THE KAREN PHENOMENON: OUTGROUP DISCRIMINATION IN THE CONTEXT OF THE RESOURCE DILEMMA

By Dejah Yansen

A Thesis

Submitted in Partial Fulfillment

of the Requirements for the Degree of

Master of Arts

in Psychological Sciences

Northern Arizona University

May 2023

Approved:

Ann C. Rumble, Ph.D., Chair

Marilynn B. Brewer, Ph.D.

Nora D. Dunbar, Ph.D.

ABSTRACT

THE KAREN PHENOMENON: OUTGROUP DISCRIMINATION IN THE CONTEXT OF THE RESOURCE DILEMMA

DEJAH YANSEN

Cooperation research underlines two types of intergroup behavior: ingroup favoritism and outgroup derogation. Favoritism and derogation are expressed through aversive racism, or the activation of implicit biases in ambiguous contexts. One such ambiguous context, the COVID-19 pandemic, introduced "Karens," White women who seek to maintain the White-dominant hierarchies of the United States. The purpose of the present study was to provide a foundation for establishing the psychological mechanisms that underlie Karens' perceived entitlement to unequal allocations of public resources.

We utilized a resource dilemma to explain how negative intergroup relations result from ambiguity and a limited understanding of social identity. We employed a 2 (race: Black/White) by 2 (gender: man/woman) by 2 (rate of harvesting: equal/unequal) between-subjects design to investigate the extent to which shared group membership and harvesting behavior influence resource consumption, sanctioning, and attributions. Participants (N = 314) withdrew more resources when grouped with Black women, and when shared resources diminished quickly. Participants may have recognized their implicit bias, which may have contributed to the fact that they then rewarded Black women more than White women and men. We concluded that gender, in comparison to race, is a more salient social identity during intergroup relations.

Keywords: implicit bias, crossed categorization, social identity complexity, aversive racism, Karens

Acknowledgements

So many people have supported me during this process, and unfortunately, I will not be able to list them all. If I did that, the acknowledgements section would be much longer than the thesis itself. My sincerest apologies to those I was unable to explicitly recognize here. Just know that words will never be enough to describe what and how much you have done for me.

First and foremost, I would like to express my deepest gratitude to my advisor and committee chair, Dr. Ann Rumble. I can say without a doubt that her guidance and kindness has been the one of, if not the, primary contributors to many of my academic, professional, and personal successes. I would also like to thank the rest of my committee, Drs. Marilynn Brewer and Nora Dunbar, for their open and honest feedback. My writing and data analysis skills would have never improved without it – without them. A special thanks to the members of the WELLS Healing Center and my cohort for teaching me that I am never alone. Lastly, I would be remiss in not mentioning my family, who has encouraged me to pursue higher education since the beginning of time. I have found utmost satisfaction in forging my own limits and surpassing them on my path to being the first of us to earn a doctoral degree.

All of you have been amazing teachers. I hope one day to do unto others what you did for me.

Table of Contents

List of Tables

List of Figures

Dedication

This thesis is dedicated to all students of color. The topic was chosen in part to increase our space in academia. I see you, I hear you, I am you.

The Karen Phenomenon: Outgroup Discrimination in the Context of the Resource Dilemma

On May 25, 2020, a White woman named Amy Cooper was reprimanded by a bird watcher for allowing her dog to roam unleashed in Central Park. In retaliation, she dialed the police, pleading to be rescued from the African American man who threatened her and her dog (Nir, 2020). Later that year, on August 16, another White woman (who remains unidentified to this day) went around Dolores Park and began cutting the caution tape that was placed around the perimeter due to COVID-19 restrictions. She then blamed a nearby Columbian parks and recreation worker for the "unconstitutional closures" and verbally harassed him (Graff, 2020). Carolyn Bryant, the woman who, in 1984, falsely accused a Black teenager of whistling flirtatiously at her in the grocery store, recently admitted that she did not want to die with his subsequent murder on her conscience (Pérez-Peña, 2017).

These cases are but a fraction of numerous examples of what are colloquially known in American culture as "Karens." Mishan (2021) and Negra and Leyda (2020) compiled a brief definition of a Karen: A White woman who has little regard for others and who is willing to do whatever it takes to uphold White dominant societies. The few studies on "Karen behavior" found this guardian mindset typically manifests when these women encounter people of color (POC), specifically Black men (Mishan, 2021). Karens may feel they need to protect public resources (such as parks) from POC and draw attention to what they view as an unfair usage.

Because Karens place value and significance in being White, they perceive their ingroup to include people who are most like themselves: White women, and to an extent, White men. Social identity theory (Tajfel & Turner, 1979) suggests that these women, in an effort to maintain a positive social identity, will work to ensure that their ingroup is evaluated positively.

One way Karens can do this is by exhibiting preferential treatment to ingroup members (ingroup favoritism; Allport, 1954). For instance, these women do not feel the need to monitor other White people's usage of public spaces. Another method of maintaining positive social identity is to be discriminatory against outgroup members (outgroup derogation; Brewer, 1999; Greenwald & Pettigrew, 2014). Since Karens base their social identity on their race, they perceive anyone who is not White to be a part of their outgroup. Men of color (MOC) are considered double outgroup members because they are not White nor women. When encountering a person/man of color utilizing a public space, Karens view themselves as victims of outgroup transgressions (Negra & Leyda, 2020). Amy Cooper saw a Black man in a park and shouted that she was being threatened; Carolyn Bryant saw a Black boy in a store and claimed she was being sexually harassed. Karens make themselves vulnerable despite their social power (White privilege; McIntosh, 1988). This self-victimizing behavior can be considered a form of outgroup "hate" because Karens use the negative perceptions of MOC to their advantage (Negra & Leyda, 2020).

The current study was designed to explore how White women respond in environments with limited resources. Specifically, this study analyzed whether White women's perceptions of and reactions to cooperation and defection varied by resource uncertainty and the other individuals' group memberships. Social identity and related theories are a framework for understanding intergroup relations when individuals share and do not share social categories. Two social categories of interest in the present study are race and gender, since racial and gender biases may intersect to influence ingroup favoritism and outgroup derogation

(Crenshaw, 1989). The resource dilemma can be utilized to understand differences in reactions and perceptions of resource consumption.

Social Identity Theory

Humans are inherently social beings – belongingness needs are only rivaled by physiological and safety needs (Baumeister & Leary, 1995; Maslow, 1943). Additionally, for long-term survival, humans must be *obligatorily interdependent* (Brewer, 1997; Caporael, 1997). Humans must be willing to rely on others for resources and be willing to provide and share resources with others. A group, or a number of individuals who understand themselves to be in the same social category (Tajfel & Turner, 1979), helps to fulfill these needs.

Human sociality is seen in cognitive processes, including how we differentiate between groups and define the self. The process of social categorization is primarily responsible for forming an individual's *social identity*, or rather, how the self is understood in social contexts (Tajfel & Turner, 1979). An individual's social identity is a component of their *self-concept* (Tajfel & Turner, 1979; Hogg, 2003). Self-concept is the collection of beliefs and perceptions we have of ourselves (Bernstein et al., 1994; Eggen & Kauchak, 1999; Myers, 1993). These beliefs and perceptions are based on both material and abstract factors, such as possessions, physical image, needs, morals, or belongingness to a category (Epstein, 1973). Karens base their self-concept on the fact that they belong to the White race. To them, everyone who is White can be considered an *ingroup member.* Thus, the *outgroup* is formed of individuals who do not belong to the same social category as ingroup members. In this case, Karens perceive POC as outgroup members. Conflict between the ingroup and outgroup occurs in part because of the need to maintain positive self-esteem.

Self-esteem is the evaluation of the self-concept (Rogers, 1951). The *self-esteem hypothesis* (D. Abrams & Hogg, 1988; Hogg & Abrams, 1990) explains how negative intergroup behavior is motivated by the need for positive self-esteem (Tajfel & Turner, 1979). If the self is evaluated positively in social contexts, then, an individual would understand the self to have greater worth (Tajfel & Turner, 1979). Members' general evaluations about an ingroup's identity and status are formed through social comparison (Tajfel & Turner, 1979). Tajfel and Turner stated that *positive distinctiveness* occurs when ingroup members perceive their own social group as one that has value and significance in comparison to the outgroup.

The self-esteem hypothesis stems from Tajfel, Flament, Billig, and Bundy's 1971 *minimal group paradigm* (MGP). When an individual feels that their self-esteem is being threatened, they are motivated to take action to boost their self-esteem. One way to do this is to discriminate against outgroup members (D. Abrams & Hogg, 1988; Hogg & Abrams, 1990; Tajfel et al., 1971; Tajfel & Turner, 1979). Discriminatory behavior towards outgroup members enhances positive distinctiveness by increasing the difference in status and power between the ingroup and outgroup. Amy Cooper's behavior can be used as an example of positive distinctiveness. Amy was protecting her, and to an extent, her ingroup's access to the resource (the park). This access would help maintain the ingroup's positive status in comparison to Christian Cooper, who can be considered to be a double outgroup member. Results from experiments exploring the MGP (Bourhis et al., 1994; Brewer, 1979; Messick & Mackie, 1989; Tajfel et al., 1971) showed that to maintain positive self-esteem and social identity individuals will compete with other groups. People displayed discriminatory behavior through differences in resource allocations. Specifically, ingroup members were willing to sacrifice maximum

benefits to ensure the outgroup gained as few resources as possible. Those who discriminated against outgroup members had larger increases in self-esteem, in comparison to those who did not (Chin & McClintock, 1993; Lemyre & Smith, 1985; Oakes & Turner, 1980). The consistent discriminatory behavior towards outgroups members supported social identity theory. Tajfel and Turner (1979) posited that positive self-esteem and social identity not only come from intragroup social consensus, but the ingroup also being used as a reference against relevant outgroups. Therefore, it can be argued that intergroup relations are influenced by both *ingroup favoritism* (Allport, 1954) and *outgroup derogation* (Brewer, 1999; Greenwald & Pettigrew, 2014).

There are different ways to consider ingroup favoritism, outgroup derogation, and the relationship between the two phenomena. Some researchers believe preferences for the ingroup are directly related to discrimination towards the outgroup (Sherif & Sherif, 1953; Sumner, 1906). Limited resources, for example, causes the need to maintain loyalty for the ingroup and compete with the outgroup. Sometimes a group is defined as a collection of people with similar goals (American Psychological Association, 2023). If another group strives to achieve those same goals, then it is difficult for the ingroup to become positively distinct since the ingroup and outgroup have the same values (Turner, 1975; Mummendey & Wenzel, 1999). However, others argue that the two intergroup biases are not reciprocal (Allport, 1954; Brewer, 1979; Hinkle & Brown, 1990; Kosterman & Feshbach, 1989). One explanation is that resource allocations are not the only type of intergroup interaction. Patterns of discriminatory behavior that were found in the MGP do not occur in conditions where resources are not scarce (Mummendey et al., 1992). Another explanation is that some behavior is solely driven by

ingroup preferences, and some by prejudice for the outgroup. One example could be acts of hate influenced by explicit racial bias (Brewer, 1999). There is also evidence that some people believe that only ingroup members should receive positive treatment (Frey & Gaertner, 1986; Gaertner & Dovidio, 1977; Gaertner et al., 1982; Pettigrew & Meertens, 1995; Weber, 1994). However, although there are not any negative attitudes being expressed towards outgroup members, the lack of positive sentiments can be considered a form of discrimination. Empirical research shows that social identity is based in both in- and outgroup memberships. Thus, social identity not only impacts cooperation, but competition as well.

Reactions to Cooperative and Competitive Behavior

Sanctions are used to moderate the cooperative and competitive behaviors of ingroup and outgroup members (Messick & Brewer, 1983; Yamagishi, 1986). Sanction systems promote individual responsibility and ensure fair distributions of shared resources (Brewer & Kramer, 1986; Rabinovich & Morton, 2011). There are two types of sanctions, positive (incentives) and negative (punishments). Incentives are used to promote cooperation, and punishments are used to address noncooperation. Negative reciprocity, for example, occurs when individuals observe each other behaving selfishly in public goods dilemmas (Fehr & Gächter, 2000b). People are more likely to negatively reciprocate when they have opportunities to directly punish those acting in self-interest, and the punishment is not too costly to the cooperator.

However, competition occurs within the ingroup as well (Goldman et al., 1977). Negative attitudes among ingroup members are further impacted by the degree of membership individuals share (i.e., partial versus full ingroup membership; Crisp & Hewstone, 2016). Therefore, incentives are not only reserved for ingroup members, and penalties are not only

reserved for outgroup members. For example, intragroup cooperators are often willing to punish free-riders, even if punishment is costly and/or does not yield any benefits (Brewer & Kramer, 1986; Fehr & Gächter, 2000a). This is because group members expect each other to act in a way that promotes fairness and cohesion (Bernhard et al., 2006). Punishment is used when ingroup members violate these expectations to preserve positive distinctiveness (Castano et al., 2002).

The expression of intergroup bias is dynamic because group identification is dynamic in and of itself (Palla et al., 2007; Rand et al., 2009; Wilson, 1979). Yet, most social identity research only considers the independent influence of one social group at a time. We will now discuss the complexities of social identity and the influence that belongingness to multiple social categories can have on social identity itself and intergroup bias.

Impact of Multiple Social Identities

The simple ingroup-outgroup dichotomy of social identity is pervasive throughout research that addresses the relationship between social identity and cooperation. Often, we understand ingroups and outgroups to be formed based on a single social category. However, people belong to multiple social groups. Even when a single social category is prioritized in a certain context, it is difficult to isolate its effects from the total influence of the other social categories (Cole, 2009; Combahee River Collective, 1995). We will review two primary ways of understanding the impact of multiple social identities: *crossed categorization* and *social identity complexity*.

Crossed categorization (Crisp & Hewstone, 2016; Mullen et al., 2001) is the crossing of two dichotomous and orthogonal social identities and the resulting four subgroups: a double

ingroup member, a double outgroup member, and two partial ingroup members. When gender (woman/man) and race (White/Black) are crossed, White men and Black women are partial ingroup members for Karens, White women.

The combination of identities influences the ingroup's saliency and distinctiveness (Imada et al., 2023), which can cause the identification with a particular social category to lessen. Crisp and Hewstone (2000) and Turner and colleagues (1987) noted that this is especially true when the identities that were crossed happen to be similarly relevant. This is because social identity is formed through group identification (Tajfel & Turner, 1979). As ingroup favoritism is influenced by group membership, Karens would show the most positive behavior and attitudes towards those with the strongest ingroup identification (double ingroup members, other White women). Partial ingroup members would receive some positive interaction, but not to the same degree as those who are double ingroup members. Partial ingroup members do belong to categories that Karens would consider to be outgroups (i.e., being Black or being a man). Displaying higher levels of ingroup favoritism to these individuals would prevent White women, the primary ingroup, from being recognized as positively distinct. It is important to note that White women would become the primary ingroup through a consolidation of both social identities. Roccas and Brewer (2002) posited that the categorization of others as an ingroup or outgroup member is dependent upon the ability to converge multiple identities through social identity complexity.

Social identity complexity (SIC; Roccas & Brewer, 2002) is an extension of social identity theory. SIC considers the degree of identity overlap between perceived ingroup and outgroup members. Roccas and Brewer established several methods – *intersection, dominance,*

compartmentalization, and *merger* – through which people combine their social identities. The intersection and dominance models are the most relevant to this discussion. Intersection describes the process in which an individual combines multiple social categories into one. Dominance is when someone prioritizes one of their group memberships above all others. To illustrate, we can revisit the Central Park Karen. If we analyze Amy Cooper's SIC with the intersection model, she would only classify people who are simultaneously *White* and *female* as a part of her ingroup. Under the dominance model, Amy could rank her identity as a White individual as primary, with *female* merely describing what kind of White person she is. She may associate with other White people but would not extend the same degree of ingroup favoritism towards other females. Karens might have negative perceptions of outgroup members because they fail to extend their understanding of their social identity outside of a small combination of stable and arbitrary factors. For example, Amy Cooper did not acknowledge the fact that Christian was also a New Yorker who enjoyed spending time in one of the city's landmarks. She instead excluded him from her group because of his race and gender, and determined that he did not deserve to have the same access to a public resource as she.

People are motivated to prevent outgroup members from taking advantage of ingroup resources (Tajfel et al., 1971). Perceptions of unfairness, for example, is an established reason for defection during intergroup cooperation (Vohs et al., 2007). Self-victimization is often used as a strategy to avoid being exploited during intergroup interactions. Moreover, victim-playing can be considered as a form of outgroup discrimination (Bar-Tal et al., 2009; Belavadi & Hogg, 2018; Noor et al., 2009). Karens recognize how policing and legal systems are structured against

minoritized groups and use that knowledge to punish the outgroup. Amy Cooper played the victim and explicitly asked for protection from a MOC (Dovidio et al., 2010).

Stereotypes and Bias

Social categorization helps people to establish their social identity and distinguish individuals as in- or outgroup members (Roccas & Brewer, 2002; Tajfel & Turner, 1979). The cognitive processes that support social categorization utilizes many elements (such as race, nonverbal cues, nationality, political ideology, and ability) to classify people into these groups (Astuti et al., 2004). A challenge to the cognitive efficiency of social categorization is the fact that not everyone belongs to the same number of shared groups, nor does everyone value each of their social groups equally (Brewer, 1991). Differences in identity salience contributes to the crossed categorization of identities and the emergence of partial and full ingroup memberships (Hogg & Abrams, 1988; Roccas & Brewer, 2002).

Schemas are another cognitive process that aids in predicting and understanding behavior. Schemas are conceptual models that organize new information into representative frameworks (Bartlett, 1932; DiMaggio, 1997; Piaget, 1952). *Stereotypes* are types of schemas used for social processing (Hilton & von Hippel, 1996). Stereotypes are beliefs about a group's attributes, such as characteristics or behaviors (Gardner, 1993; Hamilton & Sherman, 1994). In addition to physical attributes, stereotypes provide information about a group's social role(s), how unique each group member is, and what kind of expectations one should have when encountering a member of a particular group (Dovidio et al., 2010).

Stereotypic processing is a double-edged sword. Stereotypes are evolutionarily advantageous because they can be used to quickly determine if something was a threat to the

ingroup (Bowles, 2006; Darwin, 1871; Rusch, 2014). Stereotypes are also beneficial because they are a way to simplify complex environments (Dovidio et al., 2010). Since ingroup members are unfamiliar with the outgroup (Brewer, 1999; Heine et al., 2009), the outgroup can be considered "complex." However, individuals typically utilize a reductionist approach when categorizing outgroups, which prevents ingroup members from evaluating their outgroups as heterogeneous or positive entities (Turner, 1975; von Hippel et al., 1993). Stereotype content is often based on features that emphasize differences between groups (Ford & Stangor, 1992). Additionally, stereotypes are harmful in many contexts, especially since people tend to automatically rely on them during intergroup interactions. Confirmation bias, for example, plays a role during perceptual processing. When encountering an outgroup member, people typically first notice characteristics based on stereotype content (Dovidio et al., 2010) and disregard any characteristics that contradict said content (Hewstone, 1990; Pettigrew, 1979). Discrimination can be a result of negative and non-positive stereotypes, since stereotypic processing can predict intergroup attitudes and behavior (Esses et al., 1993, 1994; McConahay & Hough Jr., 1976; Stangor et al., 1991).

Discrimination is a form of *bias* (Dovidio et al., 2010), or judgments that are favorable or unfavorable towards a distinct social group. Bias can be expressed as both explicitly negative or less positive (in comparison to the ingroup) attitudes and behavior (Allport, 1954; Brewer, 1999; Jones, 1972). We can revisit the discussion regarding the relationship between ingroup favoritism and outgroup derogation. Within a social identity context, people are motivated to ensure that their ingroup is evaluated positively to maintain a positive social identity. Positive social identity can be achieved by expressing more preferential attitudes and behaviors towards

ingroup members (Allport, 1954). However, these positive interactions can be supplemented or outright replaced by bigoted attitudes and behaviors towards outgroup members (Brewer, 1999; Greenwald & Pettigrew, 2014). This process occurs particularly when negative emotions (e.g., fear, disgust, arousal, hate, contempt) are associated with the outgroup during intergroup relations (Brewer, 2001; Doosje et al., 1998; Mackie & Smith, 1998; Mummendey & Otten, 2001). Overreliance on stereotypes causes patterns of bias and discrimination to emerge on the basis of race and culture (Dovidio et al., 2010). For example, Black individuals are associated with crime and violence. This stereotype is known to influence human cognition and behavior. For instance, Payne (2001) found that White participants were more likely to associate (sometimes inaccurately) guns with Black people in comparison to White people.

Although studies by Dovidio and colleagues (2000) demonstrate that it is entirely possible for people to stop depending on stereotypes and bias during perception, they are not motivated to do so. This is because being biased and discriminatory against outgroups allows the ingroup to equate their social identity with "high" or "majority" status and characterize outgroups as "low" or "minority" (Fiske et al., 2002; Tajfel & Turner, 1979; Turner, 1975). How and the extent to which an individual relies on stereotypes during intergroup relations is dependent upon their degree of *explicit* and *implicit* biases.

Explicit Bias

Explicit bias is the overt expression of prejudice or preference. People with explicit bias are aware of their prejudice and the control they have when choosing to express it (Fazio et al., 1995). Explicit bias can be seen in blatantly racist comments. The Dolores Park Karen had said "go back to wherever the hell you came from" to the Columbian parks manager in response to

the park's closure (Graff, 2020). The present and growing population of Latino and Hispanic people in the United States continue to receive negative public reactions (Chavez, 2001; Nill, 2011). Panic surrounding potential changes in the economy has contributed to the generalization of Hispanic and Latino individuals as those who are "infesting" the United States and "stealing" jobs from "true" (i.e., White) Americans. This population is seen as "illegal," (Chavez, 2001; Ngai, 2005) and much legislation has focused on preventing further immigration to the United States (Nill, 2011). The comments in Dolores Park were motivated by these sentiments.

The nature of prejudice is evolving (Schuman et al., 1997). Society is becoming less tolerant of explicit discrimination, which can be seen in revised legal structures (Dovidio & Gaertner, 1986). Moreover, racial stereotypes, particularly those held by White individuals, have become less extreme (Campbell, 1971; Greeley & Sheatsley, 1971; Karlins et al., 1969; Taylor et al., 1978). Despite these changes, bias is still present within intergroup relations, albeit covertly (Dovidio & Gaertner, 1998).

Implicit Bias

Implicit bias is a more complex form of prejudice because of its subtlety (Crosby et al., 1980; Gaertner & Dovidio, 1981). Implicit bias is the unconscious attribution of traits to a particular individual or group (Greenwald & Banaji, 1995). When given little context, White participants tended to associate more positive descriptors (*smart, ambitious, clean*) with the term *Whites*, and negative terms (*stupid, lazy, welfare*) with *Blacks* (Gaertner & McLaughlin, 1983). Gaertner and Dovidio (1986) later explained this behavior by developing the concept of *aversive racism*, which can be understood as a function of implicit bias.

Aversive Racism. Aversive racism (Gaertner & Dovidio, 1986) occurs when someone is outwardly supportive of egalitarian principles, but they unconsciously harbor negative feelings towards marginalized groups. To relieve the cognitive dissonance that occurs during ambiguous situations, aversive racists will use the unconscious influence of their preferences and prejudices (i.e., bias and stereotypes) to rationalize their negative intergroup attitudes and behavior. Several researchers have provided evidence for this phenomenon. For example, von Hippel and colleagues (1997) detailed an increase of fundamental attribution error towards Black individuals in comparison to White individuals when asking White participants to interpret ambiguous films. Studies on aversive racism demonstrate that ambiguous situations justify the reliance on implicit prejudice and subsequent noncooperation with outgroup members. Therefore, social identity and ambiguity both have an influence on bias. This influence may shed light on how a Karen's behavior varies with whom she interacts. We can consider research on outgroup fear (Navarette et al., 2010) and aversive racism (Gaertner & Dovidio, 1986) to understand Amy Cooper's behavior. She had encountered a stereotypically violent double outgroup member in an isolated area. She was motivated to call the police because she was uncertain about Christian's next steps (Fromm, 1947; Kahneman et al., 1982; Tajfel, 1969). The ambiguity of the situation caused her to rely on implicit bias as an attempt to predict his behavior. This would not have been the case if Amy had met another woman, especially a White one, in the park. *Resource dilemmas* can model how people share limited resources and examine how reactions to resource consumption may vary by degree of shared group membership.

Intergroup Bias in the Context of the Resource Dilemma

The tragedy of the unmanaged commons first described the process of the environment's decay, which is influenced by the lack of regulation (Lloyd, 1833/1964). We can now understand the tragedy of the unmanaged commons as a social dilemma called *the resource dilemma* (Hardin, 1968). In a resource dilemma, an individual encounters a resource that is shared and limited. The person must decide whether to act in regard to self or collective interest when withdrawing a portion of the resource. Additionally, individuals must be conscientious of the fact that the resource will need time to replenish.

Social dilemma research (Dawes, 1980, Komorita et al., 1992) found that when in an ongoing social dilemma, in terms of self-interest, it is best for individuals to show noncooperative or competitive behavior (overharvesting, in resource dilemmas specifically). If everyone is noncooperative, then the resource would quickly diminish. Therefore, in terms of collective interest, it is best that all parties cooperate, regardless of group membership, to maintain the resource. Despite this, people still tend to coordinate only with ingroup members during resource dilemmas to ensure resources are allocated equally among the ingroup (De Kwaadsteniet & van Dijk, 2012; Schelling, 1960; Wilke, 1991). There are increased instances of both ingroup favoritism (Bornstein, 2003) and outgroup derogation (Carpenter & Cardenas, 2011) particularly when participants perceive competition over resources.

There are several examples in the media where a White woman has an outburst when sighting an individual, typically a MOC, utilizing a public resource (Nir, 2020). The sight of an outgroup member "exploiting" ingroup resources provokes negative reactions (Tyler, 2012). The severity of these reactions lies in the fact that MOC are considered double outgroup

members on the basis of race and gender, and Karens are unable to frame commonalities in other fundamental group memberships (Roccas & Brewer, 2002; Tajfel & Turner, 1979).

MOC simultaneously experience prejudice and privilege due to their multiple group memberships. In many patriarchal societies, men tend to benefit from institutional male supremacy (Keith, 2017; Phillips & Phillips, 2009). Nonetheless, remnants of former explicit racist and sexist attitudes still impact the likelihood of a MOC's societal success (Coston & Kimmel, 2012; Diamond, 1999; Rohlinger, 2010). For instance, the unique discrimination against Black men is rooted in the historical enslavement of Africans in the United States – one of the first cases of dehumanization of Black individuals. Negative attributions of blame towards Black men may be further influenced by more "acceptable" stereotypes and implicit bias, which becomes particularly salient in ambiguous contexts. Black individuals are already seen as loud, angry, and unintelligent (Fordham, 1993; Ghavami & Peplau, 2013; Hooks, 2004). Men as a whole are typecast as aggressive, thus, the dehumanization of Black men "evokes the 'black brute' archetype, which portrays [them] as apelike savages who use their imposing physical frame to threaten others" (Hester & Gray, 2018, p. 2711; Jackson, 2006). The dehumanization of Black men can explain why these individuals experience greater and harsher negative sanctions in some spaces (such as the courtroom) in comparison to Black women (Lewis & Van Dyke, 2018; The Sentencing Project, 2018).

The current study was designed to explore how White women respond in environments with limited resources where they are uncertain that they would receive a fair share of the resource. Specifically, the study analyzed whether White women have different reactions to

perceived cooperation and defection when interacting with individuals with varying numbers of shared group memberships.

Hypotheses

The present study investigated the factors that influence negative reactions to perceived unfairness in social dilemmas. The following hypotheses regarding Karen reactions and behavior were constructed based on present understanding of how bias and environment impact intergroup relations.

H1a: Sanctions and attributions of perceived cooperative behavior will depend on the number of shared in-groups. Participants will give greater negative sanctions to and use more negative attributions for those who share fewer ingroups.

H1b: Resource withdrawal will depend on the number of shared in-groups. Participants will withdraw greater amounts of the resource when grouped with individuals who share fewer ingroups.

H2a: Sanctions and attributions of perceived cooperative behavior will depend on equal or unequal rates of harvesting in the resource dilemma. Participants will give greater negative sanctions and use more negative attributions when there are unequal harvesting opportunities.

H2b: Resource withdrawal will depend on rates of harvesting in the resource dilemma. Participants will withdraw greater amounts of the resource when there are unequal harvesting opportunities.

H3a: Sanctions and attributions of perceived cooperative behavior will depend on an interaction between the number of shared ingroups and rate of harvesting in the resource dilemma. Participants will give more negative sanctions to and use more negative attributions for those who share fewer ingroups, particularly when there are unequal harvesting opportunities.

H3b: Resource withdrawal will depend on the number of shared ingroups and equal or unequal rates of harvesting in the resource dilemma. Participants will withdraw more of the resource when grouped with individuals who share fewer ingroups, particularly when there are unequal harvesting opportunities.

Method

Design

The purpose of this study was to investigate how group membership and differing harvest rates influence withdrawal, sanctioning and attributions. To examine these effects, we implemented a 2 (race: White or Black) by 2 (gender: man or woman) by 2 (rate of harvesting: equal or unequal) between-subjects experimental design. We used a resource dilemma to create an ambiguous environment and examine withdrawal, sanctions, and attributions. Participants were asked to positively and negatively sanction other individuals who engaged in their resource dilemma. Participants then explained their sanctions by describing others' behavior as ignorant, greedy, or showing concern for others.

Participants

Karens are characterized as middle-aged White American women (Negra & Leyda, 2020). Therefore, the population of interest was White women who were at least 30 years old.

All participants (*N* = 314) were provided by Qualtrics Online Sample. A majority of the participants (*n* = 100) were between the ages of 30 and 41 years. One hundred and seventy-two participants fell in between the ages of 42 and 53 (*n* = 90) and 54 and 65 (*n* = 82). There was minimal representation of women between the ages of 66 and 77 years old (*n* = 36) and the ages of 78 and 89 (*n* = 6).

All participants received $5.00 compensation from the survey provider. In addition, one participant was selected by a computerized randomizer to receive a $50 electronic gift card to Target.

Materials and Measures

Chicago Face Database Photographs

To study how social identity and crossed categorization influenced intergroup relations in social dilemmas, we placed each participant into a group with two other people. These "people" were actually photographs from the Chicago Face Database (CFD; Ma et al., 2015). The photographs were matched on age (the population of interest was White women who were at least 30 years old), attractiveness aggression, baby-facedness, and several facial expressions (angry, fearful, threatening, and trustworthy). This was to prevent any confounding effects from influencing cooperative or noncooperative behavior.

We hypothesized that shared group membership would have an additive effect on withdrawal, sanctioning and attributions. To test these hypotheses, we selected photographs of people who would be considered double ingroup, partial ingroup, and double outgroup members on the basis of race and gender. One member of each group was a White woman,

whose photograph served as a control. Each participant was also randomly assigned to a group with a photograph of another White woman, a White man, a Black woman, or a Black man.

Resource Dilemma

This study adapted the resource dilemma from Kramer and colleagues' work (1986) on social values and cooperative responses. In the present study, the resource was lottery tickets. Each ticket represented one chance in a drawing for a $50 gift card to Target. The more tickets a participant collected, the more chances they would have in the drawing. The rate of depletion was dependent upon how many tickets a participant collected on their turn. Participants were incentivized not to simply hoard tickets on their turn; if there were at least 10 tickets remaining after the collection period, the resource would double, and the participants would have another opportunity to collect more tickets. Visual representations of the depleting ticket pool were available during the resource dilemma (see Appendices A, B, C, and D).

Harvesting Rate Manipulation. Once participants were placed into a group with two "people," everyone was assigned a turn number. Participants were told that the person assigned to turn 1 would withdraw first, the person assigned to turn 2 would collect second, and the third individual would take their turn last. However, the participants would not be aware of who was assigned to turns 1 and 2. We programmed the survey so that participants were always assigned to turn 3, and so that the "people" were assigned to turns 1 and 2. Who was assigned to which turn was unclear. There were 60 tickets available for collection at the start of each resource dilemma (see Appendix A). Every person experienced a conflict of collective- or self-interest when deciding how many tickets to withdraw. If at least 10 tickets remained after turn 3, the number of tickets in the collection pool would double. Everyone

would then have another opportunity to collect tickets. We evoked negative responses toward the other partner's or partners' withdrawal behaviors by randomly assigning participants to the *equal* or *unequal* harvesting condition.

Equal Harvesting Condition. The survey was programmed so that one of the "people" withdrew on the first turn. Participants saw how the number of available tickets went from 60 to 40. On the second turn, the other photograph also withdrew 20 tickets; the collection pool went from having 40 tickets to 20 tickets. Participants were then given the opportunity to take between 0 and 20 tickets for themselves (see Appendix E). Participants were not able to withdraw 20 tickets (like those who were assigned to turns 1 and 2) *and* give the pool a chance to replenish.

Unequal Harvesting Condition. Similar to the equal harvesting condition, participants saw how the person assigned to turn 1 withdrew 20 tickets from the collection pool, leaving 40 available for collection. However, on the second turn, participants saw how the person assigned to turn 2 collected 30 tickets. This meant that the participant would only be able to withdraw between 0 and 10 tickets (see Appendix F). In the unequal harvesting condition, the pool would only replenish if the participant refused to withdraw *any* tickets. While the tickets would double in the next round, the people assigned to turns 2 and 3 would again be at a disadvantage, since there would only be 20 tickets available to share between three people. However, if the participant did decide to take tickets, their odds of winning the drawing in comparison to the photographs would be 2:1 and 3:1.

Sanctions System

This study utilized a sanctions system based on Yamigishi's (1986) measure of sanctions. Participants were asked to reflect on their partners' behavior during the resource dilemma. Participants were asked to penalize one of the participants and reward the other. Penalized partners could have up to 10 tickets removed from their collection to be returned to the collection pool. Up to 10 tickets from this pool could be given to rewarded partners. Participants were asked to give a reason as to why they made their sanctioning decisions.

Attribution Measure

This study evaluated attributions using an adaptation of Van Lange and colleagues' (1988) attribution measure. Van Lange, Liebrand, and Kuhlman created the measure to assess identity-based attributions. Participants again reflected on their partners' behavior during the resource dilemma. The measure helped determine what participants believed were the most probable causes and reasons for the others' behavior. There were a variety of internal, external, positive, and negative attributions. Some items were "[The penalized/rewarded partner] *was distracted by events occurring outside of the experiment*" and "[The penalized/rewarded partner *wanted to gain more than a reasonable share of tickets*."

Procedure

Participants completed the experiment via Qualtrics (see Appendix A for portions of the survey). Upon receiving the anonymous survey link, the participant was given an informed consent form detailing that the following survey seeks to investigate human decision-making. The consent form stated that participants may withdraw from the study at any time without any consequences, outlined the risks and benefits of the study, and provided the contact

information of the researcher and the Northern Arizona University division of the Institutional Review Board.

After consent was given, participants were administered instructions detailing the resource, and how the rate of its depletion is dependent upon the usage from each of the individuals. Participants viewed three examples that demonstrated the withdrawal process. Then, participants responded to three comprehension check questions to ensure that they understood the first task.

Participants were then told that some people would be randomly assigned to upload a photo of themselves wearing a neutral expression. In reality, no one was required to upload a photo. We gave photo upload instructions to provide a legitimate reason for why the four group membership conditions – two double ingroup members (two White women), a partial ingroup member (either a White man or a Black woman) and a double ingroup member, and a double outgroup member (a Black man) and a double ingroup member – were represented by photographs. These photographs would be the "people" with whom participants engaged in the withdrawal task. To further strengthen the illusion that participants are interacting with real players, each member in the group membership conditions had a name (Emily and Sarah, Joe, Jessica, or Michael). All participants provided a pseudonym that they wanted to use as a username for the duration of the study.

Once participants were randomly assigned to one of the four group membership conditions, the computer randomly assigned each person in a group to a turn number for ticket collection. In actuality, each of the human participants were always assigned to be the last to withdraw. This was so that we could study reactions to being placed in the equal or unequal

harvesting opportunity condition. Visual representations of the changes in the resource were available, although the identity of the individual collecting tickets was not. On their turn, participants were presented with a slider detailing that either up to 10 or 20 tickets were available for collection.

Participants were then asked to reflect on how their partners behaved during the collection period. They were presented with the option to penalize (remove up to 10 tickets to be placed back into the collection pool) and reward (give up to 10 tickets from the collection pool) the individuals with whom they were matched. Participants gave brief explanations as to why they selected that partner to penalize or reward.

In addition to sanctioning their partners, participants were asked to complete an attribution measure for both the penalized and rewarded partner. These seven questions explored internal ("[The penalized/rewarded partner] *wanted to give others a chance to win,*" for example) and external (e.g., "[The penalized/rewarded partner] *partner experienced a miscommunication*") attributes that could potentially explain their behavior during the resource dilemma. Participants rated the extent to how much they agreed the attribute properly described their partners on a 5-point Likert scale ranging from *Strongly disagree* to *Strongly agree*. There were also two attention checks in this portion of the survey.

Participants were debriefed after they were administered a series of demographic questions. All instances of deception were mentioned in the debriefing. Participants were also able to enter a true drawing for additional compensation in the form of an electronic $50 gift card to Target. A link to the entry form was listed following the debriefing.

Results

This study investigated how group membership and harvesting rate influence resource withdrawal, sanctioning, and behavioral attributions. To examine the role of group membership, we placed participants into a group of three with two other "participants." One of the fictitious participants was a double ingroup member – in this case, a White woman – the *constant* or *control* partner. The other "participant" was an individual with varying degrees of shared group membership, or the *target* or *manipulated* partner. The manipulated partner could be either a White woman (double ingroup member), a Black woman (partial ingroup member), a White man (partial ingroup member), or a Black man (double outgroup member). To examine the role of harvesting rate, participants engaged in a resource dilemma where up to 10 (unequal harvesting opportunity condition) or 20 (equal harvesting condition) tickets were available for withdrawal. Descriptive statistics about the random assignments can be found in Table 1.

We had three primary hypotheses. We claimed that a.) White women's sanctioning behavior is impacted by the number of shared ingroups and harvesting opportunities, b.) White women's attributional patterns are impacted by the number of shared ingroups and harvesting opportunities, and c.) there is an interaction between the number of shared ingroups and harvesting opportunities on for both dependent variables. Our secondary hypotheses stated that White women's withdrawing behavior is impacted by the number of shared ingroups, harvesting rates, and a combination of these variables.

We conducted seven analyses to study the primary (H1a, H2a, and H3a) and secondary (H1b, H2b, and H3b) hypotheses. We first investigated the secondary hypotheses with a 2 x 2 x

2 factorial ANOVA, as the withdrawal task was the first in the experiment. Next, we investigated the primary hypotheses by first looking at sanctioning patterns with three ANOVAs. First, a 2 x 2 x 2 factorial ANOVA examined how often participants punished or rewarded the target partner. Second, another 2 x 2 x 2 factorial ANOVA analyzed the degree of punishment or reward for the target. We further explored significant differences in the number of tickets removed and given by crossing group memberships and placing them in a one-way ANOVA. Last, we analyzed differences in attributions for the target partners' behaviors using three 2 x 2 x 2 factorial ANOVAs.

Almost all analyses met the assumptions of parametric tests. The data was normally distributed, the sample cases were independent of each other, and the variance or covariance of each group was equal. There was no missing data for any variables used in analysis. Although the dependent variable in the sanction type analysis was not measured on a continuous scale, we retained the 2 x 2 x 2 factorial ANOVA. Alternatives were not conducted because we were not interested in predicting sanction type over a given interval of time (as one would when using a Poisson distribution, for example).

Withdrawal Analysis

To address the secondary hypotheses, we examined how many tickets participants withdrew from the shared pool, on a scale of 0-10 (unequal harvesting opportunity condition) or 0-20 (equal harvesting opportunity condition). For analysis, we created a variable that represented the proportion of tickets participants took to the number of tickets available. Doing so allowed us to directly compare if there were any significant differences in withdrawal across harvesting rate conditions. Additionally, we studied if withdrawal amount was further

impacted by whom (a White woman, a White man, a Black woman, or a Black man) the White women were engaging with in the resource dilemma.

We used a 2 x 2 x 2 independent factorial ANOVA to determine if race (White or Black), gender (man or woman), and/or rate of harvesting (equal or unequal) significantly influenced the number of tickets participants withdrew. Race, gender, and harvesting rate did not have any significant main effects. However, the interaction between race and harvesting opportunity was significant and had a small effect on withdrawal amount, $F(1, 312) = 4.28$, $p = .039$, $\dot{\eta}_p^2 = 0.01$. Participants were more likely to withdraw a greater proportion of tickets when interacting with Black targets ($M = 0.60$, $SD = 0.94$) in comparison to White targets ($M = 0.48$, $SD = 0.60$), particularly when there were unequal harvesting opportunities. The results (see Figure 1) support the third secondary hypothesis; White women's withdrawing behavior is impacted by the number of shared ingroups, but only when less of a shared resource is available.

Sanction Analyses

In the experiment we investigated which and how sanction systems were used. First, we asked participants to select one partner to penalize, and one partner to reward. Then, we asked participants to determine an amount (1 to 10 tickets) to remove from the punished partner. Next, we asked participants to determine an amount (1 to 10 tickets) to give to the rewarded partner. The number of tickets removed and given was independent of one another.

Sanction Type

For the analysis, we coded whether the participants rewarded or punished the target. Because the hypotheses primarily focused on negative sanctions, we recoded rewards as *0* and punishments as *1*. We then used a 2 x 2 x 2 independent factorial ANOVA to determine if race

(White or Black), gender (man or woman), and/or harvesting rate (equal or unequal) significantly influenced the type of sanction (reward or punish) participants used for the target partner.

We first hypothesized that those who shared fewer ingroups with White women would receive more penalties. The results supported the hypothesis, as outgroup members were punished more often than ingroup members. Of note, the higher frequency in punishment was found only on the basis of gender. Gender had a small, significant effect on sanction type, $F(1, 312) = 4.63$, $p = .032$, $\dot{\eta}_p^2 = 0.02$ (see Figure 2). Participants were more likely to punish when the manipulated partner was a man ($M = 0.58$, $SD = 0.85$) than if the manipulated partner was a woman ($M = 0.44$, $SD = 0.67$).

No other main or interaction effects were statistically significant. Thus, we rejected the hypotheses that harvesting, alone or in combination with shared group membership, contributes to how the participants sanctioned the target partners.

Sanction Magnitude

We created a composite variable to study the degree of sanction. This variable ranged on a scale from -10 to 10, where negative values represented the number of tickets participants removed from the target, and where positive values represented the number of tickets participants gave to the target. The magnitude of these values indicated the degree to which the target was sanctioned. Larger absolute values mean that participants gave or took away a greater number of tickets. We used a 2 x 2 x 2 independent factorial ANOVA to determine if race (White or Black), gender (man or woman), and/or rate of harvesting (equal or unequal) significantly influenced how much the participants sanctioned the target partners.

Main Analysis. We first hypothesized that White women would remove more tickets from those who shared fewer ingroups. The main effect of race had a significant and small influence on how much the target was sanctioned, $F(1, 312) = 3.89$, $p < .049$, $\dot{\eta}_p^2 = 0.01$. Participants gave more severe penalties to White targets ($M = -1.22$, $SD = 8.93$) in comparison to Black targets ($M = 0.40$, $SD = 11.48$). The main effect of gender was also significant and had a small effect on the degree of sanctioning, $F(1, 312) = 4.52$, $p < .034$, $\dot{\eta}_p^2 = 0.02$. Participants removed more tickets from targets who were men ($M = -1.29$, $SD = 11.39$) in comparison to targets who were women ($M = 0.46$, $SD = 9.05$). The results (see Table 2 and Figure 3) partially supported the hypothesis, as outgroup members were punished more severely than ingroup members – but only on the basis of gender. In regard to race, participants punished ingroup members more harshly.

We did not find any support for hypotheses 2a or 3a, which described the main effect of harvesting rate and the interaction between shared group membership and harvesting rate, respectively.

Exploratory Analysis. We conducted an exploratory analysis to further examine how race and gender influenced how many tickets were removed from or given to the target. We removed the harvesting variable from this analysis since we previously determined its main and interaction effects were nonsignificant. Instead, we crossed the target race and target gender categories to create a single group membership variable. This allowed us to explore differences between targets who were White women (recoded as *2*, a double ingroup member), White men (recoded as *1*, a racial ingroup member and gender outgroup member), Black women

(recoded as *-1*, a racial outgroup member and gender ingroup member), and Black men (recoded as *-2*, a double outgroup member).

We ran a one-way ANOVA to understand the effects of combined group memberships on sanction magnitude. There were small but significant differences in sanction magnitude between the combined group memberships, $F(3, 310) = 4.59$, $p = .004$, $\acute{\omega}^2 = 0.04$. Overall, participants gave Black women more tickets (see Table 3 and Figure 4), especially in comparison to White men ($M_{diff} = 3.44$, $SE = 0.98$, $p = .003$) and White women ($M_{diff} = 2.77$, $SE = 1.01$, $p = .034$). Participants also gave Black women more tickets in comparison to Black men ($M_{diff} = 2.46$, $SE = 1.15$, $p = .145$), but this magnitude was not statistically significant. In fact, sanction magnitude for Black men was also not significant when compared to White men ($M_{diff} = 0.98$, $SE = 1.14$, $p = .826$) or White women ($M_{diff} = 0.31$, $SE = 1.17$, $p = .994$). Mean differences were also not significant between White women and White men ($M_{diff} = 0.67$, $SE = 1.00$, $p = .908$).

Attribution Analysis

The other primary area of interest was the influence of shared group membership and harvesting opportunity on how White women made attributions for their partners' behaviors. We asked participants to rate how much they agreed with how well seven attributional statements (*wanted to give others a chance to win, was concerned about others in a group, wanted to share tickets in a fair way, experienced a miscommunication, wanted to gain more than a reasonable share, was distracted by events occurring outside of the experiment,* and *did not understand the task*) explained the target and control partners' behavior during the resource dilemma.

Our analyses were based on those Van Lange and colleagues (1988) completed. The attributions were sorted into three factors, *ignorance*, *concern for others*, and *greed*. *Ignorance* included the fourth, sixth, and seventh attributional statements. *Concern for others* was composed of the first, second, and third attributional statements. The fifth statement loaded onto *greed*. We then computed means for each factor.

Sanction type was added as a quasi-independent variable to study the relationship between behavioral and cognitive reactions towards others' resource consumption. We would be able to directly analyze *why* the manipulated partner was sanctioned negatively or positively. Harvesting rate was removed from the analysis so that we could focus more so on *who* was sanctioned. Thus, three separate 2 (race: White, Black) x 2 (gender: man, woman) x 2 (sanction type: punish, reward) ANOVAs studied the impact on attributions. The results can be found in Figure 5.

The first statistical test examined ignorance. Only sanction type was significant, $F(1, 313) = 18.61$, $p < .001$, $\dot{\eta}_p^2 = 0.06$. Participants were more likely to justify penalizing the manipulated partner (in comparison to rewarding, ($M_{diff} = 0.39$, $SE = 0.90$) by claiming that the target was ignorant. Next, we explored concern for others. Sanction type again was the only significant main effect, $F(1, 313) = 9.60$, $p = .002$, $\dot{\eta}_p^2 = 0.03$. Participants were more likely to agree with statements that described concern for others when discussing a rewarded target ($M = 3.33$, $SD = 1.42$) in comparison to a punished target ($M = 2.99$, $SD = 1.40$). Last, we conducted an ANOVA to study greed. Sanction type had a significant and medium effect on the extent to which participants agreed that the target partner wanted to gain more than a fair share, $F(1, 313) =$

17.96, $p < .001$, $\dot{\eta}_p^2 = 0.06$. Targets who were punished ($M = 3.65$, $SD = 1.52$) were more likely to be seen as greedy in comparison to targets who were rewarded ($M = 3.13$, $SD = 1.54$).

Discussion

The present study explored the emotional and behavioral reactions that occur in resource dilemmas and how these reactions varied by environment and degree of shared group membership. We measured how White women withdrew resources. We also examined how White women punished and rewarded other individuals based on how much of the resource they harvested from the shared pool. Last, we analyzed which attributions White women used to explain other individuals' collection behaviors.

The hypotheses were based on Karen behavior, social identity theory, and bias research. Karen behavior can be explained by how these individuals understand identity. Karens limit their understanding of their and others' social identities on arbitrary characteristics, such as race and gender. Therefore, their ingroups can be restricted to those who are also White females. These individuals are then motivated to prevent outgroup members (POC and/or men) from having access to public resources, so that the ingroup can retain its status (Bourhis et al., 1994; Brewer, 1979; Messick & Mackie, 1989; Tajfel et al., 1971).

Because of research on ingroup favoritism and outgroup derogation (Allport, 1954; Brewer, 1999), we first hypothesized that punishment and negative attributions would increase when the participant shared one or no group memberships with the target. The results partially supported this hypothesis, particularly regarding the impact of shared group membership on sanction type. Men were punished more often than women, but there were no racial differences for sanction type. The results of the sanction magnitude analyses did not support

the hypothesis. Those analyses revealed that there were no significant differences in the degree of sanctioning for White women, White men, and Black men. However, participants tended to give Black women the greatest rewards, particularly when compared to White men and women. The results of the attribution analysis also did not support the first hypothesis, as race nor gender had a significant impact on attributions.

Second, we hypothesized that punishment would increase when there were unequal harvesting opportunities. We claimed this because of the further disadvantages presented to the participants in the unequal opportunity condition. None of the results supported this hypothesis; harvesting rate did not have a significant main or interaction effect in the sanction analyses.

The final primary hypothesis investigated the interaction between the number of shared ingroups and harvesting rate. We speculated that the main effects would have an additive effect on punishments and attributions. However, race, gender, and/or harvesting rate did not significantly interact to influence sanctions and attributions.

We revised the attributions analysis to better understand the relationship between sanction type and attributions. We concluded that shared group membership did not influence which type(s) of attributions participants used to describe their partners. The type of sanction did, however. Participants tended to justify punishment using attributions related to ignorance and greed. Participants also said that those who were rewarded had greater concern for others.

Our secondary hypotheses stressed that withdrawal behavior would vary by shared group membership, harvesting rate, and an interaction between the two. We only found support for the third secondary hypothesis. Participants were more likely to withdraw greater

proportions of tickets when grouped with Black women in the unequal harvesting rate condition.

Strengths

This study is statistically and methodically robust in several ways. Many elements of the design strengthened the study's internal and external validity. For one, we adapted the materials, measures, and methodology from influential experiments and theory exploring how identity influences intergroup relations (Dawes, 1998; Dovidio et al., 2010; Kramer et al., 1986; Van Lange et al., 1988; Yamigishi, 1986). The methodology also allowed for the analysis of different evaluations of ingroups, outgroups, and control conditions, which is crucial in social psychology research (Dovidio et al., 2010). Additionally, the data came from a random sample that was demographically reflective of the population of interest (Negra & Leyda, 2020), and was large enough to find a medium effect (Faul et al., 2007). Overall, the study contributed to social psychology by expanding upon previous social identity research and analyzing the impact of multiple, intersecting identities on intergroup relations.

Limitations

The study is limited because the resource dilemma took place in an artificial environment. Social desirability may have weakened the effects of implicit bias. Participants completing the survey online had more time to think about and change their reactions in comparison to real-world, quick reaction contexts typically characteristic of Karen situations. Additionally, demand characteristics may have been at play, particularly during the second task. Participants were forced to penalize or reward either of their partners and may have selected to reward partial or double outgroup members to avoid being seen as discriminatory.

The attribution task was another flaw within the study. There were unequal numbers of attribution questions across factor loadings, which may have contributed to the fact that only harvesting rate influenced negative attribution patterns.

Another major limitation is that the sanction type analysis did not meet the assumptions of parametric tests (the dependent variable was categorical), and yet we conducted a factorial ANOVA. We may have mistakenly retained a null hypothesis because the analyses may have lacked sensitivity because the variable had a limited range.

Societal Implications

We can conclude that participants rewarded Black women the most. It is likely that the participants did not hold aversive racist attitudes and behaviors, as those tend to be pro-White (Gaertner et at., 1997). Therefore, it may be possible that this sample is not reflective of the Karen population since Karens endorse White supremacy (Mishan, 2021; Negra & Leyda, 2020). Given these participants were not Karens, what factors, if not White dominant attitudes, drove their prosocial behavior towards Black women?

Social identity theory can be used to explain why participants favored Black women over White individuals. It is possible that the participants were the most motivated to establish positive distinctiveness. As aforementioned, ingroup members work to ensure that they and outgroup members view the ingroup positively. To be viewed positively, the group must be one that demonstrates teamwork, coordination, and a shared commitment to complete tasks (Bernhard et al., 2006; Festinger et al., 1950). If there are too many ingroup members behaving selfishly, then other ingroup members must hold them accountable. We argue that accountability can be moderated through the *black sheep effect* (Marques et al., 1988).

Marques, Yzerbyt, and Leyens referred to Linville's findings on the complexity-extremity effect (Linville, 1982; Linville & Jones, 1980). Opinions about likeable and unlikeable ingroup members are more extreme than opinions about likeable and unlikeable outgroup members. Specifically, we tend to favor likeable ingroup members over unlikeable outgroup members (similar to what the ingroup favoritism phenomenon proposes). However, the black sheep effect also argues that we show preferential treatment towards likeable outgroup members instead of unlikeable ingroup members. This treatment can be expressed in various ways. We posit that *White guilt* is a strong motivator for showing positive behavior towards racial outgroups.

White guilt is defined as the anxiety White individuals experience when considering their racial group membership and the inherent privileges that come along with it (Steele, 1988; Tatum, 1994). Steele argued that sometimes even the sight of Black and White individuals induces this anxiety, because darker and lighter skin tones remind White individuals of their Whiteness. Other empirical work shows that higher instances of White guilt are related to attitudes that support affirmative action (Swim & Miller, 1999). If we consider Swim and Miller's finding, we can say that the participants were potentially attempting to assuage their White guilt by giving reparations (increased numbers of tickets) to Black women. Participants in the unequal harvesting condition may have been experiencing higher levels of White guilt, as that was the environment where participants withdrew the greatest shares of the resource. They may have recognized how their entitlement was related to their inherent privilege, and demonstrated outgroup generosity as an apologetic gesture. However, the participants did not show the same degree of negative and positive sanctioning behavior towards all Black

participants in the study. Participants could have treated Black men and women differently because of their social identity complexity.

Social identity complexity can also be used to explain the results of the current study. We previously argued that Karens utilize either the dominance or intersection models (Roccas & Brewer, 2002) when attempting to understand their social identity. In the intersection model, Karens consolidate their racial and gender group memberships. However, it is possible that the participants did not integrate their racial and gender group memberships. Instead, they utilized the dominance model to understand their social identity and gave more saliency to their gender. This can be seen in how participants gave more rewards to Black women in comparison to White men. One reason this may be occurring is because Black and White women belong to the same marginalized group.

Gender relations stem primarily from gender roles and gender inequality (Alesina et al., 2011; Buss, 1995; Hrdy, 1997; Lerner, 1986; Shelton & John, 1996). For example, sexual selection fostered the "masculine advantage" and the "feminine disadvantage." The strains of pregnancy left females bound to their homes and unable to learn new skills, such as hunting, lumbering, or smelting (Murdock & Provost, 1973). Division of labor then contributed to women placing more worth on communal values as a compensation strategy (Block et al., 2018). Block and colleagues (2018) noted that endorsing communal values subsequently lead to joining careers that focus on healthcare, early education, or domesticity, which do not have as much societal worth or financial support as those in male-dominated fields (such as politics or science, technology, engineering, or mathematics).

Ingroup members are motivated to prevent the outgroup from having a higher status. If the outgroup has more power and status, then ingroup members would find it difficult to recognize themselves as active or distinct (J. R. Abrams, 2010; J. R. Abrams & Giles, 2007; Belavadi & Hogg, 2023). Negative evaluations of the ingroup can contribute to feelings of uncertainty about the ingroup's role or future (uncertainty-identity theory; Hogg, 2007). People often employ compensation strategies in the form of collective victimhood when facing uncertainty in their social identity. Victimhood rhetoric strengthens intragroup bonds by reminding group members that a.) they have shared experiences/fates and b.) the outgroup is preventing positive distinctiveness (Belavadi & Hogg, 2023). For the participants in the present study, other women are ingroup members, and men belong to the outgroup. Women can be considered victims of the outgroup in today's society. For example, the Supreme Court (in which a majority of the justices are men) recently overturned the *Roe v. Wade* decision. *Roe v. Wade* ruled that a woman's right to an abortion was protected by the U.S. Constitution. With the overturned decision, women with reproductive potential face several negative consequences, such as increased access issues to sexual health services and being forced to carry and care for children from unintended pregnancies (Bearak et al., 2020; Berg & Woods, 2023; Traub et al., 2022).

It is important to note that unlike White women or MOC, women of color (WOC) do not have the privilege to prioritize their gender over their race. Minoritized identities intersect and leave WOC (particularly Black women) at the greatest risk for "double jeopardy" in the spaces they occupy (Almquist, 1975; Beal, 1970; Berhadl & Moore, 2006). It is likely that, because of the shared marginalized social category, the White women in this study may have sympathized

with the Black women targets. This sympathy was further influenced by the increased discrimination WOC experience in comparison to majority men, majority women, and minority men (Berhadl & Moore, 2006).

Conclusions and Directions for Future Research

There have been many instances in the media where a White woman showed discriminatory behavior towards a person of color because they were utilizing a public space. These women and their reactions have become prevalent enough to the point where society has coined the term *Karens*. It is therefore important to provide scientific basis for Karen behavior, as these patterns of implicit and explicit bias emerge in other social spaces, not just parks or grocery stores. It is therefore crucial to study Karens in further detail. Further research will aid in acknowledging societal patterns of implicit biases and covert racism. In doing so, plausible deniability can no longer be used as an excuse that reinforces systematic inequality through White or male privilege.

We did not observe Karen behavior in this study; White women punished other White individuals and rewarded Black women instead. We argued that White guilt may have contributed to that outgroup generosity effect. Although this was not the original goal of the study, it was beneficial that we explored the role White privilege plays in intergroup relations. Explicit and implicit biases continue to contribute to the asymmetrical distribution of resources, status, and power among social groups in the form of racial privilege (Haney-López, 1996; Katznelson, 2005; McIntosh, 1988). However, a small number of social psychologists have studied the full psychology of Whiteness. Most of the research on White individuals solely compares White individuals to other ethnic and racial minorities instead of examining how

Whiteness impacts the understanding of the self (Dovidio & Gaertner, 2010; Frankenberg, 1993; Knowles & Peng, 2005). Understanding the self provides a greater understanding of how multiple social identities intersect to impact interpersonal interactions. When people recognize their wide array of social identities, they classify more individuals as ingroup members and subsequently increase and decrease positive and negative attitudes and behaviors, respectively. Doing so would be a step in the right direction in reducing discrimination.

References

Abrams, D., & Hogg, M. A. (1988). Comments on the motivational status of self-esteem in social identity and intergroup discrimination. *European Journal of Social Psychology, 18*(4)*,* 317-334. https://doi.org/10.1002/ejsp.2420180403

Abrams, J. R. (2010). Asian American television activity: Is it related to outgroup vitality? *International Journal of Intercultural Relations, 34*(6), 541–550. https://doi.org/10.1016/j.ijintrel.2010.08.002

Abrams, J. R., & Giles, H. (2007). Ethnic identity gratifications selection and avoidance by African Americans: A group vitality and social identity gratifications perspective. *Media Psychology, 9*(1), 115–134. https://doi.org/10.1080/15213260709336805

American Psychological Association. (2023). *APA dictionary of psychology.* https://dictionary.apa.org/group

Alesina, A., Giuliano, P., & Nunn, N. (2011). Fertility and the plough. *American Economic Review, 101*(3), 499-503. https://doi.org/10.1257/aer.101.3.499

Allport, G. W. (1954). *The nature of prejudice.* Addison-Wesley.

Almquist, E. M. (1975). Untangling the effects of race and sex: The disadvantaged status of Black women. *Social Science Quarterly, 56*(1), 129 –142.

Astuti, R., Solomon, G. E. A., & Carey, S. (2004). Constraints on conceptual development: A case study of the acquisition of folkbiological and folksociological knowledge in Madagascar. *Monographs of the Society for Research in Child Development, 69*(3), 1-161.

Bar-Tal, D., Chernyak-Hai, L., Schori, N., & Gundar, A. (2009). *A sense of self-perceived collective victimhood in intractable conflicts.* Cambridge University Press.

Bartlett, F. C. (1932). *Remembering: A study in experimental and social psychology*. Cambridge University Press. https://doi.org/10.1017/CBO9780511759185

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin, 117*(3), 497–529. https://doi.org/10.1037/0033-2909.117.3.497

Beal, F. M. (1970). *Double jeopardy: To be Black and female.* Radical Education Project.

Bearak, J., Popinchalk, A., Ganatra, B., Moller, A. -B., Tunçalp, Ö, Beavin, C., Kwok, L., & Alkema, L. Unintended pregnancy and abortion by income, region, and the legal status of abortion: Estimates from a comprehensive model for 1990-2019. *The Lancet Global Health, 8*(9), e1152-e1161. https://doi.org/10.1016/S2214-109X(20)30315-6

Belavadi, S., & Hogg, M. A. (2018). We are victims! How observers evaluate a group's claim of collective victimhood. *Journal of Applied Social Psychology, 48*(12), 651–660. https://doi.org/10.1111/jasp.12555

Belavadi, S., & Hogg, M. A. (2023). If they rise, will we fall? Social identity uncertainty and preference for collective victimhood rhetoric. *Journal of Applied Social Psychology*, 1-9. https://doi.org/10.1111/jasp.12964

Berdahl, J. L., & Moore, C. (2006). Workplace harassment: Double jeopardy for minority women. *Journal of Applied Psychology, 91*(2), 426-436. https://doi.org/10.1037/0021-9010.91.2.426

Berg, J. A., & Woods, N. F. (2023). Overturning Roe v. Wade: Consequences for midlife women's health and well-being. *Women's Midlife Health, 9*(2), 1-6. https://doi.org/10.1186/s40695-022-00085-8

Bernhard, H., Fischbacher, U., & Fehr, E. (2006). Parochial altruism in humans. *Nature, 44*(7105), 912–915. https://doi.org/10.1038/nature04981

Bernstein, D. A., Alison, C. S., Roy, E. J., Scrull, T. K., & Wickens, C. D. (1994). *Psychology.* Houghton Mifflin.

Block, K., Croft, A., & Schmader, T. (2018). Worth less?: Why men (and women) devalue care-oriented careers. *Frontiers in Psychology, 9,* Article 1353. https://doi.org/10.3389/fpsyg.2018.01353

Bornstein, G. (2003). Intergroup conflict: Individual, group, and collective interests. *Personality and Social Psychology Review, 7*(2), 29-145. https://doi.org/10.1207/S15327957PSPR0702_129-145

Bourhis, R. Y., Sachdev, I., & Gagnon, A. (1994). Conducting intergroup research with the Tajfel Matrices: Some methodological notes. In M. Zanna & J. Olson (Eds.). *The psychology of prejudice* (pp. 209-232). Erlbaum Publishers.

Bowles, S. (2006). Group competition, reproductive leveling, and the evolution of human altruism. *Science, 314*(5805), 1569-1572. https://doi.org/10.1126/science.1134829

Brewer, M. B. (1979). In-group bias in the minimal intergroup situation: A cognitive motivational analysis. *Psychological Bulletin, 86,* 307–324. https://doi.org/10.1037/0033-2909.86.2.307

Brewer, M. B. (1991). The social self: On being the same and different at the same time. *Personality and Social Psychology Bulletin, 17*(5), 475-482. https://doi.org/10.1177/0146167291175001

Brewer, M. B. (1997). On the social origins of human nature. In C. McGarty & S. A. Haslam (Eds.), *The message of social psychology* (pp. 54–62). Blackwell.

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

Brewer, M. B., & Kramer, R. M. (1986). Choice behavior in social dilemmas: Effects of social identity, group size, and decision framing. *Journal of Personality and Social Psychology*, *50*(3), 543–549. https://doi.org/10.1037/0022-3514.50.3.543

Buss, D. M. (1995). Psychological sex differences: Origins through sexual selection. *American Psychologist, 50*(3), 164-168. https://doi.org/10.1037/0003-066X.50.3.164

Campbell, A. (1971). *White attitudes toward black people.* University of Michigan, Institute for Social Research. https://doi.org/10.1177/002193477300300310

Caporael, L. R. (1997). The evolution of truly social cognition: The core configurations model. *Personality and Social Psychology Review, 1*(4), 276-298. https://doi.org/10.1207/s15327957pspr0104_1

Carpenter, J., & Cardenas, J. C. (2011). An intercultural examination of cooperation in the commons. *Journal of Conflict Resolution, 55*(4), 632-651. https://doi.org/10.1177/0022002710393922

Castano, E., Paladino, M. -P., Coull, A., & Yzerbyt, V. Y. (2002). Protecting the ingroup stereotype: Ingroup identification and the management of deviant ingroup members. *British Journal of Social Psychology, 41*(3), 365–385. https://doi.org/10.1348/014466602760344269

Chavez, L. (2001). *Covering immigration: Popular images and the politics of the nation.* University of California Press.

Chin, M. G., & McClintock, C. G. (1993). The effects of intergroup discrimination and social values on level of self-esteem in the minimal group paradigm. *European Journal of Social Psychology, 23*(1), 63–75. https://doi.org/10.1002/ejsp.2420230106

Cole, E. R. (2009). Intersectionality and research in psychology. *American Psychologist, 64*(3), 170-180. https://doi.org/10.1037/a0014564

Combahee River Collective. (1995). Combahee River Collective statement. In B. Guy-Sheftall (Ed.), *Words of fire: An anthology of African American feminist thought* (pp. 232–240). New Press.

Coston, B. M., & Kimmel, M. (2012). Seeing privilege where it isn't: Marginalized masculinities and the intersectionality of privilege. *Journal of Social Issues, 68*(1), 97-111. https://doi.org/10.1111/j.1540-4560.2011.01738.x

Crenshaw, K. (1989). Demarginalizing the intersection of race and sex: A black feminist critique of antidiscrimination doctrine, feminist theory and antiracist politics. *University of Chicago Legal Forum, 1*(8), 139-167.

Crisp, R. J., & Hewstone, M. (2000). Crossed categorization and intergroup bias: The moderating roles of intergroup and affective context. *Journal of Experimental Social Psychology, 36*(4), 357-383. https://doi.org/10.1006/jesp.1999.1408

Crisp, R. J., & Hewstone, M. (2016). Differential evaluations of crossed category groups: Patterns, processes, and reducing intergroup bias. *Group Processes and Intergroup Relations, 2*(4), 307-333. https://doi.org/10.1177/1368430299024001

Crosby, F., Bromley, S., & Saxe, L. (1980). Recent unobtrusive studies of Black and White discrimination and prejudice: A literature review. *Psychological Bulletin, 87*(3)*,* 546-563. https://doi.org/10.1037/0033-2909.87.3.546

Darwin, C. (1871). *The descent of man and selection in relation to sex*. John Murray. https://doi.org/10.1037/12293-000

Dawes, R. M. (1980). Social dilemmas. *Annual Review of Psychology, 31,* 169-193. https://doi.org/10.1146/annurev.ps.31.020180.001125

Dawes, R. M. (1998). Behavioral decision making and judgment. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (pp. 497–548). McGraw-Hill.

De Kwaadsteniet, E. W., & van Dijk, E. (2012). A social-psychological perspective on tacit cooperation: How it works, when it works, (and when it does not). *European Review of Social Psychology, 23*(1), 187-223. https://doi.org/10.1080/10463283.2012.718136

Diamond, J. (1999). *Guns, germs, and steel: The fates of human societies.* W.W. Norton and Company.

DiMaggio, P. (1997). Culture and cognition. *Annual Review of Sociology, 23*(1), 263–287. https://doi.org/10.1146/annurev.soc.23.1.263

Doosje, B., Haslam, S. A., Spears, R., Oakes, P. J., & Koomen, W. (1998). The effect of comparative context on central tendency and variability judgements and the evaluation of group characteristics. *European Journal of Social Psychology*, *28*(2), 173-184. https://doi.org/10.1002/(SICI)1099-0992(199803/04)28:2<173::AID-EJSP862>3.0.CO;2-Z

Dovidio, J. F., & Gaertner, S. L. (1981). The effects of race, status, and ability on helping behavior. *Social Psychology Quarterly, 44*(3), 193-203. https://doi.org/10.2307/3033833

Dovidio, J. F., & Gaertner, S. L. (1998). On the nature of contemporary prejudice: The causes, consequences, and challenges of aversive racism. In J. Eberhardt & S. T. Fiske (Eds.), *Confronting racism: The problem and the response* (pp. 3-32). SAGE Publications.

Dovidio J. F., & Gaertner S. L. (2010). Intergroup bias. In S. T. Fiske, D. T. Gilbert, & G. Lindzey (Eds.), *Handbook of social psychology* (pp. 1084–1121). Wiley. https://doi.org/10.1002/9780470561119.socpsy002029

Dovidio, J. F., Hewstone, M., Glick, P., & Esses, V. (2010). *Prejudice, stereotyping and discrimination: Theoretical and empirical overview.* SAGE Publications. https://doi.org/10.4135/9781446200919

Dovidio, J. F., Kawakami, K., & Gaertner, S. L. (2000). Reducing contemporary prejudice: Combating explicit and implicit bias at the individual and intergroup level. In S. Oskamp (Ed.), *Reducing prejudice and discrimination* (pp. 137-163). Lawrence Erlbaum Associates Publishers.

Eggen, P., & Kauchak, D. (1999). *Educational psychology.* Merrill.

Epstein, S. (1973). The self-concept revisited: Or a theory of a theory. *American Psychologist, 28*(5), 404-416. https://doi.org/10.1037/h0034679

Esses, V. M., Haddock, G., & Zanna, M. P. (1993). Values, stereotypes, and emotions as determinants of intergroup attitudes. In D. M. Mackie & D. L. Hamilton (Eds), *Affect, cognition and stereotyping: Interactive processes in group perception* (pp. 137–166). Academic Press.

Esses, V. M., Haddock, G., & Zanna, M. P. (1994). The role of mood in the expression of intergroup stereotypes. In M. P. Zanna & J. M. Olson (Eds.), *The psychology of prejudice* (pp. 77-101). Lawrence Erlbaum Associates.

Faul, F., Erdfelder, E., Lang, A. G. & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods, 39*(2), 175-191. https://doi.org/10.3758/bf03193146

Fazio, R. H., Jackson, J. R., Dunton, B. C., & Williams, C. J. (1995). Variability in automatic activation as an unobtrusive measure of racial attitudes: A bona fide pipeline? *Journal of Personality and Social Psychology, 69*(6), 1013–1027. https://doi.org/10.1037/0022-3514.69.6.1013

Fehr, E., & Gächter, S. (2000a). Cooperation and punishment in public goods experiments. *The American Economic Review, 90*(4), 980-994. https://doi.org/10.1257/aer.90.4.980

Fehr, E., & Gächter, S. (2000b). Fairness and retaliation: The economics of reciprocity. J*ournal of Economic Perspectives, 14*(3), 159-181. https://doi.org/10.1257/jep.14.3.159

Festinger, L., Schachter, S., & Back, K. (1950). *Social pressures in informal groups: A study of human factors in housing.* Harper.

Fiske, S. T., Cuddy, A. J., Glick, P., & Xu, J. (2002). A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition. *Journal of Personality and Social Psychology, 82*(6), 878-902. https://doi.org/10.1037/0022-3514.82.6.878

Ford, T. E., & Stangor, C. (1992). The role of diagnosticity in stereotype formation: Perceiving group means and variances. *Journal of Personality and Social Psychology*, *63*(3), 356-367. https://doi.org/10.1037/0022-3514.63.3.356

Fordham, S. (1993). "Those loud Black girls": (Black) women, silence, gender "passing" in the academy. *Anthropology and Education Quarterly, 24*(1), 3-32. https://doi.org/10.1525/aeq.1993.24.1.05x1736t

Frankenberg, R. (1993). *White women, race matters: The social construction of Whiteness*. University of Minnesota Press.

Frey, D., & Gaertner, S. L. (1986). Helping and the avoidance of inappropriate interracial behavior: A strategy that can perpetuate a non-prejudiced self-image. *Journal of Personality and Social Psychology, 50,* 1083–1090. https://doi.org/10.1037/0022-3514.50.6.1083

Fromm, E. (1947). *Man for himself: An inquiry into the psychology of ethics.* Rinehart.

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

Gaertner, S. L., Dovidio, J. F., Banker, B., Rust, M., Nier, J., Mottola, G., & Ward, C. (1997). Does racism necessarily mean anti-blackness? Aversive racism and pro-whiteness. In M. Fine, L. Powell, L. Weiss, & M. Wong (Eds.), *Off white* (pp. 167-178). Routledge.

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

Gardner, R. C. (1993). Stereotypes as consensual beliefs. In M. P. Zanna & J. M. Olson (Eds.), *The psychology of prejudice* (pp. 1-31). Erlbaum.

Ghavami, N., & Peplau, L. A. (2013). An intersectional analysis of gender and ethnic stereotypes: Testing three hypotheses. *Psychology of Women Quarterly, 37*(1)*,* 113-127. https://doi.org/10.1177/0361684312464203

Goldman, M., Stockbauer, J. W., & McAuliffe, T. G. (1977). Intergroup and intragroup competition and cooperation. *Journal of Experimental Psychology, 13*(1), 81-88. https://doi.org/10.1016/0022-1031(77)90015-4

Graff, A. (2020, August 18). *Woman filmed hurling racist insults, breaking COVID rules at Dolores Park.* SFGATE. https://www.sfgate.com/bayarea/article/Dolores-Park-video-racist-viral-San-Francisco-15493837.php

Greeley, A. M., & Sheatsley, P. B. (1971). Attitudes toward racial integration. *Scientific American, 255*(6), 13-19.

Greenwald, A. G., & Banaji, M. R. (1995). Implicit social cognition: Attitudes, self-esteem, and stereotypes. *Psychological Review, 102*(1), 4-27. https://doi.org/10.1037/0033-295X.102.1.4

Greenwald, A. G., & Pettigrew, T. F. (2014). With malice toward none and charity for some: Ingroup favoritism enables discrimination. *American Psychologist, 69*(7), 669–684. https://doi.org/10.1037/a0036056

Hamilton, D. L., & Sherman, J. W. (1994). Stereotypes. In R. S. Wyer & T. K. Srull (Eds.), *Handbook of social cognition* (pp. 1-68). Lawrence Erlbaum.

Haney-López, I. (1996). *White by law: The legal construction of race*. New York University Press.

Hardin, G. (1968). The tragedy of the commons. *Science, 162*(3859), 1243-1248.

Heine, S. J, Foster, J-A, B., & Spina, R. (2009). Do birds of a feather universally flock together? Cultural variation in the similarity-attraction effect. *Asian Journal of Social Psychology*, *12*(4), 247–258. https://doi.org/10.1111/j.1467-839X.2009.01289.x

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

Hewstone, M. (1990). The "ultimate attribution error"? A review of the literature on intergroup attributions. *European Journal of Social Psychology, 20*(4), 311–335. https://doi.org/10.1002/ejsp.2420200404

Hilton, J. L., & von Hippel, S. (1996). Stereotypes. *Annual Review of Psychology, 47*, 237-271. https://doi.org/10.1146/annurev.psych.47.1.237

Hinkle, S., & Brown, R. (1990). Intergroup comparisons and social identity: Some links and lacunae. In D. Abrams & M. A. Hogg (Eds.), *Social identity theory: Construction and critical advances* (pp. 48–70). Harvester Wheatsheaf.

Hogg, M. A. (2003). Social identity. In M. R. Leary & J. P. Tangney (Eds.), *Handbook of self and identity* (pp. 462–479). Guilford Press.

Hogg, M. A. (2007). Uncertainty-identity theory. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (pp. 69–126). Elsevier Academic Press. https://doi.org/10.1016/S0065-2601(06)39002-8

Hogg, M. A., & Abrams, D. (1990). Social motivation, self-esteem and social identity. In D. Abrams & M. A. Hogg (Eds.), *Social identity theory: Constructive and critical advances* (pp. 28-47). Harvester Wheatsheaf.

Hooks, B. (2004). *We real cool: Black men and masculinity*. Routledge.

Hrdy, S. B. (1997). Raising Darwin's consciousness. *Human Nature, 8*(1), 1-49.

Imada, H., Ito, A., Hopthrow, T., Abrams, D., Yansen, D., Willcox, K., & Rumble, A. C. (2023). Intergroup cooperation under crossed categorization. *Comprehensive Results in Social Psychology.* (Stage I revise and resubmit, accepted in principle).

Jackson, R. L. (2006). *Scripting the black masculine body: Identity, discourse, and racial politics in popular media*. SUNY Press.

Jones, J. M. (1972). *Prejudice and racism.* Addison-Wesley.

Kahneman, D., Slovic, P., & Tversky, A. (1982). *Judgment under uncertainty: Heuristics and biases.* Cambridge University Press.

Karlins, M., Coffman, T. L., & Walters, G. (1969). On the fading of social stereotypes: Studies in three generations of college students. *Journal of Personality and Social Psychology, 13*(1), 1-16. https://doi.org/10.1037/h0027994

Katznelson, I. (2005). *When affirmative action was White: An untold history of racial inequality in twentieth-century America*. W.W. Norton.

Keith, T. (2017). *Masculinities in contemporary American culture: An intersectional approach to the complexities and challenges of male identity.* Routledge.

Knowles E. D., & Peng K. (2005). White selves: Conceptualizing and measuring a dominant-group identity. *Journal of Personality and Social Psychology, 89*(2), 223–241. https://doi.org/10.1037/0022-3514.89.2.223

Komorita, S. S., Parks, C. D., & Hubert, L. G. (1992). Reciprocity and the induction of cooperation in social dilemmas. *Journal of Personality and Social Psychology, 62*(4), 607-617.

Kosterman, R., & Feshbach, S. (1989). Toward a measure of patriotic and nationalistic attitudes. *Political Psychology, 10*(2)*,* 257–274. https://doi.org/10.2307/3791647

Kramer, R. M., McClintock, C. G., & Messick, D. M. (1986). Social values and cooperative response to a simulated resource conservation crisis. *Journal of Personality, 54*(3), 576-592. https://doi.org/10.1111/j.1467-6494.1986.tb00413.x

Lemyre, L., & Smith, P. M. (1985). Intergroup discrimination and self-esteem in the minimal group paradigm. *Journal of Personality and Social Psychology, 49*(3), 660–670. https://doi.org/10.1037/0022-3514.49.3.660

Lerner, G. (1986). *The creation of patriarchy.* Oxford University Press.

Lewis, T. T., & Van Dyke, M. E. (2018). Discrimination and the health of African Americans: The potential importance of intersectionalities. *Current Directions in Psychological Science, 27*(3), 176-182. https://doi.org/10.1177/0963721418770442

Linville, P. W. (1982). The complexity-extremity effect and age-based stereotypes. J*ournal of Personality and Social Psychology, 42*(2), 193-211. https://doi.org/10.1037/0022-3514.42.2.193

Linville, P. W., & Jones, E. E. (1980). Polarized appraisals of outgroup members. *Journal of Personality and Social Psychology, 38*(5), 689-703. https://doi.org/10.1037/0022-3514.38.5.689

Lloyd, W. F. (1833). *Two lectures on the checks to population*. Oxford Press. (Reprinted from Population, evolution, and birth control, p. 37, by G. Hardin, Ed., 1964, Freeman Publications)

Ma, D. S., Correll, J., & Wittenbrink, B. (2015). The Chicago face database: A free stimulus set of faces and norming data. *Behavior Research Methods, 47*(4)*,* 1122–1135.

Mackie, D. M., & Smith, E. R. (1998). Intergroup relations: Insights from a theoretically integrative approach. *Psychological Review, 105*(3), 499–529. https://doi.org/10.1037/0033-295X.105.3.499

Marques, J. M., Yzerbyt, V. Y., & Leyens, J. -P. (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

Maslow, A. H. (1943). A theory of human motivation. *Psychological Review, 50*(4), 370–396. https://doi.org/10.1037/h0054346

McConahay, J. B., & Hough Jr., J. C. (1976). Symbolic racism. *Journal of Social Issues, 32*(2), 23–45. https://doi.org/10.1111/j.1540-4560.1976.tb02493.x

McIntosh, P. (1988). White privilege: Unpacking the invisible knapsack. In P. S. Rothbenberg (Ed.), *Race, class, and gender in the United States: An integrated study* (pp. 188–192). Worth.

Messick, D. M., Brewer, M. B. (1983). Solving social dilemmas: A review. In L. Wheeler (Ed.), *Review of personality and social psychology* (pp. 11-44). SAGE Publications.

Messick, D. M., & Mackie, D. M. (1989). Intergroup relations. *Annual Review of Psychology, 40*, 45-81. https://doi.org/10.1146/annurev.ps.40.020189.000401

Mishan, L. (2021, August 12). *March of the Karens.* New York Times. https://www.nytimes.com/2021/08/12/t-magazine/white-women-karen.html

Mummendey, A., & Otten, S. (2001). Aversive discrimination. In R. Brown & S. L. Gaertner (Eds.), *Blackwell handbook of social psychology: Intergroup processes* (pp. 112–132). Blackwell.

Mummendey, A., Simon, B., Dietze, C., Grunert., M., Haeger, G., Kessler, S., Lettgen, S., & Schaferhoff, S. (1992). Categorization is not enough: Intergroup discrimination in negative outcome allocations. *Journal of Experimental Social Psychology, 28,* 125–144.

Mummendey, A., & Wenzel, M. (1999). Social discrimination and tolerance in intergroup relations: Reactions to intergroup difference. *Personality and Social Psychology Review, 3*(2)*,* 158–174. https://doi.org/10.1207/s15327957pspr0302_4

Mullen, B., Migdal, M. J., & Hewstone, M. (2001). Crossed categorization versus simple categorization and intergroup evaluations: A meta-analysis. *European Journal of Social Psychology, 31*(6), 721-736. https://doi.org/10.1002/ejsp.60

Murdock, G.P., & Provost, C. (1973). Factors in the division of labor by sex: A cross-cultural analysis. *Ethnology, 12*(2), 203-225.

Myers, D. G. (1993). *Social psychology*. McGraw-Hill.

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

Negra, D., & Leyda, J. (2020). Querying 'Karen': The rise of the angry white woman. *European Journal of Cultural Studies, 24*(1), 350-357. https://doi.org/10.1177/1367549420947777

Ngai, M. A. (2005). Impossible subjects: Illegal aliens and the making of modern America. Princeton University Press.

Nill, A. C. (2011). Latinos and S.B. 1070: Demonization, Dehumanization, and Disenfranchisement. *Harvard Latino Review, 14*(1), 35-66.

Nir, S. M. (2020, June 14). *How 2 lives collided in Central Park, rattling the nation.* New York Times. https://www.nytimes.com/2020/06/14/nyregion/central-park-amy-cooper-christian-racism.html

Nosek, B. A., Hawkins, C. B., & Frazier, R. S. (2011). Implicit social cognition: From measures to mechanisms. *Trends in Cognitive Sciences, 15*(4), 152-159. https://doi.org/10.1016/j.tics.2011.01.005

Noor, M., Vollhardt, J. R., Mari, S., & Nadler, A. (2017). The social psychology of collective victimhood. *European Journal of Social Psychology*, *47*(2), 121–134. https://doi.org/10.1002/ejsp.2300

Oakes, P. J., & Turner, J. C. (1980). Social categorization and intergroup behaviour: Does minimal intergroup discrimination make social identity more positive? *European Journal of Social Psychology, 10*(3), 295–301. https://doi.org/10.1002/ejsp.2420100307

Palla, G., Barabasi, A. L., & Vicsek, T. (2007). Quantifying social group evolution. *Nature, 446*(7136)*,* 664–667. https://doi.org/10.1038/nature05670

Payne, B. K. (2001). Prejudice and perception: The role of automatic and controlled processes in misperceiving a weapon. *Journal of Personality and Social Psychology, 81*(2), 181-192. https://doi.org/10.1037/0022-3514.81.2.181

Pérez-Peña, R. (2017, January 17). *Woman linked to 1955 Emmett Till murder tells historian her claims were false.* New York Times. https://www.nytimes.com/2017/01/27/us/emmett-till-lynching-carolyn-bryant-donham.html

Pettigrew, T. F. (1979). The ultimate attribution error: Extending Allport's cognitive analysis of prejudice. *Personality and Social Psychology Bulletin*, *5*(4), 461-476.

Pettigrew, T. F., & Meertens, R. W. (1995). Subtle and blatant prejudice in western Europe. *European Journal of Social Psychology, 25*(1)*,* 57–75. https://doi.org/10.1177/014616727900500407

Phillips, D. A., & Phillips, J. R. (2009). Male privilege. In J. O'Brien (Ed.), *Encyclopedia of gender and society* (pp. 683-685). SAGE Publications.

Piaget, J. (1952). *The origins of intelligence in children.* (M. Cook, Trans.). W.W. Norton & Company.

Rabinovich, A., & Morton, T. A. (2011). Subgroup identities as a key to cooperation within large social groups. *British Journal of Social Psychology, 50*(1), 36–51. https://doi.org/10.1348/014466610X486356

Rand, D. G., Pfeiffer, T., Dreber, A., Sheketoff, R. W., Wernerfelt, N. C., & Benkler, Y. (2009). Dynamic remodeling of in-group bias during the 2008 presidential election. *Proceedings*

of the National Academy of Sciences of the United States of America, 106(15), 6187–6191. https://doi.org/10.1073/pnas.0811552106

Roccas, S., & Brewer, M. B. (2002). Social identity complexity. *Personality and Social Psychology Review, 6*(2), 88-106. https://doi.org/10.1207/S15327957PSPR0602_01

Rogers, C. R. (1951). *Client-centered therapy: Its current practice, implications and theory.* Houghton Mifflin.

Rohlinger, D. A. (2010). Privilege. In G. Ritzer & J. M. Ryan (Eds.), The concise encyclopedia of sociology (pp. 473-474). John Wiley & Sons.

Rusch, H. (2014). The evolutionary interplay of intergroup conflict and altruism in humans: A review of parochial altruism theory and prospects for its extension. *Proceedings of the Royal Society B*, 281. https://doi.org/10.1098/rspb.2014.1539

Schelling, T. C. (1960). *The strategy of conflict.* Harvard University Press.

Schuman, H., Steeh, C., Bobo, L., & Krysan, M. (1997). *Racial attitudes in America: Trends and interpretations.* Harvard University Press.

Shelton, B. A., & John, D. The division of household labor. *Annual Review of Sociology, 22*(1), 299-322.

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

Stangor, C., Sullivan, L. A., & Ford, T. E. (1991). Affective and cognitive determinants of prejudice. *Social cognition*, *9*(4), 359-380. https://doi.org/10.1521/soco.1991.9.4.359

Steele, S. (1988). I'm Black, you're White, who's innocent? *Harper's Magazine*, *276*, 45-53.

Sumner, W. G. (1906). *Folkways.* Ginn.

Swim, J. K., & Miller, D. L. (1999). White guilt: Its antecedents and consequences for attitudes toward affirmative action. *Personality and Social Psychology Bulletin, 25*(4), 500-514. https://doi.org/10.1177/0146167299025004008

Tajfel, H. (1969). Cognitive aspects of prejudice. *Journal of Social Issues, 25*(4), 79–97. https://doi.org/10.1111/j.1540-4560.1969.tb00620.x

Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33-37). Brooks/Cole.

Tajfel, H., Bilig, 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

Tatum, B. D. (1994). Teaching White students about racism: The search for White allies and the restoration of hope. *Teachers College Record, 95*(4), 462–476.

Taylor, D. G., Sheatsley, P. B., & Greeley, A. M. (1978). Attitudes toward racial integration. *Scientific American, 238*(6), 42-49. https://doi.org/10.1038/scientificamerican0678-42

The Sentencing Project (2018). *Report to the United Nations on racial disparities in the U.S. criminal justice system.* https://docs.google.com/document/d/1nJKCnIPQGii61dbUT_mZLoahsuTqGu1OadBeSyHWzXw/edit#

Traub, A. M., Mermin-Bunnell, K., Pareek, P., Williams, S., Connell, N. B., Kawwass, J. F., & Cwiak, C. (2022). The implications of overturning *Roe v. Wade* on medical education and future physicians. *The Lancet Regional Health, 14*(100334), 1-3. https://doi.org/10.1016/j.lana.2022.100334

Turner, J. C. (1975). Social comparison and social identity: Some prospects for intergroup behaviour. *European Journal of Social Psychology*, *5*(1), 5–34. https://doi.org/10.1002/ejsp.2420050102

Turner, J. C. (1996). Henri Tajfel: An introduction. In W. P. Robinson (Ed.), *Social groups and identities: Developing the legacy of Henri Tajfel* (pp. 1-23). Butterworth-Heinemann.

Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). *Rediscovering the social group: A self-categorization theory.* Basil Blackwell.

Tyler, T. R. (2012). Justice and effective cooperation. *Social Justice Research, 25*(4), 355-375. https://doi.org/10.1007/s11211-012-0168-5

Van Lange, P. A. M., Liebrand, W. B. G., & Kuhlman, D. M. (1988). Causal attribution of choice behavior in three n-person prisoner's dilemmas. *Journal of Experimental Social Psychology, 26*, 34-48.

Vohs, K. D., Baumeister, R. F., & Chin, J. (2007). Feeling duped: Emotional, motivational, and cognitive aspects of being exploited by others. *Review of General Psychology, 11*(2), 127-141. https://doi.org/10.1037/1089-2680.11.2.127

Von Hippel, W., Jonides, J., Hilton, J. L., & Narayan, S. (1993). Inhibitory effect of schematic processing on perceptual encoding. *Journal of Personality and Social Psychology*, *64*(6), 921-935. https://doi.org/10.1037/0022-3514.64.6.921

Von Hippel, W., Sekaquaptewa, & Vargas, P. T. (1997). The linguistic intergroup bias as an implicit indicator of prejudice. *Journal of Experimental Social Psychology, 33*(5), 490-509. https://doi.org/10.1006/jesp.1997.1332

Weber, J. G. (1994). The nature of ethnocentric attribution bias: Ingroup protection or enhancement? *Journal of Experimental Social Psychology*, *30*(5), 482–504. https://doi.org/10.1006/jesp.1994.1023

Wilke, H. A. (1991). Greed, efficiency and fairness in resource management situations. *European Review of Social Psychology, 2*(1), 165-187.

Wilson, E. O. (1979). *On human nature.* Harvard University Press.

Yamagishi, T. (1986). The provisions of a sanctioning system as a public good. *Journal of Personality and Social Psychology*, *51*(1), 110-116. https://doi.org/10.1037/0022-3514.51.1.110

Table 1

Target Race, Target Gender, and Harvesting Rate Condition Frequencies

	n	%
Condition		
Harvesting Type		
Equal	159	50.60
Unequal	155	49.40
Race		
White	174	55.40
Black	140	44.60
Gender		
Woman	169	53.80
Man	145	46.20
Race × *Gender*		
White Woman	81	25.80
White Man	93	29.60
Black Woman	88	28.00
Black Man	52	16.60

Note. The survey was programmed so that each condition would be randomly and evenly distributed to participants.

Table 2

Descriptive Statistics for Main Sanction Magnitude Analysis

	M	*SD*	*p*	$\dot{\eta}_p^2$
Race			.049	0.01
White	-1.22	8.93		
Black	0.39	11.48		
Gender			.034	0.02
Woman	0.46	9.05		
Man	-1.29	11.39		

Note. Results from the 2 x 2 x 2 factorial ANOVA examining sanction magnitude are displayed. Race and gender had significant main effects at $p < .050$. Racial ingroup and gender outgroup members received harsher penalties.

Table 3

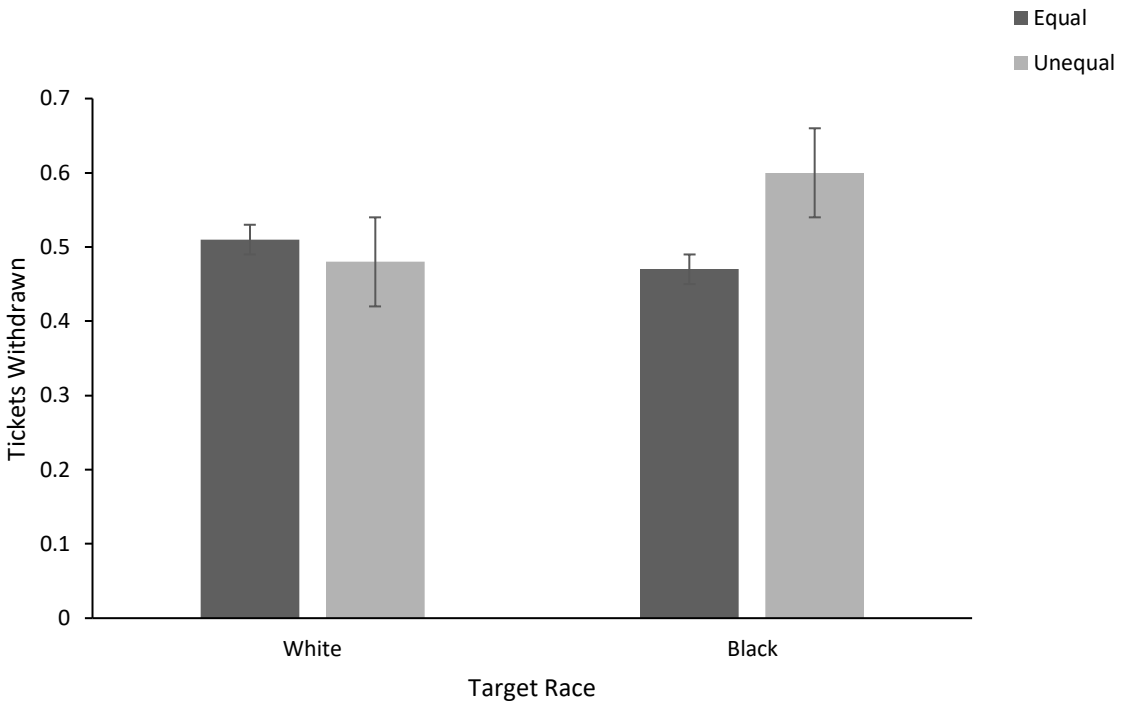
Means and Standard Deviations for Exploratory Sanction Magnitude Analysis

	Race	
	M (SD)	M (SD)
Gender	White	Black
Woman	-0.85 (13.08) [a]	1.78 (12.53) [b]
Man	-1.59 (12.16) [a]	-0.98 (19.24) [a, b]

Note. Means with different superscripts differ at $p < .050$ (*Post hoc,* Tukey).

Figure 1

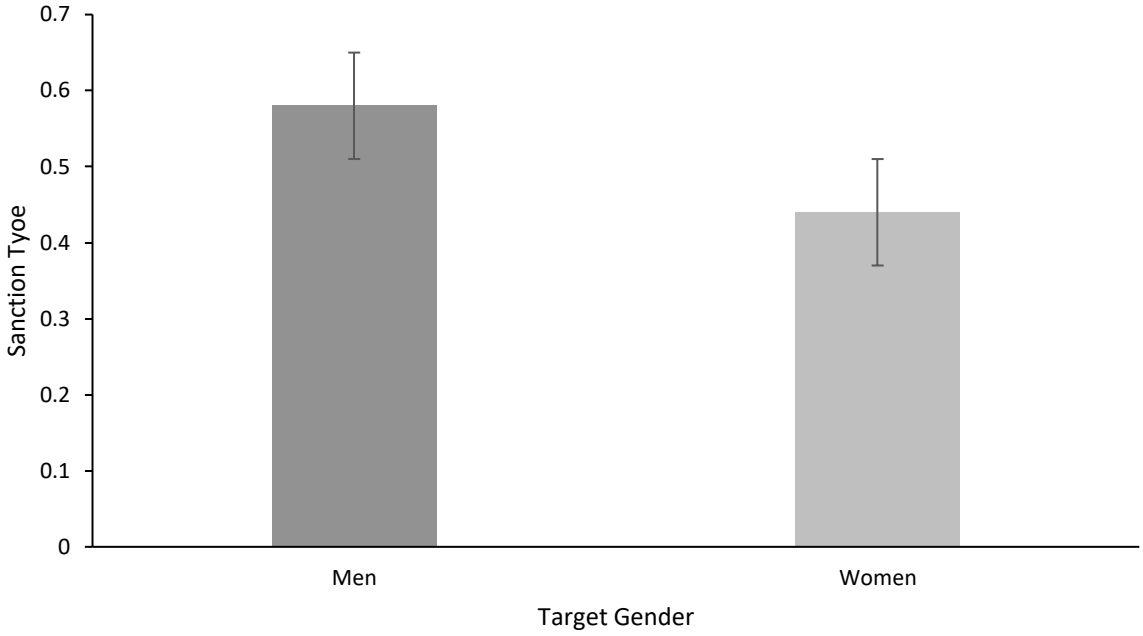
Tickets Withdrawn by the Interaction between Target Race and Harvesting Rate



Note. Means and standard errors are depicted for how the proportion of tickets withdrawn varied by an interaction between target race and harvesting rate. Significant pairwise comparisons indicated that this effect was driven by the Black woman condition.

Figure 2

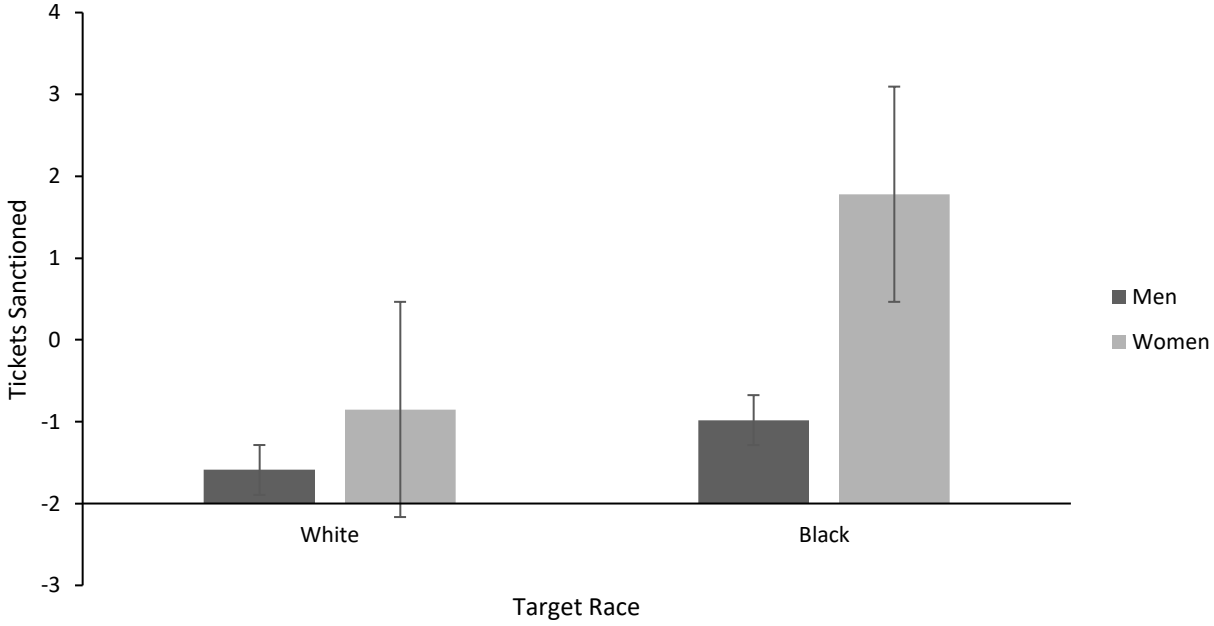
Sanction Type by Target Gender



Note. Means and standard error are depicted for how the sanction type varied by target gender. Values closer to 0 represent more positive sanctions. Values closer to 1 represent more negative sanctions.

Figure 3

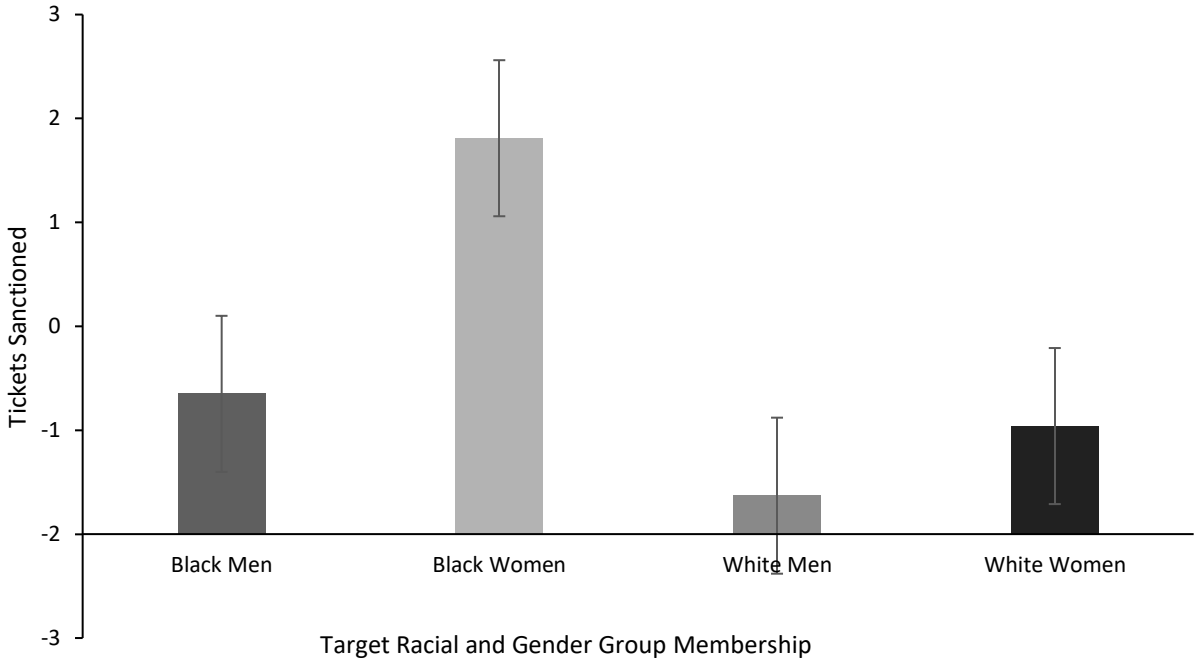
Sanction Magnitude by Target Race and Target Gender



Note. Means and standard error are depicted for how the sanction magnitude varied by target gender and target race. More positive values mean the participant rewarded more tickets. More negative values mean the participant removed more tickets.

Figure 4

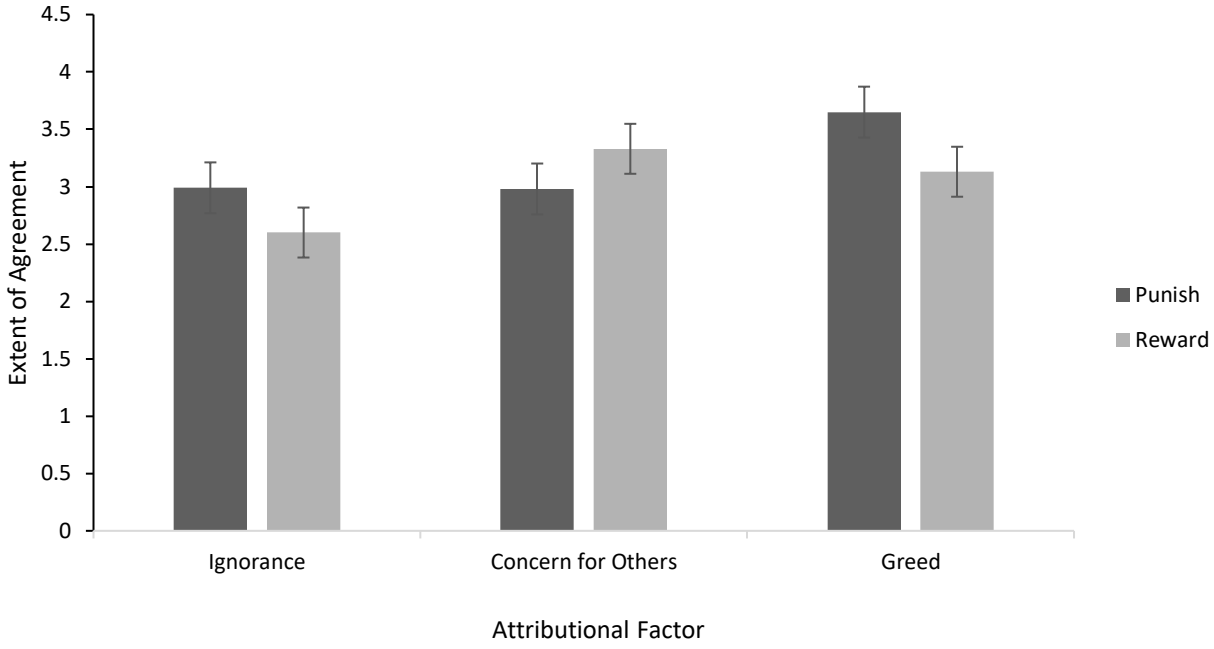
Sanction Magnitude by Crossed Target Race and Gender



Note. Means and standard error are depicted for how the number of tickets sanctioned varied by level of crossed categorization. More positive values mean the participant rewarded more tickets. More negative values mean the participant removed more tickets.

Figure 5

Attributions for Ignorance, Concern for Others, and Greed by Sanction Type



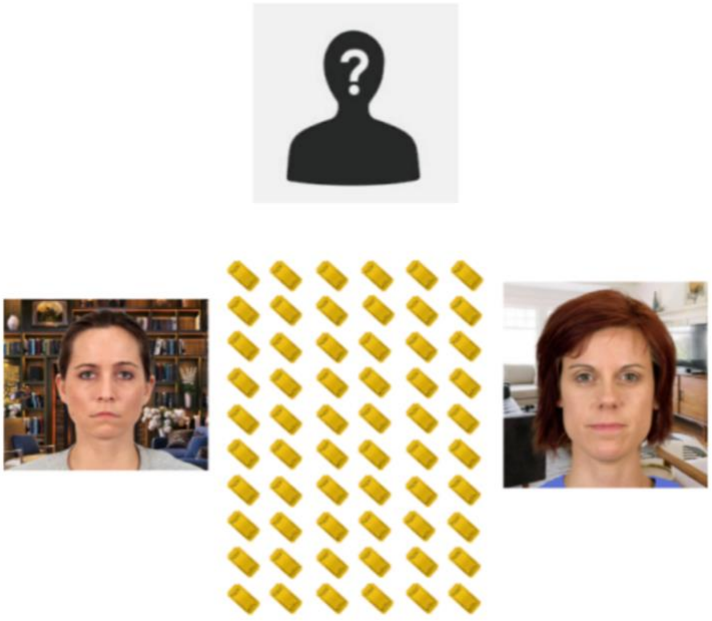
Note. Means and standard error are depicted for how much participants agreed, on average, with each attributional factor loading, and how these values varied by sanction type. Greater values mean a greater extent of agreement.

Appendix A

Beginning of the Resource Dilemma

In the Qualtrics survey, one of the tasks participants were administered was to withdraw the resource. Participants engaged in a resource dilemma with two other people. These people were photographs from the CFD. In this example, both photographs depicted a double ingroup member. At the start of the resource dilemma, 60 tickets were available for collection.

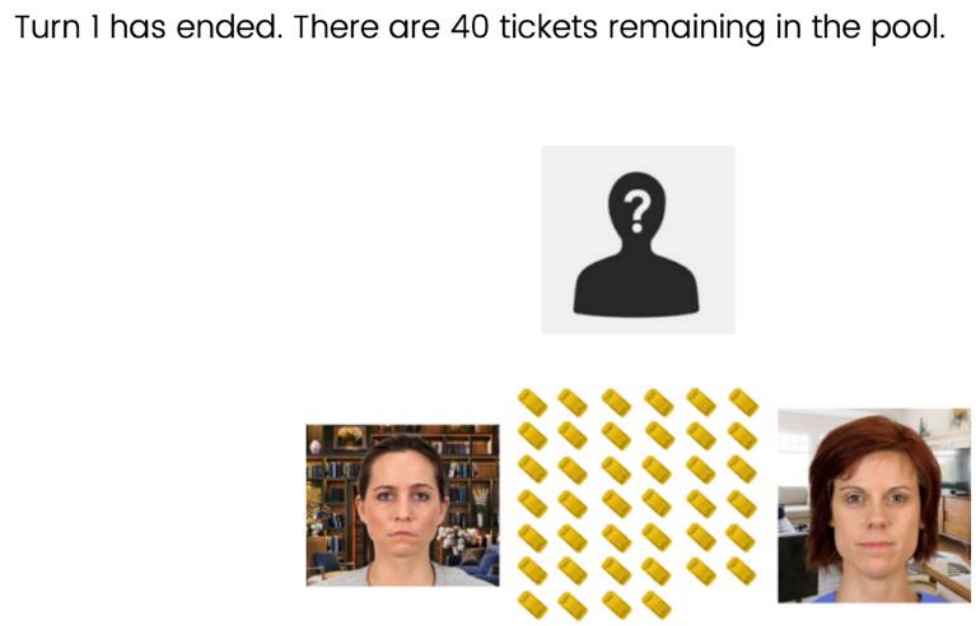
The round will begin shortly. There are currently 60 tickets available for collection.



Appendix B

Round 1 of the Resource Dilemma

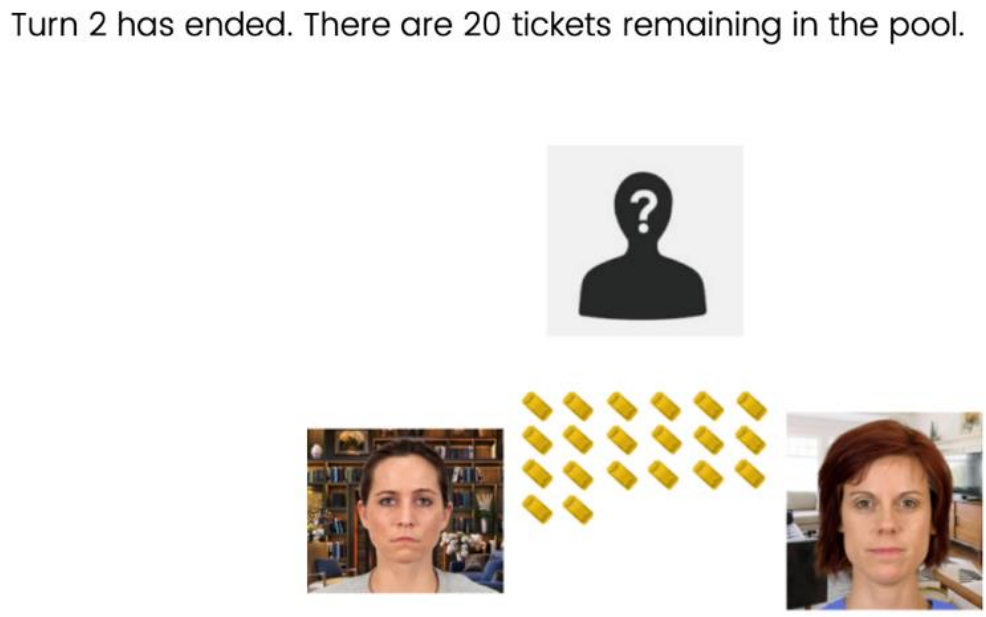
Each person in a group was assigned a turn number, which determined the order by which everyone would withdraw from the shared pool. One of the photographs was assigned to turn 1. The participant was not aware of which person was withdrawing. In both harvesting conditions, 40 tickets remained in the pool.



Appendix C

Round 2 of the Equal Opportunity Resource Dilemma

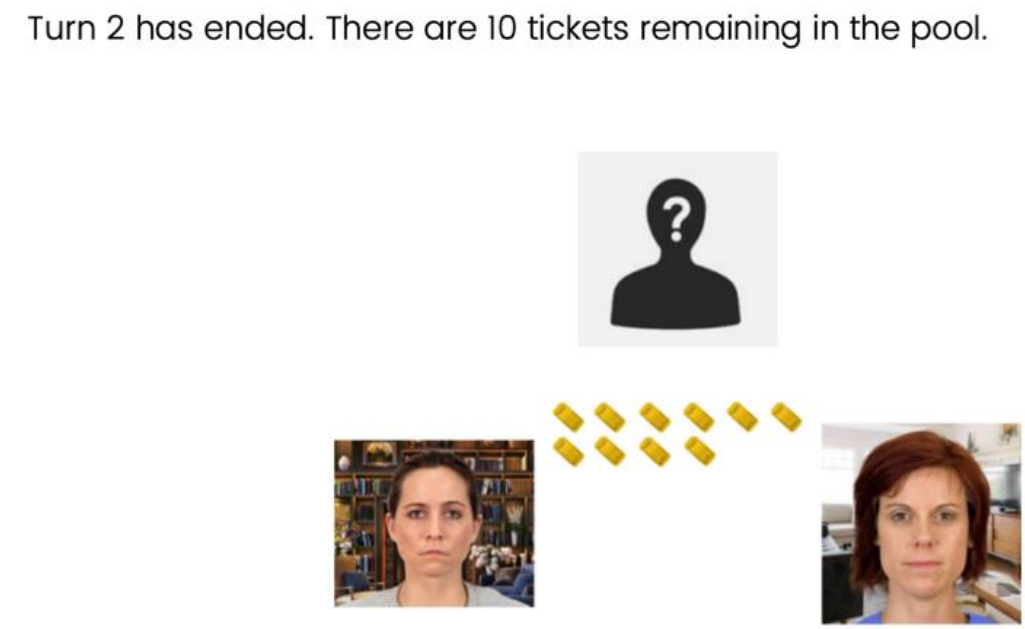
Each person in a group was assigned a turn number, which determined the order by which everyone would withdraw from the shared pool. The other photograph was assigned to turn 2. The participant was not aware of which person was withdrawing. In the equal harvesting condition, 20 tickets remained in the pool.



Appendix D

Round 2 of the Unequal Opportunity Resource Dilemma

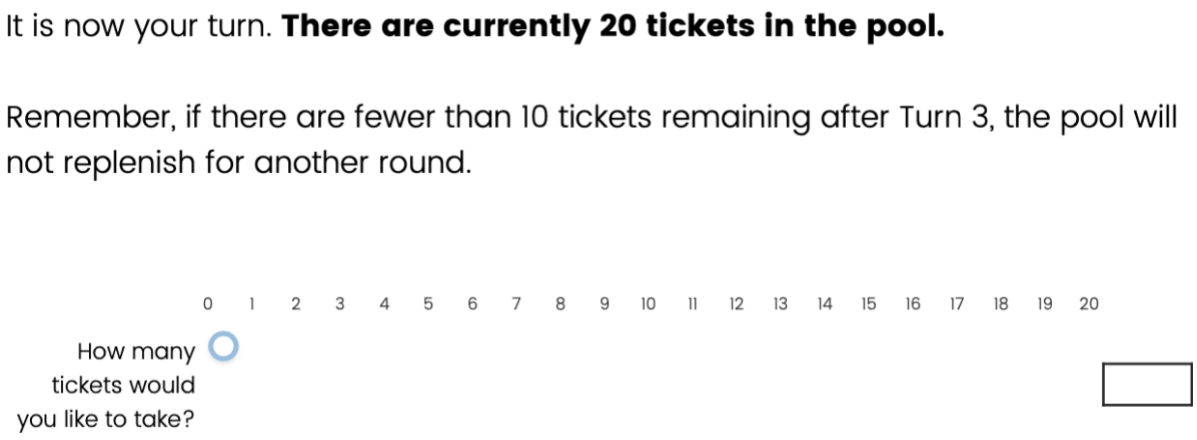
Each person in a group was assigned a turn number, which determined the order by which everyone would withdraw from the shared pool. The other photograph was assigned to turn 2. The participant was not aware of which person was withdrawing. In the equal harvesting condition, 10 tickets remained in the pool.



Appendix E

Turn 3 of the Equal Opportunity Resource Dilemma

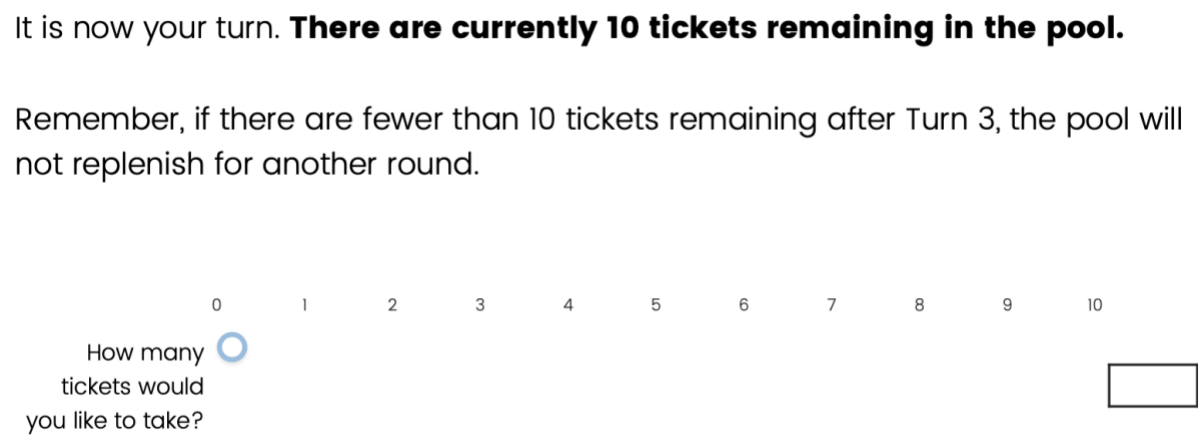
Each person in a group was assigned a turn number, which determined the order by which everyone would withdraw from the shared pool. The participant was always assigned to turn 3. In the equal harvesting condition, participants could take between 0 and 20 tickets.



Appendix F

Turn 3 of the Unequal Opportunity Resource Dilemma

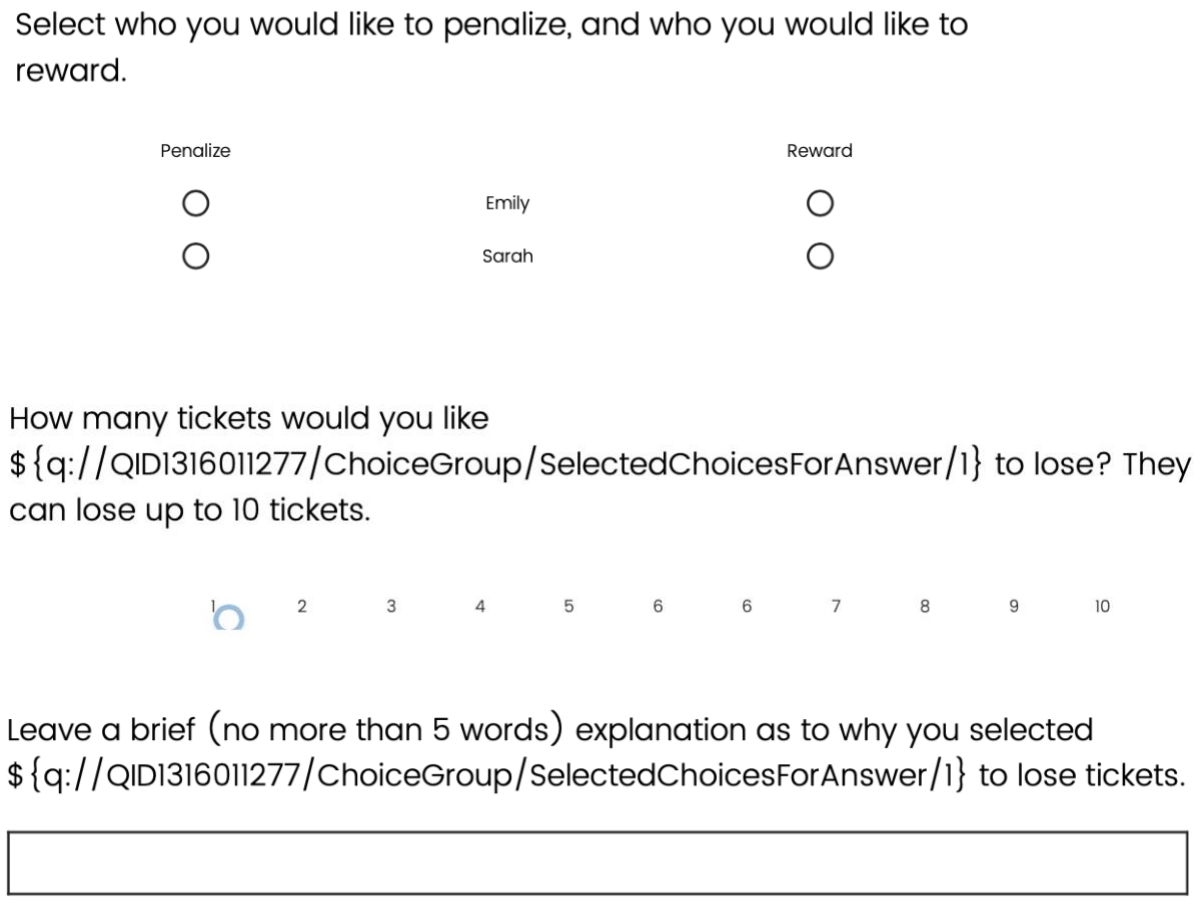
Each person in a group was assigned a turn number, which determined the order by which everyone would withdraw from the shared pool. The participant was always assigned to turn 3. In the unequal harvesting condition, participants could take between 0 and 10 tickets.



Appendix G

Sanction Type and Magnitude Questions

In the Qualtrics survey, one of the tasks participants were administered was to sanction their partners. Participants were asked to choose one person to penalize, and one person to reward. Before giving a reason for doing so, the participant could take between 1 and 10 tickets from the penalized partner to return to the shared pool. The participant could then take between 1 and 10 tickets from that pool to give to the rewarded partner.



How many tickets would you like ${q://QID1316011277/ChoiceGroup/SelectedChoicesForAnswer/2} to gain? They can gain up to 10 tickets.

1 2 3 4 5 6 6 7 8 9 10

Leave a brief (no more than 5 words) explanation as to why you selected ${q://QID1316011277/ChoiceGroup/SelectedChoicesForAnswer/2} to gain tickets.

Appendix H

Attribution Questions

In the Qualtrics survey, one of the tasks participants were administered was to consider reasons for their partners' behavior. Participants were asked to what extent (on a scale of 1 to 5, where 1 was *strongly disagree* and 5 was *strongly agree*) did they agree with seven statements describing behavior. Participant answered each of the seven questions twice, once for their rewarded partner, and once for their penalized partner.

Think about the choices ${q://QID1316011277/ChoiceGroup/SelectedChoicesForAnswer/2} may have made in the decision-making task. Rate the extent to which you agree with the following causes/reasons for why ${q://QID1316011277/ChoiceGroup/SelectedChoicesForAnswer/2} behaved the way they did.

${q://QID1316011277/ChoiceGroup/SelectedChoicesForAnswer/2} wanted to give others a chance to win.

- ○ Strongly disagree
- ○ Disagree
- ○ Neither agree nor disagree
- ○ Agree
- ○ Strongly agree

${q://QID1316011277/ChoiceGroup/SelectedChoicesForAnswer/2} was concerned about others in a group.

- ○ Strongly disagree
- ○ Disagree
- ○ Neither agree nor disagree
- ○ Agree
- ○ Strongly agree

${q://QID1316011277/ChoiceGroup/SelectedChoicesForAnswer/2} wanted to share tickets with others in a fair way.

- ○ Strongly disagree
- ○ Disagree
- ○ Neither agree nor disagree
- ○ Agree
- ○ Strongly agree

${q://QID1316011277/ChoiceGroup/SelectedChoicesForAnswer/2} experienced a miscommunication.

- ○ Strongly disagree
- ○ Disagree
- ○ Neither agree nor disagree
- ○ Agree
- ○ Strongly agree

${q://QID1316011277/ChoiceGroup/SelectedChoicesForAnswer/2} wanted to gain more than a reasonable share of the tickets.

- ○ Strongly disagree
- ○ Disagree
- ○ Neither agree nor disagree
- ○ Agree
- ○ Strongly agree

${q://QID1316011277/ChoiceGroup/SelectedChoicesForAnswer/2} was distracted by events occurring outside of the experiment.

- ○ Strongly disagree
- ○ Disagree
- ○ Neither agree nor disagree
- ○ Agree
- ○ Strongly agree

${q://QID1316011277/ChoiceGroup/SelectedChoicesForAnswer/2} did not understand the task.

- ○ Strongly disagree
- ○ Disagree
- ○ Neither agree nor disagree
- ○ Agree
- ○ Strongly agree