the target group poses a threat to a particular ingroup resource, to the group's functioning, or to the integrity of the group itself. Identification with the ingroup or dislike of the target group may predict group protection discriminatory behavior. And because group protection seeks to maintain the resources and status of the ingroup, social dominance orientation—an interpersonal characteristic reflecting endorsement of social hierarchy and a desire for one's ingroup to be superior to outgroups—may also be an important predictor (Ho et al., 2015; Sidanius & Pratto, 1999).

Further, recent research (Hehman & Neel, 2024) found ingroup identification, or how important the ingroup is to defining oneself (Leach et al., 2008), to be the single strongest predictor of prejudice, and we expect it would similarly be an important predictor of group protection behavior. Situations that lead to perceived scarcity of resources or competition between groups may be especially likely to produce group protection behaviors (Sherif et al., 1961; K. E. G. Williams et al., 2019).

Helping

Relative to group protection, the helping cluster concerns the uneven distribution of resources, such that certain people (often ingroup members) are prioritized. Such behaviors might serve the function of maximizing and increasing the ingroup's resources and power and depriving them of an outgroup. Such behavior has been widely studied in lab-based research, often in the form of social dilemmas or tasks under the umbrella of game theory, including the "prisoner's dilemma" or "chicken" (Camerer, 2003; M. Nowak & Sigmund, 1993), or completed following group interactions (Deegan et al., 2015; Kachanoff et al., 2020; Scheepers et al., 2006; Tajfel et al., 1971). Participants engage in a task with members of different social groups and then must distribute some resource (e.g., tokens, points, money, ratings) to members of the groups (Krosch & Amodio, 2014). Discrimination is evident when members of one group are allocated more resources.

According to social identity theory, individuals strive to maintain a positive social identity and to distinguish their own group from other groups to feel better about themselves (Jetten et al., 1998; Tajfel & Turner, 2004). Classic studies using the minimal groups paradigm—in which participants are assigned to groups based on arbitrary criteria—found that people allocated more rewards to their ingroup versus the outgroup (Tajfel et al., 1971). Such findings suggest that people are inclined to engage in behaviors that protect and maximize benefits to their own group compared to other groups.

Outside of these games and designs, research is more sparse. Helping discrimination is evident when members of one group are helped more than another, on average. Some evidence suggests that people are faster and more likely to help ingroup than outgroup members. For example, lab-based research created false emergencies (e.g., the sound of crashing chairs and a scream), encouraging participants to intervene for either an ingroup or outgroup member (Gaertner & Dovidio, 1977). A meta-analysis examining helping and altruism concluded that people helped the ingroup more than the outgroup when helping was riskier and more effortful, and particularly in high-arousal contexts (Saucier et al., 2005).

Real-world variations might include differences in tipping behavior (Brewster & Lynn, 2014), buying products from ingroup members (Schnurr & Halkias, 2022), or differing donation amounts to charities associated with social groups. In addition, we consider that differential promotion or leadership nomination decisions may fall in this cluster, as the power, status, and money that might come with such a promotion are not equally distributed across members of varying social groups (D. D. King et al., 2022; Morgenroth et al., 2020). Another example is intergroup time bias, in which individuals allocate more time and attention to ingroup than outgroup members (Do Bú et al., 2025; Pereira et al., 2025). A more complex example may include helping behavior that is directed toward the outgroup. Such behaviors might fall in the current clusters because, while outgroups are certainly receiving some resources, it is the status and dominance conveyed by the helping that the ingroup values (Nadler, 2002; Nadler & Halabi, 2006). Certain behaviors associated with benevolent sexism may similarly fall into this cluster, in which women may be technically "helped" by a benevolently sexist man, but in a way that is ultimately harmful to their status or agency (Glick & Fiske, 1996).

Model

Liking the target group is particularly likely to be a predictor of helping discrimination. One approach to measuring prejudice has been to operationalize it as the difference in animus or liking between members of the ingroup and outgroup (Axt, 2017; Hester et al., 2023). Because it is based on a difference score, some researchers have conceptually distinguished between two forces that might drive such prejudice, ingroup love (i.e., liking the ingroup more) and outgroup hate (i.e., liking the outgroup less; Brewer, 1999). This research suggests that most prejudice and discriminatory behaviors in the world are caused more by ingroup love, and we believe that would fit the cluster here.

Social dominance orientation seems a promising predictor for modeling this cluster of behavior, especially when the helping targets a high-status group (Levin et al., 2002). Perceptions that outgroups pose a threat to resources, as well as the perception that resources are scarce, can increase disparate distribution of resources (Krosch & Amodio, 2014). Having a zero-sum mindset, in which individuals perceive that one group's gain is another group's loss, may also predict differences in helping discrimination consistent with work showing that zero-sum mindsets lead to less cooperation (Andrews Fearon & Götz, 2024). As with group protection, we expect ingroup identification would strongly predict helping behavior directed toward the ingroup.

Finally, the meta-analysis on helping behavior (Saucier et al., 2005) identifies some potentially useful predictors. When helping required more effort, helping was reduced (Saucier et al., 2005). Accordingly, situational factors that increase the perceived risk of helping, or the amount of effort and resources that would be needed to help, may differentially predict helping discrimination.

Exclusion

While exclusion may seem similar to the reducing discomfort and self-protection clusters, as these behaviors keep outgroup members distant, it differs in that exclusion behaviors are active, conscious decisions more akin to shunning than avoidance. A rich literature examines responses to exclusionary behaviors such as ostracism (Smart Richman & Leary, 2009; K. D. Williams, 2007), though there is less research on the process that leads a person to exclude others. Examples of behaviors in this category would include inviting people from only one group to an event or business proprietors refusing to serve members of some social groups (*Masterpiece Cakeshop v. Colorado Civil Rights Commission*, 2018).

Exclusionary behaviors can also take more subtle interpersonal forms that are nonverbal and covert (Hebl et al., 2020), such as showing less warmth and friendliness toward job applicants from certain groups (Hebl et al., 2002); giving less eye contact, smiling less, and acting more rudely toward retail shoppers of some groups (E. B. King, Shapiro, et al., 2006); restaurant employees giving little or no attention to customers of a certain group and other instances of "cool neglect" in which individuals disregard or ignore members of certain groups over others (Fiske, 2002).

Initial hiring decisions, an outcome in which discrimination is regularly noted, may also fall into this category. Hiring studies are a common experimental design in which participants are given a series of resumes for some job and must make hiring or rating decisions for each. Critically, these resumes vary on their qualifications, but also their social group membership is signaled in some way. Discrimination is demonstrated when members of one group are hired more than another (Axt et al., 2018; Dovidio & Gaertner, 2000). A common field variant is audit studies in which identical applications, letters, or emails are sent to a wide variety of hiring managers, varying only the apparent group of the applicant. More responses observed for one group than another constitute discrimination (Kang et al., 2016; E. B. King, Mendoza, et al., 2006; Milkman et al., 2015; Tilcsik, 2011). We consider such behaviors exclusionary as these candidates are not already known (unlike promotion disparities above) and are not invited to join the group because of their group membership.

Model

Prejudice is likely to be an important predictor of exclusion behavior. Holding stereotypes that a group is low in power, status, resources, or domain-specific capacities may be especially likely to predict exclusion, because these stereotypes signal that the group is generally of low value to the perpetrator. This may be especially true for groups who are stereotyped as low in competence and warmth, for example, who likely elicit disgust and the tendency to reject and exclude members of these groups (Cuddy et al., 2007).

Separately, norms regarding being inclusive are a likely situational candidate for predicting (less) exclusion discrimination. Along these lines, the clarity of social norms—approving or disapproving of prejudice toward certain groups—plays a key role in shaping people's prejudiced beliefs (Zitek & Hebl, 2007) and might also influence whether people engage in exclusion discrimination.

Value Signaling

Value signaling serves the function of communicating one's values to both ingroup and outgroup. Discriminatory behaviors in this cluster would be consciously enacted and often retain a measure of distance from outgroup members (i.e., no direct confrontation). As one example, we consider visual displays of hate to be discrimination. These signals might vary from hate group–associated tattoos, bumper stickers associated with certain agendas (Motyl et al., 2014), or symbols associated with various group identities

(Callahan & Ledgerwood, 2016). These are intentional signals of values both to others who might share these beliefs and also to outgroup members toward whom these attitudes are directed.

Other examples of behavior that would fall into this cluster include relatively visible and deliberate behaviors, such as attending hate-associated rallies, and more mundane forms, such as internet behavior of posting or "liking" others' posts disparaging an outgroup. Online messaging forums often include expressions of identity-based discriminatory speech, including rampant sexist, homophobic, and racial hate speech, among others (Bliuc et al., 2018; Fox et al., 2015; Martínez-Bacaicoa et al., 2023; Rappel et al., 2025). Because these forums are almost exclusively used by members of the ingroup, this type of hate speech may signal to other members one's beliefs and identities, rather than directly serving to harm outgroup members.

Model

While we expect prejudice to be a predictor of value signaling, other constructs broadly associated with wanting to be accepted by one's group might be particularly useful in prediction here. Basic psychological needs theory (Ryan & Deci, 2000), a subtheory of self-determination theory, argues that group membership can serve as an avenue for empowerment and companionship (Vansteenkiste et al., 2020). Individuals seeking personal fulfillment through relatedness, or the need to feel that one has meaningful relationships with others, might send such signals in the hopes of achieving a sense of belonging and acceptance. Indeed, research suggests such relational needs are involved in motivations to join extremist groups (Abrahms, 2008; Kruglanski et al., 2014; Rappel & Vachon, 2023).

In the group domain, group norms theory (Crandall et al., 2002; Sherif & Sherif, 1953) posits that people adopt and display the predominant attitudes of groups to which they want to belong. Being seen as a good member of one's group would increase acceptance by the group, and people may engage in value signaling, even when knowing such shared information is false (Barlev & Neuberg, 2025), to pursue acceptance. Accordingly, ingroup identification is likely particularly important (Hehman & Neel, 2024; Leach et al., 2008). People may also value signal when they feel their group status is ambiguous, such as when entering new groups or when interacting with unfamiliar people who are potential group members.

Instrumental Use

Some forms of discrimination may function not to avoid, exclude, or harm a group, but to preferentially engage with or exploit a group for personal gain. Instrumental use is distinguished from helping behaviors because rather than simply favoring the ingroup for giving help and resources, these behaviors explicitly function to use resources provided by the target group for one's own benefit. Any time a person sees a particular group as providing opportunities to further one's goals, and the target group is treated differently than other potential groups for the intended benefit of the perpetrator, instrumental use discrimination is possible. Sometimes the target may willingly participate in the discriminatory behavior and the provision of benefits to the person acting in a discriminatory way (e.g., for perceived mutual benefit). Other times the behavior may be more exploitative, in that the target would not or could not consent to the differential treatment (Phelan et al., 2008). The perpetrator is likely to be aware and conscious of the action, even if they may not consider it discriminatory.

The instrumental use category is quite broad and may include a variety of behaviors across domains. Historically, colonizers of many areas exploited and enslaved members of Indigenous groups for economic gain. In more mundane examples, if a restaurant hires only young, attractive women, they would be engaging in instrumental use discrimination if they believe these women will provide benefits to the business versus other groups (e.g., men, older adults). As another example, following group stereotypes (Stone et al., 1997), a sports team may preferentially recruit Black athletes for positions prioritizing strength and White athletes for positions prioritizing intelligence, because they think this will serve the team's goals. More explicit exploitative treatment of workers would be included here as well, such as when organizations trap or traffic people from particular groups (e.g., recent immigrants with few resources) to engage in coerced sex work.

Model

We do not expect prejudice to be a relevant predictor of instrumental use discrimination. Endorsing stereotypes that a group poses relevant capabilities to advance the perpetrator's goals, whether those be labor, athleticism, intelligence, sexual desirability, or another attribute, is likely to be a key predictor. Note that these may be typically positive stereotypes, in the sense they are subjectively positive to the perceiver, not that their effects are necessarily positive (Czopp et al., 2015; Siy & Cheryan, 2013). Some operationalization of attitudes such as dehumanization may be useful here, associated with seeing people as less than human and more as animalistic creatures or mechanistic tools (Haslam & Loughnan, 2014). Perceptions that the group is low in power or status may also facilitate freely engaging in exploitative behavior. Individual differences in Machiavellianism may also predict instrumental use discrimination, based on past work showing that people with this personality trait act in ways to maximize their personal gain at the expense of others (Czibor & Bereczkei, 2012).

As in other clusters, both norms and support for norms would be likely situational candidates for predicting instrumental use. Specifically, perpetrators would exploit social groups only when considered to their overall advantage, and this would be reduced when doing so violates local norms or lacks support from others.

Harm

Finally, some discriminatory behaviors simply serve to hurt members of another group. The harm cluster encompasses any aggression toward others with the intent to harm, including but not limited to physical harm, from mild workplace incivility (Cortina et al., 2022) to murder. The function of such behaviors is to mentally, physically, reputationally, or otherwise harm or eliminate another group and would be characterized by approach-oriented, conscious behaviors in which the perpetrator confronts the target. Many behaviors that are blatantly or overtly discriminatory would belong in this cluster. Extreme versions of such behaviors abound throughout human history and encompass genocides, such as that of the Hutu and Tutsi in Rwanda, Jews (and other groups) during the Holocaust, and also targeted violence like lynchings of Black people in the United States.

Beyond corporeal harm, this cluster encompasses property damage, such as keying a person's car or damaging their mailbox, or the theft of property, provided the goal is to harm rather than acquire the property. Behaviors that occur primarily online, such as "swatting" (misleading police into raiding another's house) or "doxxing" (exposing a person's sensitive information online), could similarly be included. Malicious gossip can also be considered a form of aggression (Archer, 2004; Card et al., 2008). Thus, relational forms of aggression would also belong in this cluster when used with the intent to harm another's status or well-being. Similarly, hate speech aimed at harming others falls in this cluster (rather than other potential uses discussed above), and the predictors of such behavior are likely to be the same as physical violence.

There is less field or laboratory psychological research focused on harm, presumably because it is rarer and more difficult to study realistically and ethically. Yet many of the measures devised to study conformity or aggression in the lab serve as measures of discrimination. For example, classic conformity experiments used electric shocks (Milgram, 1963), and modern descendants operationalize harm as white noise blasts given from one participant to another (C. A. Anderson et al., 2008) or as adding increasingly spicy hot sauce to another's food (Ritter & Eslea, 2005). To the extent such treatment is administered more to one group than another, discrimination is evident.

Model

A model predicting harm should certainly incorporate prejudice but might uniquely focus on outgroup hate and especially the emotions of anger, disgust, contempt, and moral outrage toward the target group. Measures of dehumanization, especially overt, blatant dehumanization, have been associated with intergroup aggression and violence (Kteily & Landry, 2022). Less agreeable people (Crawford & Brandt, 2019; Hehman & Neel, 2024; Sibley & Duckitt, 2008) express more prejudice, and this may be a personality predictor of harm discrimination. Similarly, we would expect perceptions of threat from targeted outgroups to be particularly strong predictors of harm discrimination.

A situational construct that might play a powerful role with harm is the perception of anonymity (Beaman et al., 1979; Diener et al., 1976). Given that group-based discrimination, and harm in general, is taboo in most egalitarian societies, perpetrators may act in harmful ways when they feel they can do so under anonymous conditions. Conversely, we would expect to see more harm discrimination when norms and beliefs explicitly support and can be used to justify such harm (Crandall & Eshleman, 2003), such as in honor cultures (Cohen et al., 1996; A. Nowak et al., 2016). Accordingly, factors that might be especially predictive here are anonymity and norms that allow, endorse, or justify harm against the group.

Other variables known to cause greater aggression in general are also likely to be implicated in harm discrimination. Such constructs are numerous, as aggression is considered a widely multiply determined behavior, theoretically caused by reduced inhibition, threatened self-esteem, frustration, and physical conditions people find uncomfortable (e.g., heat, noise), among others (Berkowitz, 1998; Denson et al., 2012; DeWall et al., 2011; Leary et al., 2006). These constructs would likely have predictive power.

Multifinal Behaviors

There are some behaviors that we opted to not include in the taxonomy because they may be particularly heterogeneous in their motivations, serving multiple ends (Kruglanski et al., 2013), leading them to fit across many clusters. Derogatory jokes serve as one example. Some might argue that jokes about other social groups are intended to exclude members of those groups or to harm them in some capacity. And yet such jokes are sometimes made in the absence of members of those other groups (Rappel et al., 2025), suggesting they may sometimes serve a value signaling goal to aid in being liked by members of one's ingroup, with an absence of harm intentions. Alternatively, the perpetrator of such jokes may truly believe they are being funny, that members of the groups targeted will also find the joke funny, and have merely miscalibrated. This interpretation suggests such jokes might belong in the not motivated cluster of behaviors.

We consider all these possibilities to be sometimes true, which highlights a fact common to many other behaviors in the taxonomy: The same behavior may sometimes be enacted by perpetrators with very different motivations. In other words, we have necessarily placed types of behavior within separate clusters based on what we think are the most likely motivations, but there are times when people will enact the same behavior for different reasons. This is problematic for modeling. When the behavior of two theoretical subpopulations (with different motivations) is regressed on the same model, error will increase. We return to this important issue in the General Discussion.

General Discussion

The intergroup literature has overwhelmingly focused on the attitude construct of prejudice and less so on empirical observation of discrimination, prompting various calls for refocusing efforts (Brauer, 2024; Dixon et al., 2012; Paluck et al., 2021). We view the present work as a necessary step toward this goal, initially breaking down the heterogeneous array of "discriminatory behaviors" into clusters that we argue are more likely to be related to one another, and only some of which are predicted by prejudice. Doing so will enable generalization from difficult and costly behavioral studies to other similar behaviors and move discrimination research forward.

The basis for organizing the taxonomy is shared causes. We predict that behaviors within the same cluster will be caused by similar psychological factors and, accordingly, share a model. We have chosen this organizational framework because we value the ability to predict behavior. Other researchers with different goals might organize this multidimensional behavioral space differently. For example, if researchers were interested in frequency, then behaviors currently in different clusters, like not making eye contact (reduce discomfort) or liking a social media post (value signaling), would be considered more similar on this metric.

Relatedly, other researchers may be interested in how target group members respond to different types of discrimination, structural manifestations of discrimination, or the consequences of such discrimination. From these perspectives, social identity and status, for example, may play a larger role when considering the consequences of discrimination (Swim et al., 2003). The potential impact of hate speech or being denied a job may vary depending on the perceived

availability of resources, opportunities, and status of a person, leading members of lower power, marginalized groups to potentially suffer disproportionate impact from these actions (Leitner et al., 2016). And to the extent that discriminatory behaviors are more frequently directed toward lower power, marginalized groups, they would experience discrimination more often (Hebl et al., 2020; West, 2019). In other words, such behaviors are not equal in their consequences across all groups. Researchers examining consequences of discrimination will necessarily need to consider such factors.

Falsifiability and Theoretical Predictions

A theory (or taxonomy) is more useful to the extent that it can make predictions and can be falsified (Lewin, 1943; Meehl, 1967; Popper, 1959). The present framework can be falsified with evidence that behaviors placed in distinct clusters are equally or similarly predicted by the same statistical model or, conversely, that two behaviors within the same cluster have very different predictive models. Similarity, in this case, would be defined by a mix of the constructs included, the coefficients of the constructs, and overall model error or variance explained. Such evidence can be used to update and improve the taxonomy, which we believe is necessary for an improved understanding of discrimination.

Many testable implications remain. For example, both the not motivated and reduce discomfort behaviors are theorized to stem more from ignorance than prejudice. Typically, minority group members have far more contact and experience with majority group members than the reverse (E. Anderson, 2015; Barlow et al., 2013). Accordingly, minority knowledge of majority group practices and cultural traditions may often exceed the reverse. Thus, a straightforward prediction is that majority group members will enact more discriminatory behaviors of this type than minority groups, as majority group members' lower intergroup contact facilitates ignorance of minority groups.

This prediction is interesting only to the extent that it does not also occur in the other clusters, and some may intuitively believe that majority group members engage in more of the discriminatory behaviors within each cluster. Yet for the majority of clusters, we posit that discrimination will be equally frequent. Assuming that a tendency toward discrimination is evenly distributed among the human population, we do not predict differences in the self-protection, group protection, exclusion, helping, acting on behalf of a system, or value signaling clusters. In fact, the only other clusters in which we predict that majority and minority group differences might emerge (accounting for population size differences) are harm, instrumental use, and mating though for different reasons than ignorance.

With harm and instrumental use, we again predict that majority group members will enact these behaviors to a greater extent, but due instead to a reduced fear of punishment or retribution. While this might also be a concern for behaviors in the other clusters, many harm and instrumental use behaviors are generally illegal or strongly taboo in most cultures around the world and thus carry repercussions if caught or suspected. Majority group members, benefiting from being at the top of the local social hierarchy, generally experience the costs of such behaviors less (Crosby & Wilson, 2015; Jost et al., 2004; Kawakami et al., 2009) and therefore may feel more emboldened to engage in such behaviors in the first place.

Mating is the sole category for which we tentatively theorize that minority groups may discriminate to a greater extent than the majority group. Religious and racial minority group members tend to identify to a greater extent with their identities than majority group members (Ellemers et al., 1997; Judd et al., 1995; Verkuyten, 2005) and may have cultural traditions they seek to preserve. Mating with other members of their own group might be perceived as a way to maintain these traditions and preserve their identity, thus guiding their dating behavior. Early dating websites popular among minority groups, such as JDate for Jewish singles, offer anecdotal evidence for such a possibility. That said, patterns of mating discrimination are likely guided by more than simply preservation of culture. Indeed, several studies have found preference for racial majority group partners among all groups (Arranz Aldana & Salazar, 2024; Potârcă & Mills, 2015). Given the limited research on mating discrimination, future research is necessary for disentangling the causes of behavior in this cluster.

Separately, much of the present work contrasts majority and minority groups, but discriminatory behaviors may have distinct patterns along other dimensions as well. Gendered theories of prejudice (McDonald et al., 2015; Navarrete et al., 2010) rooted in intergroup and intersexual competition suggest that men and women experience different types of discriminatory behaviors at varying rates and from different groups of people. For example, women (more than men) might enact self-protection discrimination against outgroup men to a greater extent to avoid physical danger and unwanted sexual attention. Similarly, because of their greater physical strength, men (more than women) might enact group protection discrimination against outgroup members to a greater extent.

These are but several examples of how differential rates of discrimination might occur across different clusters as a function of both perpetrator and target identity. Further, identity-dependent patterns of discrimination may be one explanation for why the link between prejudice and discrimination has been weak (Kurdi et al., 2019). Lumping these categories together would obscure true relationships. These predictions can be tested by future research.

Discriminating Against Ingroup Members

The definition of discrimination we use here is "differential behavior by target group membership." This definition encompasses people discriminating against their own group. While this is not the prototypical representation of discrimination, many phenomena comprising such behavior have been documented, some of which are included in the review above. Queen bee syndrome, for example, is when women in authority treat subordinate women worse than subordinate men (Derks et al., 2011; Ellemers et al., 2004). Another example is a Black security guard selectively following Black shoppers around a store due to suspicion of theft. We consider these behaviors to constitute discrimination and have presented examples of such behaviors in different clusters of the taxonomy above.

Our theoretical basis for each cluster is that it serves the same function and that a model will predict the behavior equally. And despite the behaviors in these instances targeting fellow ingroup members, we currently postulate that the same variables will predict such behavior. For example, to the extent that a manager endorses stereotypes that women work less hard and are less effective in the workplace, we theorize the manager would discriminate against women regardless of their own gender. Future research could examine whether discrimination against outgroup versus ingroup

members varies qualitatively, requiring different models with different predictors.

One important concern in such scenarios is knowing with which specific identities a person identifies for a given moment. For instance, in the Black security guard example, whether the person is identifying as "Black," "security guard," or "people who work at this store" would lead to different predictions. But for a discriminatory behavior in clusters such as group protection, what matters would be identification with the group that is the perceived target of the presumed perpetrator's actions. Thus, discrimination that appears to be directed toward apparent ingroup members may not actually be "ingroup" on the salient identity being considered at the time, and contexts make more salient which identities will be important to classify.

Anticipated Challenges for Future Discrimination Research

A complicated problem for predicting discrimination is that people with different psychological motives might exhibit the same behavior. Relatedly, a single behavior could serve multiple functions that are distinct (Kruglanski et al., 2013; Skinner et al., 2003). For example, two people may attend the same hate rally, but one more so from a desire to be accepted by ingroup members and the other from a desire to harm an outgroup. Any statistical modeling is necessarily finding the average relationship between variables across people in a sample, and such a mix of subpopulations would reduce the accuracy of a single model. Statistical approaches that could accommodate this situation, such as interactions or mixture modeling (Pearson, 1894), will be needed to identify which model will predict behavior for which "types" of people.

However, this may be the case more for some clusters of behavior than others. Whereas some behaviors might be caused by very different psychological profiles, some may be more singular in their functions. These will be the behaviors that are easier to model and predict by future researchers. Another way that behaviors might vary is the complexity of their models. Whereas some behaviors might be mostly predicted by a handful of variables, others might be more multiply determined and validly predicted by a very large number of variables. To the extent that single constructs predict large percentages of variance, fewer additional independent constructs will need to be identified (Tosh et al., 2025).

One concern for these theorized predictive models is to what extent effects are caused directly by prejudice and other factors versus whether other factors act on discrimination indirectly via prejudice (e.g., prejudice as a mediator). There has been a great deal of research on the causes of prejudice, and recent research has identified a formalized predictive model identifying the strongest predictors (Hehman & Neel, 2024). Many of those predictors are also discussed as causes of discrimination here. Yet across the different clusters of discrimination, prejudice has a varying role: In some models, prejudice is not theorized to be an important predictor at all (e.g., not motivated, instrumental use). For other models, it may be a focal predictor and even mediate the effect of other variables on discrimination (e.g., harm, exclusion). Testing when and how prejudice causes discrimination, as well as when it mediates the effect of other constructs on discrimination, is a challenge for future research seeking to identify the data-generating process or causal models. Yet we reiterate that due to the potentially small and variable role that prejudice plays in discrimination, research pursuing other nonattitudinal causes of discrimination may be fruitful.

The interpretation of all behavior is context-dependent (Heider & Simmel, 1944). Laughing at a friend's injury is different than laughing at a friend's joke, and both are different than laughing at a racist joke. The present taxonomy is necessarily context-free as a starting point, but the appropriateness of these various behaviors will be modified by different contexts, such as local and broader environments, time period, and so on. We view context as an element that itself might be decomposed, measured, and incorporated in future research to improve the prediction of any models. Although the overarching goal of the current article was to provide a broad taxonomy of discriminatory behavior, we also acknowledge that discrimination is often rooted in historical events and sociocultural scripts. For example, behaviors in the mating and helping clusters of our taxonomy might be shaped by specific historical or cultural scripts of what is considered acceptable within these clusters. From this perspective, the boundaries of what is considered discrimination may vary depending on whether the behavior is enacted by members of advantaged versus disadvantaged groups (Greenland et al., 2022; West et al., 2022). Although historical, sociocultural, and situational contexts are likely to be important factors to consider when studying discrimination, the aim of the current taxonomy is to provide a general framework for categorizing discriminatory behaviors that are thought to vary in their function and predictors.

Further, researchers must consider their level of analysis when applying the models. For example, under the self-protection cluster, people may cross the street to avoid an outgroup member as a result of physical danger stereotypes or separately due to disease stereotypes. Considering whether these two reasons are the same or different will have to be determined by researchers, depending on their research question. Self-protection may be a broader umbrella encapsulating both physical threat– and disease-related motives, though differentiating between those two will provide additional nuance. We consider this a "level of analysis" issue, and for some research questions, differentiating between these two (or others) might provide additional traction, whereas for other questions, this distinction may be irrelevant.

Related to this issue is the specificity of measurement. Returning to the same crossing the street example, people would respond differently to two questions capturing associations with physical threat or disease in these distinct contexts and thus seem to have different predictive models. This is a measurement concern about the appropriate level of the items that will need to be solved by researchers examining behavior in different domains. For example, more generic items capturing "threat" might be equally predictive across both scenarios and predict approach or avoidance behaviors (Park et al., 2023, 2025), regardless of the specific threat association.

Along these lines, theory and research on attitude–behavior consistency reveal that attitude–behavior relationships are stronger when the attitude and behavior measures are at the same level of specificity (Fazio & Zanna, 1981). That is, the match between measures of a construct and different types of discrimination likely depends on how specific the assessments are in relation to the behaviors being studied. Consideration of overly specific items and the right level of analysis will be an important concern for all predictors of discrimination across the 11 clusters.

Limitations

This taxonomy is far from ideal. As mentioned, discriminatory behaviors occupy a multidimensional space, and a taxonomy partials

this continuous space into clusters. Though we have done so by drawing on theoretical foundations and existing findings, for some behaviors there is scant research from which to draw, and ultimately, we are speculating on their causes. Essentially, we are trying to get "into the heads" of the people discriminating to hypothesize about valid predictive models, and this is certainly an error-prone process. However, such an approach appears necessary in this case. Other domains of research can measure and factor-analyze such multidimensional spaces. For example, person-perception researchers have collected thousands of ratings of people forming impressions of others on different traits and factor-analyzed these ratings to determine the factors on which impressions are made (Jones et al., 2021; Todorov et al., 2015; Xie et al., 2021).

Doing so with discrimination is nearly impossible, as it would require data from those committing illegal acts, such as hate crimes and murder, as well as less severe but socially taboo behaviors. Further, it is questionable to what extent perpetrators can accurately introspect on their own motivations for such acts (Nisbett & Wilson, 1977). Accordingly, we consider the present system a flawed but necessary step that can be honed by future research.

In addition, a major limitation of the taxonomy is that it partitions only individual-level behavior. In reality, individual and structural levels of discrimination likely have a complex interplay in which they reinforce one another (Skinner-Dorkenoo et al., 2023). While the causes of structural discrimination are likely distinct, occurring at a different level entirely, determining exactly how structural discrimination fits into a broader, more comprehensive taxonomy of discrimination will be a question for future research. One potential route to begin exploring and predicting such types of behavior from the individual to the structural level is through the acting on behalf of a system cluster. This cluster, along with the others, might contribute to and be reinforced by structural levels of discrimination.

Finally, the present work focuses on what causes people to discriminate against others and does not address how discrimination is perceived by those who are targeted or its impacts. Developing a taxonomy of discrimination from the target perspective (i.e., perceptions and experiences of being discriminated against) may be critical for understanding how discrimination affects targets. However, doing so would likely involve a distinct taxonomy guided by variables that are most important to understanding targets' experiences, such as harm, power asymmetries, perceived control, and individual and group coping resources. Different social groups may also perceive discrimination differently or experience varying impacts depending on whether their group membership is visible or concealable (Hebl et al., 2020) or if they possess multiple intersectional social identities (Christophe et al., 2022; Hester et al., 2020; Pietri et al., 2018; Shih et al., 2019). Simply understanding the origins of discriminatory behaviors (or their impacts) may not necessarily improve outcomes for those who experience discrimination. Thus, future theory and research could map the landscape of discrimination from the target's perspective.

Conclusion

The present taxonomy of discrimination provides a necessary first step for a science hoping to understand different types of discrimination, their purported functions, and predictors of such behaviors. We envision several possible uses of this taxonomy. One is to organize and direct research efforts to predict discriminatory behaviors. For example, researchers interested in a particular cluster of behaviors can identify the most valid and predictive variables to ultimately cohere in a causal model. In addition, the taxonomy could be useful to those looking to promote positive intergroup relations across various settings (Axt & To, 2025; Campbell & Brauer, 2020; Paluck et al., 2021). These approaches could identify a discriminatory behavior to target in an intervention, and the taxonomy might then be used to aid practitioners in sorting heterogeneous behaviors into addressable clusters, enabling a clearer vision of the problem to be addressed. Further, given that we theorize behaviors to arise from the same cause, methods identified by other interventions that have been shown to effectively reduce a specific discriminatory behavior might be applied to other behaviors within the same cluster as well. Overall, future research could test the current taxonomy and iteratively improve upon it to enable better predictive models and interventions for reducing discrimination.

References

Abrahms, M. (2008). What terrorists really want: Terrorist motives and counterterrorism strategy. *International Security*, *32*(4), 78–105. https://doi.org/10.1162/isec.2008.32.4.78

Ajzen, I., & Fishbein, M. (1977). Attitude–behavior relations: A theoretical analysis and review of empirical research. *Psychological Bulletin*, *84*(5), 888–918. https://doi.org/10.1037/0033-2909.84.5.888

Albarracín, D., Fayaz-Farkhad, B., & Granados Samayoa, J. A. G. (2024). Determinants of behaviour and their efficacy as targets of behavioural change interventions. *Nature Reviews Psychology*, *3*(6), 377–392. https://doi.org/10.1038/s44159-024-00305-0

Albarracín, D., Johnson, B. T., Fishbein, M., & Muellerleile, P. A. (2001). Theories of reasoned action and planned behavior as models of condom use: A meta-analysis. *Psychological Bulletin*, *127*(1), 142–161. https://doi.org/10.1037/0033-2909.127.1.142

Altemeyer, B. (1988). *Enemies of freedom: Understanding right-wing authoritarianism*. Jossey-Bass.

Anant, S. S. (1975). The changing intercaste attitudes in North India: A follow-up after four years. *European Journal of Social Psychology*, *5*(1), 49–59. https://doi.org/10.1002/ejsp.2420050104

Anderson, C. A., Buckley, K. E., & Carnagey, N. L. (2008). Creating your own hostile environment: A laboratory examination of trait aggressiveness and the violence escalation cycle. *Personality and Social Psychology Bulletin*, *34*(4), 462–473. https://doi.org/10.1177/0146167207311282

Anderson, E. (2015). The white space. *Sociology of Race and Ethnicity*, *1*(1), 10–21. https://doi.org/10.1177/2332649214561306

Andrews Fearon, P., & Götz, F. M. (2024). The zero-sum mindset. *Journal of Personality and Social Psychology*, *127*(4), 758–795. https://doi.org/10.1037/pspa0000404

Archer, J. (2004). Sex differences in aggression in real-world settings: A meta-analytic review. *Review of General Psychology*, *8*(4), 291–322. https://doi.org/10.1037/1089-2680.8.4.291

Arendt, H. (1963). *Eichmann in Jerusalem: A report on the banality of evil*. Penguin.

Arranz Aldana, A., & Salazar, L. (2024). Racial preferences in dating apps: An experimental approach. *The History of the Family*, *29*(4), 620–640. https://doi.org/10.1080/1081602X.2024.2352547

Avery, D. R., Richeson, J. A., Hebl, M. R., & Ambady, N. (2009). It does not have to be uncomfortable: The role of behavioral scripts in Black–White interracial interactions. *The Journal of Applied Psychology*, *94*(6), 1382–1393. https://doi.org/10.1037/a0016208

Axt, J. R. (2017). The best way to measure explicit racial attitudes is to ask about them. *Social Psychological and Personality Science*, *9*(8), 896–906. https://doi.org/10.1177/1948550617728995

Axt, J. R., Atwood, S., Talhelm, T., & Hehman, E. (2022). Asian men and Black women hold weaker race–gender associations: Evidence from the United States and China. *Social Psychological and Personality Science*, *14*(6), 686–697. https://doi.org/10.1177/19485506221127493

Axt, J. R., Nguyen, H., & Nosek, B. A. (2018). The Judgment Bias Task: A flexible method for assessing individual differences in social judgment biases. *Journal of Experimental Social Psychology*, *76*, 337–355. https://doi.org/10.1016/j.jesp.2018.02.011

Axt, J. R., & To, J. (2025). How can debiasing research aid efforts to reduce discrimination? *Personality and Social Psychology Review*, *29*(1), 81–105. https://doi.org/10.1177/10888683241244829

Azhar, S., Alvarez, A. R. G., Farina, A. S. J., & Klumpner, S. (2021). "You're so exotic looking": An intersectional analysis of Asian American and Pacific Islander stereotypes. *Affilia*, *36*(3), 282–301. https://doi.org/10.1177/08861099211001460

Bargh, J. A. (2014). The four horsemen of automaticity: Awareness, intention, efficiency, and control in social cognition. In R. S. Wyer & T. K. Srull (Eds.), *Handbook of social cognition* (pp. 1–40). Psychology Press.

Barlev, M., & Neuberg, S. L. (2025). Rational reasons for irrational beliefs. *American Psychologist*, *80*(1), 79–90. https://doi.org/10.1037/amp0001321

Barlow, F. K., Hornsey, M. J., Thai, M., Sengupta, N. K., & Sibley, C. G. (2013). The wallpaper effect: The contact hypothesis fails for minority group members who live in areas with a high proportion of majority group members. *PLOS ONE*, *8*(12), Article e82228. https://doi.org/10.1371/journal.pone.0082228

Bastos, J. L., Celeste, R. K., Faerstein, E., & Barros, A. J. D. (2010). Racial discrimination and health: A systematic review of scales with a focus on their psychometric properties. *Social Science & Medicine*, *70*(7), 1091–1099. https://doi.org/10.1016/j.socscimed.2009.12.020

Beaman, A. L., Klentz, B., Diener, E., & Svanum, S. (1979). Self-awareness and transgression in children: Two field studies. *Journal of Personality and Social Psychology*, *37*(10), 1835–1846. https://doi.org/10.1037//0022-3514.37.10.1835

Berkowitz, L. (1998). 3—Affective aggression: The role of stress, pain, and negative affect. In R. G. Geen & E. Donnerstein (Eds.), *Human aggression* (pp. 49–72). Elsevier. https://doi.org/10.1016/B978-012278805-5/50004-3

Bliuc, A.-M., Faulkner, N., Jakubowicz, A., & McGarty, C. (2018). Online networks of racial hate: A systematic review of 10 years of research on cyber-racism. *Computers in Human Behavior*, *87*, 75–86. https://doi.org/10.1016/j.chb.2018.05.026

Bodenhausen, G., & Cheryan, S. (2025). Stereotyping and prejudice. In D. T. Gilbert, S. T. Fiske, E. J. Finkel, & W. B. Mendes (Eds.), *Handbook of social psychology* (6th ed.). Situational Press. https://doi.org/10.70400/elps5283

Bohren, J. A., Hull, P., & Imas, A. (2022). *Systemic discrimination: Theory and measurement* (Working Paper No. W29820). National Bureau of Economic Research. https://doi.org/10.3386/w29820

Brauer, M. (2024). Stuck on intergroup attitudes: The need to shift gears to change intergroup behaviors. *Perspectives on Psychological Science*, *19*(1), 280–294. https://doi.org/10.1177/17456916231185775

Brewer, M. B. (1999). The psychology of prejudice: Ingroup love or outgroup hate? *Journal of Social Issues*, *55*(3), 429–444. https://doi.org/10.1111/0022-4537.00126

Brewster, Z. W., & Lynn, M. (2014). Black–white earnings gap among restaurant servers: A replication, extension, and exploration of consumer racial discrimination in tipping. *Sociological Inquiry*, *84*(4), 545–569. https://doi.org/10.1111/soin.12056

Brooks, J. E., & Neville, H. A. (2016). Interracial attraction among college men: The influence of ideologies, familiarity, and similarity. *Journal of Social and Personal Relationships*, *34*(2), 166–183. https://doi.org/10.1177/0265407515627508

Brown-Iannuzzi, J. L., Hoffman, K. M., Payne, B. K., & Trawalter, S. (2014). The invisible man: Interpersonal goals moderate inattentional blindness to African Americans. *Journal of Experimental Psychology: General*, *143*(1), 33–37. https://doi.org/10.1037/a0031407

Buunk, A. P., Park, J. H., & Duncan, L. A. (2009). Cultural variation in parental influence on mate choice. *Cross-Cultural Research*, *44*(1), 23–40. https://doi.org/10.1177/1069397109337711

Callahan, S. P., & Ledgerwood, A. (2016). On the psychological function of flags and logos: Group identity symbols increase perceived entitativity. *Journal of Personality and Social Psychology*, *110*(4), 528–550. https://doi.org/10.1037/pspi0000047

Camerer, C. F. (2003). Strategizing in the brain. *Science*, *300*(5626), 1673–1675. https://doi.org/10.1126/science.1086215

Camp, N. P., Voigt, R., Jurafsky, D., & Eberhardt, J. L. (2021). The thin blue waveform. *Journal of Personality and Social Psychology*, *121*(6), 1157–1171. https://doi.org/10.1037/pspa0000270

Campbell, M. R., & Brauer, M. (2020). Incorporating social-marketing insights into prejudice research: Advancing theory and demonstrating real-world applications. *Perspectives on Psychological Science*, *15*(3), 608–629. https://doi.org/10.1177/1745691619896622

Campbell, M. R., & Brauer, M. (2021). Is discrimination widespread? Testing assumptions about bias on a university campus. *Journal of Experimental Psychology: General*, *150*(4), 756–777. https://doi.org/10.1037/xge0000983

Card, N. A., Stucky, B. D., Sawalani, G. M., & Little, T. D. (2008). Direct and indirect aggression during childhood and adolescence: A meta-analytic review of gender differences, intercorrelations, and relations to maladjustment. *Child Development*, *79*(5), 1185–1229. https://doi.org/10.1111/j.1467-8624.2008.01184.x

Carr, P. B., Dweck, C. S., & Pauker, K. (2012). "Prejudiced" behavior without prejudice? Beliefs about the malleability of prejudice affect interracial interactions. *Journal of Personality and Social Psychology*, *103*(3), 452–471. https://doi.org/10.1037/a0028849

Carver, C. S., & White, T. L. (1994). Behavioral inhibition, behavioral activation, and affective responses to impending reward and punishment: The BIS/BAS scales. *Journal of Personality and Social Psychology*, *67*(2), 319–333. https://doi.org/10.1037/0022-3514.67.2.319

Cheng, J. T., Tracy, J. L., Foulsham, T., Kingstone, A., & Henrich, J. (2013). Two ways to the top: Evidence that dominance and prestige are distinct yet viable avenues to social rank and influence. *Journal of Personality and Social Psychology*, *104*(1), 103–125. https://doi.org/10.1037/a0030398

Christophe, N. K., Atkin, A. L., Stein, G. L., Chan, M., & The LOVING Study Collaborative. (2022). Examining multiracial pride, identity-based challenges, and discrimination: An exploratory investigation among biracial emerging adults. *Race and Social Problems*, *14*(1), 22–38. https://doi.org/10.1007/s12552-021-09325-4

Cohen, D., Nisbett, R. E., Bowdle, B. F., & Schwarz, N. (1996). Insult, aggression, and the southern culture of honor: An "experimental ethnography". *Journal of Personality and Social Psychology*, *70*(5), 945–960. https://doi.org/10.1037//0022-3514.70.5.945

Cook, C. L., Krems, J. A., & Kenrick, D. T. (2021). Fundamental motives illuminate a broad range of individual and cultural variations in thought and behavior. *Current Directions in Psychological Science*, *30*(3), 242–250. https://doi.org/10.1177/0963721421996690

Correll, J., Hudson, S. M., Guillermo, S., & Ma, D. S. (2014). The police officer's dilemma: A decade of research on racial bias in the decision to shoot. *Social and Personality Psychology Compass*, *8*(5), 201–213. https://doi.org/10.1111/spc3.12099

Correll, J., Lakshmi, A., Wittenbrink, B., Ma, D. S., Singh, B., Bansemer, E., & Harvey, L. O., Jr. (2025). The mental representation of ingroup and outgroup faces. *Journal of Personality and Social Psychology*, *129*(1), 42–70. https://doi.org/10.1037/pspa0000442

Corrington, A. R., Hebl, M., & Tsang, J.-A. (2017). Behavioral indicators of discrimination in social interactions. In M. Powers (Ed.), *Oxford Research Encyclopedia of Communication*. Oxford University Press. https://doi.org/10.1093/acrefore/9780190228613.013.381

Cortina, L. M., Sandy Hershcovis, M., & Clancy, K. B. H. (2022). The embodiment of insult: A theory of biobehavioral response to workplace incivility. *Journal of Management*, *48*(3), 738–763. https://doi.org/10.1177/0149206321989798

Costa, P. T., & McCrae, R. R. (1995). Domains and facets: Hierarchical personality assessment using the Revised NEO Personality Inventory. *Journal of Personality Assessment*, *64*(1), 21–50. https://doi.org/10.1207/s15327752jpa6401_2

Cottrell, C. A., & Neuberg, S. L. (2005). Different emotional reactions to different groups: A sociofunctional threat-based approach to "prejudice". *Journal of Personality and Social Psychology*, *88*(5), 770–789. https://doi.org/10.1037/0022-3514.88.5.770

Crandall, C. S., & Eshleman, A. (2003). A justification-suppression model of the expression and experience of prejudice. *Psychological Bulletin*, *129*(3), 414–446. https://doi.org/10.1037/0033-2909.129.3.414

Crandall, C. S., Eshleman, A., & O'Brien, L. (2002). Social norms and the expression and suppression of prejudice: The struggle for internalization. *Journal of Personality and Social Psychology*, *82*(3), 359–378. https://doi.org/10.1037/0022-3514.82.3.359

Crawford, J. T., & Brandt, M. J. (2019). Who is prejudiced, and toward whom? The Big Five traits and generalized prejudice. *Personality and Social Psychology Bulletin*, *45*(10), 1455–1467. https://doi.org/10.1177/0146167219832335

Crockett, M. J. (2016). How formal models can illuminate mechanisms of moral judgment and decision making. *Current Directions in Psychological Science*, *25*(2), 85–90. https://doi.org/10.1177/0963721415624012

Crosby, J. R., & Wilson, J. (2015). Let's not, and say we would: Imagined and actual responses to witnessing homophobia. *Journal of Homosexuality*, *62*(7), 957–970. https://doi.org/10.1080/00918369.2015.1008284

Cuddy, A. J. C., Fiske, S. T., & Glick, P. (2007). The BIAS map: Behaviors from intergroup affect and stereotypes. *Journal of Personality and Social Psychology*, *92*(4), 631–648. https://doi.org/10.1037/0022-3514.92.4.631

Czibor, A., & Bereczkei, T. (2012). Machiavellian people's success results from monitoring their partners. *Personality and Individual Differences*, *53*(3), 202–206. https://doi.org/10.1016/j.paid.2012.03.005

Czopp, A. M., Kay, A. C., & Cheryan, S. (2015). Positive stereotypes are pervasive and powerful. *Perspectives on Psychological Science*, *10*(4), 451–463. https://doi.org/10.1177/1745691615588091

Daniels, M. A., & Greguras, G. J. (2014). Exploring the nature of power distance: Implications for micro- and macro-level theories, processes, and outcomes. *Journal of Management*, *40*(5), 1202–1229. https://doi.org/10.1177/0149206314527131

Deegan, M. P., Hehman, E., Gaertner, S. L., & Dovidio, J. F. (2015). Positive expectations encourage generalization from a positive intergroup interaction to outgroup attitudes. *Personality and Social Psychology Bulletin*, *41*(1), 52–65. https://doi.org/10.1177/0146167214556240

Denson, T. F., DeWall, C. N., & Finkel, E. J. (2012). Self-control and aggression. *Current Directions in Psychological Science*, *21*(1), 20–25. https://doi.org/10.1177/0963721411429451

Derks, B., Ellemers, N., Van Laar, C., & De Groot, K. (2011). Do sexist organizational cultures create the Queen Bee? *The British Journal of Social Psychology*, *50*(3), 519–535. https://doi.org/10.1348/014466610X525280

Deska, J. C., Kunstman, J., Lloyd, E. P., Almaraz, S. M., Bernstein, M. J., Gonzales, J. P., & Hugenberg, K. (2020). Race-based biases in judgments of social pain. *Journal of Experimental Social Psychology*, *88*, Article 103964. https://doi.org/10.1016/j.jesp.2020.103964

DeWall, C. N., Anderson, C. A., & Bushman, B. J. (2011). The general aggression model: Theoretical extensions to violence. *Psychology of Violence*, *1*(3), 245–258. https://doi.org/10.1037/a0023842

DeYoung, C. G. (2006). Higher-order factors of the Big Five in a multi-informant sample. *Journal of Personality and Social Psychology*, *91*(6), 1138–1151. https://doi.org/10.1037/0022-3514.91.6.1138

DeYoung, C. G., Quilty, L. C., & Peterson, J. B. (2007). Between facets and domains: 10 aspects of the Big Five. *Journal of Personality and Social Psychology*, *93*(5), 880–896. https://doi.org/10.1037/0022-3514.93.5.880

Diener, E., Fraser, S. C., Beaman, A. L., & Kelem, R. T. (1976). Effects of deindividuation variables on stealing among Halloween trick-or-treaters. *Journal of Personality and Social Psychology*, *33*(2), 178–183. https://doi.org/10.1037/0022-3514.33.2.178

Dietze, P., & Knowles, E. D. (2016). Social class and the motivational relevance of other human beings: Evidence from visual attention. *Psychological Science*, *27*(11), 1517–1527. https://doi.org/10.1177/0956797616667721

Dixon, J., Levine, M., Reicher, S., & Durrheim, K. (2012). Beyond prejudice: Are negative evaluations the problem and is getting us to like one another more the solution? *The Behavioral and Brain Sciences*, *35*(6), 411–425. https://doi.org/10.1017/S0140525X11002214

Do Bú, E. A., da Silva, R. P., Pereira, C. R., Torres, A. R. R., Madeira, A. F., Vala, J., & Hagiwara, N. (2025). The intergroup time bias and its implications for medical healthcare. *The Journal of Social Issues*, *81*(3), Article e70014. https://doi.org/10.1111/josi.70014

Dovidio, J. F., & Gaertner, S. L. (1986). The aversive form of racism. In J. F. Dovidio & S. L. Gaertner (Eds.), *Prejudice, discrimination, and racism* (pp. 61–89). Academic Press.

Dovidio, J. F., & Gaertner, S. L. (2000). Aversive racism and selection decisions: 1989 and 1999. *Psychological Science*, *11*(4), 315–319. https://doi.org/10.1111/1467-9280.00262

Dovidio, J. F., Hewstone, M., Glick, P., & Esses, V. M. (2010). Prejudice, stereotyping, and discrimination: Theoretical and empirical overview. In J. F. Dovidio, M. Hewstone, P. Glick & V. M. Esses (Eds.), *The SAGE handbook of prejudice, stereotyping, and discrimination* (pp. 3–28). Sage Publications. https://doi.org/10.4135/9781446200919.n1

Dovidio, J. F., Kawakami, K., & Gaertner, S. L. (2002). Implicit and explicit prejudice and interracial interaction. *Journal of Personality and Social Psychology*, *82*(1), 62–68. https://doi.org/10.1037//0022-3514.82.1.62

Dovidio, J. F., Penner, L. A., Albrecht, T. L., Norton, W. E., Gaertner, S. L., & Shelton, J. N. (2008). Disparities and distrust: The implications of psychological processes for understanding racial disparities in health and health care. *Social Science & Medicine*, *67*(3), 478–486. https://doi.org/10.1016/j.socscimed.2008.03.019

Dunning, D., & Sherman, D. A. (1997). Stereotypes and tacit inference. *Journal of Personality and Social Psychology*, *73*(3), 459–471. https://doi.org/10.1037/0022-3514.73.3.459

Ekstrom, P. D., Le Forestier, J. M., & Lai, C. K. (2022). Racial demographics explain the link between racial disparities in traffic stops and county-level racial attitudes. *Psychological Science*, *33*(4), 497–509. https://doi.org/10.1177/09567976211053573

Ellemers, N., Spears, R., & Doosje, B. (1997). Sticking together or falling apart: In-group identification as a psychological determinant of group commitment versus individual mobility. *Journal of Personality and Social Psychology*, *72*(3), 617–626. https://doi.org/10.1037/0022-3514.72.3.617

Ellemers, N., Van Den Heuvel, H., De Gilder, D., Maass, A., & Bonvini, A. (2004). The underrepresentation of women in science: Differential commitment or the queen bee syndrome? *The British Journal of Social Psychology*, *43*(3), 315–338. https://doi.org/10.1348/0144666042037999

Enos, R. D. (2014). Causal effect of intergroup contact on exclusionary attitudes. *Proceedings of the National Academy of Sciences of the United States of America*, *111*(10), 3699–3704. https://doi.org/10.1073/pnas.1317670111

Er-rafiy, A., Brauer, M., & Musca, S. C. (2010). Effective reduction of prejudice and discrimination: Methodological considerations and three field experiments. *Revue internationale de psychologie sociale*, *23*(2), 57–95.

Fazio, R. H., & Zanna, M. P. (1981). Direct experience and attitude–behavior consistency. *Advances in Experimental Social Psychology*, *14*, 161–202. https://doi.org/10.1016/S0065-2601(08)60372-X

Filip-Crawford, G., & Neuberg, S. L. (2016). Homosexuality and pro-gay ideology as pathogens? Implications of a disease-spread lay model for

understanding anti-gay behaviors. *Personality and Social Psychology Review*, *20*(4), 332–364. https://doi.org/10.1177/1088868315601613

Fiske, S. T. (2002). What we know now about bias and intergroup conflict, the problem of the century. *Current Directions in Psychological Science*, *11*(4), 123–128. https://doi.org/10.1111/1467-8721.00183

Fox, J., Cruz, C., & Lee, J. Y. (2015). Perpetuating online sexism offline: Anonymity, interactivity, and the effects of sexist hashtags on social media. *Computers in Human Behavior*, *52*, 436–442. https://doi.org/10.1016/j.chb.2015.06.024

Gächter, S., Molleman, L., & Nosenzo, D. (2025). Why people follow rules. *Nature Human Behaviour*, *9*(7), 1342–1354. https://doi.org/10.1038/s41562-025-02196-4

Gaertner, S. L. (1973). Helping behavior and racial discrimination among liberals and conservatives. *Journal of Personality and Social Psychology*, *25*(3), 335–341. https://doi.org/10.1037/h0034221

Gaertner, S. L., & Dovidio, J. F. (1977). The subtlety of White racism, arousal, and helping behavior. *Journal of Personality and Social Psychology*, *35*(10), 691–707. https://doi.org/10.1037/0022-3514.35.10.691

Gaertner, S. L., & McLaughlin, J. P. (1983). Racial stereotypes: Associations and ascriptions of positive and negative characteristics. *Social Psychology Quarterly*, *46*(1), 23–30. https://doi.org/10.2307/3033657

Galinsky, A. D., Hall, E. V., & Cuddy, A. J. C. (2013). Gendered races: Implications for interracial marriage, leadership selection, and athletic participation. *Psychological Science*, *24*(4), 498–506. https://doi.org/10.1177/0956797612457783

Galvan, M. J., Alvarez, G. M., Cipolli, W., Cooley, E., Muscatell, K. A., & Payne, B. K. (2026). Is discrimination widespread or concentrated? Evaluating the distribution of anti-black discrimination in judicial, hiring, and housing decisions. *Personality and Social Psychology Bulletin*, *52*(3), 692–705. https://doi.org/10.1177/01461672241288929

Geiger, J. L., Steg, L., van der Werff, E., & Ünal, A. B. (2019). A meta-analysis of factors related to recycling. *Journal of Environmental Psychology*, *64*, 78–97. https://doi.org/10.1016/j.jenvp.2019.05.004

Gelfand, M. J., Raver, J. L., Nishii, L., Leslie, L. M., Lun, J., Lim, B. C., Duan, L., Almaliach, A., Ang, S., Arnadottir, J., Aycan, Z., Boehnke, K., Boski, P., Cabecinhas, R., Chan, D., Chhokar, J., D'Amato, A., Subirats Ferrer, M., Fischlmayr, I. C., … Yamaguchi, S. (2011). Differences between tight and loose cultures: A 33-nation study. *Science*, *332*(6033), 1100–1104. https://doi.org/10.1126/science.1197754

Glick, P., & Fiske, S. T. (1996). The Ambivalent Sexism Inventory: Differentiating hostile and benevolent sexism. *Journal of Personality and Social Psychology*, *70*(3), 491–512. https://doi.org/10.1037/0022-3514.70.3.491

Goff, P. A., Steele, C. M., & Davies, P. G. (2008). The space between us: Stereotype threat and distance in interracial contexts. *Journal of Personality and Social Psychology*, *94*(1), 91–107. https://doi.org/10.1037/0022-3514.94.1.91

Gómez Plata, M., Laghi, F., Zammuto, M., & Pastorelli, C. (2022). Refusal self-efficacy and alcohol-related behaviours in community samples: A systematic review and meta-analysis. *Current Psychology*, *42*(33), 29349–29376. https://doi.org/10.1007/s12144-022-03954-7

Götz, F. M., Gvirtz, A., Galinsky, A. D., & Jachimowicz, J. M. (2021). How personality and policy predict pandemic behavior: Understanding sheltering-in-place in 54 countries at the onset of COVID-19. *American Psychologist*, *76*(1), 39–49. https://doi.org/10.1037/amp0000740

Gould, S. J. (1981). *The mismeasure of man*. Norton.

Greenland, K., West, K., & Van Laar, C. (2022). Definitional boundaries of discrimination: Tools for deciding what constitutes discrimination (and what doesn't). *Journal of Applied Social Psychology*, *52*(10), 945–964. https://doi.org/10.1111/jasp.12902

Greenwald, A. G., McGhee, D. E., & Schwartz, J. L. (1998). Measuring individual differences in implicit cognition: The implicit association test. *Journal of Personality and Social Psychology*, *74*(6), 1464–1480. https://doi.org/10.1037//0022-3514.74.6.1464

Greenwald, A. G., Poehlman, T. A., Uhlmann, E. L., & Banaji, M. R. (2009). Understanding and using the Implicit Association Test: III. Meta-analysis of predictive validity. *Journal of Personality and Social Psychology*, *97*(1), 17–41. https://doi.org/10.1037/a0015575

Grossmann, I., Varnum, M. E. W., Hutcherson, C. A., & Mandel, D. R. (2024). When expert predictions fail. *Trends in Cognitive Sciences*, *28*(2), 113–123. https://doi.org/10.1016/j.tics.2023.10.005

Hagiwara, N., Penner, L. A., Gonzalez, R., Eggly, S., Dovidio, J. F., Gaertner, S. L., West, T., & Albrecht, T. L. (2013). Racial attitudes, physician–patient talk time ratio, and adherence in racially discordant medical interactions. *Social Science & Medicine*, *87*, 123–131. https://doi.org/10.1016/j.socscimed.2013.03.016

Haslam, N., & Loughnan, S. (2014). Dehumanization and infrahumanization. *Annual Review of Psychology*, *65*(1), 399–423. https://doi.org/10.1146/annurev-psych-010213-115045

Hebl, M., Cheng, S. K., & Ng, L. C. (2020). Modern discrimination in organizations. *Annual Review of Organizational Psychology and Organizational Behavior*, *7*(1), 257–282. https://doi.org/10.1146/annurev-orgpsych-012119-044948

Hebl, M. R., Foster, J. B., Mannix, L. M., & Dovidio, J. F. (2002). Formal and interpersonal discrimination: A field study of bias toward homosexual applicants. *Personality and Social Psychology Bulletin*, *28*(6), 815–825. https://doi.org/10.1177/0146167202289010

Hehman, E., & Neel, R. (2024). Prejudice model 1.0: A predictive model of prejudice. *Psychological Review*, *131*(5), 1235–1265. https://doi.org/10.1037/rev0000470

Hehman, E., Sutherland, C. A. M., Flake, J. K., & Slepian, M. L. (2017). The unique contributions of perceiver and target characteristics in person perception. *Journal of Personality and Social Psychology*, *113*(4), 513–529. https://doi.org/10.1037/pspa0000090

Heider, F., & Simmel, M. (1944). An experimental study of apparent behavior. *The American Journal of Psychology*, *57*(2), 243–259. https://doi.org/10.2307/1416950

Hester, N., Axt, J. R., Siemers, N., & Hehman, E. (2023). Evaluating validity properties of 25 race-related scales. *Behavior Research Methods*, *55*(4), 1758–1777. https://doi.org/10.3758/s13428-022-01873-w

Hester, N., & Gray, K. (2018). For Black men, being tall increases threat stereotyping and police stops. *Proceedings of the National Academy of Sciences of the United States of America*, *115*(11), 2711–2715. https://doi.org/10.1073/pnas.1714454115

Hester, N., Payne, K., Brown-Iannuzzi, J., & Gray, K. (2020). On intersectionality: How complex patterns of discrimination can emerge from simple stereotypes. *Psychological Science*, *31*(8), 1013–1024. https://doi.org/10.1177/0956797620929979

Ho, A. K., Sidanius, J., Kteily, N., Sheehy-Skeffington, J., Pratto, F., Henkel, K. E., Foels, R., & Stewart, A. L. (2015). The nature of social dominance orientation: Theorizing and measuring preferences for intergroup inequality using the new SDO_7 scale. *Journal of Personality and Social Psychology*, *109*(6), 1003–1028. https://doi.org/10.1037/pspi0000033

Holzleitner, I. J., Lee, A. J., Hahn, A. C., Kandrik, M., Bovet, J., Renoult, J. P., Simmons, D., Garrod, O., DeBruine, L. M., & Jones, B. C. (2019). Comparing theory-driven and data-driven attractiveness models using images of real women's faces. *Journal of Experimental Psychology: Human Perception and Performance*, *45*(12), 1589–1595. https://doi.org/10.1037/xhp0000685

Hönekopp, J. (2006). Once more: Is beauty in the eye of the beholder? Relative contributions of private and shared taste to judgments of facial attractiveness. *Journal of Experimental Psychology: Human Perception and Performance*, *32*(2), 199–209. https://doi.org/10.1037/0096-1523.32.2.199

Hugenberg, K., Young, S. G., Bernstein, M. J., & Sacco, D. F. (2010). The categorization-individuation model: An integrative account of the other-race recognition deficit. *Psychological Review*, *117*(4), 1168–1187. https://doi.org/10.1037/a0020463

Jaeger, B., Paolacci, G., & Boegershausen, J. (2025). Social bias blind spots: Attractiveness bias is seemingly tolerated because people fail to notice the bias. *Journal of Personality and Social Psychology*, *129*(6), 1037–1053. https://doi.org/10.1037/pspa0000459

Jetten, J., Spears, R., & Manstead, A. S. (1998). Defining dimensions of distinctiveness: Group variability makes a difference to differentiation. *Journal of Personality and Social Psychology*, *74*(6), 1481–1492. https://doi.org/10.1037/0022-3514.74.6.1481

John, O. P., & Srivastava, S. (1999). *The Big-Five trait taxonomy: History, measurement, and theoretical perspectives* (Vol. *2*, pp. 102–138). University of California.

Johnson, K. L., Freeman, J. B., & Pauker, K. (2012). Race is gendered: How covarying phenotypes and stereotypes bias sex categorization. *Journal of Personality and Social Psychology*, *102*(1), 116–131. https://doi.org/10.1037/a0025335

Jolly, E., & Chang, L. J. (2019). The flatland fallacy: Moving beyond low–dimensional thinking. *Topics in Cognitive Science*, *11*(2), 433–454. https://doi.org/10.1111/tops.12404

Jones, B. C., DeBruine, L. M., Flake, J. K., Liuzza, M. T., Antfolk, J., Arinze, N. C., Ndukaihe, I. L. G., Bloxsom, N. G., Lewis, S. C., Foroni, F., Willis, M. L., Cubillas, C. P., Vadillo, M. A., Turiegano, E., Gilead, M., Simchon, A., Saribay, S. A., Owsley, N. C., Jang, C., … Coles, N. A. (2021). To which world regions does the valence–dominance model of social perception apply? *Nature Human Behaviour*, *5*(1), 159–169. https://doi.org/10.1038/s41562-020-01007-2

Jost, J. T., Banaji, M. R., & Nosek, B. A. (2004). A decade of system justification theory: Accumulated evidence of conscious and unconscious bolstering of the status quo. *Political Psychology*, *25*(6), 881–919. https://doi.org/10.1111/j.1467-9221.2004.00402.x

Judd, C. M., Park, B., Ryan, C. S., Brauer, M., & Kraus, S. (1995). Stereotypes and ethnocentrism: Diverging interethnic perceptions of African American and White American youth. *Journal of Personality and Social Psychology*, *69*(3), 460–481. https://doi.org/10.1037//0022-3514.69.3.460

Kachanoff, F. J., Kteily, N. S., Khullar, T. H., Park, H. J., & Taylor, D. M. (2020). Determining our destiny: Do restrictions to collective autonomy fuel collective action? *Journal of Personality and Social Psychology*, *119*(3), 600–632. https://doi.org/10.1037/pspi0000217

Kang, S. K., DeCelles, K. A., Tilcsik, A., & Jun, S. (2016). Whitened résumés: Race and self-presentation in the labor market. *Administrative Science Quarterly*, *61*(3), 469–502. https://doi.org/10.1177/0001839216639577

Kawakami, K., Dunn, E., Karmali, F., & Dovidio, J. F. (2009). Mispredicting affective and behavioral responses to racism. *Science*, *323*(5911), 276–278. https://doi.org/10.1126/science.1164951

King, D. D., Hall, A. V., Johnson, L., Carter, J., Burrows, D., & Samuel, N. (2022). Research on anti-Black racism in organizations: Insights, ideas, and considerations. *Journal of Business and Psychology*, *38*(1), 145–162. https://doi.org/10.1007/s10869-022-09804-4

King, E. B., Mendoza, S. A., Madera, J. M., Hebl, M. R., & Knight, J. L. (2006). What's in a name? A multiracial investigation of the role of occupational stereotypes in selection decisions. *Journal of Applied Social Psychology*, *36*(5), 1145–1159. https://doi.org/10.1111/j.0021-9029.2006.00035.x

King, E. B., Shapiro, J. R., Hebl, M. R., Singletary, S. L., & Turner, S. (2006). The stigma of obesity in customer service: A mechanism for remediation and bottom-line consequences of interpersonal discrimination. *The Journal of Applied Psychology*, *91*(3), 579–593. https://doi.org/10.1037/0021-9010.91.3.579

Kirby, T. A., Gündemir, S., Carter, A. B., Schwanold, E., & Ketzitzidou-Argyri, E. (2023). The role of intraminority relations in perceptions of cultural appropriation. *Journal of Personality and Social Psychology*, *125*(6), 1373–1393. https://doi.org/10.1037/pspi0000428

Ko, A., Neuberg, S. L., Pick, C. M., Varnum, M. E. W., & Becker, D. V. (2025). Responses to political partisans are shaped by a COVID-19-sensitive disease avoidance psychology: A longitudinal investigation of functional flexibility. *American Psychologist*, *80*(2), 193–205. https://doi.org/10.1037/amp0001318

Krosch, A. R., & Amodio, D. M. (2014). Economic scarcity alters the perception of race. *Proceedings of the National Academy of Sciences of the United States of America*, *111*(25), 9079–9084. https://doi.org/10.1073/pnas.1404448111

Kruglanski, A. W., Gelfand, M. J., Bélanger, J. J., Sheveland, A., Hetiarachchi, M., & Gunaratna, R. (2014). The psychology of radicalization and deradicalization: How significance quest impacts violent extremism. *Political Psychology*, *35*(S1), 69–93. https://doi.org/10.1111/pops.12163

Kruglanski, A. W., Köpetz, C., Bélanger, J. J., Chun, W. Y., Orehek, E., & Fishbach, A. (2013). Features of multifinality. *Personality and Social Psychology Review*, *17*(1), 22–39. https://doi.org/10.1177/1088868312453087

Kteily, N. S., & Landry, A. P. (2022). Dehumanization: Trends, insights, and challenges. *Trends in Cognitive Sciences*, *26*(3), 222–240. https://doi.org/10.1016/j.tics.2021.12.003

Kurdi, B., Seitchik, A. E., Axt, J. R., Carroll, T. J., Karapetyan, A., Kaushik, N., Tomezsko, D., Greenwald, A. G., & Banaji, M. R. (2019). Relationship between the Implicit Association Test and intergroup behavior: A meta-analysis. *American Psychologist*, *74*(5), 569–586. https://doi.org/10.1037/amp0000364

Lavrakas, P. J., Burl, J. R., & Mayzner, M. S. (1976). A perspective on the recognition of other-race faces. *Perception & Psychophysics*, *20*(6), 475–481. https://doi.org/10.3758/BF03208285

Leach, C. W., van Zomeren, M., Zebel, S., Vliek, M. L. W., Pennekamp, S. F., Doosje, B., Ouwerkerk, J. W., & Spears, R. (2008). Group-level self-definition and self-investment: A hierarchical (multicomponent) model of in-group identification. *Journal of Personality and Social Psychology*, *95*(1), 144–165. https://doi.org/10.1037/0022-3514.95.1.144

Leary, M. R., Twenge, J. M., & Quinlivan, E. (2006). Interpersonal rejection as a determinant of anger and aggression. *Personality and Social Psychology Review*, *10*(2), 111–132. https://doi.org/10.1207/s15327957pspr1002_2

Leitner, J. B., Hehman, E., Ayduk, O., & Mendoza-Denton, R. (2016). Blacks death rate due to circulatory diseases is positively related to Whites explicit racial bias: A nationwide investigation using project implicit. *Psychological Science*, *27*(10), 1299–1311. https://doi.org/10.1177/0956797616658450

Levin, S., Federico, C. M., Sidanius, J., & Rabinowitz, J. L. (2002). Social dominance orientation and intergroup bias: The legitimation of favoritism for high-status groups. *Personality and Social Psychology Bulletin*, *28*(2), 144–157. https://doi.org/10.1177/0146167202282002

Lewin, K. (1943). Psychology and the process of group living. *The Journal of Social Psychology*, *17*(1), 113–131. https://doi.org/10.1080/00224545.1943.9712269

Lloyd, E. P., Lloyd, A. R., McConnell, A. R., & Hugenberg, K. (2021). Race deficits in pain detection: Medical providers and laypeople fail to accurately perceive pain authenticity among Black people. *Social Psychological and Personality Science*, *13*(5), 895–905. https://doi.org/10.1177/19485506211045887

Lloyd, E. P., Paganini, G. A., & ten Brinke, L. (2020). Gender stereotypes explain disparities in pain care and inform equitable policies. *Policy Insights from the Behavioral and Brain Sciences*, *7*(2), 198–204. https://doi.org/10.1177/2372732220942894

MacInnis, C. C., & Page-Gould, E. (2015). How can intergroup interaction be bad if intergroup contact is good? Exploring and reconciling an apparent paradox in the science of intergroup relations. *Perspectives on Psychological Science*, *10*(3), 307–327. https://doi.org/10.1177/1745691614568482

Macrae, C. N., & Bodenhausen, G. V. (2000). Social cognition: Thinking categorically about others. *Annual Review of Psychology*, *51*(1), 93–120. https://doi.org/10.1146/annurev.psych.51.1.93

Macrae, C. N., Bodenhausen, G. V., Milne, A. B., & Jetten, J. (1994). Out of mind but back in sight: Stereotypes on the rebound. *Journal of Personality*

and Social Psychology, *67*(5), 808–817. https://doi.org/10.1037/0022-3514.67.5.808

Mandalaywala, T. M., Gonzalez, G., & Tropp, L. R. (2023). Early perceptions of COVID-19 intensity and anti-Asian prejudice among White Americans. *Group Processes & Intergroup Relations*, *26*(1), 48–70. https://doi.org/10.1177/13684302211049721

Marques, J. M., Yzerbyt, V. Y., & Leyens, J. (1988). The "black sheep effect": Extremity of judgments towards ingroup members as a function of group identification. *European Journal of Social Psychology*, *18*(1), 1–16. https://doi.org/10.1002/ejsp.2420180102

Martínez-Bacaicoa, J., Alonso-Fernández, M., Wachs, S., & Gámez-Guadix, M. (2023). Prevalence and motivations for technology-facilitated gender- and sexuality-based violence among adults: A mixed-methods study. *Sex Roles*, *89*(11–12), 670–684. https://doi.org/10.1007/s11199-023-01412-7

Masterpiece Cakeshop v. Colorado Civil Rights Commission, 584 United States Reports 617 (Supreme Court 2018).

McCarty, R. (2016). Chapter 4—The fight-or-flight response: A cornerstone of stress research. In G. Fink (Ed.), *Stress: Concepts, cognition, emotion, and behavior* (pp. 33–37). Elsevier. https://doi.org/10.1016/B978-0-12-800951-2.00004-2

McDonald, M. M., Donnellan, M. B., Cesario, J., & Navarrete, C. D. (2015). Mate choice preferences in an intergroup context: Evidence for a sexual coercion threat-management system among women. *Evolution and Human Behavior*, *36*(6), 438–445. https://doi.org/10.1016/j.evolhumbehav.2015.04.002

Meehl, P. E. (1967). Theory-testing in psychology and physics: A methodological paradox. *Philosophy of Science*, *34*(2), 103–115. https://doi.org/10.1086/288135

Meissner, C. A., & Brigham, J. C. (2001). Thirty years of investigating the own-race bias in memory for faces: A meta-analytic review. *Psychology, Public Policy, and Law*, *7*(1), 3–35. https://doi.org/10.1037/1076-8971.7.1.3

Milgram, S. (1963). Behavioral study of obedience. *Journal of Abnormal Psychology*, *67*(4), 371–378. https://doi.org/10.1037/h0040525

Milkman, K. L., Akinola, M., & Chugh, D. (2015). What happens before? A field experiment exploring how pay and representation differentially shape bias on the pathway into organizations. *The Journal of Applied Psychology*, *100*(6), 1678–1712. https://doi.org/10.1037/apl0000022

Morgenroth, T., Kirby, T. A., Ryan, M. K., & Sudkämper, A. (2020). The who, when, and why of the glass cliff phenomenon: A meta-analysis of appointments to precarious leadership positions. *Psychological Bulletin*, *146*(9), 797–829. https://doi.org/10.1037/bul0000234

Morrison, T. G., Bishop, C. J., Morrison, M. A., & Parker-Taneo, K. (2016). A psychometric review of measures assessing discrimination against sexual minorities. *Journal of Homosexuality*, *63*(8), 1086–1126. https://doi.org/10.1080/00918369.2015.1117903

Moss, J. H., & Maner, J. K. (2016). Biased sex ratios influence fundamental aspects of human mating. *Personality and Social Psychology Bulletin*, *42*(1), 72–80. https://doi.org/10.1177/0146167215612744

Mõttus, R., Sinick, J., Terracciano, A., Hřebíčková, M., Kandler, C., Ando, J., Mortensen, E. L., Colodro-Conde, L., & Jang, K. L. (2019). Personality characteristics below facets: A replication and meta-analysis of cross-rater agreement, rank-order stability, heritability, and utility of personality nuances. *Journal of Personality and Social Psychology*, *117*(4), e35–e50. https://doi.org/10.1037/pspp0000202

Motyl, M., Iyer, R., Oishi, S., Trawalter, S., & Nosek, B. A. (2014). How ideological migration geographically segregates groups. *Journal of Experimental Social Psychology*, *51*, 1–14. https://doi.org/10.1016/j.jesp.2013.10.010

Motzny, S. J., Tratner, A. E., & McDonald, M. M. (2024). Motivations for endogamous relationship preferences. *Archives of Sexual Behavior*, *53*(8), 3205–3228. https://doi.org/10.1007/s10508-024-02910-9

Mousa, S. (2020). Building social cohesion between Christians and Muslims through soccer in post-ISIS Iraq. *Science*, *369*(6505), 866–870. https://doi.org/10.1126/science.abb3153

Nadler, A. (2002). Inter–group helping relations as power relations: Maintaining or challenging social dominance between groups through helping. *Journal of Social Issues*, *58*(3), 487–502. https://doi.org/10.1111/1540-4560.00272

Nadler, A., & Halabi, S. (2006). Intergroup helping as status relations: Effects of status stability, identification, and type of help on receptivity to high-status group's help. *Journal of Personality and Social Psychology*, *91*(1), 97–110. https://doi.org/10.1037/0022-3514.91.1.97

Navarrete, C. D., McDonald, M. M., Molina, L. E., & Sidanius, J. (2010). Prejudice at the nexus of race and gender: An outgroup male target hypothesis. *Journal of Personality and Social Psychology*, *98*(6), 933–945. https://doi.org/10.1037/a0017931

Neel, R., Kenrick, D. T., White, A. E., & Neuberg, S. L. (2016). Individual differences in fundamental social motives. *Journal of Personality and Social Psychology*, *110*(6), 887–907. https://doi.org/10.1037/pspp0000068

Neel, R., & Lassetter, B. (2019). The stigma of perceived irrelevance: An affordance-management theory of interpersonal invisibility. *Psychological Review*, *126*(5), 634–659. https://doi.org/10.1037/rev0000143

Neel, R., & Shapiro, J. R. (2012). Is racial bias malleable? Whites' lay theories of racial bias predict divergent strategies for interracial interactions. *Journal of Personality and Social Psychology*, *103*(1), 101–120. https://doi.org/10.1037/a0028237

Neuberg, S. L., Kenrick, D. T., & Schaller, M. (2011). Human threat management systems: Self-protection and disease avoidance. *Neuroscience & Biobehavioral Reviews*, *35*(4), 1042–1051. https://doi.org/10.1016/j.neubiorev.2010.08.011

Neuberg, S. L., Williams, K. E. G., Sng, O., Pick, C. M., Neel, R., Krems, J. A., & Pirlott, A. G. (2020). Chapter Five—Toward capturing the functional and nuanced nature of social stereotypes: An affordance management approach. In B. Gawronski (Ed.), *Advances in experimental social psychology* (Vol. 62, pp. 245–304). Elsevier. https://doi.org/10.1016/bs.aesp.2020.04.004

Newport, F. (2013, July 25). *In U.S., 87% approve of Black–White marriage, vs. 4% in 1958*. Gallup.Com. https://news.gallup.com/poll/163697/approve-marriage-blacks-whites.aspx

Nisbett, R. E., & Wilson, T. D. (1977). The halo effect: Evidence for unconscious alteration of judgments. *Journal of Personality and Social Psychology*, *35*(4), 250–256. https://doi.org/10.1037/0022-3514.35.4.250

North, M. S., & Fiske, S. T. (2013). Act your (old) age: Prescriptive, ageist biases over succession, consumption, and identity. *Personality and Social Psychology Bulletin*, *39*(6), 720–734. https://doi.org/10.1177/0146167213480043

Nowak, A., Gelfand, M. J., Borkowski, W., Cohen, D., & Hernandez, I. (2016). The evolutionary basis of honor cultures. *Psychological Science*, *27*(1), 12–24. https://doi.org/10.1177/0956797615602860

Nowak, M., & Sigmund, K. (1993). Chaos and the evolution of cooperation. *Proceedings of the National Academy of Sciences of the United States of America*, *90*(11), 5091–5094. https://doi.org/10.1073/pnas.90.11.5091

Okonofua, J. A., & Eberhardt, J. L. (2015). Two strikes: Race and the disciplining of young students. *Psychological Science*, *26*(5), 617–624. https://doi.org/10.1177/0956797615570365

Okonofua, J. A., Walton, G. M., & Eberhardt, J. L. (2016). A vicious cycle: A social–psychological account of extreme racial disparities in school discipline. *Perspectives on Psychological Science*, *11*(3), 381–398. https://doi.org/10.1177/1745691616635592

Oswald, F. L., Mitchell, G., Blanton, H., Jaccard, J., & Tetlock, P. E. (2013). Predicting ethnic and racial discrimination: A meta-analysis of IAT criterion studies. *Journal of Personality and Social Psychology*, *105*(2), 171–192. https://doi.org/10.1037/a0032734

Paluck, E. L., Porat, R., Clark, C. S., & Green, D. P. (2021). Prejudice reduction: Progress and challenges. *Annual Review of Psychology*, *72*(1), 533–560. https://doi.org/10.1146/annurev-psych-071620-030619

Park, L. E., Naidu, E., Lemay, E. P., Canning, E. A., Ward, D. E., Panlilio, Z., & Vessels, V. (2023). Social evaluative threat across individual, relational, and collective selves. *Advances in Experimental Social Psychology*, *68*, 139–222. https://doi.org/10.1016/bs.aesp.2023.03.001

Park, L. E., Ward, D. E., Naragon-Gainey, K., Canning, E. A., Koefler, N., Panlilio, Z. A., Vessels, V., & Pascuzzi, G. (2025). Perceptions of safety and threat in the environment: The STEP scale. *Personality and Social Psychology Bulletin*. Advance online publication. https://doi.org/10.1177/01461672251344359

Payne, B. K., Cheng, C. M., Govorun, O., & Stewart, B. D. (2005). An inkblot for attitudes: Affect misattribution as implicit measurement. *Journal of Personality and Social Psychology*, *89*(3), 277–293. https://doi.org/10.1037/0022-3514.89.3.277

Pearson, K. (1894). III. Contributions to the mathematical theory of evolution. *Philosophical Transactions of the Royal Society of London*, *185*, 71–110. https://doi.org/10.1098/rsta.1894.0003

Penner, L. A., Blair, I. V., Albrecht, T. L., & Dovidio, J. F. (2014). Reducing racial health care disparities: A social psychological analysis. *Policy Insights from the Behavioral and Brain Sciences*, *1*(1), 204–212. https://doi.org/10.1177/2372732214548430

Penner, L. A., Dovidio, J. F., Gonzalez, R., Albrecht, T. L., Chapman, R., Foster, T., Harper, F. W. K., Hagiwara, N., Hamel, L. M., Shields, A. F., Gadgeel, S., Simon, M. S., Griggs, J. J., & Eggly, S. (2016). The effects of oncologist implicit racial bias in racially discordant oncology interactions. *Journal of Clinical Oncology*, *34*(24), 2874–2880. https://doi.org/10.1200/JCO.2015.66.3658

Pereira, C. R., Do Bú, E., Madeira, F., De Carvalho, P., Techio, E. M., & Vala, J. (2025). Racial discrimination in time investment: The intergroup time bias in different social contexts. *Journal of Personality and Social Psychology*. Advance online publication. https://doi.org/10.1037/pspi0000507

Pettigrew, T. F. (1998). Intergroup contact theory. *Annual Review of Psychology*, *49*(1), 65–85. https://doi.org/10.1146/annurev.psych.49.1.65

Phelan, J. C., Link, B. G., & Dovidio, J. F. (2008). Stigma and prejudice: One animal or two? *Social Science & Medicine*, *67*(3), 358–367. https://doi.org/10.1016/j.socscimed.2008.03.022

Phillips, L. T., & Jun, S. (2022). Why benefiting from discrimination is less recognized as discrimination. *Journal of Personality and Social Psychology*, *122*(5), 825–852. https://doi.org/10.1037/pspi0000298

Pietri, E. S., Johnson, I. R., & Ozgumus, E. (2018). One size may not fit all: Exploring how the intersection of race and gender and stigma consciousness predict effective identity-safe cues for Black women. *Journal of Experimental Social Psychology*, *74*, 291–306. https://doi.org/10.1016/j.jesp.2017.06.021

Pincus, F. L. (1996). Discrimination comes in many forms: Individual, institutional, and structural. *American Behavioral Scientist*, *40*(2), 186–194. https://doi.org/10.1177/0002764296040002009

Pirlott, A. G., & Cook, C. L. (2018). Prejudices and discrimination as goal activated and threat driven: The affordance management approach applied to sexual prejudice. *Psychological Review*, *125*(6), 1002–1027. https://doi.org/10.1037/rev0000125

Plant, E. A., & Butz, D. A. (2006). The causes and consequences of an avoidance-focus for interracial interactions. *Personality and Social Psychology Bulletin*, *32*(6), 833–846. https://doi.org/10.1177/0146167206287182

Popper, K. (1959). *The logic of scientific discovery*. Hutchinson.

Potârcă, G., & Mills, M. (2015). Racial preferences in online dating across European countries. *European Sociological Review*, *31*(3), 326–341. https://doi.org/10.1093/esr/jcu093

Pratto, F., Sidanius, J., & Levin, S. (2006). Social dominance theory and the dynamics of intergroup relations: Taking stock and looking forward. *European Review of Social Psychology*, *17*(1), 271–320. https://doi.org/10.1080/10463280601055772

Rappel, J. J. J., & Vachon, D. D. (2023). The role of basic psychological needs in right-wing extremism risk among American conservatives. *Terrorism and Political Violence*, *36*(4), 533–551. https://doi.org/10.1080/09546553.2023.2178305

Rappel, J. J. J., Vachon, D. D., & Hehman, E. (2025). Basic psychological needs are associated with engagement and hate term use in extremist chatrooms. *Social Psychological and Personality Science*. Advance online publication. https://doi.org/10.1177/19485506251389642

Rauthmann, J. F., Sherman, R. A., & Funder, D. C. (2015). Principles of situation research: Towards a better understanding of psychological situations. *European Journal of Personality*, *29*(3), 363–381. https://doi.org/10.1002/per.1994

Rhodes, G., Hayward, W. G., & Winkler, C. (2006). Expert face coding: Configural and component coding of own-race and other-race faces. *Psychonomic Bulletin & Review*, *13*(3), 499–505. https://doi.org/10.3758/BF03193876

Ritter, D., & Eslea, M. (2005). Hot Sauce, toy guns, and graffiti: A critical account of current laboratory aggression paradigms. *Aggressive Behavior*, *31*(5), 407–419. https://doi.org/10.1002/ab.20066

Roy, E., Jaeger, B., Evans, A. M., Turetsky, K. M., & Axt, J. R. (2025). A contest study to reduce attractiveness-based discrimination in social judgment. *Journal of Personality and Social Psychology*, *128*(3), 508–535. https://doi.org/10.1037/pspa0000414

Rucker, J. M., & Richeson, J. A. (2021). Toward an understanding of structural racism: Implications for criminal justice. *Science*, *374*(6565), 286–290. https://doi.org/10.1126/science.abj7779

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, *55*(1), 68–78. https://doi.org/10.1037//0003-066x.55.1.68

Sagar, H. A., & Schofield, J. W. (1980). Racial and behavioral cues in Black and White children's perceptions of ambiguously aggressive acts. *Journal of Personality and Social Psychology*, *39*(4), 590–598. https://doi.org/10.1037/0022-3514.39.4.590

Saucier, D. A., Miller, C. T., & Doucet, N. (2005). Differences in helping Whites and Blacks: A meta-analysis. *Personality and Social Psychology Review*, *9*(1), 2–16. https://doi.org/10.1207/s15327957pspr0901_1

Schaller, M., Murray, D. R., & Hofer, M. K. (2021). The behavioural immune system and pandemic psychology: The evolved psychology of disease-avoidance and its implications for attitudes, behaviour, and public health during epidemic outbreaks. *European Review of Social Psychology*, *33*(2), 360–396. https://doi.org/10.1080/10463283.2021.1988404

Schaller, M., & Neuberg, S. L. (2012). Chapter one—Danger, disease, and the nature of prejudice(s). In J. M. Olson & M. P. Zanna (Eds.), *Advances in experimental social psychology* (Vol. 46, pp. 1–54). Elsevier. https://doi.org/10.1016/B978-0-12-394281-4.00001-5

Scheepers, D., Spears, R., Doosje, B., & Manstead, A. S. R. (2006). Diversity in in-group bias: Structural factors, situational features, and social functions. *Journal of Personality and Social Psychology*, *90*(6), 944–960. https://doi.org/10.1037/0022-3514.90.6.944

Schnurr, B., & Halkias, G. (2022). Made by her vs. him: Gender influences in product preferences and the role of individual action efficacy in restoring social equalities. *Journal of Consumer Psychology*, *33*(3), 510–528. https://doi.org/10.1002/jcpy.1327

Schütz, H., & Six, B. (1996). How strong is the relationship between prejudice and discrimination? A meta-analytic answer. *International Journal of Intercultural Relations*, *20*(3–4), 441–462. https://doi.org/10.1016/0147-1767(96)00028-4

Sesko, A. K., & Biernat, M. (2010). Prototypes of race and gender: The invisibility of Black women. *Journal of Experimental Social Psychology*, *46*(2), 356–360. https://doi.org/10.1016/j.jesp.2009.10.016

Shapiro, J. R. (2011). Different groups, different threats: A multi-threat approach to the experience of stereotype threats. *Personality and Social Psychology Bulletin*, *37*(4), 464–480. https://doi.org/10.1177/0146167211398140

Shapiro, J. R., & Neuberg, S. L. (2007). From stereotype threat to stereotype threats: Implications of a multi-threat framework for causes, moderators, mediators, consequences, and interventions. *Personality and Social Psychology Review*, *11*(2), 107–130. https://doi.org/10.1177/1088868306294790

Sheeran, P., & Taylor, S. (1999). Predicting intentions to use condoms: A meta-analysis and comparison of the theories of reasoned action and planned behavior. *Journal of Applied Social Psychology*, *29*(8), 1624–1675. https://doi.org/10.1111/j.1559-1816.1999.tb02045.x

Shelton, J. N. (2003). Interpersonal concerns in social encounters between majority and minority group members. *Group Processes & Intergroup Relations*, *6*(2), 171–185. https://doi.org/10.1177/1368430203006002003

Shelton, J. N., Richeson, J. A., Salvatore, J., & Trawalter, S. (2005). Ironic effects of racial bias during racially discordant interactions. *Psychological Science*, *16*(5), 397–402. https://doi.org/10.1111/j.0956-7976.2005.01547.x

Shenhav, S., Campos, B., & Goldberg, W. A. (2016). Dating out is intercultural: Experience and perceived parent disapproval by ethnicity and immigrant generation. *Journal of Social and Personal Relationships*, *34*(3), 397–422. https://doi.org/10.1177/0265407516640387

Sherif, M., Harvey, O. J., White, B. J., Hood, W. R., & Sherif, C. W. (1961). *Intergroup conflict and cooperation: The Robbers Cave experiment* (pp. 150–198). University Book Exchange.

Sherif, M., & Sherif, C. W. (1953). *Groups in harmony and tension: An integration of studies of intergroup relations*. Harper & Brothers.

Sherman, J. W., Macrae, C. N., & Bodenhausen, G. V. (2000). Attention and stereotyping: Cognitive constraints on the construction of meaningful social impressions. *European Review of Social Psychology*, *11*(1), 145–175. https://doi.org/10.1080/14792772043000022

Shih, M., Wilton, L. S., Does, S., Goodale, B. M., & Sanchez, D. T. (2019). Multiple racial identities as sources of psychological resilience. *Social and Personality Psychology Compass*, *13*(6), Article e12469. https://doi.org/10.1111/spc3.12469

Shinada, M., & Yamagishi, T. (2007). Punishing free riders: Direct and indirect promotion of cooperation. *Evolution and Human Behavior*, *28*(5), 330–339. https://doi.org/10.1016/j.evolhumbehav.2007.04.001

Sibley, C. G., & Duckitt, J. (2008). Personality and prejudice: A meta-analysis and theoretical review. *Personality and Social Psychology Review*, *12*(3), 248–279. https://doi.org/10.1177/1088868308319226

Sidanius, J., & Pratto, F. (1999). *Social dominance: An intergroup theory of social hierarchy and oppression*. Cambridge University Press. https://doi.org/10.1017/cbo9781139175043

Siy, J. O., & Cheryan, S. (2013). When compliments fail to flatter: American individualism and responses to positive stereotypes. *Journal of Personality and Social Psychology*, *104*(1), 87–102. https://doi.org/10.1037/a0030183

Skinner, E. A., Edge, K., Altman, J., & Sherwood, H. (2003). Searching for the structure of coping: A review and critique of category systems for classifying ways of coping. *Psychological Bulletin*, *129*(2), 216–269. https://doi.org/10.1037/0033-2909.129.2.216

Skinner-Dorkenoo, A. L., George, M., Wages, J. E., Sánchez, S., & Perry, S. P. (2023). A systemic approach to the psychology of racial bias within individuals and society. *Nature Reviews Psychology*, *2*(7), 392–406. https://doi.org/10.1038/s44159-023-00190-z

Slone, A. E., Brigham, J. C., & Meissner, C. A. (2000). Social and cognitive factors affecting the own-race bias in Whites. *Basic and Applied Social Psychology*, *22*(2), 71–84. https://doi.org/10.1207/s15324834basp2202_1

Smart Richman, L., & Leary, M. R. (2009). Reactions to discrimination, stigmatization, ostracism, and other forms of interpersonal rejection: A multimotive model. *Psychological Review*, *116*(2), 365–383. https://doi.org/10.1037/a0015250

Sng, O., Neuberg, S. L., Varnum, M. E. W., & Kenrick, D. T. (2018). The behavioral ecology of cultural psychological variation. *Psychological Review*, *125*(5), 714–743. https://doi.org/10.1037/rev0000104

Snyder, M. L., Kleck, R. E., Strenta, A., & Mentzer, S. J. (1979). Avoidance of the handicapped: An attributional ambiguity analysis. *Journal of Personality and Social Psychology*, *37*(12), 2297–2306. https://doi.org/10.1037/0022-3514.37.12.2297

Song, S. (2023). *Morality of matchmaking: When is discrimination perceived as more or less immoral?* [Doctoral dissertation, University of Toronto].

Sporer, S. L. (2001). Recognizing faces of other ethnic groups: An integration of theories. *Psychology, Public Policy, and Law*, *7*(1), 36–97. https://doi.org/10.1037/1076-8971.7.1.36

Srivastava, S. (2020). Personality structure: Who cares? *European Journal of Personality*, *34*(4), 550–551. https://doi.org/10.31234/osf.io/dvb4n

Steele, C. M. (2011). *Whistling Vivaldi: And other clues to how stereotypes affect us (issues of our time)*. W.W. Norton.

Stelter, M., Essien, I., Sander, C., & Degner, J. (2022). Racial bias in police traffic stops: White residents' county-level prejudice and stereotypes are related to disproportionate stopping of Black drivers. *Psychological Science*, *33*(4), 483–496. https://doi.org/10.1177/09567976211051272

Stephan, W. G., & Stephan, C. W. (1985). Intergroup anxiety. *Journal of Social Issues*, *41*(3), 157–175. https://doi.org/10.1111/j.1540-4560.1985.tb01134.x

Stone, J., Perry, W., & Darley, J. M. (1997). "White men can't jump": Evidence for the perceptual confirmation of racial stereotypes following a basketball game. *Basic and Applied Social Psychology*, *19*(3), 291–306. https://doi.org/10.1207/s15324834basp1903_2

Sue, D. W., Capodilupo, C. M., Torino, G. C., Bucceri, J. M., Holder, A. M. B., Nadal, K. L., & Esquilin, M. (2007). Racial microaggressions in everyday life: Implications for clinical practice. *American Psychologist*, *62*(4), 271–286. https://doi.org/10.1037/0003-066X.62.4.271

Summers, K. M., Deska, J. C., Almaraz, S. M., Hugenberg, K., & Lloyd, E. P. (2021). Poverty and pain: Low-SES people are believed to be insensitive to pain. *Journal of Experimental Social Psychology*, *95*, Article 104116. https://doi.org/10.1016/j.jesp.2021.104116

Summers, K. M., Pitts, S., & Lloyd, E. P. (2024). Racial bias in perceptions of children's pain. *Journal of Experimental Psychology: Applied*, *30*(1), 135–155. https://doi.org/10.1037/xap0000491

Swim, J. K., Scott, E. D., Sechrist, G. B., Campbell, B., & Stangor, C. (2003). The role of intent and harm in judgments of prejudice and discrimination. *Journal of Personality and Social Psychology*, *84*(5), 944–959. https://doi.org/10.1037/0022-3514.84.5.944

Tajfel, H., Billig, M. G., Bundy, R. P., & Flament, C. (1971). Social categorization and intergroup behaviour. *European Journal of Social Psychology*, *1*(2), 149–178. https://doi.org/10.1002/ejsp.2420010202

Tajfel, H., & Turner, J. C. (2004). The social identity theory of intergroup behavior. In J. T. Jost & J. Sidanius (Eds.), *Political psychology* (pp. 276–293). Psychology Press. https://doi.org/10.4324/9780203505984

Talaska, C. A., Fiske, S. T., & Chaiken, S. (2008). Legitimating racial discrimination: Emotions, not beliefs, best predict discrimination in a meta-analysis. *Social Justice Research*, *21*(3), 263–296. https://doi.org/10.1007/s11211-008-0071-2

Tilcsik, A. (2011). Pride and prejudice: Employment discrimination against openly gay men in the United States. *American Journal of Sociology*, *117*(2), 586–626. https://doi.org/10.1086/661653

Todd, A. R., Johnson, D. J., Lassetter, B., Neel, R., Simpson, A. J., & Cesario, J. (2021). Category salience and racial bias in weapon identification: A diffusion modeling approach. *Journal of Personality and Social Psychology*, *120*(3), 672–693. https://doi.org/10.1037/pspi0000279

Todorov, A., Olivola, C. Y., Dotsch, R., & Mende-Siedlecki, P. (2015). Social attributions from faces: Determinants, consequences, accuracy, and functional significance. *Annual Review of Psychology*, *66*, 519–545. https://doi.org/10.1146/annurev-psych-113011-143831

Tosh, C., Greengard, P., Goodrich, B., Gelman, A., Vehtari, A., & Hsu, D. (2025). The piranha problem: Large effects swimming in a small pond. *Notices of the American Mathematical Society*, *72*(1), 15–44. https://doi.org/10.1090/noti3044

Triandis, H. C., & Davis, E. E. (1965). Race and belief as determinants of behavioral intentions. *Journal of Personality and Social Psychology*, *2*(5), 715–725. https://doi.org/10.1037/h0022719

Valentine, T. (1991). A unified account of the effects of distinctiveness, inversion, and race in face recognition. *The Quarterly Journal of Experimental Psychology*, *43*(2), 161–204. https://doi.org/10.1080/14640749108400966

Vansteenkiste, M., Ryan, R. M., & Soenens, B. (2020). Basic psychological need theory: Advancements, critical themes, and future directions. *Motivation and Emotion*, *44*(1), 1–31. https://doi.org/10.1007/s11031-019-09818-1

Verkuyten, M. (2005). Ethnic group identification and group evaluation among minority and majority groups: Testing the multiculturalism hypothesis. *Journal of Personality and Social Psychology*, *88*(1), 121–138. https://doi.org/10.1037/0022-3514.88.1.121

Voigt, R., Camp, N. P., Prabhakaran, V., Hamilton, W. L., Hetey, R. C., Griffiths, C. M., Jurgens, D., Jurafsky, D., & Eberhardt, J. L. (2017). Language from police body camera footage shows racial disparities in officer respect. *Proceedings of the National Academy of Sciences of the United States of America*, *114*(25), 6521–6526. https://doi.org/10.1073/pnas.1702413114

West, K. (2019). Testing hypersensitive responses: Ethnic minorities are not more sensitive to microaggressions, they just experience them more frequently. *Personality and Social Psychology Bulletin*, *45*(11), 1619–1632. https://doi.org/10.1177/0146167219838790

West, K., Greenland, K., Van Laar, C., & Barnoth, D. (2022). It's only discrimination when they do it to us: When White men use ingroup-serving double standards in definitional boundaries of discrimination. *European Journal of Social Psychology*, *52*(4), 735–747. https://doi.org/10.1002/ejsp.2849

Williams, K. D. (2007). Ostracism. *Annual Review of Psychology*, *58*(1), 425–452. https://doi.org/10.1146/annurev.psych.58.110405.085641

Williams, K. E. G., Votruba, A. M., Neuberg, S. L., & Saks, M. J. (2019). Capital and punishment: Resource scarcity increases endorsement of the death penalty. *Evolution and Human Behavior*, *40*(1), 65–73. https://doi.org/10.1016/j.evolhumbehav.2018.08.002

Williams, M. T. (2020). Microaggressions: Clarification, evidence, and impact. *Perspectives on Psychological Science*, *15*(1), 3–26. https://doi.org/10.1177/1745691619827499

Word, C. O., Zanna, M. P., & Cooper, J. (1974). The nonverbal mediation of self-fulfilling prophecies in interracial interaction. *Journal of Experimental Social Psychology*, *10*(2), 109–120. https://doi.org/10.1016/0022-1031(74)90059-6

Xie, S. Y., Flake, J. K., Stolier, R. M., Freeman, J. B., & Hehman, E. (2021). Facial impressions are predicted by the structure of group stereotypes. *Psychological Science*, *32*(12), 1979–1993. https://doi.org/10.1177/09567976211024259

Zitek, E. M., & Hebl, M. R. (2007). The role of social norm clarity in the influenced expression of prejudice over time. *Journal of Experimental Social Psychology*, *43*(6), 867–876. https://doi.org/10.1016/j.jesp.2006.10.010

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