Investigating the relationship between favoritism towards physically attractive people and individual levels of physical attractiveness

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PSYC 494

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February 28, 2020

Abstract

Previous research has indicated that more physically attractive individuals are favored when it comes to first impressions and evaluations, such as during hiring decisions. The mechanisms behind why such attractiveness bias exists are unclear, but the answers may lie in who is most likely to display an attractiveness bias. We investigated this phenomenon by having college-aged participants ($N = 55$) complete a mock admissions task for an academic honors society, where participants looked at 64 applications that contained several decision-relevant criteria (e.g., GPA) as well as a more versus less physically attractive face. Participants were also asked to rate their own attractiveness and were photographed to be rated for objective attractiveness. We assessed the correlation between the participant's attractiveness bias on the admissions task and the participant's physical attractiveness (subjective or objective). While participants favored more physically attractive applicants in the admissions task ($d = .68$), there was no reliable correlation between the strength of the participant's attractiveness bias in judgment and participant's subjective ($r = -.089$) or ($r = -.097$) objective physical attractiveness. Because participants showed an attractiveness bias regardless of their own attractiveness, we believe that a more generalized halo effect may be a possible mechanism behind the attractiveness bias. As individuals associate unrelated positive traits with each other, physically attractive targets may appear more capable and competent. We also hypothesize that the saliency of facial cues within decision-making may play a role in why physical attractiveness bias is present in most individuals, regardless of their own attractiveness.

Word Count: 250

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First used in the 1970s as part of the fat acceptance movement, the term 'lookism' is relatively new and refers to any sort of discrimination based off looks ("Fat Pride", 1978). Lookism pervades nearly every facet of society. For instance, past work finds that people without any strong political leanings will tend to vote for the more physically attractive candidate (Stockemer & Praimo, 2015) and that when asked to act as hypothetical employers, individuals are less likely to terminate a physically attractive employee than a physically unattractive one (Commisso & Finkelstein, 2012).

While such discrimination often emerges in studies of real-world behavior, individuals often fail to notice the influence of such ostensibly irrelevant social information on their own behavior. Most individuals display a 'bias blind spot' (Pronin, Lin & Ross, 2002), where they believe that they are more objective than their peers and less prone to making judgment errors, even when they are equally as susceptible. One study demonstrated this phenomenon by having university students rate themselves in comparison to their peers in class. Students were first asked to rate themselves on positive and negative personality dimensions in comparison to their peers. Students were then informed of the "better than average effect," where individuals tend to rate themselves as higher than others on positive traits and lower than others on negative traits. Out of the participants who rated themselves as higher than their peers on positive traits (87% of the total sample), only 24% of those participants believed that they had over-inflated their responses. The rest of the participants felt that they had been completely objective or even too modest in their ratings, despite being informed of the "better than average effect." This work

illustrates that most individuals tend to believe that they are more objective than the average person, meaning that even when they are aware of judgment biases in society, they may not be aware when they themselves are susceptible to them (Pronin, Lin, & Ross, 2002).

This same 'bias blind spot' phenomenon is likely to emerge in lookism specifically. In another study (Axt, Casola & Nosek, 2018), college-aged participants completed a mock academic admissions task, where applicants varied on physical attractiveness. On average, physically attractive applicants were more likely to receive an admission offer despite no systematic differences in qualifications (e.g., GPA) between more and less physically attractive applicants. Notably, favoritism based on attractiveness was still evident among 80% of the participants who claimed that they did not use physical attractiveness when making their judgments. Further meta-analytic investigations (Hosoda, Stone-Romero, & Coats, 2003) not only confirm the positive relationship between physical attractiveness and job-related outcomes, but reveal that individuals are more positively biased toward attractive job candidates and employees regardless of job-relevant information (mean effect size of $d = .37$). Attractiveness bias was also found to be present in students and professionals, as well as in both men and women. Such findings confirm the prevalence of discrimination based on physical appearances. When even trained personnel professionals rely on physical attractiveness as a deciding factor between employment decisions or evaluations, the idea that a bias blind spot exists as a mechanism for attractiveness-based discrimination becomes even more plausible.

If the influence of appearance on behavior is so subtle that it is still displayed even by individuals who intend to be neutral, it presents a challenge for effectively reducing this biased behavior. Some progress on this issue may come from identifying *who* is most likely to display

the attractiveness bias, given that self-reported intentions are only moderately related to actual behavior (e.g., Axt, Nguyen & Nosek, 2018). Identifying which individuals are more likely to show an attractiveness bias in social judgment can provide insight into the causes behind the behavior and potentially guide future efforts to create more tailored interventions for reducing such biases.

Explaining Looks-Based Discrimination

This study examines one possible predictor of attractiveness bias in social judgment: participant's own level of physical attractiveness. Specifically, participants in this study were asked to complete a hypothetical judgment task known to reliably reveal favoritism based on physical attractiveness. During the study session, participant's own photographs were taken and later rated on physical attractiveness. This design allows us to test for a possible correlation between participant's own attractiveness and the magnitude of biases based on attractiveness in social judgment.

We then explore whether bias towards physically attractive people is another form of ingroup favoritism, wherein individuals behave more favorably toward those perceived to be in the same group (Mullen, Brown & Smith, 1992). Ingroup bias is one of the most consistent findings in research on intergroup relations (Greenwald & Pettigrew, 2014), as it can emerge from even novel or weakly held group membership (Dobbs & Crano, 2001), and can also exist outside of conscious awareness or control (Axt, Nguyen & Nosek, 2018).

Ingroup favoritism is a strong candidate to predict looks-based discrimination in judgment, as individuals may display leniency toward those who they perceive to be just as attractive as they are. In fact, past research finds that individuals do have some insight into their

own physical attractiveness. For example, one study found that objective ratings of facial attractiveness have a low, but positive correlation with self-perceived attractiveness (r = .16; Kenealy et al, 1991). From this perspective, since individuals have reliable—but weak—accuracy into their own levels of physical attractiveness, it may be possible for them to translate perceptions of their own level of physical attractiveness into ingroup favoritism when evaluating other physically attractive people.

Alternatively, it is also possible that favoritism towards physically attractive people is more universal and not constrained by one's own level of attractiveness. Past research on the "halo effect" offers one explanation as to how biases towards physically attractive people operate independently from perceiver's level of attractiveness. In the halo effect, individuals automatically associate one positive trait with other positive traits, even when those traits are unrelated. For example, when the same college professor with a foreign accent was shown behaving in either a friendly versus hostile manner, students viewing the friendly version rated the professor as more physically attractive and his accent as less irritating, whereas students viewing the hostile version rated his appearance and accent more negatively (Nisbett & Wilson, 1977). In the context of physical attractiveness, perceivers may be more likely to associate other positive attributes, like professionalism and competence, in the presence of physical attractiveness. Indeed, past work consistently finds evidence for this "beauty is good" bias; Individuals tend to perceive physically attractive people as possessing a variety of positive traits, such as being more warm, intelligent, sociable, and mentally healthy, even when this is not the case (Feingold, 1992). Compared to ingroup favoritism, a more general halo effect can serve as an alternative explanation for the presence of looks-based discrimination that is not dependent on

the perceiver's own level of attractiveness.

It is also worth considering possible differences between objective and subjective levels of physical attractiveness in predicting looks-based discrimination. As mentioned previously, past work finds a positive but small correlation between subjective and objective (i.e., rated by others) levels of attractiveness (Kenealy et al., 1991), suggesting that many people have sizable discrepancies between how they perceive themselves and how others perceive them. These discrepancies may have implications for understanding biases in social judgment. In particular, an ingroup favoritism account would predict that attractiveness biases in social judgment should be more related to *subjective* than objective levels of physical attractiveness. For example, participants who consider themselves attractive may see themselves as part of an attractive 'ingroup' that should be favored over those in the less attractive 'outgroup' despite the perceiver being objectively low in physical attractiveness. From this perspective, subjective attractiveness may be more related to discriminatory behavior than objective attractiveness.

At the same time, it is also possible for objective levels of attractiveness to be more related to behavior. For instance, if results found that attractiveness biases in judgment were more strongly associated with objective than subjective levels of attractiveness, it may suggest socialization as a cause of looks-based discrimination. That is, individuals may be socialized throughout their lives to favor those who look like them, meaning that more physically attractive participants are in turn more likely to go easier on applicants with similar attractive features. This socialization phenomenon can be seen in multiple contexts. For example, past work finds that attractive people tend to have equally as attractive same-sex friends (Cash & Derlega, 1978), or that individuals in social interactions prefer to sit closer to physically similar others (Mackinnon,

Jordan, & Wilson, 2011). If physically attractive people have been observed to gravitate toward other physically attractive people in friendships as well as general social scenarios, then it is also possible that they may gravitate toward (and thus show leniency toward) more physically attractive applicants when evaluating them for an outcome that is ostensibly unrelated to physical appearance, such as in an admissions task. As this study examines the relationship between physical attractiveness and strength of attractiveness bias in social judgment, the type of physical attractiveness displayed by the participant (objective versus subjective) is important to consider, and we assess both forms of attractiveness as predictors of attractiveness-based favoritism in social judgment.

Possible Study Outcomes

Based on past research, there are four possible outcomes that may be observed in this study. The first outcome is if subjective attractiveness is more strongly correlated with attractiveness bias than objective attractiveness. Though ultimately correlational, this result would be consistent with an account that the mechanism behind looks-based discrimination is more likely a result of ingroup bias, as individuals perceive themselves as part of an attractive ingroup and favor those they perceive to be in the same group as them. Another possible outcome may be that objective attractiveness is more strongly correlated with attractiveness bias than subjective attractiveness, which would then point to socialization as a possible mechanism of looks-based discrimination. A third outcome could be if both subjective and objective attractiveness correlate with the Judgment Bias task and these correlations do not differ, in which case perhaps both ingroup favoritism and socialization play a role in looks-based favoritism, though such results would be more difficult to interpret. Finally, if all participants show a strong

bias in favor of those who are physically attractive and this bias is not associated with either objective or subjective attractiveness, it would suggest that a more general halo effect drives lookism, where attractive people are generally regarded as possessing more positive traits than those who are less attractive, regardless of the perceiver's own level of subjective or objective attractiveness.

Method

Participants

Participants were 55 (78.2% female, 65.5% White, M_{Age} = 20.42, SD_{Age} = 1.26) students or community members aged 18 or older. Participants were recruited through advertisements posted around local college campuses, and participated in exchange for $5 or course credit. The final target sample size was 200 participants, which would provide 80% power to detect a correlation as small as r = .20. Due to internal deadlines to complete this project, we analyzed data after 55 participants, which provided 80% power to detect a correlation as small as r = .36. Regardless of these initial results, we will collect data until we hit our target sample size.

Procedure

Participants were first asked to complete a measure of socially biased judgment: The Judgment Bias Task (JBT; Axt, Nguyen & Nosek, 2018). After the JBT, participants completed measures of perceived performance, desired performance, explicit attractiveness attitudes, subjective attractiveness ratings, and implicit attractiveness attitudes. The attitude measures as well as the perceived and desired performance measures were included to be consistent with past research using the JBT (Axt, Casola & Nosek, 2018; Axt & Lai, 2019).

Before starting the study, participants also had a photo taken of them against a white background with a neutral expression. This photo was then used for ratings of objective physical attractiveness.

Photo and attractiveness rating. At the beginning of the study session, participants were asked to have their photograph taken under standard conditions while making a neutral expression. Each photo was later rated by nine research assistants at two separate, US-based research labs. Raters used a 1 (Not at all) to 5 (Extremely) response scale. For each photo, we took the average response for each rating as our objective measure of physical attractiveness.

Academic Judgment Bias Task. Participants completed an academic JBT following the same materials and design as Study 1a in Axt et al. (2018). Participants received instructions that they would be making accept or reject decisions for admission to a hypothetical academic honor society. Each application contained four pieces of information (Science GPA, Humanities GPA, Letter of recommendation quality, and interview score), as well as a photo of the applicant. Participants were shown 64 unique applicant profiles and were told that they needed to accept roughly half of the applicants. Before making the accept and reject decisions, participants first viewed each application one at a time for one second each during an encoding phase.

Applicant profiles were manipulated so that half of the applicants were objectively more qualified for admission acceptance, while the other half were objectively less qualified. Furthermore, each applicant was paired with a face that was previously rated to be more or less physically attractive (Axt, Nguyen & Nosek, 2018). More and less physically attractive applicants were equally represented across the more and less qualified applications, and pairings between face and application was randomized for each study session. Finally, there was a

balanced number of more and less attractive and applicants for both male and female profiles.

To score the JBT, we focused on a participant's criterion bias. Criterion refers to the threshold that participant's set to provide an "accept response" to an applicant. A lower criterion occurs when participants are more lenient (i.e., more likely to make errors of accepting objectively unqualified applicants), and higher criterion occurs when participants are more stringent (i.e., more likely to make errors of rejecting objectively qualified applicants) To measure criterion bias based on physical attractiveness, we use a difference score, which subtracts a participant's criterion towards more physically attractive applicants from their criterion towards less physically attractive applicants. Higher values on the criterion bias difference score suggest that the participant was more lenient towards more versus less physically attractive applicants.

Performance, motivation, attitude, and identity measures. Following the JBT, participants completed a questionnaire that assessed self-perceived attractiveness, explicit attractiveness attitudes, perceived JBT performance, and desired JBT performance.

Participants were first asked to rate their self-perceived attractiveness, where they rated themselves using a scale similar to the one used for the objective ratings, which ranged from 1(Not at all) to 5 (Extremely). Next, participants reported their perceived JBT performance (-3 = "I was extremely easier on less physically attractive applicants and tougher on more physically attractive applicants," +3 = "I was extremely easier on more physically attractive applicants and extremely tougher on less physically attractive applicants"), followed by their desired performance (-3 = "I wanted to be extremely easier on less physically attractive applicants and extremely tougher on more physically attractive applicants," +3 = "I wanted to be extremely

easier on more physically attractive applicants and extremely tougher on less physically attractive applicants").

Implicit attitudes. Participants completed a seven-block Implicit Association Test (IAT; Greenwald, McGhee & Schwartz, 1998) to assess implicit attitudes toward physical attractiveness, with stimuli coming from separate faces pre-rated to vary in physical attractiveness. The IAT was scored such that higher values indicated more positive implicit evaluations of more relative to less physically attractive people.

Table 1. Means and standard deviations for all study measures

Study Measure	Mean (SD)
Criterion Bias	.27 (.40)
Participant objective attractiveness	2.59 (.70)
Participant subjective attractiveness	3.18 (.67)
Explicit attractiveness attitude	.94 (.85)
Implicit attractiveness attitude	.85 (.33)
Perceived performance	.20 (.49)
Desired performance	.05 (.36)

Results

Participants were excluded from analyses for accepting fewer than 20% or more than 80% of applicants on the JBT, or for having more than 10% of critical trials on the IAT faster than 300 milliseconds. No participants met these criteria. See Table 1 for means and standard deviations for all study measures. Three participants did not consent to having their photo taken and as a result were not included in analyses concerning objective physical attractiveness.

Overall JBT performance. JBT accuracy (rate of accepting more qualified applicants and rejecting less qualified applicants) was above chance (69.72%). As in prior work, participants showed an attractiveness bias in criterion, meaning the acceptance criterion for more physically attractive applicants (M = -.20, SD = .37) was lower than the acceptance criterion for less physically attractive applicants (M = .08, SD = .33), $t(54) = 5.07$, $p < .001$, d = .68, 95% CI [.39, .97].

Table 2. Correlations between criterion bias and other study measures

	Objective Attr.	Subjective Attr.	Explicit Attitudes	Implicit Attitudes	Perceived performance	Desired performance
Criterion Bias	-.097	-.089	-.177	.054	.430*	.089

Attractiveness has been abbreviated to attr. * = $p < .05$

Association between criterion bias and attractiveness, attitudes, and motivation. We then ran a series of correlations between the criterion bias difference score and measures of participant attractiveness, attractiveness attitudes, and perceived and desired performance. See

Table 2 for the correlation between criterion bias and each outcome variable.

The only reliable predictor of criterion bias was perceived task performance, where participants who believed they favored more physically attractive applicants showed greater biases in criterion, $r = .430$, $p < .001$. Neither objective attractiveness ($r = -.097$, $p = .493$) or subjective attractiveness ($r = -.089$, $p = .517$) were reliably correlated with criterion biases on the JBT.

Comparison between correlations with objective and subjective levels of physical attractiveness. Objective and subjective attractiveness were positively but not reliably correlated, $r = .144$, $p = .309$. Using a Williams' t test for comparing dependent correlations, the two measures did not differ in strength of correlation with criterion bias on the JBT, $t(49) = .06$, $p = .953$.

General Discussion

Replicating past work (Axt & Lai, 2019; Axt, Nosek & Nguyen, 2018), participants completing a hypothetical academic admissions task exhibited reliably lower criterion for more versus less physically attractive applicants. Prior research using this paradigm found reliable but small (i.e., $r < .20$) correlations with measures like implicit and explicit attitudes. This study tested whether attractiveness biases in social judgment would be associated with subjective and objective ratings of physical attractiveness. Though data collection is still ongoing, an interim analysis found that social judgment biases favoring more physically attractive people were not reliably correlated with the participant's own objective or subjective physical attractiveness.

The idea that individuals are likely to show an attractiveness bias in judgment regardless of their own physical attractiveness (perceived or objective) is consistent with the idea that bias

toward physically attractive people seems to be more universal and not dependent on individual characteristics of the perceiver. Finding discrimination that favors more physically attractive people is consistent with a "halo effect", where physically attractive people are consistently associated with positive traits like intelligence and sociability, which translates into preferred treatment on ostensibly unrelated outcomes (Feingold, 1992). The present study would suggest that individual differences in the halo effect concerning treatment of more physically attractive people is then not related to the degree to which people themselves identify as physically attractive or are seen by others as physically attractive.

In this sense, the attractiveness bias found in the JBT used here is a notable departure from other uses of the task. For example, prior uses of the same measure have found robust ingroup biases in evaluation, where students from the same university or individuals of the same political affiliation receive lower criterion (Axt, Nguyen & Nosek, 2018). Compared to these previous studies, the attractiveness bias is not simply another form of ingroup favoritism.

One reason for this discrepancy from past work using the JBT may be due to the use of facial cues. In this study, physical attractiveness was defined only by one's face, as hypothetical applicants in the JBT included only a photo of the applicant's face and participant photos were taken in a similar manner. Past research suggests that such facial cues play an incredibly important and automatic role in judgment- a role that may be particularly hard to override through more effortful processing. For example, research finds that while individuals may recognize that facial cues are inaccurate, people still tend to rely on facial cues frequently due to the intuitive accessibility that they provide. One study had participants play a trust game, where they were given the choice to 'reciprocate' or 'betray' their partner for points which would be

converted to money. Participants could make a 100% increase in points if they chose to 'betray' their partner and could either use a facial trustworthiness cue (in which they would be shown a picture of their partner's face) or economic payoff information to help them make the decision. The intuitive reliance on facial cues could be observed, when more participants chose facial trustworthiness as their preferred cue over the more subjectively valid cue (Jaeger et al., 2019). It was hypothesized that participants still chose to rely on facial trustworthiness cues despite knowing it was subjectively less valid, because of the relative ease with which facial cues could be processed as opposed to economic information. Perhaps just as facial trustworthiness is a facial cue that is frequently relied upon for its ease of processing, facial attractiveness may similarly be relied upon.

The facial cues available in our study signaled physical attractiveness, which according to the halo effect, would cue the participant to think that the physically attractive applicant was also more sociable, friendly, and capable. Because facial cues are so immediate and can be accessed with relative ease, it's possible that attractiveness bias may be more universal than other biases, such as bias towards ingroup members based on university affiliation or political orientation. Thus, an individual's physical attractiveness is perhaps more immediately recognizable and the associations between facial physical attractiveness and positive traits is more intuitive, as such facial information is used intuitively and even effortlessly when making judgments. Cues to signal ingroup membership (e.g., a logo depicting one's university; Axt, Nguyen & Nosek, 2018) may not be as automatically encoded, and in turn may be more shaped by an individual's explicit goals.

Limitations

One limitation to the study could be the fact that due to time constraints, there was only enough time to analyze the data of 55 participants. However, although a small sample is bad at detecting small effects, it is sufficient for us to at least rule out large effects. Thus, the relatively small sample size was at least enough for us to see that there was no large correlation between attractiveness criterion bias and subjective or objective physical attractiveness, as the current sample size provided 95% power for detecting an effect of $r = .45$. As a result, it does not appear that subjective or objective physical attractiveness has a strong correlation with attractiveness biases in judgment; the full sample will then tell us whether objective or subjective attractiveness has a small relationship with biased judgment.

Another limitation of the study may lie in the participant sample itself, as all participants were university students within the 18-24 age range. Although participants showed some variation in their ratings of objective and subjective physical attractiveness, it is also possible that the 18-24 age range (or ages close to it) is an age range when individuals are usually perceived to be the most physically attractive. Widening the age sample of participants may reveal different results, as age could affect one's subjective and objective physical attractiveness, which could then possibly influence one's attractiveness bias. For example, if older participants were in the sample, criterion bias may be less strong, as younger individuals may value physical appearance more than older participants. The attractiveness bias observed here was quite large ($d = .68$), which may have introduced possible ceiling effects that suppressed any correlations. With more variability in levels of criterion bias, it could then be possible to detect associations with objective or subjective levels of physical attractiveness.

Another possible limitation in the sample is that the sample is entirely made up of

students from McGill University. Recruiting students from different universities or recruiting young adults who do not attend university could increase the diversity of the sample and possibly indicate a stronger correlation toward criterion bias and an individual's own physical attractiveness. Perhaps at McGill, a school that is very academically-driven, students do not view physical appearance as a core part of their identity because academics already take up a large part of their core identity. Recruiting individuals from different areas where the focus is less on academics may find differing results, especially among populations where physical appearance may play more of an important role in success, such as those who go into fields of art, music, and media.

Future Directions

As mentioned within the limitations section, it is possible that individual characteristics other than objective or subjective physical attractiveness predict strength of attractiveness bias. To follow up on this work, it could be interesting to test what other personal characteristics may be associated with the strength of one's physical attractiveness bias. For instance, a variable such as media consumption could reliably predict the degree to which participants show biases favoring more physically attractive people on the JBT. Television shows frequently feature attractive actors and actresses that may heighten one's existing bias toward those who are physically attractive, while platforms such as Youtube and Instagram have hundreds of celebrities whose main point of attraction is their physical appearance. It would be interesting to see whether participants who consume an extensive amount of media or have grown up consuming an extensive amount of media would have differing criterion bias from those who are relatively disconnected. Further, one could explore what forms of media are most predictive of

high criterion bias, as social media, the internet, and television could all be possible contributing factors to attractiveness bias, but for very different reasons.

Another direction for future research to consider would be to move on from identifying what factors influence the strength of physical attractiveness bias and instead begin to identify what factors can best reduce one's physical attractiveness bias. From these and previous results, one can likely assume that physical attractiveness bias is possessed by most individuals regardless of unique personal traits. If this is truly the case, it would be more beneficial to begin identifying mechanisms to reduce physical attractiveness bias, since at this point physical attractiveness bias is a recognized phenomenon possessed by the general public.

Perhaps increasing one's self-awareness could impact the way one makes decisions, even if implicitly. In line with this idea is objective self-awareness theory, where one's increasing self-awareness of themselves as an object results in increasing comparisons between the self and moral standards of correctness (Duval & Wicklund, 1972). One study found that when participants were placed in front of a mirror, their heightened self-focus overrode behavioral effects of stereotype activation (Dijksterhuis & Knippenberg, 2000). If the halo effect is a mechanism behind overall attractiveness bias, then placing participants in front of a mirror while completing the JBT could make them more aware of their positive bias toward physically attractive people, which could cause them to implicitly correct it, especially if they acknowledge that bias toward physically attractive individuals is wrong.

Other intervention possibilities include keeping the JBT format but investigating whether informing participants of their existing attractiveness bias, along with evidence disconfirming the idea that physically attractive people are more capable, would impact their lower attractiveness

criterion in hiring. One could also compare two different interventions given to participants before completion of the JBT task, perhaps with one intervention taking a more educational approach (informing the participant of their biases and how they are statistically inaccurate) and another intervention taking a more emotional approach (giving the participant an article to read about how someone was unfairly discriminated against because they were unattractive) to see which appeal works more effectively in reducing biased social judgment.

Conclusion

While positive bias toward physically attractive individuals has been confirmed by previous research, this study aimed to investigate whether an individual's own physical attractiveness (objective or subjective) influenced the strength of their attractiveness bias. After having a sample of university students complete a Judgment Bias Task, we found that although the students did display a positive bias toward more physically attractive individuals (confirming previous research), we did not find any correlation between this bias and the participant's own level of attractiveness. These results suggest that although attractiveness bias exists, it is not dependent on one's individual appearance. However, this does not mean that attractiveness bias is completely universal and that it is not dependent upon individual factors. Future research should explore other factors, such as media consumption, to investigate whether strength of attractiveness is dependent on other individual factors or whether it really is just a universal bias that exists outside of personal characteristics. It may also be important to focus on how to reduce attractiveness bias rather than on what causes it. Future research could also test interventions through the Judgment Bias Task, such as having participants sit in front of a mirror or read through an educational or emotional appeal to reduce attractiveness bias, to see whether physical

attractiveness bias can be reduced. In fact, perhaps by finding an intervention solution first, the personal characteristics behind physical attractiveness bias will become clearer.

References

Axt, J., Casola, G., & Nosek, B. A. (2018). Reducing social judgment biases may require identifying the potential source of bias. *Personality and Social Psychology Bulletin*, *45*(8), 1232–1251. doi: 10.31234/osf.io/ngxks

Axt, J., & Lai, C. K. (2019). Reducing discrimination: A bias versus noise perspective. *Journal of Personality and Social Psychology*, *117*(1). doi: 10.31234/osf.io/v7ksz

Axt, J., Nguyen, H., & Nosek, B. A. (2018). The Judgment Bias Task: A flexible method for assessing individual differences in social judgment biases. *Journal of Experimental Social Psychology*, *76*, 337–355. doi: 10.31234/osf.io/bhzz6

Cash, T. F., & Derlega, V. J. (1978). The matching hypothesis: Physical attractiveness among same-sexed friends. *Personality and Social Psychology Bulletin*, *4*(2), 240–243. doi: 10.1177/014616727800400213

Commisso, M., & Finkelstein, L. (2012). Physical attractiveness bias in employee termination. *Journal of Applied Social Psychology*, *42*(12), 2968–2987. doi: 10.1111/j.1559-1816.2012.00970.x

Cook, A. (1978, May 14). Fat Pride. *The Washington Post*. Retrieved from https://www.washingtonpost.com/archive/lifestyle/magazine/1978/05/14/fat-pride/782c4d14-4c75-424b-aff0-ae62cc8dd8fa/

Dijkstehuis, A., & Knippenberg, A. V. (2000). Behavioral indecision: Effects of self-focus on automatic behavior. *Social Cognition*, *18*(1), 55–74.

Dobbs, M., & Crano, W. D. (2001). Outgroup accountability in the minimal group paradigm: Implications for aversive discrimination and social identity theory. *Personality and Social Psychology Bulletin*, *27*(3), 355–364. doi: 10.1177/0146167201273009

Duval, S., & Wicklund, R. A. (1972). *A theory of objective self awareness*. New York, NY: Academic Press.

Feingold, A. (1992). Good-looking people are not what we think. *Psychological Bulletin*, *111*(2), 304–341. doi: 10.1037/0033-2909.111.2.304

Greenwald, A. G., McGhee, D. E., & Schwartz, J. L. K. (1998). Measuring individual differences in implicit cognition: The implicit association test. *Journal of Personality and Social Psychology*, *74*(6), 1464–1480. Retrieved from https://faculty.washington.edu/agg/pdf/Gwald_McGh_Schw_JPSP_1998.OCR.pdf

Greenwald, A. G., & Pettigrew, T. F. (2014). With malice toward none and charity for some: Ingroup favoritism enables discrimination. *The American Psychologist*, *69*(7), 669–684. doi: 10.1177/002205749317500208

Hosoda, M., Stone-Romero, E. F., & Coats, G. (2003). The effects of physical attractiveness on job-related outcomes: A meta-analysis of experimental studies. *Personnel Psychology*, *56*(2), 431–462. doi: 10.1111/j.1744-6570.2003.tb00157.x

Jaeger, B. M., Evans, A. V., Stel, M., & Beest, I. (2019). Explaining the persistent influence of facial cues in social decision-making. *Journal of Experimental Psychology*, *148*(6). doi: 10.31234/osf.io/q4fxk

Kenealy, P., Gleeson, K., Frude, N., & Shaw, W. (1991). The importance of the individual in the "causal" relationship between attractiveness and self-esteem. *Journal of Community & Applied Social Psychology*, *1*(1), 45–56. Retrieved from https://psycnet.apa.org/record/1991-30119-001

Mackinnon, S. P., Jordan, C. H., & Wilson, A. E. (2011). Birds of a feather sit together: Physical similarity predicts seating choice. *Personality and Social Psychology Bulletin*, *37*(7), 879–892. doi: 10.1177/0146167211402094

Mullen, B., Brown, R., & Smith, C. (1992). Ingroup bias as a function of salience, relevance, and status: An integration. *European Journal of Social Psychology*, *22*(2), 103–122. doi: 10.1002/ejsp.2420220202

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

Pronin, E., Lin, D. Y., & Ross, L. (2002). The bias blind spot: Perceptions of bias in self versus others. *Personality and Social Psychology Bulletin*, *28*(3), 369–381. doi: 10.1177/0146167202286008

Stockemer, D., & Praino, R. (2015). Blinded by beauty? Physical attractiveness and candidate selection in the U.S. house of representatives. *Social Science Quarterly*, *96*(2), 430–443. doi: 10.1111/ssqu.12155