Journal of Applied Social Psychology

Journal of Applied Social Psychology 2014, 44, pp. 40-45

Looking up versus looking down: attractiveness-based organizational biases are moderated by social comparison direction

Maria Agthe¹, Matthias Spörrle², Dieter Frey¹, Jon K. Maner³

¹Ludwig-Maximilians-University of Munich (LMU) ²University of Applied Management (UAM) ³Florida State University (FSU)

Correspondence concerning this article should be addressed to Maria Agthe, Department of Psychology, Ludwig-Maximilians-University of Munich (LMU), Leopoldstr. 13, D-80802 München, Germany.

E-mail: MariaAgthe@lmu.de

doi: 10.1111/jasp.12198

Abstract

Organizational decision-making research demonstrates an abundance of positive biases directed toward attractive individuals. However, recent research suggests that these favorable consequences of attractiveness do not hold when the person being evaluated is of the same sex as the evaluator. In the current study, participants evaluated prospective job candidates and indicated their desire to interact socially with the candidate. Results indicated positive responses toward attractive other-sex targets but not toward attractive same-sex targets. This pattern was moderated by participants' social comparison orientation: People who tended to engage in downward (rather than upward) social comparison displayed stronger reactions to attractive comparison targets. They indicated less desire to interact socially with attractive same-sex job candidates than those who tend to engage in upward social comparison.

In all organizations, people evaluate and select others to become part of the institution (e.g., hiring decisions). Many different factors (e.g., applicants' ethnicity or attractiveness) can bias those evaluations, even when that information is not objectively related to the evaluative context. Indeed, organizational behavior often involves close social interactions among employees, and one factor people may weigh when evaluating prospective job candidates is the extent to which they think they would enjoy interacting socially with the candidate.

One of the most powerful characteristics influencing social judgment is physical attractiveness. Attractive people generally receive more favorable evaluations than less attractive people (Eagly, Ashmore, Makhijani, & Longo, 1991; Langlois et al., 2000), for example, with regard to job-related outcomes (Hosoda, Stone-Romero, & Coats, 2003) and perceptions of job qualifications (Shannon & Stark, 2003). These findings fit with evidence that people generally enjoy being around highly attractive people (Lemay, Clark, & Greenberg, 2010).

However, the positive effects of attractiveness on social judgment are not as straightforward as they seem: Although

reactions to attractive members of the opposite sex tend to reflect positive biases, attractiveness may fail to cause positive reactions toward same-sex persons, and it may even elicit negative responses. Several studies suggest that, within romantic relationships, concerns over intrasexual rivalry lead people to respond negatively to attractive same-sex persons who might threaten one's relationships (Buss, Shackelford, Choe, Buunk, & Dijkstra, 2000; Maner, Miller, Rouby, & Gailliot, 2009) and self-esteem (Gutierres, Kenrick, & Partch, 1999; Park & Maner, 2009). Indeed, upwardly comparing oneself to more attractive same-sex individuals can lead to a variety of negative psychological consequences (Brown, Novick, Lord, & Richards, 1992; Gutierres et al., 1999). To alleviate such social comparison threats, many people derogate (Salovey & Rodin, 1984) and avoid targets of upward social comparison (Tesser, Campbell, & Smith, 1984). Consequently, people tend to look favorably upon attractive opposite-sex targets, but unfavorably upon attractive same-sex targets, for example, in terms of less positive attributions (Agthe & Spörrle, 2009; Försterling, Preikschas, & Agthe, 2007) and less desire for interaction (Agthe, Spörrle, & Försterling, 2008). Moreover, Agthe et al. 41

a small body of recent research suggests that these biases may carry over into organizational settings (cf. Luxen & van de Vijver, 2006).

One factor that may moderate people's responses to attractive same-sex targets is their social comparison orientation—the degree to which people chronically compare themselves to others who are better versus worse off on some self-relevant dimension (Aspinwall & Taylor, 1993). People who feel especially threatened by others tend to seek downward comparisons in order to reduce the selfevaluative threat (Brown, Ferris, Heller, & Keeping, 2007). People who generally engage in downward comparison tend to be more susceptible to self-threat and to experience negative contrast effects, whereas people who generally engage in upward comparison tend to be interested in selfimprovement and to experience positive assimilation effects. Thus, for the former, one might expect negative responses to attractive same-sex targets, whereas, for the latter, exposure to attractive targets should be less threatening and might even be motivating (Lockwood & Kunda, 1997). That is, the tendency to compare oneself to superior others might moderate negative effects of exposure to attractive same-sex targets.

In the current research, we investigated whether social comparison direction would moderate responses to highly attractive job candidates. We expected that negative biases toward attractive same-sex persons would be most pronounced for persons who tend to engage in downward comparisons. When people who tend to compare downward (as a strategy to avoid socially threatening comparisons) are confronted with a highly attractive same-sex person, the resulting upward comparison might prove threatening. Consequently, for those who tend to engage in downward comparison, the threat of a same-sex person's superior physical appearance might lead to a comparably lower inclination to interact with the target. Those who tend to engage in upward comparison are more comfortable with those comparisons, so an attractive target should not constitute much of a threat. Thus, persons who generally engage in downward comparisons should react more strongly to attractive same-sex targets than persons who generally prefer upward comparisons.

In sum, we expected that participants would desire social interaction with attractive opposite-sex job candidates, but that this preference for attractive persons would not hold for same-sex job candidates. Moreover, we hypothesized that this pattern would be pronounced only among individuals who tend to engage in downward social comparison—people for whom attractive same-sex candidates pose the greatest self-evaluative threat. Finally, we also examined people's decisions to hire attractive versus less attractive targets because we reasoned that people's desire for social interaction with a prospective job candidate would be linked with people's interest in actually hiring the candidate.

Method

Participants and procedure

European-Caucasian students (240 females, 240 males, mean age 22.89 years, SD = 2.26) from German universities were approached individually on campuses and randomly assigned to experimental conditions. They read a scenario that asked them to play the role of a member of a company's selection committee tasked with evaluating a candidate's application. Participants then read the applicant's cover letter and résumé and responded to dependent measures.

Design and materials

The experiment used a 2 (participant sex) \times 2 (target sex) \times 2 (target attractiveness: high vs. lower) between-subjects design. To manipulate the attractiveness of the candidate, we used pretested pictures based on the following criteria: (a) pictures were passport-sized facial photographs, (b) those depicted were in their 20s, and (c) of Caucasian descent. Twelve photos (three attractive men/women; three relatively less attractive men/women) were selected. Three exemplars for each target category were used to increase generalizability. Each participant saw only one target; which target they saw was randomized across participants.

The materials included a cover letter and résumé ostensibly written as part of an application for the position of a team assistant. In addition to personal history and demographics (e.g., date of birth), stimulus materials contained detailed descriptions of job-specific qualifications (e.g., computer skills), former work experience (e.g., internships), and interests of the candidate (e.g., cooking), indicating that he/she was fairly well qualified for the job. This information was identical across conditions; the only experimental manipulations were the candidate's sex and level of attractiveness.

Measures

Participants indicated their desire for social interaction with the candidate by means of three items on 10-point scales from 1 (not at all) to 10 (very); sample item: "How interested would you be to get to know this person?" (α = .85). To assess the extent to which participants would select the candidate for the job, they answered three items on 10-point scales from 1 (unlikely) to 10 (very likely); for example, "Would you hire the applicant?" (α = .92). After completing these items, participants responded to a manipulation check assessing target attractiveness on three 10-point scales from 1 (not at all) to 10 (very); for example, "How attractive is this person?" (α = .96). Finally, participants provided demographic information (e.g., age) and their social comparison tendencies by responding to the 10-point scale item, "When I compare myself to others, I usually compare myself to people who

are compared to me ... [inferior] (left label of the scale) [superior] (right label of the scale)." No significant effects of the experimental manipulations on this variable emerged, indicating that these responses were unaffected by the manipulations.

Results

Manipulation check

Participants rated the attractive candidates to be substantially more attractive (M = 6.97, SD = 1.91) than the less attractive ones (M = 3.83, SD = 1.74), F(1, 471) = 386.90, p < .001, $\eta^2 = .42$. The attractiveness manipulation was effective for all four combinations of participant sex and target sex (ps < .001).

Desire for interaction with job candidate

A 2 (participant sex) \times 2 (target sex) \times 2 (target attractiveness: high vs. low) analysis of variance on desire for social interaction revealed a significant attractiveness main effect, $F(1, 472) = 17.09, p < .001, \eta^2 = .03$. Moreover, we confirmed the hypothesized three-way interaction among participant sex, target sex, and attractiveness, F(1, 472) = 10.85, p < .005, $\eta^2 = .02$, consistent with our hypothesis that the effect of attractiveness would depend on whether the target was of the same or opposite sex as the participant. To clarify the interaction, we tested the effect of attractiveness for same-sex versus opposite-sex targets. When the target was of the opposite sex, we observed a positive effect of attractiveness on desire for social interaction, F(1, 476) = 27.11, p < .001, $\eta^2 = .02$. This effect was eliminated, however, when the target was of the same sex as the participant, F = 0.35, p = .56 (see Figure 1). Thus, the positive effect of target attractiveness was elimi-

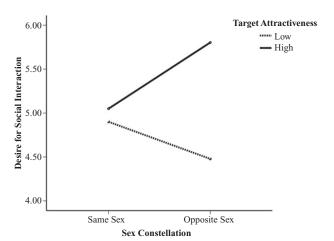


Figure 1 Effects of target attractiveness on desire for social interaction as a function of the sex constellation of rater and target.

nated in same-sex contexts, and this was the case for both men and women (both ps > .50).

Moderation analyses

Using regression analyses, we examined whether the three-way interaction among participant sex, target sex, and target attractiveness on desire for social interaction would be moderated by social comparison orientation. We found that the three-way interaction ($\beta = -.14$, p < .005) was moderated by social comparison orientation, that is, a four-way interaction ($\beta = .14$, p < .005). As recommended by Aiken and West (1991), we examined the three-way interaction at three different levels of the moderator: at comparatively low levels on the scale of social comparison orientation (1 *SD* below the mean, indicating a downward comparison orientation), at moderate levels of social comparison orientation, and at high levels (1 *SD* above the mean, indicating an upward comparison orientation).

Significant three-way interactions on desire for social interaction were observed for participants with a downward social comparison orientation ($\beta = -.27, p < .001$) and moderate orientation ($\beta = -.14, p < .005$), but not for participants with a tendency toward upward social comparison ($\beta = .00, p > .95$).

Correspondingly, for participants with levels of social comparison in the upper third of the sample (i.e., with a relative tendency toward upward comparison, n = 196), we detected no three-way interaction, F < 1, only a significant preference for attractive targets, F(1, 188) = 4.58, p < .05. However, for the remaining participants with no upward comparison tendency (n = 275), we found a significant three-way interaction, F(1, 267) = 16.71, p < .001. In this group, attractiveness induced higher desire for social interaction for opposite-sex targets, but lower desire for social interaction in same-sex constellations (see Figure 2).

Job selection decision

Although we found a strong correlation between desire for social interaction and the selection decision, r = .56, p < .001, we detected no significant direct effect of the three-way interaction on job selection decisions, F = 0.14, p = .71. Nevertheless, analyses did show that there was a significant indirect effect of the three-way interaction on hiring preferences via participants' desire for social interaction, a*b = .08, p < .05. In the absence of the direct effect, this finding should be interpreted with caution.

Discussion

Social interaction is an essential part of working life in almost all organizations. The current study builds on previous Agthe et al. 43

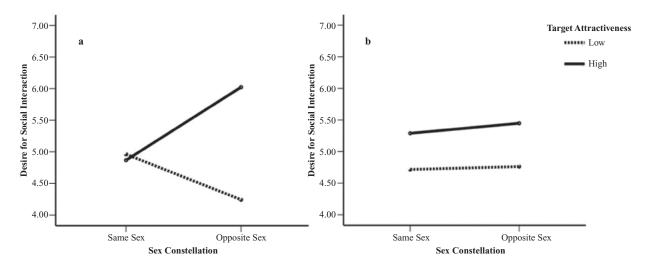


Figure 2 Effects of target attractiveness on desire for social interaction as a function of sex constellation of rater and target and rater's social comparison orientation.

Note: (a) For participants with a relative downward social comparison tendency (n = 275). (b) For participants with a relative upward social comparison tendency (n = 196).

findings suggesting that attractiveness can affect people's desire for social interaction which, in turn, can influence a range of important organizational processes (Agthe, Spörrle, & Maner, 2011; Lemay et al., 2010). The current work contributes to the literature by identifying the role social comparison direction plays in responses to attractive same-sex versus opposite-sex persons. In line with hypotheses, participants preferred to interact with attractive (in comparison to less attractive) opposite-sex candidates, but those positive effects of attractiveness did not apply to same-sex constellations. Moreover, participants' desire for social interaction was moderated by their tendency to engage in upward versus downward social comparison. Participants who engage in downward comparisons reacted more strongly to attractive persons than participants who generally prefer upward comparisons. That is, people with a downward comparison tendency were less interested in interacting with attractive samesex targets, consistent with the idea that they would seek to avoid self-evaluation threat; in contrast, people with an upward comparison tendency showed a general preference to interact with attractive candidates, thereby suggesting less concern about the possible threats attractive same-sex individuals pose.

This pattern is consistent with evidence that people who generally engage in downward comparison display greater susceptibility to self-threat and an enhanced tendency to protect their self-esteem (Brown et al., 2007), whereas people who generally engage in upward comparison tend to be less vulnerable to self-threat (Lockwood & Kunda, 1997). Our results are also in line with findings that people who show a downward comparison tendency (compared to people who

engage in upward comparison) try harder to avoid unfavorable comparisons (Friend & Gilbert, 1973). The current research provides the first empirical evidence that biasing effects of attractiveness are moderated by people's tendency toward upward versus downward social comparison and suggests important implications for organizational processes linked to social evaluation and selection.

On a broader level, our results are consistent with the notion that the direction of social comparison may reflect strategies to enhance (in the long term) or to protect (in the short run) one's self-esteem (Nussbaum & Dweck, 2008). Additionally, our findings fit with research that social comparison is linked to interpersonal rivalry (Wehrens et al., 2010), particularly on self-relevant dimensions (Schmitt, 1988). Moreover, the current study is consistent with recent findings that even though physically attractive persons are generally favored in interpersonal and organizational contexts, positive biases do not always hold for attractive members of one's own sex (Agthe, Spörrle, Frey, Walper, & Maner, 2013; Agthe et al., 2011); in particular, the reactions displayed by persons who tend to compare downward are in line with findings that people who are vulnerable to selfthreat (in terms of comparably lower attractiveness or selfesteem; Agthe, Spörrle, & Maner, 2010; Agthe et al., 2011) seek to avoid interacting with attractive same-sex targets.

One reason desire for interaction is important is that it reflects a factor that might weigh into people's hiring decisions (cf. Luxen & van de Vijver, 2006). Indeed, in our own data, desire for interaction was strongly correlated with people's decisions to hire the candidate. Although attractiveness did not directly influence hiring decisions, the data are

consistent with the possibility that attractiveness might ultimately affect people's choices about whom they wish to work and interact with.

The effects of attractiveness on social interaction extend beyond the realm of personal relationships and have implications for professional settings. For instance, even in organizational contexts in which physical attractiveness is assumed to be irrelevant, attractive same-sex persons might elicit perceptions of threat and those perceptions might negatively bias organizational processes. Hence, implicit positive responses to attractive opposite-sex targets or a lack of positive responses to attractive same-sex targets might carry over into professional settings, biasing the way people respond to job candidates, employees, or coworkers (Buunk, Pollet, Dijkstra, & Massar, 2011). From an applied perspective, it seems particularly important for institutions to emphasize the benefits of upward comparison, for that orientation appears to reduce the potential for bias.

Efforts should also be made to compensate for effects of attractiveness biases on social interaction and outcomes in organizations. For instance, a careful composition of working teams (e.g., by including men and women of different ages with different strengths) could prove beneficial, as it might lessen rivalry resulting from unfavorable social comparison. On a more general level, it might be wise for organizations to avoid overemphasizing competition and contrast in employees, since a highly competitive atmosphere might increase susceptibility to perceived social threat, particularly among those who tend to compare downward. Instead,

encouraging people to perceive upward comparison as a chance for improvement (e.g., by implementing mentoring programs) and emphasizing employees' strengths to buffer them against the negative consequences of social comparison might prove beneficial for organizational performance. Moreover, because social comparisons often occur unconsciously and spontaneously (Mussweiler, Rüter, & Epstude, 2006), making people aware of such biases might lower their impact.

Limitations of the current research provide valuable opportunities for further investigation. For instance, future research would benefit from testing the role social comparison plays in people's reactions by using other methods (e.g., experimental manipulations of social threat in addition to self-reports), actual applied contexts, and a multiple-item scale for assessing social comparison orientation. Although we have provided preliminary evidence pointing to the moderating role of social comparison orientation, there are still a number of other potential moderators to examine, such as the importance people place on physical attractiveness (Crocker, Luhtanen, Cooper, & Bouvrette, 2003). This, and other possible moderating variables, provides fruitful avenues for further research aimed at understanding the implications of attractiveness for organizational evaluation and behavior.

Acknowledgment

The authors want to thank Kerstin Nachtigall for the great efforts she has invested in collecting and coding the data.

References

Agthe, M., & Spörrle, M. (2009). On the context sensitivity of the sexual attribution bias: A replication and extension to situations of failure. *The Open Psychology Journal*, *2*, 19–24.

Agthe, M., Spörrle, M., & Försterling, F. (2008). Success attributions and more: Multidimensional extensions of the sexual attribution bias to failure attributions, social emotions, and the desire for social interaction. *Personality and Social Psychology Bulletin*, 34, 1627–

Agthe, M., Spörrle, M., Frey, D., Walper, S., & Maner, J. K. (2013). When romance and rivalry awaken: Attractiveness-based social judgment biases emerge at puberty. *Human Nature*, 24, 182–195.

Agthe, M., Spörrle, M., & Maner, J. K. (2010). Don't hate me because I'm beautiful: Anti-attractiveness bias in organizational evaluation and decision making. *Journal of Experimental Social Psychology*, 46, 1151–1154.

Agthe, M., Spörrle, M., & Maner, J. K. (2011). Does being attractive always help? Positive and negative effects of attractiveness on social decision making. *Personality and Social Psychology Bulletin*, 37, 1042–1054.

Aiken, L. S., & West, S. G. (1991). Multiple regression: Testing and interpreting interactions. Newbury Park: Sage.

Aspinwall, L. G., & Taylor, S. E. (1993). Effects of social comparison direction, threat, and self-esteem on affect, self-evaluation, and expected success. *Journal of Personality and Social Psychology*, 64, 708–722.

Brown, D. J., Ferris, D. L., Heller, D., & Keeping, L. M. (2007). Antecedents and consequences of the frequency of upward and downward social comparisons at work. Organizational Behavior and Human Decision Processes, 102, 59–75.

Brown, J. D., Novick, N. J., Lord, K. A., & Richards, J. M. (1992). When Gulliver travels: Social context, psychological closeness, and self-appraisals. *Journal of Personality and Social Psychology*, 62, 717–727.

Buss, D. M., Shackelford, T. K., Choe, J., Buunk, B. P., & Dijkstra, P. (2000). Distress about mating rivals. *Personal Relationships*, *7*, 235–243.

Buunk, A. P., Pollet, T. V., Dijkstra, P., & Massar, K. (2011). Intrasexual competition within organizations. In G. Saad (Ed.), Evolutionary psychology in the

Agthe et al. 45

business sciences (pp. 41–70). Berlin: Springer.

- Crocker, J., Luhtanen, R. K., Cooper, M. L., & Bouvrette, A. (2003). Contingencies of self-worth in college students: Theory and measurement. *Journal of Personality* and Social Psychology, 85, 894–908.
- Eagly, A. H., Ashmore, R. D., Makhijani, M. G., & Longo, L. C. (1991). What is beautiful is good, but . . . : A meta-analytic review of research on the physical attractiveness stereotype. *Psychological Bulletin*, 110, 109–128.
- Försterling, F., Preikschas, S., & Agthe, M. (2007). Ability, luck, and looks: An evolutionary look at achievement ascriptions and the sexual attribution bias. *Journal of Personality and Social Psychology*, 92, 775–788.
- Friend, R. M., & Gilbert, J. (1973). Threat and fear of negative evaluation as determinants of locus of social comparison. *Journal of Personality*, 41, 328–340.
- Gutierres, S. E., Kenrick, D. T., & Partch, J. J. (1999). Beauty, dominance, and the mating game: Contrast effects in self-assessment reflect gender differences in mate selection. *Personality and Social Psychology Bulletin*, 25, 1126–1134.
- 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*, 431–462.

- Langlois, J. H., Kalakanis, L., Rubenstein, A. J., Larson, A., Hallam, M., & Smoot, M. (2000). Maxims or myths of beauty? A meta-analytic and theoretical review. *Psychological Bulletin*, *126*, 390–423.
- Lemay, E. P., Jr, Clark, M. S., & Greenberg, A. (2010). What is beautiful is good because what is beautiful is desired: Physical attractiveness stereotyping as projection of interpersonal goals. Personality and Social Psychology Bulletin, 36, 339–353.
- Lockwood, P., & Kunda, Z. (1997). Superstars and me: Predicting the impact of role models on the self. *Journal of Personality and Social Psychology*, 73, 91–103.
- Luxen, M. F., & van de Vijver, F. J. R. (2006).
 Facial attractiveness, sexual selection, and personnel selection: When evolved preferences matter. *Journal of Organizational Behavior*, 27, 241–255.
- Maner, J. K., Miller, S. L., Rouby, D. A., & Gailliot, M. T. (2009). Intrasexual vigilance: The implicit cognition of romantic rivalry. *Journal of Personality and Social Psychology*, 97, 74–87.
- Mussweiler, T., Rüter, K., & Epstude, K. (2006). The why, who, and how of social comparison: A social-cognition perspective. In S. Guimond (Ed.), Social comparison and social psychology: Understanding cognition, intergroup relations, and culture (pp. 33–54). New York: Cambridge University Press.

- Nussbaum, A. D., & Dweck, C. S. (2008). Defensiveness versus remediation: Self-theories and modes of self-esteem maintenance. Personality and Social Psychology Bulletin, 34, 599–612.
- Park, L. E., & Maner, J. K. (2009). Does selfthreat promote social connection? The role of self-esteem and contingencies of self-worth. *Journal of Personality and Social Psychology*, 96, 203–217.
- Salovey, P., & Rodin, J. (1984). Some antecedents and consequences of social-comparison jealousy. *Journal of Personality and Social Psychology*, 47, 780–792.
- Schmitt, B. H. (1988). Social comparison in romantic jealousy. *Personality and Social Psychology Bulletin*, 14, 374–387.
- Shannon, M. L., & Stark, C. P. (2003). The influence of physical appearance on personnel selection. *Social Behavior and Personality*, *31*, 613–624.
- Tesser, A., Campbell, J., & Smith, M. (1984). Friendship choice and performance: Self-evaluation maintenance in children. *Journal of Personality and Social Psychology*, 46, 561–574.
- Wehrens, M. J. P. W., Buunk, A. P., Lubbers, M. J., Dijkstra, P., Kuyper, H., & van der Werf, G. P. C. (2010). The relationship between affective response to social comparison and academic performance in high school. *Contemporary Educational Psychology*, 35, 203–214.