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The Impact of Target Sex Typicality on Participant's Willingness To Engage in Prosocial Behaviors

Olajuwon Olagbegi

THE IMPACT OF TARGET SEX TYPICALITY ON PARTICIPANT'S WILLINGNESS TO ENGAGE IN PROSOCIAL BEHAVIORS

by

Olajuwon Olagbegi

A Thesis
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Committee:

Dr. Donald F. Sacco, Committee Chair
Dr. Alen Hajnal
Dr. Mitch Brown

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ABSTRACT

One's decision to engage in prosocial behavior relies on various pieces of social information. The physical attractiveness of a social target could inform a perceiver's subsequent intentions. In identifying which aspect of physical attractiveness could inform these decisions, it could be possible that prosocial decisions are heightened among those with sex-typical facial structures. This study explored the extent to which sex-typical facial structures informed perceivers' interest in the context of social activism. Participants imagined themselves as responding to a request from a social target, deciding how behavior with high-cost and low-cost options. The male or female social target was manipulated to vary in sex typicality (i.e., masculinized versus feminized). Men and women did not report greater interest in prosocial behavior toward an opposite-sex target with sex-typical facial features. However, participants were more likely to comply with low-cost activism behaviors than high-cost ones. Women additionally reported greater willingness to comply with prosocial requests. Exploratory analyses indicated that higher self-reported social activism predicted greater compliance with activism requests from masculinized female targets, an effect descriptively higher for high-cost activism. These findings underscore the multifaceted nature of individuals' responses to social activism cues, emphasizing the influence of both participant characteristics and target characteristics. Implications for this study are discussed.

ACKNOWLEDGMENTS

First and foremost, I extend profound gratitude to my advisor and committee chair, Dr. Donald Sacco for his steadfast support and significant guidance throughout this endeavor. Dr. Sacco's expertise and mentorship have profoundly influenced my research and academic development. I am also deeply appreciative of my thesis committee members, Dr. Mitch Brown and Dr. Alen Hajnal, for their consistent guidance and impactful feedback. Their insight and constructive suggestions have greatly enhanced the quality of my work. Lastly, I would like to express sincere thanks to my family and friends for their continuous support and encouragement while completing my thesis project. I am genuinely fortunate to have them by my side. Together, these individuals have played pivotal roles in shaping my academic journey and pathway to success.

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LIST OF ABBREVIATIONS

ANOVA	Analysis of Variance
SD	Standard Deviation
USM	The University of Southern Mississippi

CHAPTER I – ORIGINS OF PROSOCIAL BEHAVIOR

Human evolutionary history has relied on group living. Such social structures necessitated extensive cooperation between group members to improve the group's flourishing. Prosocial tendencies would have thus improved the inclusive fitness of kin to ensure replication of one's own genes or increase one's access to resources and reproductive opportunities afforded through genetically unrelated conspecifics (Eberhard, 1975; Trivers, 1971). Such a functional history of prosociality makes it unsurprising to see its manifestation in contemporary forms, including social activism. Social activism has recently gained greater attention, given its intention to improve the wellbeing of ostensibly disadvantaged group members by advocating for social or political change (Kearl, 2015).

Despite the function of prosociality to ensure group-level flourishing, the self-interested nature of many prosocial behaviors could lead to some prosociality to occur more readily than others (e.g., Cialdini et al., 1997). Prosocial behavior benefits the individual more readily if those receiving help afford a salient benefit. Physically attractive facial features and expressions are one route through which a requester can receive greater compliance with helping requests (Benson et al., 1976; Centorrino et al., 2015; Landry et al., 2006; Maestripieri et al., 2017; West & Brown, 1975). Compliance with the request of attractive social activists could increase the likelihood of a perceiver in attaining relevant fitness goals (see Zebrowitz & Montpare, 2007). One set of features that could inform a perceiver's willingness to engage in social activism is the extent to which an individual appears sex-typical, given that sex typicality connotes developmentally appropriate levels of sex hormones connoting heritable fitness (e.g.,

Smith et al., 2006; Whitehouse et al., 2015). Perceivers could thus recognize compliance with the request of a sex-typical requester, particularly of the opposite sex, as a potential route to a reproductive opportunity (Blake, 2022). This study explores the extent to which a social target's sex typicality influences compliance from a perceiver to engage in social activism.

1.1 Evolution of Prosocial Behavior

Selection would have favored organisms best adapted to their environment with the genetic underpinnings to a successful behavioral repertoire being inherited by offspring. As prosociality solved many adaptive problems humans faced throughout evolutionary history, prosociality critical in human society. Nonetheless, the benefits of prosociality remained bounded to instances wherein the costs of helping did not exceed the benefits. When considering inclusive fitness theory (Hamilton, 1964), prosociality should most readily occur with greater genetic kinship between parties or when there is the possibility that one's genes could be transmitted (i.e., reproduction).

This relatively "selfish" nature of human prosociality could serve to ensure the survival of an individual (Dawkins, 1979). Being prosocial to targets who could optimize inclusive fitness would increase the possibility of a perceiver's offspring having an advantage in survival (Simpson & Beckes, 2010; Trivers, 1985). Individuals whose predilection toward prosociality was selfish gained benefits from these behaviors. Over time, groups began to work together to increase the size of their groups by means of reciprocal altruism (Dunbar, 2003; Trivers, 1971). Being likely to respond favorably to another person's initial prosocial request, regardless of genetic relatedness, and assuming others adopt the same response style, increases the likelihood of expanding social group

size through cooperation, thus allow groups to more effectively solve adaptive problems related to survival and reproduction. Thus, prosocial behavior can benefit one directly through increasing one's genetically lineage (kin selection), or indirectly by enhancing survival in the service of reproduction (reciprocal altruism).

1.1.1 Costs Associated with Helping Behaviors

Prosocial behaviors elicit positive outcomes, but these behaviors often incur costs to the individual performing the task. The magnitude of sacrifice in prosocial endeavors can be classified into high-cost and low-cost behaviors. High-cost prosocial behaviors benefit others but require personal sacrifice, significant effort or resourceful aid on behalf of the individual. These actions are high in cost because they display heightened difficulty (Wilson & Kahn, 1975). Examples of high-cost behaviors include putting oneself in harm's way, or extending valuable resources such as time, and large sums of money. In contrast, low-cost behaviors are actions that grant a benefit to the recipient with very little sacrifice for the actor. Examples of low-cost behaviors include signing a petition, opening a door, or donating a dollar. Individuals who participate in high- and low-cost opportunities may be increasingly motivated by inclusive fitness. High-cost opportunities are often associated with increased inclusive fitness because they are more likely to have a significant impact on the individual's genetic success overall. Low-cost behaviors, on the other hand, may have a less significant impact on one's genetic success but can still be beneficial in promoting other benefits such as social cohesion.

Prosocial behavior is often elicited in low-cost situations despite high-cost opportunities. Additionally, helping is determined by the potential donor's perception of need and may be moderated by generosity or selfishness (Wagner & Wheeler, 1969).

These acts can also be determined by increased feelings of empathy and decreased by personal distress that may create immorality or selfish actions (Paciello et al., 2013). In a field experiment, participants were asked to donate 10 cents or 30 cents to a male or female target. Although both amounts were relatively insignificant, subjects helped at an increasingly higher rate when only 10 cents was requested. Additionally, female requests were granted at a higher rate than males, and cross-sex interactions were only present in the 10-cent condition (Dovidio, 1982). Similarly, economic games assessing prosocial responses to refugees indicate that individuals are less likely to help when costs are incurred (Böhm et. al., 2018). Nonetheless, prosociality becomes more frequent following an awareness of loss prevention. Additional work suggests that both adults and children tend to display more interest in low-cost opportunities for familiar individuals and are interested in low-cost opportunities independent of familiarity (Lee & Setoh, 2023). Low-cost helping is more prevalent because people tend to abstain from helping behaviors when it is costly and does not provide an immediate benefit to the actor. Within the context of reproductive opportunities, wherein the benefits of even high-cost cooperation could yield considerable downstream benefits, perceivers could become more prosocial toward social targets whose appearance connotes an increase opportunity.

1.1.1.1 Prosocial Behavior and Courtship Signals

The ability to identify viable mates to satisfy one's relational needs is pertinent in long term mating (Brown et al., 2020). However, men and women navigate adaptive concerns through contrasting preferences in mating (Buss & Schmitt, 1993). According to the Parental Investment Theory, the more parentally invested of a sex for a given species will demonstrate greater selectivity toward a mate (Trivers, 1972). In humans,

women incur substantially larger minimal reproductive costs compared to men (e.g., gestation versus sperm provision), thus leading to women becoming more judicious in their mating decisions. Within this framework, women prioritize men with access to resources and an interest familial commitment (Bereckzei et al., 1997; Kenrick et al., 1993; Li et al., 2013). Conversely, although both sexes would prefer a highly attractive mate, men especially prioritize physical attributes indicative of reproductive viability (e.g., waist to hip ratio; Brooks et al., 2015; Karremans, 2010; Singh et al., 2010).

Prosociality consists of acts that benefit others, but they can also be motivated by a desire to signal virtue to potential mates. For example, altruism is desirable traits to women, thus prompting men to signal their prosociality and ultimately reporting more sexual success (Arnocky et al., 2017; Barclay, 2010; Bhogal & Farrelly, 2019; Brown et al., 2022). A Costly Signaling Theory perspective indicates that men could demonstrate greater altruism to increase social recognition, treatment, and overall fitness in the service of demonstrating to women that they have considerable resources (McAndrew, 2021). Prosocial mates are regarded particularly attractive to perceivers (Jensen-Campbell et al., 1985). Therefore, individuals may be increasingly motivated to respond favorably to a requestor especially when the individual is motivated by mating concerns.

1.1.1.1.1 Facial Features as a Mating Cue

Given the recurrent primacy of face-to-face communication throughout evolutionary history, humans use cues such as facial features as heuristics to identify viable mates. These mates would yield offspring that would, in turn, possess these adaptive traits and exhibit higher survival rates (Thornhill & Gangestad, 1999). Within this suite of heritable fitness cues are traits regarded as being sexually dimorphic. Sexual

dimorphism is the difference in appearance and behaviors displayed by males and females of a given species. These features track men and women's mate preferences in humans. Men prefer physical features diagnostic of heightened estrogen, whereas women will prefer features connoting testosterone in certain contexts (Bardin & Catterall, 1981; Jones et al., 2018; Kandrik & DeBruine, 2012; Smith et al., 2012). The innervation of these hormones is heuristically inferred through visible secondary sexual traits. For women, larger eyes and fuller lips are perceived as more feminine and thus diagnostic of estrogen from which perceivers can estimate women's fecundity and maternal tendencies (Thornhill & Møller, 1997; Smith et al., 2006; Taylor et al., 2000). For men, features such as strong jaw lines, heavy brows and thinner eyes are perceived as more masculine and thus indicative of testosterone from which perceivers could identify men's relative resistance to health complications (Pound et al., 2009; Whitehouse et al., 2015).

Sex typicality can influence prosociality. For example, gender stereotypes may associate specific behaviors with males and females. Some cultures expect women to possess communal traits and males to possess agentic traits due to women's natural nurturing abilities and men's ability to fill competitive roles (Haines & Stroessner, 2019). Because of this preferential stereotype, individuals may possess certain characteristics and exude behaviors to be more liked, and even secure mates (Phelan et al., 2008; Hsu et al., 2021). It could be possible that the physical components of sex typicality can elicit similar effects toward perceivers based on inferences of such targets as affording considerable benefits for the perceiver.

CHAPTER II – CURRENT RESEARCH

This study assessed how morphological differences in facial structures influenced compliance requests to participate in social activism. Namely, we tasked participants with evaluating the requests of a male or female target whose facial features appeared more masculine or feminine. Based on the target, participants were instructed to indicate the extent to which they would be willing to comply with that targets' request to engage in low-cost activism (e.g., donating $5 to a social justice cause) and high-cost activism (e.g., attending an in-person rally). Following that, participants completed demographic questions. The following hypothesis were tested.

2.1 Hypothesis

H1: Participants will be more willing to engage in low-cost activism irrespective of target preferences (Rubaltelli & Agnoli, 2012).

H2: Participants will respond more favorably to a target's request for high-cost activism with sex-typical features (Smith et al., 2006; Whitehouse et al., 2015).

H3: Sex typical targets will receive favorable responses to their social activism request at a higher rate in both high and low-cost conditions (Hodne, 2024; Koohgard et. al, 2024).

H4: Men will be more willing to engage in high-cost social activism for a sex-typical (i.e., feminine) female target (Brumbaugh, 2024).

H5: Women will be more willing to engage in high-cost social activism for a sex typical (i.e., masculine) male target, albeit at a weaker magnitude than for men (Brumbaugh, 2024).

CHAPTER III – METHOD AND PROCEDURE

3.1 Participants

A power analysis using G*Power indicated that a sample of 250 participants would adequately detect small effects at 80% power (Cohen's f = .25; Faul et al., 2007). I deliberately oversampled for a total of 280 participants (N=280). Each participant was recruited through Prolific and granted financial compensation based on federal minimum wage ($0.50) and average completion time. This study was a single online session with an estimated duration of 5 minutes. 7 participants were excluded from analyses, as they did not identify as a woman or male (N=280; 142 men, 131 women, 7 undisclosed; MAge = 37.02, SD = 11.367).

3.1.1 Materials

Target Stimuli. Participants were randomly assigned to view one of four specific face combinations. The target was either male or female, with an accompanying manipulation of their facial structures to appear masculinized or feminized (Welling et al., 2008). These faces were previously normed to differ only in sex-typicality, with the masculinized face reliably connoting masculinity to perceivers (Welling et al., 2007). The masculinization and feminization of these facial structures was based on the transformation of a unique identity onto an average face morph of male and female targets to create a typically masculine and feminine appearance to perceivers (Appendix C).

Low-Cost/High-Cost Activism Behaviors. Participants viewed a series of low-cost (e.g., signing an online petition) and high-cost social activism behaviors (e.g., participating in an in-person rally), ostensibly requested to them by the social target.

Items operated along a 9-point scale assessing the extent to which participants would be interested in engaging in the listed behavior and will be presented in a random order (1=Not at All; 9=Very Much; Appendix D). Items exhibited acceptable reliabilities (αs > 0.88).

Gender Normativeness/Attraction Assessment: Participants were initially supposed to view two additional assessments that inquired about the attractiveness and normativeness of each target on a 9-point Scale (Appendix E). However, these items were not included in the study, due to a programming error. The primary analyses conducted were not significant, so the exclusion of these variables were not critically detrimental to the study.

Social Activism Scale: Participants were asked about their general participation in social activism. “How often do you engage in social activism behaviors?” Responses were recorded on a 5-point Likert Scale (1=Never; 5=Always).

3.1.1.1 Procedure

Participants viewed their respective target and responded to the activism items provided to them. Once completed, participants were then prompted to complete a demographics section (Appendix F) in which they were asked to provide their age, race and ethnicity, prior social activism engagement and gender. Finally, participants were thanked for their participation, and redirected to an online debriefing page (Appendix G).

CHAPTER IV – RESULTS

4.1 Primary Analysis

We conducted a 2 (Participant Sex: Male vs. Female) × 2 (Target Sex: Male vs. Female) × 2 (Target Structure: Masculinized vs. Feminized) × 2 (Activism Cost: High vs. Low) mixed-model ANOVA with repeated measures over the latter factor. An Activism cost main effect indicated that participants were more interested in low-cost behaviors (M=3.58, SD 1.50) than high-cost behaviors (M=2.50, SD=1.43), $F(1, 265)=244.61$, $p<.001$, $\eta p^2=109$. Additionally, a Participant Sex main effect indicated that women reported greater willingness to comply with prosocial requests (M=3.22, SD=1.53) than men (M=2.88, SD=1.38), $F (1, 265) = 4.06$, $p = .045$, $\eta p2=.015$. No other main effects or interactions emerged.

4.1.1 Exploratory Analysis

We conducted an exploratory analysis using the same model while considering participant engagement in social activism as a custom covariate to test for interactive effects within the same model. Our reasoning for this analysis was the possibility that a predisposition to engage in social activism could lead to greater compliance with requests (Albarracin & Wyer, 2000; Fielding et. al, 2008; Florito et. al, 2014; Stake, 2017; Wallis & Loy, 2021). A trending 4-way interaction emerged for Target Sex, Target Facial Structure, Activism Type, and individual differences in activism proclivity, $F(2, 257) =2.870$, $p=.059$, $\eta p2=.022$.

We decomposed this interaction by first running two subordinate custom ANCOVAs, separate for male and female targets. The only subordinate 3-way interaction to emerge was for female targets, $F(1,137)=11.20$, $p=.001$, $\eta p2=.076$. We decomposed

this interaction further by splitting by Target Facial Structure to see interactive effects for Activism Type and participants' self-reported proclivity toward activism. A subordinate interaction emerged for masculine female targets, F(1,70)=13.95, p<.001, ηp2=.166. To decompose this interaction, we individually correlated proclivity toward activism with compliance for activism. Participants' self-reported activism was associated with and low-cost activism behavior, r(70)=.88, p<.001. It was also associated with high-cost activism behavior, r(70)=.90, p<.001. A subsequent Z-test indicated that these correlations were not different from each other, Z=-.45, p=.65.1 The subordinate interaction for feminine female targets was not significant, F(1,67)=.89, p=.35, ηp2=.013.

[1] We conducted the same omnibus analysis, but instead used a median split of the social activism variable rather than the continuous measure. This analysis yielded a similar interaction between target sex, target facial structure, high versus low cost helping, and participant activism, $F(1,257)=3.83$, $p=.051$, $\eta_p^2=015$. Further decomposition revealed a trending 3-way interaction between target sex, target facial structure and high versus low cost helping for participants high in social activism, $F(1,55)=3.07$, $p=.085$, $\eta_p^2=053$, but not low in social activism, $F(1,210)=2.049$, $p=.15$, $\eta_p^2=010$. We then conducted two target facial structure x high versus low-cost activism ANOVAs, one for female targets and one for male targets. The interaction for female targets was significant, $F(1,28)=8.87$, $p<.01$, $\eta_p^2=.241$, whereas the interaction for male targets was not, $F(1,27)=.80$, $p=.38$, $\eta_p^2=.029$. Independent *t*-tests revealed that participants reported no difference in willingness to comply with low-cost prosocial solicitations for both masculine ($M=4.61$, $SD=1.44$) and feminine ($M=4.60$, $SD=.87$) female targets, $t(28)=.026$, $p=.98$, d=.01, though participants were more interested in compliance with high cost activism requests from masculine female ($M=4.81$, $SD= 1.62$) relative to feminine female targets ($M=3.36$, $SD=1.08$), $t(28)=.2.89$, $p<.01$, d=1.05. This suggests that our findings are driven by participants high in social activism reported greater willingness to comply with a masculine relative to a feminine female target, though these results should be interpreted cautiously because the median split classified only 59 participants as high in self-reported social activism, suggesting they underpowered and prone to higher Type I error rates.

CHAPTER V – GENERAL DISCUSSION

5.1 Discussion

Although some hypotheses were not largely supported, several sensible findings emerged that did support some predictions. First, participants were more interested in low-cost activism compared to high-cost activism. That is, engagement in activism would be highest if the costs were minimal (Hobfoll, 1989, Rubaltelli & Agnoli, 2012). Individuals are indeed more likely to participate in prosocial behavior when it demands lower costs (Bode et. al, 2015; Warneken & Tomasello, 2009; Simpson, 2009). Additionally, women were more interested in prosociality than were men. Evolutionary theories posit that men are generally more aggressive than women and this can be linked to competition for resources and mates, which were crucial for survival and reproduction (Darwin, 1859. Therefore, the evolution of men may not have favored warmth to the same degree as women. The contrast in behavioral tendences align with adaptive challenges faced by each gender throughout evolutionary history.

Moreover, it could be that gendered societal expectations and norms may influence individuals' proclivity towards activism, as men and women may undergo distinct socializations and adhere to different gender norms. Societal expectations often highlight nurturing, cooperation, collaboration, emotionality and domestic roles (i.e., caregiving, and child rearing) for women (Haines & Stroessner, 2019; Berkery et. al, 2013). This emphasis on communal traits poses a potential explanation on why women may be more inclined to engage in prosocial behaviors as they may be more attuned to the needs of others therefore more likely to comply to requests. Conversely, men may be socialized as assertive, independent, competitive, and emotionally restrained, potentially

influencing their engagement in activism differently (Steinberg & Diekman, 2016; Smith, 2010).

The fact that higher order interactions in our analysis only emerged with the inclusion of individual differences in participants past activism behavior reflects the importance of understanding participants' individual-level characteristics when attempting to understand their prosocial behavior toward others (Ouellette & Wood, 1998; Albarracin & Wyer, 2000; Ferguson & Bibby, 2002). The exploratory analysis indicated that self-reported activism interest is associated with greater compliance with masculine female targets' social activism compliance requests, an effect that was descriptively stronger for high-cost requests. Potential explanations for this may include that individuals are generally more compliant to women's prosocial solicitations in comparison to men's (Eagly, 1986). Previous work indicates that 88% of participants would rather push a male bystander off a footbridge than a female bystander (Derks, 2014). Past research also indicates requesting help can create perceptions of incompetence, which may lead men to shy from help seeking behaviors and actions, indirectly bolstering aid/opportunities for women (Lee, 1997). However, inclination of prosocial activity may be amplified when requests are presented by masculine women, possibly due to perceived dominance associated with masculine traits (Liebenow et. al, 2024).

Notably, these effects were not driven by participant sex, challenging predictions based around mating intentions. Instead, our findings suggest that compliance in these situations may be rooted in broader social dynamics such as affiliation and impression management. Affiliation refers to the desire or motivation to connect with others, form

relationships and be a part of social groups. In the context of this study, individuals may be more inclined to comply with requests related to activism because of potential benefits of belonging, and connection, (Mu & Du, 2024). Impression management involves the efforts individuals make to present themselves in socially desirable ways to enhance their reputation (Santos, 2024). When compliance to activism is requested, individuals may be driven by a desire to be viewed as cooperative, supportive, or aligned with certain values. The positive impression can be beneficial in social contexts, ultimately influencing how others perceive and interact with them overall.

5.1.1 Limitations and Future Directions

Several limitations emerge that warrant future research. First, the reliance on self-reported measures introduces potential biases. Participants may have shaped their responses based on social desirability of appearing prosocial. Employing additional measures, such as implicit association tests, could provide a more nuanced understanding and mitigate the impact of social desirability biases (Lalwani et. al, 2006; Van de Mortel, 2008).

Second, the omission of attractiveness and normativeness as variables in our investigation posed challenges in dissecting the effects. Facial attractiveness is known to influence social perceptions, and future research should carefully control for and explore its role in conjunction with facial features. Gender normativeness refers to the degree to which an individual's gender expression or behavior aligns with societal expectations. For this study, gender normativeness may have served as a crucial factor because it could have influenced how participants responded to compliance requests. Future studies

should assess both variables to unravel the complexities and barriers to activism engagement.

Third, the exclusive use of White faces limits the generalizability of our findings. Therefore, future studies should aim to be more comprehensive by including diverse faces representative of various cultures. Participants exposed to racial incongruence may perceive facial features differently and may be further swayed by in-group-outgroup bias (MacInnis & Hodson, 2013; Jacoby-Senghor et. al, 2015). This bias refers to the tendency of individuals to favor and show preference toward members of their own social group (ingroup) while displaying prejudice or discrimination against members of other groups (outgroup). Extending this study to include Afrocentric features (which often overlap with masculinity and dominance) may introduce an additional layer to this dynamic (Russell et. al, 1993; Blair & Judd, 2011). There is a possibility that individuals, including those who identify as White, may exhibit reduced compliance with Afrocentric Black targets. This could be influenced by external factors such as stereotype, biases or societal perceptions that intersect race and masculinity (MacInnis & Hodson, 2013; Jacoby-Senghor et. al, 2015). Exploring this dynamic further would provide unique insights into how race might impact engagement in activism behaviors.

5.1.1.1 Conclusion

In conclusion, this study enriches our understanding of the multifaceted factors influencing activism engagement. By exploring the psychological and societal underpinnings of each observed effect, we move beyond statistical significance to uncover the complex dynamics shaping individuals' proclivity toward social and political

causes. These insights offer a foundation for future research endeavors, aiming to foster a more inclusive and nuanced understanding of activism in diverse social contexts.

APPENDIX A – FIGURES

Figure A.1 *Willingness to Engaage in Prosocial Behavior Across Activism Types*

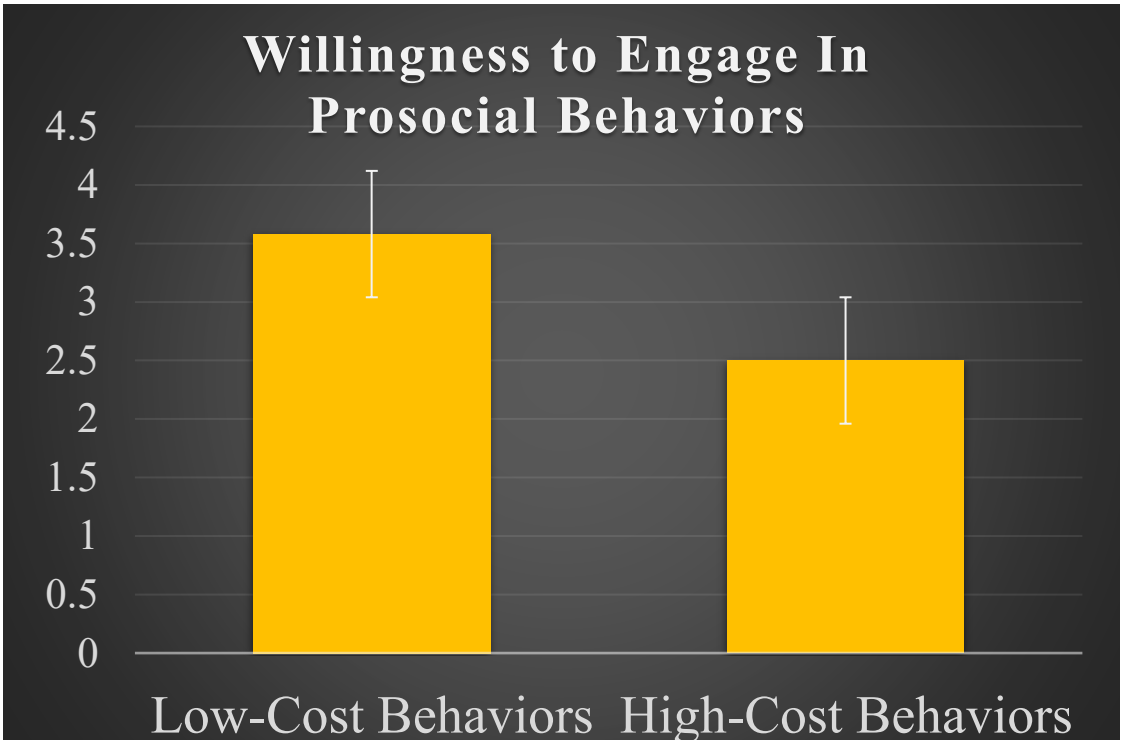

Figure A.2 *Willingness to Engage in Prosocial Behaviors By Sex*

APPENDIX B – IRB Approval Letter

Office *of*
Research Integrity

THE UNIVERSITY OF SOUTHERN MISSISSIPPI

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NOTICE OF INSTITUTIONAL REVIEW BOARD ACTION

The project below has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services regulations (45 CFR Part 46), and University Policy to ensure:

- The risks to subjects are minimized and reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered involving risks to subjects must be reported immediately. Problems should be reported to ORI using the Incident form available in InfoEd.
- The period of approval is twelve months. If a project will exceed twelve months, a request should be submitted to ORI using the Renewal form available in InfoEd prior to the expiration date.

PROTOCOL NUMBER:	23-0445
PROJECT TITLE:	Sex Typicality as a Predictor for Prosocial Behavior
SCHOOL/PROGRAM	Psychology
RESEARCHERS:	PI: Olajuwon Olagbegi Investigators: Olagbegi, Olajuwon Latrice~Sacco, Donald~
IRB COMMITTEE ACTION:	Approved
CATEGORY:	Expedited Category
PERIOD OF APPROVAL:	17-May-2023 to 16-May-2024

Alen Hajnal, Ph.D.
Institutional Review Board Vice Chairperson

APPENDIX C – CONSENT FORM

Project Title: Social Activism (IRB-22-1423)
Investigators: Olajuwon Olagbegi & Don Sacco, PhD
Contact Information: Participants may contact Donald Sacco, PhD, in the School of Psychology at The University of Southern Mississippi (donald.sacco@usm.edu) or Olajuwon Olagbegi (olajuwon.olagbegi@usm.edu).

Research Description: You are invited to take part in a research study conducted by Olajuwon Olagbegi in the School of Psychology. Any questions or concerns regarding this research may be directed to Donald Sacco (donald.sacco@usm.edu) or Olajuwon Olagbegi (olajuwon.olagbegi@usm.edu).

Description of Study: This study is interested in how you perceive different social behaviors. You will view a series of images and answer questions after viewing them. Following that, you will complete some basic demographic information. **Based on pre-testing, this study should take you no more than 5 minutes to complete if you complete this study undistracted.**

Benefits: Your participation in this study does not guarantee any beneficial results. However, it will aid in your understanding of how psychological research is conducted as well as contribute to the general knowledge in the field. You will receive $0.50 for your participation. ****However, throughout the study you will be asked to respond to attention check items to ensure you are properly attenuating to the study. Should you fail to answer these correctly, the study will be terminated, and you will not receive credit.**

Risks: The risks associated with participation in this study are not greater than those ordinarily encountered in daily life. In the unlikely event that you feel distressed at any time while participating in this research, you should notify the researcher immediately. Furthermore, for questions regarding topics of a sensitive nature, you can choose to skip those questions and it will not impact your compensation for participating in this study.

Confidentiality: The responses that you provide today will be kept completely confidential. At no time will your name or any other identifying information be associated with any of the data you generate today. It will never be possible to identify you personally in any report of this research. Within these restrictions, results of the study will be made available to you upon request.

Alternative Procedures: You are free to discontinue your participation at any time without penalty of loss of benefits. You may also freely decline to answer any of the questions asked of you. Participant's Assurance: This project has been reviewed by the Institutional Review Board, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about your rights as a research participant should be directed to the Chair of the IRB at (601) 266-5997.

Participation in this study is completely voluntary, and participants may withdraw from this study at any time without penalty, prejudice, or loss of benefits. Any questions about the research should be directed to the Principal Investigator (Don Sacco) using the contact information provided in the Project Information Section above. Consent to Participate in Research Consent is hereby given to participate in this research project. All procedures and/or investigations to be followed and their purposes, including any experimental procedures, were explained to me. Information was given about all benefits, risks, inconveniences, or discomforts that might be expected. The opportunity to ask questions regarding the research and procedures was given. Participation in the project is completely voluntary, and participants may withdraw at any time without penalty, prejudice, or loss of benefits. All personal information is strictly confidential, and no names will be disclosed. Any new information that develops during the project will be provided if that information may affect the willingness to continue participation in the project. Questions concerning the research, at any time during or after the project, should be directed to the principal investigator (Dr. Don Sacco) with the contact information provided above.

This project and this consent form have been reviewed by the Institutional Review Board, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research participant should be directed to the Chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5125, Hattiesburg, MS 39406-0001, (601) 266-5997. If you consent to these procedures, please click the button labeled "Consent" below and click the arrow to start. If you do not consent, please close the window now.

APPENDIX D – TARGET STIMULI

Masculine Target

Feminine Target

Masculine Target

Feminine Target

APPENDIX E – LOW COST/HIGH COST ITEMS

Participants will be asked to which extent they would be willing to engage in each of the following behaviors. (Answers will be recorded on a 9-point Likert-type scale; 0=not at all; 8=very much)

Low-cost

-signing an online petition

-joining a social activism group on social media (e.g., Facebook)

-donating $5 to a social justice cause

-sharing a post on social media related to a social justice cause

-using a hashtag relating to a social justice cause (e.g., #BLM)

-using your favorite source of media (e.g., reading a book, listening to a podcast, watching a documentary) to educate yourself more on a social justice issue of your interest.

High-cost

-attending an in-person rally relating to social activism

-joining a group on your college campus relating to social justice

-enrolling in a college course related to social justice causes

-writing a letter to your state representative (local government) to petition for social justice issues -volunteering for a panel to discuss a social justice issue on your campus

-donating $100 to a cause of your choice

-volunteering to ask for signatures on a petition for social justice cause

APPENDIX F – GENDER NORMATIVENESS AND ATTRACTION ASSESMENT

Participants will be asked one question per assessment. Answers will be recorded on a 9-point Likert-type scale; 0=not at all; 8=very much)

Gender Normativeness Assessment

Please rate the extent to which you agree with the statement below.

This target is gender normative.

Attraction Assessment

Please rate the extent to which you agree with the statement below.

This target is attractive.

APPENDIX G – DEMOGRAPHICS

1. What is your sex?
   - Male
   - Female
   - Non-binary/third gender

2. What is your age in years? _____

3. What is your ethnicity
   - African American/Black
   - Asian/Asian-American
   - Caucasian/White
   - Hispanic/Latino
   - Other

4. What is your sexual orientation
   - Bisexual
   - Heterosexual
   - Homosexual
   - Other

5. What is your relationship status?
   - Single
   - Married
   - In a relationship
   - Divorced

6. How often do you engage in social activism behaviors?

- Never
- Rarely
- Sometimes
- Often
- Always

7. Specifically with regard to **economic issues**, and setting social issues aside, how would you describe your political orientation? (Likert Scale 1-9) (Very liberal – Very Conservative)
8. Specifically with regard to **social issues**, and setting economic issues aside, how would you describe your political orientation? (Likert Scale 1-9) (Very liberal – Very Conservative)

APPENDIX H – DEBRIEFING

Thank you for participating in today's study. We hope you found your experience interesting and enjoyable. In this study, we were interested in how sex typicality might impact an individual's willingness to get involved with various social activities. Therefore, we presented targets that were either sex typical (feminine females, masculine males) or sex a-typical (masculine females, feminine males). After viewing these photos, we asked participants to rate their willingness to engage in activism behaviors. There were 6 low-cost and 6 high-cost behaviors, and all participants were given the same behaviors. In this study, we thought that people would be more likely to engage in high-cost behaviors when the target reflected sex typical traits. For today's experiment, we ask that you not discuss what you did today with anyone. If someone asks about this experiment, simply say that this study was about social activism. Thank you in advance for your cooperation. If you have further questions, please contact the experimenter listed on your consent form (Olajuwon Olagbegi, Olajuwon.olagbegi@usm.edu).

Should you be interested in reading more research related to this work, you can get more information from:

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