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Mirror, mirror on the wall, who's the fairest of them all? Thinking that one is attractive increases the tendency to support inequality



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ABSTRACT

Five studies tested the hypothesis that self-perceived attractiveness shapes people's perceptions of their social class (subjective SES), which, in turn, shape how people respond to inequality and social hierarchies. Study 1 found that self-perceived attractiveness was associated with support for group-based dominance and belief in legitimizing ideologies, and that these relationships were mediated by subjective social class. Subsequent experiments showed that higher self-perceived attractiveness increased subjective SES, which in turn, increased SDO (Study 2 and Study 5); promoted stronger beliefs in dispositional causes of inequality (Study 3); and reduced donations to a movement advocating for social equality (Study 4). By contrast, lower self-perceived attractiveness decreased subjective SES, which in turn, led to a greater tendency to reject social hierarchies and to construe inequality in terms of contextual causes. These effects emerged even after controlling for power, status, and self-esteem, and were not simply driven by inducing people to see themselves positively on desirable traits (Study 4 and Study 5).

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Introduction

Social inequality is at the forefront of today's national consciousness and political debates (Pew Research Center, 2012). Attitudes about inequality not only reflect people's ideological preferences but also affect how people approach important social issues, such as how public goods should be distributed, how much the wealthy should be taxed, and whether lucrative industries should be regulated (cf. Price, Kang, Dunn, & Hopkins, 2011). In organizations, people's attitudes about inequality influence what they perceive to be fair (Tyler, 1994), what they feel they are entitled to (Miller, 2001), and how enthusiastic they support social and organizational policies (e.g., affirmative action; Sidanius & Pratto, 1999).

The question of what makes people more or less egalitarian is a prolific area of research that has been studied extensively in social (e.g., Lowery, Unzueta, Knowles, & Goff, 2006; Monin & Miller, 2001; Schmitt, Branscombe, & Kappen, 2003) and personality psychology (e.g., Pratto, Sidanius, Stallworth, & Malle, 1994). In the current research, we extend this rich literature by investigating a specific and previously unexamined idea: that people's beliefs about their physical attractiveness (self-perceived attractiveness) can also influence whether people will support or reject inequality.

We propose that when cues suggest to people that they are more attractive, they will espouse *more* favorable attitudes toward inequality and social hierarchies; by contrast, when cues suggest to people that they are less attractive, they will espouse *less* favorable attitudes toward inequality and social hierarchies.

Why might people's beliefs about their physical attractiveness influence their attitudes about inequality? In the current research, we suggest (and demonstrate) that this occurs because people's beliefs about their physical attractiveness influence their perception of their social class. Specifically, we posit that higher self-perceived attractiveness would lead one to a perception of relatively higher social class membership, which, in turn, would result in having a more favorable view of inequality. By contrast, we posit that lower self-perceived attractiveness would lead one to a perception of relatively lower social class membership, which, in turn, would lead to greater rejection of inequality and social hierarchies (Brandt, 2013).

Our interest in studying self-perceived attractiveness stems from the observation that being physically attractive is an important goal for many people, even during times of economic hardship (Allison & Martinez, 2010; Schaefer, 2008). Records indicate that Americans today spend over 200 billion dollars a year on their physical appearance despite poor economic conditions (Rhode, 2010), and are willing to expend more money on grooming than on reading material (United States Census Bureau, 2012). In 2011, the American Society of Plastic Surgeons (ASPS) also estimated that approximately 13 million cosmetic surgeries were

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performed in the United States, which is now the fastest-growing area of medical expenditures of the last decade (ASPS, 2012; Rhode, 2010).

The staggering amounts of money and time that people invest to become physically attractive led us to entertain the idea that perhaps, physical attractiveness is not just a cultural obsession, but a substantially important attribute by which the social hierarchy is fundamentally organized. We suspect that physical attractiveness is one important dimension in which humans sort themselves into positions of low and high rank (Kraus, Piff, Mendoza-Denton, Rheinschmidt, & Keltner, 2012), and thus people's beliefs about whether they are attractive or not should influence their perception of their standing in the social hierarchy. If our contention were accurate, then situations and experiences that change people's beliefs about their physical appearance would also change how people see themselves in relation to others.

Self-perceived attractiveness

Self-perceived attractiveness refers to people's beliefs about the quality of their physical appearance. The majority of prior work on this topic has focused primarily on how self-perceived attractiveness relates to people's personality and social behavior (see Feingold, 1992 for a meta-analysis). For example, past scholarship has shown that people who think that they are highly attractive are also more likely to be extraverted, psychologically healthy, and more popular with the opposite sex. In this paper, we suggest that the extent to which people believe that they are physically attractive can also influence their beliefs about whether they belong to a relatively higher or lower social class.

Social class

Social class is a combination of both material resources (e.g., income, educational attainment, occupational prestige; *objective SES*) and perceived rank vis-à-vis others in the social hierarchy (subjective SES; Kraus, Piff, & Keltner, 2009). Our focus in this investigation is on subjective social class (Adler, Epel, Castellazzo, & Ickovics, 2000; Kraus et al., 2009; Laurin, Fitzsimons, & Kay, 2011; Piff, Stancato, Côté, Mendoza-Denton, & Keltner, 2012). Emerging work suggests that subjective social class shapes how people construe their social world, independent of their actual objective resources (for a review see Kraus et al., 2012). For example, the perception that they are in a lower class can increase people's attentiveness to their social environment (Kraus, Horberg, Goetz, & Keltner, 2011), susceptibility to the effects of stress (Adler et al., 2000), and the likelihood that they will behave compassionately and prosocially (Piff, Kraus, Côté, Cheng, & Keltner, 2010). By contrast, the perception that they are in an upper class can lead to reduced sensitivity to threat (Kraus et al., 2012), lower willingness to observe ethical norms (Piff et al., 2012), and a stronger desire for freedom and personal agency (Kraus et al., 2012). Social class perceptions, therefore, constitute an important cause of people's attitudes and behaviors, and are particularly useful for understanding how organizational members approach and affirm organizational hierarchies (see Côté, 2011).

Whereas past work suggests that individuals assess their social class by evaluating themselves and comparison others on traditional economic indicators (e.g., wealth, educational attainment, occupational prestige; see Kraus et al., 2009), we propose that people can also infer their social class based on subtle cues, such as their judgments about their own physical appearance (self-perceived attractiveness). We propose that when cues suggest to people that they are more attractive, it should lead them to think that they belong to a relatively higher social class; by contrast, when cues suggest to people that they are less attractive, it should

lead them to think that they belong to a relatively lower social class.

Why might self-perceived attractiveness shape subjective social class?

Although cultures vary in what is perceived as attractive (Rhode, 2010), prescriptive standards of beauty often reflect features that signal wealth and upper social class membership. For example, in societies where food is scarce, plumpness signals that one has resources, and is considered to be an attractive quality; however, where food is abundant, thinness is seen as an attractive trait (Sobal & Stunkard, 1989). In the Western context, physical traits that more frequently appear in the upper social class define the ideal standard of beauty (e.g., light skin, straight hair, Anglo-European features; Rhode, 2010) – indicating that we derive our definitions of attractiveness from the features of the upper social class.

While most societies derive the standards of beauty from the features of the upper social class, individuals also form inferences about the social class membership of other people based on their physical appearance (Kalick, 1988). For example, during the 20th century, it was typical to infer the social class category of other people based on the lightness of their skin. Those with fair skin were considered beautiful and part of the elite, who could afford to spend their days inside shielded from the sun, while those with "red necks" were considered members of the working class, whose skin became tan from long hours in the field (Cassidy & Hall, 2002). Moreover, people tend to associate attractiveness with privilege and favored social treatment (Dermer & Thiel, 1975; Kalick, 1988), indicating that they see beauty as an important component of assignment in the class hierarchy.

Based on the evidence that people draw inferences about the wealth and social class of others based on their physical appearance (Kalick, 1988), we suspect they may apply those same inferences to themselves. For example, just as they judge attractive others as relatively higher social class, they may judge their own social class as higher to the extent they believe they possess physically attractive features. On the other hand, cues that suggest to people that they are lacking attractive qualities should lead them to conclude that they belong to a relatively lower and less privileged social class. In the present research, our first hypothesis is that people's beliefs about their physical attractiveness will influence their perceptions of their own class membership.

Subjective social class and inequality

Our second hypothesis is that differences in social class perceptions, driven by differences in self-perceived attractiveness, will predict attitudes toward inequality. We predicted that higher self-perceived attractiveness would lead to a perception of relatively higher social class membership, which, in turn, would lead to a more favorable view of inequality. By contrast, we expected that lower self-perceived attractiveness would lead to a perception of relatively lower social class membership, which, in turn, would lead to greater rejection of inequality and social hierarchies. In other words, we posit in our theoretical model that subjective SES will be a mediator between self-perceived attractiveness and attitudes toward inequality.

Our second hypothesis has been demonstrated in emerging work on subjective social class. Scholars have shown that members of the upper class espouse a more favorable view of social inequality (Piff et al., 2010) and have a greater propensity to endorse attitudes and beliefs that reinforce existing inequalities (Kraus & Keltner, 2013; Kraus et al., 2009). Recent work by Kraus (2013) suggest that people from the upper class are more inclined to endorse inequality because they are more motivated to maintain or

justify their elevated social position, and are thus, more prone to espouse views that justify disparities in status and rank between different social groups. In related scholarship, researchers have found that being in high status positions or high status groups can increase the favorability of social dominance (Morrison & Ybarra, 2008; Piff et al., 2010), in part because people like being on top (Chow, Lowery, & Hogan, 2013) and the privileges that come with an advantaged position (Bobo & Kluegel, 1993). These effects have been found to emerge even when group status (Bettencourt, Dorr, Charlton, & Hume, 2001; Guimond & Dambrun, 2002; Mullen, Brown, & Smith, 1992) or class (e.g., Kraus, 2013) was randomly assigned. Thus, consistent with prior scholarship, we expected that perceptions of higher class membership, as driven by the perception that one is more attractive, would also be associated with a stronger tendency to accept and legitimize inequality. By contrast, we expected that perceptions of lower class membership, as driven by the perception that one is less attractive, would be associated with a stronger tendency to reject social inequality (Brandt, 2013).

Contributions of research

Two contributions lie at the heart of the present research. First, the present research tests the idea that people draw inferences about their social class based on their self-perceived attractiveness. Cues that suggest to people that they are more attractive should lead them to think that they belong to a relatively higher social class; by contrast, cues that suggest to people that they are less attractive should lead them to think that they belong to a relatively lower social class. Evidence for this hypothesis would deepen our understanding of how subjective social class perceptions are formed. Specifically, it would illustrate that such perceptions are sensitive not only to evaluations of traditional economic dimensions (e.g., wealth, educational attainment, occupational prestige) but also to subtle social cues about physical appearance. Understanding how social class perceptions are formed is important both because it illuminates people's lay theories about how their social world is fundamentally organized and stratified (Fiske, 2010; Gruenfeld & Tiedens, 2010) and because these perceptions can predict a wide-range of outcomes that are relevant for understanding organizational behavior, such as people's empathic accuracy (Kraus, Côté, & Keltner, 2010), prosocial and unethical behavior (Piff et al., 2010, 2012), and even their health status (Adler et al., 2000; Sapolsky, 2005).

Second, the present investigation deepens our understanding of self-perceived attractiveness by exploring the possibility that it can influence people's attitudes and beliefs, not only because of self-esteem as previous research would suggest (e.g., Feingold, 1992), but also because it can influence people's perceptions of their own social class. If supported, the present account should also advance our theoretical understanding of self-perceived attractiveness and highlight the relevance of studying it beyond the results demonstrated in traditional self-esteem models. We predict that selfperceived attractiveness would shape people's tendencies to legitimize social hierarchies, and that this effect would be mediated by subjective social class. If our account were accurate, then the present research would suggest that self-perceived attractiveness is important because it can color people's worldviews, perceptions of fairness, and organizational preferences (Gruenfeld & Tiedens, 2010).

Overview of research

We used a wide range of methods to achieve our goal. To test our hypotheses in a real-world setting, Study 1 examined the correlations between self-perceived attractiveness, subjective social class, and attitudes about inequality in a large nationally representative sample. Then, in the subsequent experimental studies, we manipulated self-perceived attractiveness and examined its effect on perceptions of social class and support for inequality. Studies 2, 3 and 5 used different self-report measures that assess attitudes and beliefs about inequality; Study 4 used a behavioral measure. Across all studies, we hypothesized that higher self-perceived attractiveness would lead to a perception of relatively higher social class membership, which, in turn, would lead to a more favorable view of inequality. Similarly, we expected that lower self-perceived attractiveness would lead to a perception of relatively lower social class membership, which, in turn, would lead to greater rejection of inequality and social hierarchies (Brandt, 2013).

To rule out alternative explanations, Studies 2–5 also systematically measured constructs that are closely related to subjective social class (i.e., power, status, and self-esteem). To establish discriminant validity, Studies 4 and 5 contrasted self-perceived attractiveness from other types of priming (empathy and integrity) and showed that these effects were specific to physical attractiveness.

Study 1: Self-perceived attractiveness, support for group-based dominance and belief in legitimizing myths

In a survey consisting of a nationally representative sample of participants, we assessed people's perceptions of their physical attractiveness, their perceptions of their subjective social class, how much they favor group-based dominance, and how much they believe in legitimizing ideologies (e.g., "In America, every person has an equal chance to rise up and prosper"; Pratto et al., 1994). On the basis of our theory, we hypothesized that self-perceived attractiveness would positively predict support for group-based dominance and belief in legitimizing ideologies; moreover, we expected subjective social class to mediate these relationships. Study 1 tests this hypothesis in a real-world setting.

Method

Study 1 was an online survey that included 180 individuals (68 Males, 110 Females, 2 Unidentified; $M_{\rm age}$ = 37.05, $SD_{\rm age}$ = 11.71) from a nationally representative participant pool maintained by a third-party online panel company (all studies in the present report used the same participant pool, but we enforced restrictions so that participants could sign up for only one study). The sample consisted of White Americans (73%), Latino Americans (11%), African Americans (9%), Asian Americans/ Pacific Islanders (7%), and Native Americans (<1%; see Table 1 for demographic data).

The study was advertised as a survey on "General Attitudes and Social Perceptions." The measures relevant to the present investigation (described below) were embedded as part of a larger survey on social life (e.g., "What are your favorite hobbies?"). At the end of the survey, participants reported their demographic information, were thanked, and debriefed.

Measures

Self-perceived attractiveness

Three items assessed self-perceived attractiveness: (a) "I think I am physically attractive", (b) "I think I have a lot of physically attractive qualities", and (c) "In general, I see myself as a physically attractive individual" (1 = Strongly Disagree, 7 = Strongly Agree;

 Table 1

 Demographic information of participants across studies.

	Study 1 (n = 180) (%)	Study 2 (n = 383) (%)	Study 3 (n = 484) (%)	Study 4 (n = 492) (%)	Study 5 (n = 340) (%)
Gender					
Male	38	34	23	30	53
Female	61	65	76	69	46
Not reported	<1	1	<1	<1	<1
Race					
African-American	9	10	7	8	7
European-American	73	77	72	85	78
Asian/pacific islander	7	6	9	3	9
Latino-American	11	5	10	3	6
Native American	<1	2	2	1	
Not reported		<1	<1		
Education					
Some high school	2	2	4	2	<1
High school degree	23	20	19	14	11
Some college	35	39	40	39	39
College degree	33	30	29	31	41
Graduate/professional	7	9	8	13	9
Not reported	<1	<1			

 α = .97, factor loadings > .94). Responses were averaged, with higher scores representing higher self-perceived attractiveness.

Support for group based dominance

The abridged version of the social dominance orientation scale (Ho et al., 2012) assessed support for group-based dominance (e.g., "Having some groups on top really benefits everybody", "Some groups of people are simply inferior to other groups"; 1 = Strongly Disagree, 7 = Strongly Agree; α = .81). For the objectives of the present investigation, which is to assess the downstream effect of self-perceived attractiveness on attitudes about inequality, the use of SDO is ideal because it predicts support for hierarchy-enhancing social policies (Pratto et al., 1994) and opposition to hierarchy-attenuating social policies (e.g., affirmative action, see Quist & Resendez, 2003; Sidanius & Pratto, 1999). Responses were averaged, with higher scores representing stronger support for group-based dominance.

Belief in legitimizing ideologies

Legitimizing ideologies are beliefs that reinforce the status quo (Pratto et al., 1994). Five items from prior research (Pratto et al., 1994) assessed belief in legitimizing ideologies (e.g., "In America, every person has an equal chance to rise up and prosper", "Lower wages for women and ethnic minorities simply reflect lower skill and education level"; 1 = Strongly Disagree, 7 = Strongly Agree; α = .73). Responses were averaged, with higher scores representing stronger beliefs in legitimizing ideologies.

Subjective social class

Prior research has typically relied on the single-item ladder measure to capture people's perceptions of their social class (see Adler et al., 2000; Kraus et al., 2009; Piff et al., 2010). However, recent work suggests that the traditional ladder measure may not only capture people's perceptions of their social class but also other related but distinct constructs, such as power and status (Diemer, Mistry, Wadsworth, Lope, & Reimers, 2012). Single-item measures can also be subject to reliability concerns (Wanous, Reichers, & Hudy, 1997).

To circumvent the issues associated with the use of a singleitem measure, we created six items that assess people's perceptions of their socioeconomic standing. Sample items include, "In general, I feel as though I know what it's like to belong to a high social class", "In general, I feel as though I am part of the elite group in society", and "In general, I identify with those who live a life of wealth and privilege" (1 = Strongly Disagree; 7 = Strongly Agree; α = .96; loadings > .85; see Appendix A). Responses were averaged, with higher scores representing higher social class perceptions.¹

Demographic controls

The demographic controls included race (dummy coded: 0 = Ethnic Minority, +1 = White), age, gender (dummy coded: 0 = Males, +1 = Females), educational attainment (an objective measure of SES; 1 = Some High School, 6 = Professional/Advanced Graduate Degree), and political orientation (1 = Very Liberal, 5 = Very Conservative). We included them in the model to test whether self-perceived attractiveness would predict SDO and belief in legitimizing ideologies, above and beyond the effect of the demographic variables.

Results

Three participants did not complete one of the demographic measures, and were excluded from the analysis where appropriate.² Gender did not moderate any of the results in these four studies.

Self-perceived attractiveness and subjective SES

Supporting our hypothesis, self-perceived attractiveness predicted subjective social class (b = .45, t(170) = 6.49, p < .001), above and beyond the effect of the demographic controls (none of the covariates were significant). Thus, we obtained preliminary, real-world evidence that the more individuals believe they are physically attractive, the more they tend to see themselves as belonging to a higher social class.

Support for group based dominance

Regression analysis revealed that self-perceived attractiveness predicted support for group-based dominance (b = .21, t(170) =

 $^{^1}$ In this study, we also measured subjective social class using the traditional ladder measure (1 = In general, I feel I am on the very bottom part of the social class hierarchy; 9 = In general, I feel I am on the very top part of the social class hierarchy). Our subjective social class measure and the ladder measure were correlated (r = .58, p < .001). Analyzing the results using each measure separately, or combining the two measures using standardized z-scores, yielded the same (i.e., significant) results.

² Two participants did not indicate their gender, and one participant did not indicate his educational attainment.

3.01, p < .01), above and beyond the effect of the demographic controls (none of the covariates were significant, ps > .26).

Belief in legitimizing ideologies

Self-perceived attractiveness also positively predicted belief in legitimizing ideologies, above and beyond the effect of the demographic controls (b = .14, t(170) = 2.34, p = .02; political orientation was the only significant covariate, such that more political conservatism was associated with a greater tendency to endorse legitimizing ideologies, b = .27, p < .01).

Mediation by subjective social class

First, we tested whether subjective social class mediated the relationship between self-perceived attractiveness and SDO. When subjective social class was included in the model (with control variables included), self-perceived attractiveness became a nonsignificant predictor (b = .12, t[169] = 1.57, p = .12), but subjective social class remained a significant predictor (b = .20, t[169] = 2.63, p < .01). To test for the significance of the indirect effect, we conducted a bootstrap analysis with 1000 iterations (Preacher & Hayes, 2004). The 95% confidence interval did not include zero [.11,.76]; therefore, we conclude that subjective social class mediated the relationship between self-perceived attractiveness and SDO.

Next, we tested whether subjective social class mediated the relationship between self-perceived attractiveness and belief in legitimizing ideologies. When subjective social class was included in the model, self-perceived attractiveness became a non-significant predictor (b = .06, t[169] = .96, p = .34), but subjective social class remained a significant predictor (b = .17, t[169] = 2.62, p < .01). The 95% confidence interval from the bootstrap analysis did not include zero [.06,.67]; therefore, we conclude that subjective social class also mediated the relationship between

self-perceived attractiveness and the belief in legitimizing ideologies (see Fig. 1).

Discussion

Study 1 showed that self-perceived attractiveness was positively associated with social class perceptions, support for group based-dominance, and belief in legitimizing ideologies. Moreover, Study 1 showed that subjective social class mediated the relationship between self-perceived attractiveness and people's attitudes toward inequality. Albeit correlational, Study 1 provides preliminary support for the hypothesis in a real-world setting. However, because claims of causality cannot be made in Study 1, we conducted an experiment in Study 2.

Study 2: Manipulating self-perceived attractiveness and its effect on subjective social class and support for group-based dominance

Our goal in Study 2 was two-fold. First, we aimed to establish causality by experimentally manipulating self-perceived attractiveness and examining its effect on subjective social class and SDO. We hypothesized that priming people to think they are more attractive would induce a perception of membership in a relatively higher social class, which in turn, would lead to greater *acceptance* of group-based dominance; by contrast, we hypothesized that priming people to think they are less attractive would induce a perception of membership in a relatively lower social class, which in turn, would lead to greater *rejection* of group-based dominance (Brandt, 2013).

Second, we aimed to rule out alternative explanations by measuring and controlling for constructs related to subjective social class. First, we measured *perceived power*, the degree to which

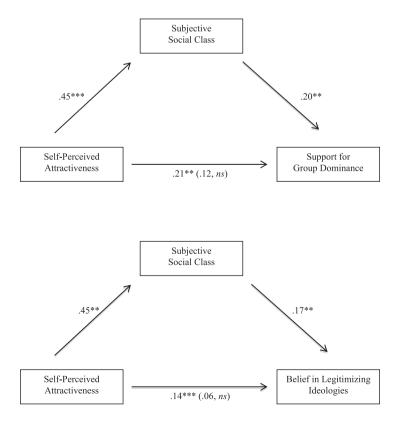


Fig. 1. Mediation analyses for Study 1. *p < .05, **p < .01, ***p < .001.

people believe they can influence others (Keltner, Gruenfeld, & Anderson, 2003; Anderson, John, & Keltner, 2012). Second, we measured *perceived status*, the degree to which people think others respect and admire them (Anderson, John, Keltner, & Kring, 2001). These two constructs would be especially relevant to the present investigation because research suggests that individuals tend to associate power and status with more attractive people (Rhode, 2010), and that power and status can influence people's attitudes about inequality (e.g., Morrison & Ybarra, 2008). Finally, we measured self-esteem because prior research suggests that self-perceived attractiveness affects self-esteem, which in turn, influences how people behave and appraise situations (see Feingold, 1992).³

Method

Participants

Study 2 was an online experiment that included 383 individuals (129 Males, 248 Females, 6 Unidentified; $M_{\rm age}$ = 39.86, $SD_{\rm age}$ = 10.36) consisting of White Americans (77%), Latino Americans (5%), African Americans (10%), Asian Americans/ Pacific Islanders (6%), and Native Americans (2%). To disguise the hypothesis, the experiment was advertised as a study on "Social Perception" consisting of several unrelated tasks (the same cover story was used in the subsequent studies).

Procedure

Self-perceived attractiveness was manipulated using a recall paradigm (adapted from Galinsky, Gruenfeld, & Magee, 2003). Participants began with a writing exercise about an incident in their life in which they thought they were *physically attractive* (High Attractiveness Condition), an incident in their life in which they thought they were *physically unattractive* (Low Attractiveness Condition), or a time when they went to the *grocery store* (Control Condition). Then, participants rated their physical attractiveness ("I think I am physically attractive"; 1 = Strongly Disagree, 7 = Strongly Agree). Next, they answered an ostensibly unrelated survey, which included the measures relevant to the present investigation (i.e, perceived power, perceived status, perceived social class, self-esteem, and the SDO scale from Study 1). Finally, participants reported their demographic information, were thanked, and debriefed.

Measures

Perceived power

Four items (Anderson et al., 2012) assessed perceived power (e.g., "I feel as though I have a great deal of power", "I feel as though I can get other people to do what I want"; 1 = Strongly Disagree, 7 = Strongly Agree; α = .92). Responses were averaged, with higher scores representing a stronger personal sense of power.

Perceived status

Four items (Anderson et al., 2001) assessed perceived status (e.g., "I feel as though others hold me in high regard"; "I feel as though others respect me"; 1 = Strongly Disagree, 7 = Strongly

Agree; α = .93). Responses were averaged, with higher scores representing higher perceived status.

Subjective social class

The same items from Study 1 assessed subjective social class (e.g., "I feel as though I am part of the elite group in society"; "I feel as though I know what it's like to belong to a high social class"; 1 = Strongly Disagree, 7 = Strongly Agree, $\alpha = .96$).

Self-esteem

We administered the full state self-esteem scale (Heatherton & Polivy, 1991, α = .92) and Rosenberg's (1965) self-esteem scale (α = .91), and calculated a composite for each scale, with higher scores representing higher self-esteem.

Empirical strategy

Because subjective social class, power, and status are conceptually related (Kraus & Keltner, 2013), we began with a factor analysis to determine whether our measures assessed empirically distinct constructs. Factor analysis with varimax rotation confirmed that we were measuring three empirically distinct constructs, which explained 79% of the total variance (none of the items exhibited cross-loading; loadings on each factor > .65). Furthermore, as expected, the correlations between the three measures were only moderate, suggesting that we were assessing empirically distinct constructs (see Table 2).

To test the hypothesis, we created two dummy codes representing the three levels of the experimental condition. We created the dummy codes such that the control condition was the comparison condition (Aiken & West, 1991). We examined whether the high attractiveness condition and the low attractiveness condition differed from this comparison. One dummy variable thus coded the high attractiveness condition as +1 and the other two conditions as 0. The second dummy variable coded the high attractiveness condition and control condition as 0 and the low attractiveness condition as +1 (Aiken & West, 1991). We then regressed our dependent variable on the two dummy variables simultaneously.

Table 2Correlations between class, power, status, and self-esteem.

	Subjective social class	Power	Self-esteem
Study 2 Subjective social class Power Self-esteem Status	.46*** .18*** .50***	.21*** .68***	.32***
Study 3 Subjective social class Power Self-Esteem Status	.54*** .14** .58***	.27*** .72***	.27***
Study 4 Subjective social class Power Self-esteem Status	.44*** .08 .48***	.15** .66***	.12***
Study 5 Subjective social class Power Self-esteem Status	.47*** .19*** .44***	.36*** .54***	.22***

For Study 2–4, the correlations for self-esteem were computed using state self-esteem scores.

³ Prior work suggests that self-esteem and self-perceived attractiveness are constructs that are empirically distinct. For example, in a meta-analysis of over 47 studies involving 7304 participants, Feingold (1992) found that self-perceived attractiveness and self-esteem were only modestly correlated (r = .32). Thus, on the basis of prior research, we assume that self-perceived attractiveness is distinct from self-esteem. More importantly, we assume that self-perceived attractiveness is malleable and dynamic (Markus & Wurf, 1987; Wheeler, DeMarree, & Petty, 2007).

p < .01.

^{***} p < .001.

Results

Manipulation check

Participants in the high attractiveness condition rated themselves significantly higher on the attractiveness measure $(M=5.92,\ SD=1.26)$ relative to control participants $(M=3.83,\ SD=1.54;\ b=2.09,\ t[380]=11.71,\ p<.001,\ d=1.47)$. In contrast, participants in the low attractiveness condition rated themselves significantly lower on the attractiveness measure $(M=2.15,\ SD=1.46)$ relative to control participants $(b=-1.68,\ t[380]=-9.44,\ p<.001,\ d=1.19)$. Therefore, we conclude that the manipulation was successful.

Subjective social class

As hypothesized, individuals primed to think they were more attractive perceived that they had significantly higher social class (M = 3.38, SD = 1.60) relative to control participants (M = 2.52, SD = 1.44; b = .86, t[380] = 4.92, p < .001, d = .62). By contrast, participants primed to think they were less attractive (M = 2.02, SD = 1.08) perceived that they had significantly lower social class relative to control participants (b = -.50, t[380] = -2.91, p < .01, d = .36).

Power and status

Participants primed to think they were more attractive also perceived that they had significantly *more* power ($M_{Power} = 5.01$, $SD_{Power} = 1.23$) and status ($M_{Status} = 5.12$, $SD_{Status} = .95$) relative to control participants ($M_{Power} = 4.25$, $SD_{Power} = 1.13$; $M_{Status} = 4.45$, $SD_{Status} = 1.14$; ps < .001). By contrast, participants primed to think they were less attractive perceived that they had significantly *less* power ($M_{Power} = 3.35$, $SD_{Power} = 1.66$) and status ($M_{Status} = 3.13$, $SD_{Status} = 1.51$; ps < .001) relative to control participants.

Self-esteem

The only effect for self-esteem was a tendency for participants in the low attractiveness condition to score lower on the Rosenberg Self-Esteem Scale compared to the control condition, b = -.14, t[380] = -1.94. There were no condition effects on state self-esteem, or on any of its subscales (ps > .43).

Support for group-based dominance

As hypothesized, individuals primed to think they were more attractive were significantly more supportive of group-based dominance (M = 3.45, SD = 1.51) relative to control participants (M = 3.00, SD = 1.44; b = .45, t[380] = 2.48, p = .01, d = .31). By contrast, individuals primed to think they were less attractive were significantly less supportive of group-based dominance (M = 2.49, SD = 1.34) relative to control participants (b = -.51, t[380] = -2.86, p < .01, d = .36).

Mediation by subjective social class

Linearly-coded condition (Low Attractiveness = -1, Control = 0, High Attractiveness = +1) predicted subjective social class (b = .68, t[381] = 7.86, p < .001), and SDO (b = .48, t[381] = 5.38, p < .001), indicating that, as self-perceived attractiveness increased, perceived social class and SDO increased. We tested whether subjective social class mediated the relationship between self-perceived attractiveness and SDO, while simultaneously including the other potential mediators in the model (i.e., power, status, and the two measures of self-esteem) to test for alternative mediation. The strength of condition as a predictor was reduced (b = .43, t[376] = 3.97, p < .001), and subjective social class was the only other significant predictor (b = .23, t[376] = 4.02, p < .001). Power, status, and the two measures of self-esteem were not significant predictors (ps > .30), and their inclusion did not improve the model fit $(\Delta \chi^2 | 4) = 6.16$, p = .54). The 95% confidence interval from the bootstrap analysis (Preacher & Haves, 2004) did not include zero [.02,.27]; therefore, we conclude that subjective social class mediated the effect of self-perceived attractiveness on SDO (see Fig. 2).

Discussion

Study 2 provided support for the hypothesis that self-perceived attractiveness shapes people's social class perceptions, which in turn, influence how people respond to inequality. Higher self-perceived attractiveness induced higher social class perceptions, which in turn, led to greater support for group-based dominance; by contrast, lower self-perceived attractiveness induced lower social class perceptions, which in turn, led to greater rejection of group-based dominance. Study 2 also demonstrated that subjective social class was the key mediating mechanism; power, status, and self-esteem did not account for the effect.

Study 3: Self-perceived attractiveness, social class, and construal of social inequality

Study 3 tested whether self-perceived attractiveness would influence subjective social class, and subsequently, the construal of social inequality. Recent work suggests that social class shapes how people explain social inequality (Kraus et al., 2009). For example, compared to the lower social class, the upper social class tend to attribute inequality to dispositional (e.g., hard work, effort) rather than to contextual causes (e.g., economic structure, political influence; Kraus et al., 2009), a mindset which reinforces their belief that the existing system is fair (Kay & Jost, 2003) and that people get what they deserve in life (Lerner, 1980).

As in Study 2, we hypothesized that higher self-perceived attractiveness would induce a perception of membership in a

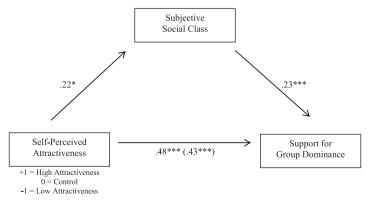


Fig. 2. Mediation analysis for Study 2. *p < .05, **p < .01, ***p < .001.

higher social class. We further hypothesized that this, in turn, would lead individuals to construe inequality in terms of dispositional rather than contextual causes. In contrast, we hypothesized that lower self-perceived attractiveness would induce a perception of membership in a lower social class. We further hypothesized that this, in turn, would lead individuals to construe inequality in terms of contextual rather than dispositional causes (Kraus et al., 2009). As in Study 2, we also tested whether power, status, or self-esteem were viable alternative mediators.

Method

Participants

Study 3 was an online experiment that included 484 individuals (111 Males, 369 Females, 4 Unidentified; $M_{\rm age}$ = 39.11, $SD_{\rm age}$ = 11.49) consisting of White Americans (72%), Latino Americans (10%), African Americans (7%), Asian Americans/ Pacific Islanders (9%), and Native Americans (2%). The same cover story from Study 2 was used in Study 3.

Procedure

The procedure for Study 3 was similar to Study 2. Participants first completed the writing exercise manipulation, and then reported their perceived attractiveness, perceived power (α = .93), perceived status (α = .93), subjective social class (α = .96) and self-esteem (α s > .89). Next, participants answered an ostensibly unrelated survey concerning their opinion about the economic structure of the United States. They viewed a graph displaying growing economic inequality between the rich and the poor from 1947-2010. Then, they read a list of dispositional and contextual causes, and rated the contribution of each to the growing economic inequality (1 = Strongly Disagree, 7 = Strongly Agree). The dispositional explanations include "Ability and Skills", "Money Management", "Hard Work", "Ambition", "Talent" and "Effort" (α = .91), whereas the contextual explanations include "Economic Policy", "Prejudice and Discrimination", "Political Influence", and "Inheritance" (α = .71). After completing this task, participants reported their demographic information, were thanked and debriefed.

Results

Manipulation check⁴

Participants in the high attractiveness condition rated themselves significantly more attractive (M = 6.17, SD = .93) relative to control participants (M = 3.99, SD = 1.45; b = 2.18, t[480] = 14.96, p < .001, d = 1.67). In contrast, participants in the low attractiveness condition rated themselves significantly less attractive (M = 2.17, SD = 1.45) relative to control participants (b = -1.82, t[480] = -12.54, p < .001, d = 1.39).

Subjective social class

Replicating Study 2, individuals primed to think they were more attractive perceived that they had significantly higher social class $(M=3.35,\ SD=1.51)$ relative to control participants $(M=2.75,\ SD=1.44;\ b=.60,\ t[481]=3.93,\ p<.001,\ d=.44)$. By contrast, participants primed to think they were less attractive $(M=2.12,\ SD=1.14)$ perceived that they had significantly lower social class relative to control participants $(b=-.63,\ t[481]=-4.16,\ p<.001,\ d=.46)$.

Power and status

As in Study 2, participants in the high attractiveness condition also reported that they had significantly more power (M_{Power} = 4.94, SD_{Power} = 1.26) and status (M_{Status} = 5.03, SD_{Status} = .98) relative to control participants (M_{Power} = 4.34, SD_{Power} = 1.32; M_{Status} = 4.35, SD_{Status} = 1.21; ps < .001). By contrast, participants in the low attractiveness condition reported that they had significantly less power (M_{Power} = 3.17, SD_{Power} = 1.44) and status (M_{Status} = 3.02, SD_{Status} = 1.41; ps < .001) relative to control participants.

Self-esteem

The only effect for self-esteem was a tendency for participants in the low attractiveness condition to score lower on the Rosenberg Self-Esteem Scale (b = -.15, p = .02) and the state self-esteem scale (b = -.21, p < .01) relative to control participants.

Construal of inequality

To examine whether self-perceived attractiveness influenced how people construed social inequality, we conducted a 3 (Condition: High, Control, Low) \times 2 (Explanation Type: Contextual vs. Dispositional) mixed-model ANOVA, treating condition as the between-subjects factor, and Explanation Type as the within-subjects factor.

As hypothesized, the mixed model ANOVA revealed a significant Condition \times Explanation Type interaction, F(2,481) = 41.49, p < .001. To decompose the interaction, we began by comparing the dispositional and contextual scores within the high and low attractiveness conditions (see Fig. 3). As hypothesized, for participants primed to think they were more attractive, dispositional explanations for economic inequality (M = 5.28, SD = 1.13) were significantly favored over contextual explanations (M = 4.73, SD = 1.20; b = .56, t[159] = 3.99, p < .001, d = .47). By contrast, the attributional pattern was reversed for participants in the low attractiveness condition: contextual explanations for economic inequality (M = 5.28, SD = 1.05) were significantly favored over dispositional explanations (M = 4.55, SD = 1.34; t[163] = 4.98, p < .001, d = .61). For participants in the control condition, both types of explanations were equally endorsed ($M_{\text{CONTEXTUAL}} = 5.02$, $SD_{CONTEXTUAL} = 1.10$; $M_{DISPOSITIONAL} = 4.93$, $SD_{DISPOSITIONAL} = 1.23$, p = .49; see Fig. 3).

Alternatively, we decomposed the interaction by comparing the three experimental groups on each explanation type. We did this by regressing the relevant dependent variables on condition (dummy-coded), with the control condition chosen as the baseline variable, just as we did in Study 2 (Aiken & West, 1991). On the dispositional measure, as hypothesized, higher self-perceived

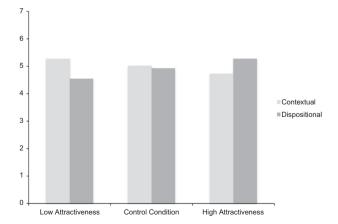


Fig. 3. Note: Higher numbers indicate more agreement with the explanation type.

⁴ One participant was excluded from this analysis because he did not answer the manipulation check.

attractiveness significantly strengthened endorsement of dispositional explanations (M = 5.28, SD = 1.13, p = .01, d = .29) relative to the control condition (M = 4.93, SD = 1.23), while lower self-perceived attractiveness significantly lowered endorsement of dispositional explanations (M = 4.55, SD = 1.34, p < .01, d = .30) relative to the control condition. Further, as hypothesized, the opposite pattern was observed on the contextual measure: higher self-perceived attractiveness led to *weaker* endorsement of contextual explanations (M = 4.73, SD = 1.20, p = .02, d = .26), while lower self-perceived attractiveness led to *stronger* endorsement of contextual explanations (M = 5.28, SD = 1.05, p = .04, d = .23), relative to the control condition (M = 5.02, SD = 1.10).

Mediation analysis

Overall, the findings supported the hypothesis that self-perceived attractiveness would influence people's construal of social inequality. Did subjective social class account for this effect? To examine this, we calculated a relative dispositional preference score by subtracting the contextual scores from the dispositional scores (higher scores on the composite indicate a higher relative preference for dispositional explanations). Then, we ran several regression models to test for mediation (Baron & Kenny, 1986).

Linearly-coded condition predicted relative dispositional preference scores (b = .33, t[482] = 6.42, p < .001) and subjective social class (b = .62, t[482] = 8.13, p < .001). When relative dispositional preference was regressed on condition, subjective social class, power, status, and the two measures for self-esteem, the significance of condition as a predictor was reduced (b = .27, t[477] = 4.32, p < .001); as in Study 2, subjective social class was the only other significant predictor (b = .11, t[477] = 3.04, p < .01). Power, status, and the two measures for self-esteem were not significant (ps > .25), and their inclusion did not improve the model fit ($\Delta \chi^2$ [4] = 3.61, p = .37). The 95% confidence interval from the bootstrap analysis (Preacher & Hayes, 2004) did not include zero [.05,.24]; therefore, we conclude that subjective social class mediated the effect of self-perceived attractiveness on the construal of social inequality (see Fig. 4).

Discussion

Study 3 demonstrated that self-perceived attractiveness shaped people's social class perceptions, which in turn, influenced how people construed inequality. Higher self-perceived attractiveness led to greater ascription of inequality to dispositional causes (e.g., talent, effort), whereas lower self-perceived attractiveness led to greater ascription of inequality to contextual causes (e.g., prejudice, policy). As in Study 2, Study 3 demonstrated that

subjective social class was the key mediating mechanism; power, status, and self-esteem did not account for the effect.

Studies 2 and 3 raise two interesting questions. First, could the same results be obtained if people are simply primed to think about themselves more positively on any trait? Second, can self-perceived attractiveness influence *actual* behavior toward inequality? Study 4 aimed to answer these questions.

Study 4: Self-perceived attractiveness, social class, and donations toward social equality

Study 4 addressed two important ideas. First, we examined whether priming people to think positively about themselves on any particular trait would enhance perceptions of social class. To achieve this goal, Study 4 manipulated self-perceived attractiveness or self-perceived empathy. Because beauty, like wealth and education (Kraus et al., 2009), is associated with privilege and favored social treatment (Kalick, 1988), we expected that people would report that they belong to a relatively higher social class when they think they are highly attractive. By contrast, we did not expect this effect to emerge when people are made aware that they are highly empathic, because empathy is not a trait that is associated with privilege and favored social treatment (Kalick, 1988).

To gather preliminary evidence, we conducted a pilot survey (N = 93) with a sample of participants drawn from the same pool as in the previous studies. In this pilot test, we assessed people's perceptions of how attractive they are, their perceptions of how empathic they are (e.g., "I see myself as someone who is very sensitive to the feelings of others; "I see myself as someone who can feel what it's like to be in other people's shoes"; α = .92; adapted from Davis, 1983), and their perceptions of their social class (using the same items from the previous studies). Replicating the results of Study 1, the pilot test revealed that self-perceived attractiveness was positively associated with social class perceptions (r = .42, p < .001). Self-perceived empathy, on the other hand, was not associated with people's judgments about their social class (r = -.03, p = .76). Self-perceived attractiveness and self-perceived empathy were not correlated (r = -.01, p = .91). Thus, we expected that the induction of high attractiveness (vs. low attractiveness) would lead to perceptions of relatively higher social class, whereas the induction of high self-perceived empathy (vs. low self-perceived empathy) would not.

Second, we measured support for inequality using a behavioral measure. After the priming manipulation, we gave participants an opportunity to donate to a social movement that advocated for social equality. On the basis of our previous findings, we expected that people would be relatively less inclined to donate when they

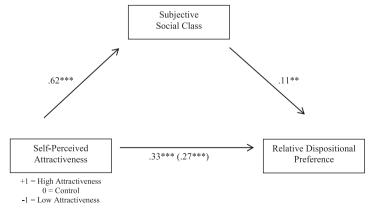


Fig. 4. Mediation analysis for Study 3. **p < .01, ***p < .001.

think they are highly attractive. As in the earlier studies, we expected subjective social class to be the key underlying mechanism, but also tested whether power, status, and self-esteem accounted for the effect.

Method

Participants

Study 4 was an online experiment that included 492 individuals (149 Males, 342 Females, 1 unidentified; $M_{\rm age}$ = 37.72, $SD_{\rm age}$ = 11.56). The sample consisted of White Americans (85%), African Americans (8%), Latino Americans (3%), Asian Americans/ Pacific Islanders (3%), and Native Americans (1%).

Procedure

Study 4 used a 2 (Trait: Attractiveness vs. Empathy) × 2 (Condition: Low, High) design. At the beginning of the experiment, participants were told that, at the end of the survey, they would receive a special lottery ticket which amounted to a \$50 gift card from an online retailer if their ticket won. After consenting to participate, participants began with the writing exercise from the previous studies. Half of the participants were randomly assigned to write an incident about physical attractiveness (Attractiveness Condition); the remaining participants wrote about an incident concerning empathy (Empathy Condition). As before, participants in the attractiveness condition wrote either about an incident in which they thought they were physically attractive (High Self-Perceived Attractiveness) or an incident in which they thought they were physically unattractive (Low Self-Perceived Attractiveness). Participants in the empathy condition, on the other hand, wrote about an incident that highlighted their empathic quality (High Self-Perceived Empathy; i.e., "a time in which you thought you were very empathic or very sensitive to the needs and feelings of others"), or about an incident that highlighted their unempathic quality (Low Self-Perceived Empathy; i.e., "a time in which you thought you were very unempathic or not very sensitive to the needs and feelings of others").

After writing their narratives, participants rated their physical attractiveness ("I think I am physically attractive"; 1 = Strongly Disagree, 7 = Strongly Agree), and the extent to which they view themselves as an empathic individual ("I see myself as someone who is very sensitive to the feelings of others; "I see myself as someone who can feel what it's like to be in other people's shoes"; 1 = Strongly Disagree, 7 = Strongly Agree, α = .93; Davis, 1983). Then, they rated their perceptions of power (α = .91), status (α = .95), social class (α = .97) and self-esteem (α s > .90), using the same measures from the previous experiments.

Next, participants watched a short video clip about the *Occupy Movement*, a social movement advocating for social equality in the United States. The video consisted of several people from various demographic backgrounds voicing their opinions about the social changes that they would like to see (e.g., justice, equality). We asked participants to comment briefly on the video clip; then, we asked them whether they would like to donate their special lottery ticket to the Occupy Movement. Participants were told that \$50 would be donated instead to the Occupy Movement if their ticket won (participants indicated Yes or No, and confirmed their response). After completing this task, participants reported their demographic information, were thanked and debriefed.

Empirical strategy

We regressed the relevant dependent variables on trait (dummy coded: 0 = Attractiveness, +1 = Empathy), condition (dummy coded: 0 = Low, +1 = High) and the interaction of the predictor variables. Simple effects were calculated by setting the trait variable to 0 for the focal trait being analyzed (Aiken & West, 1991). Degrees

of freedom vary for different analyses because some participants did not complete one of the relevant measures, and were therefore, excluded where appropriate.⁵

Results

Manipulation checks

There was a significant Trait \times Condition interaction (t[488] = -13.44, p < .001) on self-perceived attractiveness. The interaction indicated that participants primed to think they were more attractive (M = 5.90, SD = 1.22) rated themselves significantly higher on the attractiveness measure relative to participants primed to think they were unattractive (M = 2.24, SD = 1.38, p < .001). Participants in the high (vs. low) self-perceived empathy conditions did not differ on the attractiveness measure, p = .21.

Furthermore, there was a significant Trait \times Condition interaction on self-perceived empathy (t[488] = -10.92, p < .001). Participants primed to think they were highly empathic (M = 5.93, SD = .90) rated themselves as having significantly more empathy relative to participants primed to think they were not empathic (M = 3.49, SD = 1.61, p < .001). Participants in the high (vs. low) attractiveness conditions did not differ on the perceived empathy measure, p = .76. Overall, the manipulations were successful.

Subjective social class

As hypothesized, there was a significant Trait \times Condition interaction on subjective social class (t[488] = -5.17, p < .001). Replicating the results from the previous experiments, participants in the high attractiveness condition (M = 3.41, SD = 1.56) rated themselves as having significantly higher social class relative to participants in the low attractiveness condition (M = 2.12, SD = 1.21, t[488] = 7.45, p < .001, d = .95). By contrast, participants in the high (vs. low) self-perceived empathy conditions did not differ on perceived social class ($M_{HighEmpathy} = 2.32$, $M_{LowEmpathy} = 2.29$, p = .88), supporting the argument that inducing participants to see themselves more favorably does not necessarily enhance class perceptions.

Power and status

There were significant Trait × Condition interactions on power (t[483] = -3.20, p < .01) and status (t[488] = -5.28, p < .001). These interactions indicated that participants primed to think about themselves more favorably rated themselves more highly on the power and status measures, but the effects were more robust within the attractiveness condition. Specifically, participants in the high attractiveness condition reported that they had significantly more power ($M_{Power} = 4.85$, $SD_{Power} = 1.28$, b = 1.40, p < .001) and status $(M_{\rm Status} = 5.13, SD_{\rm Status} = 1.00, b = 2.01, p < .001)$ relative to participants in the low attractiveness condition $(M_{\rm Power} = 3.46,$ $SD_{Power} = 1.44$; $M_{Status} = 3.12$, $SD_{Status} = 1.40$), while participants in the high empathy condition also tended to report that they had more power (b = .63, p < .001) and status (b = .76, p < .001) relative to the low empathy condition, albeit slightly less robust. Although we certainly did not expect participants in the high empathy condition to report a greater personal sense of power, we suspect that the participants in the high empathy conditions were writing instances in which they were adept at understanding the experiences of others, and thus, may have felt that they had a valuable attribute that could be used strategically to influence others and the outcomes of social situations. Indeed, some work (e.g., Pfeffer, 2010) suggests that being able to perceive and feel another person's emotions, intentions and goals can facilitate persuasion and influence.

⁵ Five participants did not complete the power scale.

Self-Perceived Attractiveness

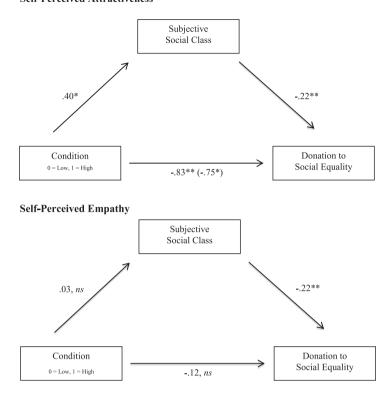


Fig. 5. Moderated mediation analysis for Study 4. p < .05, p < .01.

Self-esteem

The only effect for self-esteem was a marginal tendency for participants in the high attractiveness condition to score lower on the Rosenberg (b = -.14, p = .09) and State Self-Esteem (b = -.14, p = .09) relative to low attractiveness participants (b = -.12, p = .09). Self-esteem did not differ for participants within the empathy condition (ps > .16).

Donation

Logistic regression (0 = Did Not Donate, 1 = Donated) showed the hypothesized Trait \times Condition interaction (b = .76, z(491) = 2.01, p = .04). The interaction indicated that participants in the high attractiveness condition were significantly less likely to donate their ticket (28%) relative to participants in the low attractiveness condition (49%; b = -.88, z(491) = -3.27, p < .01). By contrast, donations did not significantly differ between the high (vs. low) self-perceived empathy conditions ($M_{HighEmpathy}$ = 36%, $M_{LowEmpathy}$ = 33%, p = .65).

Mediation analysis

Overall, the findings supported the hypothesis that people would be relatively less likely to donate to social equality when primed to think they were more attractive. To examine whether subjective social class accounted for this effect, we conducted a moderated mediation analysis (see Fig. 5). As mentioned above, condition (low vs. high) predicted both donation and social class within the attractiveness condition, but not in the empathy

condition. When we ran the full model controlling for subjective social class, power, status, and the two measures for self-esteem, the Condition \times Trait interaction was no longer significant (z = .63, p = .12), the significance of condition was reduced (z = -.75, z[486] = -2.34, p = .02), and subjective social class was the only significant mediator (z = -.22, z[486] = -2.61, p < .01). Power, status, and the two measures of self-esteem were not significant predictors (ps > .30), and their inclusion did not improve the model fit ($\Delta \chi^2$ [4] = 3.37, ns). The 95% confidence interval for the indirect effect (Preacher & Hayes, 2004) did not include zero [-.06, -.74], indicating that subjective social class mediated the effect of self-perceived attractiveness on donations toward social equality.

Discussion

The results of Study 4 illustrated two key findings. First, it revealed that priming people to think about themselves positively on any trait does not necessarily enhance perceptions of class. Priming people to think they were more attractive increased their social class perceptions, whereas priming people to think they were more empathic did not. This suggests that not all traits can enhance perceptions of class, and that subjective social class does not simply capture the extent to which people have a favorable view of themselves. Second, the experiment demonstrated that people's self-perceived attractiveness shaped how people behaved toward inequality: participants primed to think they were more attractive donated less to a social equality movement relative to participants primed to think were less attractive. As in the earlier studies, subjective social class was the key mediating mechanism; power, status, and self-esteem did not account for the effect.

⁶ While these marginal findings seem inconsistent with the other studies, it has been demonstrated in a substantial body of work that self-perceived attractiveness and self-esteem can be negatively correlated sometimes (see Berg, 1980; Feingold 1982; Feingold, 1984; Feingold, 1992; Schultz & Moore, 1984; Schultz & Moore, 1988), which illustrate that the two constructs are not conceptually the same.

Study 5: Self-perceived attractiveness, integrity and attitudes toward equality

One limitation of Study 4 is that empathy may not be a trait that people would readily recognize as desirable. Thus, in our final study, we contrasted physical attractiveness with another trait that people would readily recognize as desirable. For our final study, we chose integrity. We chose integrity because research suggests that people have a desire to see themselves as good and moral individuals (Steele, 1988), and thus, integrity is a trait that is clearly desirable for most people. In fact, in our pre-test (N = 120), integrity was not only seen as a highly desirable trait (M = 6.20 on a 7-point scale, which was significantly different from the midpoint, p < .001), but it was also perceived to be even more desirable than physical attractiveness (M = 5.18, p < .001).

As before, we conducted a pilot test by assessing people's perceptions of how attractive they are, their perceptions of their integrity (e.g., "Integrity is one of my prominent traits, "I think I am a person of integrity", "I see myself as someone who is principled"), and their perceptions of their social class (using the same items from the previous studies). Replicating the results of the earlier studies, the pilot test revealed that self-perceived attractiveness was positively associated with social class perceptions (r = .35. p < .001). Self-perceived integrity, on the other hand, was not associated with people's judgments about their social class (r = -.04. p = .59). On the basis of our previous findings, we expected that the induction of high attractiveness (vs. low attractiveness) would lead to perceptions of relatively higher social class and relatively greater support for inequality, whereas the induction of high self-perceived integrity (vs. low self-perceived integrity) would not. To measure support for inequality, we used the SDO scale (Pratto et al., 1994). As in the earlier studies, we expected subjective social class to be the key underlying mechanism, but also tested whether power, status, and self-esteem accounted for the effect.

Method

Participants

Study 5 was an online experiment that included 340 individuals (180 Males, 158 Females, 2 unidentified; $M_{\rm age}$ = 30.93, $SD_{\rm age}$ = 9.15) from Amazon Mechanical Turk. The sample consisted of White Americans (78%), African Americans (7%), Latino Americans (6%), Asian Americans/ Pacific Islanders (9%).

Procedure

Study 5 used a 2 (Trait: Attractiveness vs. Integrity) × 2 (Condition: Low, High) design. As in Study 4, participants began with the writing exercise from the previous studies. Half of the participants were randomly assigned to write an incident about physical attractiveness (Attractiveness Condition); the remaining participants wrote about an incident concerning integrity (Integrity Condition). As before, participants in the attractiveness condition wrote either about an incident in which they thought they were physically attractive (High Self-Perceived Attractiveness) or an incident in which they thought they were physically unattractive (Low Self-Perceived Attractiveness). Participants in the integrity condition, on the other hand, wrote about an incident that demonstrated their integrity (High Self-Perceived Integrity), or about an incident that demonstrated their lack of integrity (Low Self-Perceived Integrity).

After writing their narratives, participants rated their physical attractiveness ("I think I am physically attractive"; 1 = Strongly

Disagree, 7 = Strongly Agree), and the extent to which they view themselves as an individual with integrity (e.g., "I think I am a person of integrity; "I think integrity is one of my prominent traits"; 1 = Strongly Disagree, 7 = Strongly Agree, α = .95). Then, they rated their perceptions of power (α = .92), status (α = .96), social class (α = .97) and self-esteem (Rosenberg, 1965; α > .92), using the same measures from the previous experiments. Finally, they reported their support for group-based dominance using the SDO scale (e.g., "Some people are just more deserving than others", "It is not a problem if some people have more of a chance in life than others"; α = .86, Pratto et al., 1994). After completing this task, participants reported their demographic information, were thanked and debriefed.

Empirical strategy

As in Study 4, we regressed the relevant dependent variables on trait (dummy coded: 0 = Attractiveness, +1 = Integrity), condition (dummy coded: 0 = Low, +1 = High) and the interaction of the predictor variables (Aiken & West, 1991).

Results

Manipulation checks

There was a significant Trait \times Condition interaction (t[336] = -6.19, p < .001) on self-perceived attractiveness. The interaction indicated that participants primed to think they were more attractive (M = 5.55, SD = 1.12) rated themselves significantly higher on the attractiveness measure relative to participants primed to think they were unattractive (M = 3.21, SD = 1.84, p < .001). Participants in the high (vs. low) self-perceived integrity conditions did not differ on the attractiveness measure (p = .34).

Furthermore, there was a significant Trait \times Condition interaction on self-perceived integrity (t[336] = 6.07, p < .001). Participants primed to think they had high integrity (M = 5.98, SD = .80) rated themselves as having significantly more integrity relative to participants primed to think they had low integrity (M = 4.14, SD = 1.75, p < .001). Participants in the high (vs. low) attractiveness conditions did not differ on the perceived integrity measure (p = .10). Overall, the manipulations were successful.

Subjective social class

As hypothesized, there was a significant Trait \times Condition interaction on subjective social class (t[336] = -3.50, p < .001). Replicating the results from the previous experiments, participants in the high attractiveness condition (M = 3.50, SD = 1.75) rated themselves as having significantly higher social class relative to participants in the low attractiveness condition (M = 2.32, SD = 1.20, t[336] = 5.11, p < .001). By contrast, participants in the high (vs. low) self-perceived integrity conditions did not differ on perceived social class ($M_{HighIntegrity}$ = 2.86, $M_{LowIntegrity}$ = 2.80, p = .79).

Power and status

On the power measure, there was a significant Trait \times Condition interaction (t[336] = -4.27, p < .001). The interaction indicated that participants in the high attractiveness condition (M = 5.20, SD = 1.13) felt significantly more powerful than participants in the low attractiveness condition (M = 3.80, SD = 1.49, p < .001). By contrast, participants in the high (vs. low) self-perceived integrity conditions did not differ on perceived power ($M_{HighIntegrityy} = 4.78$, $M_{LowIntegrity} = 4.59$, p = .31).

On the status measure, the Trait \times Condition interaction was non-significant (t[336] = -1.25, p = .21). In general, those who were primed to think positively about themselves (M = 4.89, SD = 1.13) reported a higher personal sense of status compared to those who were primed to think negatively about themselves (M = 3.29, SD = 1.57, p < .001).

⁷ We thank Francesca Gino and an anonymous reviewer for this comment.

Self-esteem

The Trait \times Condition interaction was also non-significant for self-esteem (t[336] = -.30, p = .77). In general, those who were primed to think positively about themselves (M = 3.13, SD = .60) reported a higher self-esteem score compared to participants who were primed to think negatively about themselves (M = 2.93, SD = .65, p < .01).

Support for group-based dominance

As hypothesized, there was a Trait \times Condition interaction on the SDO measure (b = -.61, t[336] = -2.28, p = .02). The interaction indicated that participants in the high attractiveness condition showed greater support for group-based dominance (M = 2.83, SD = 1.34) relative to participants in the low attractiveness condition (M = 2.41, SD = 1.13; b = .42, t[336] = 2.17, p = .03). By contrast, SDO scores did not significantly differ between the high (vs. low) self-perceived integrity conditions ($M_{HighIntegrity} = 2.29$, $M_{LowIntegrity} = 2.48$, p = .29).

Mediation analysis

Overall, the findings supported the prediction that people would be relatively more likely to support social inequality when primed to think they were more attractive. To examine whether subjective social class accounted for this effect, we conducted a moderated mediation analysis (see Fig. 6). As mentioned above, condition (low vs. high) predicted both SDO and social class within the attractiveness condition, but not in the integrity condition. When we ran the full model controlling for subjective social class, power, status, and self-esteem, the Condition \times Trait interaction was no longer significant (b = .38, p = .15), the significance of condition as a predictor was also no longer significant (b = .27, p = .18), and subjective social class was the only significant mediator (b = .30, b < .001). Power, status, and self-esteem were not significant predictors (b > .11). The 95% confidence interval for the

indirect effect (Preacher & Hayes, 2004) did not include zero [.06,.26], indicating that subjective social class mediated the effect of self-perceived attractiveness on support for group-based dominance.

Discussion

Study 5 illustrated that people's class perceptions increased when they were induced to see themselves as more attractive, but not when they were induced to see themselves as having more integrity – a trait that people see as desirable, even more so than physical attractiveness. Reinforcing the results of Study 4, Study 5 suggests that not all traits can enhance perceptions of class, and that subjective social class does not simply capture the extent to which people have a favorable view of themselves. Furthermore, Study 5 showed that priming people to think they are attractive increased their support for social inequality, and subjective social class was the key mediating mechanism; power, status, and self-esteem did not account for the effect.

General discussion

Using diverse samples and a wide range of methods, we found that self-perceived attractiveness shaped people's social class perceptions, which in turn, influenced how people responded to inequality and social hierarchies. Higher self-perceived attractiveness led to a perception of membership in a relatively higher social class, which, in turn, increased support for group-based dominance (Study 1, Study 2 and Study 5), promoted stronger beliefs in legit-imizing ideologies (Study 1 and Study 3), and reduced donations to a movement advocating for social equality (Study 4). By contrast, lower self-perceived attractiveness led to a perception of membership in a relatively lower social class, which, in turn, led to greater rejection of inequality and social hierarchies. Across all

Self-Perceived Attractiveness

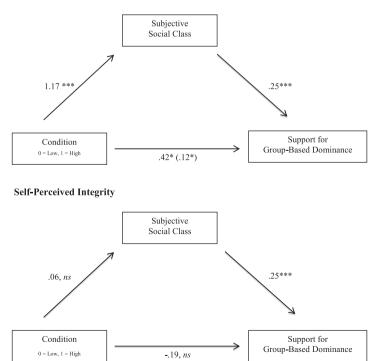


Fig. 6. Moderated mediation analysis for Study 5. *p < .05, ****p < .001.

experiments, subjective social class was found to consistently mediate the effects; power, status, and self-esteem did not account for the effects. The final study also showed that these effects were specific to attractiveness, and not merely the result of priming superiority on a particular trait. Taken together, our findings underscore important implications for the theoretical understanding of subjective social class, self-perceived attractiveness, and inequality.

Social class perceptions

While past work suggests that individuals assess their social class by evaluating themselves and comparison others on traditional economic indicators (e.g., wealth, educational attainment, occupational prestige, Kraus et al., 2009), the present studies indicate that people also infer their social class based on their assessment of their physical appearance. Indeed, we found that cues that suggested to people that they were more attractive led them to think that they belonged to a relatively higher social class; by contrast, cues that suggested to people that they were less attractive led them to think that they belonged to a relatively lower social class. The present research, therefore, is an important step in gaining a deeper understanding of how people use subtle social cues in locating their standing in the class hierarchy, and how they respond to their perceived social reality (Kraus et al., 2009).

Understanding how social class perceptions are formed is important for two reasons. First, class perceptions have been shown to predict a wide-range of outcomes that are relevant for understanding behavior in organizations (e.g., Côté, 2011), such as people's empathic accuracy (Kraus et al., 2010), prosocial and unethical behavior (Piff et al., 2010, 2012), and even their health status (Adler et al., 2000; Sapolsky, 2005). Second, understanding what shapes people's class perceptions illuminates people's lay theories about how their social world is fundamentally organized (Fiske, 2010; Gruenfeld & Tiedens, 2010). The fact that people infer their social class based on their assessment of their physical appearance suggests that, for many people, they see the social world as fundamentally stratified not only on the basis of who has wealth, education, and occupational prestige but also on the basis of who is beautiful and attractive (e.g., the beautiful are at the top, the less attractive are at the bottom). Insofar as people are sensitive to this reality and are motivated to maintain a perception of adequate social class standing, then it makes sense why they feel pressured to adopt the beauty trends of the elite (Patton, 2006; Rhode, 2010), and why they are willing to spend huge amounts of money on their physical appearance, even in times of economic hardship (Allison & Martinez, 2010; Hill, Rodeheffer, Griskevicius, Durante, & White, 2012; Schaefer, 2008).

In addition, the fact that social class perceptions were unaffected by manipulations of empathy and integrity illustrates two important points. First, it reveals that inducing people to see the self more favorably does not necessarily increase class perceptions. Second, it reinforces the point that power, status, and social class perceptions are conceptually different constructs that people can meaningfully distinguish (Côté, 2011). In the present case, it shows that people can recognize that they have traits and qualities that they believe can increase their ability to influence others (perceived power) and make them more respectable in the eyes of others (status), but such qualities do not necessarily make them part of an elite and privileged social strata (perceived social class; see Côté, 2011 for a similar point about power, status, and social class).

As a supplementary analysis, we reanalyzed our data from Studies 1–5 to explore whether the effect of self-perceived attractiveness on social class perceptions were moderated by demographic variables such as age, gender and ethnicity (i.e., White vs. ethnic minority). Suggesting the generality of the process, we did not find

any evidence that these demographic variables moderated our effect across the studies. We also re-examined the data with self-esteem as a potential moderator and did not find any significant effects

The absence of moderator effects, particularly on gender and ethnicity, raises one intriguing question: do members of groups that are traditionally discriminated against show less support for policies that may help their groups (e.g., affirmative action) when they perceive themselves as belonging to an upper class? In other words, do historically disadvantaged group members embrace inequality and justify the existing system once they believe they are in positions of greater rank compared to others? The fact that we do not find any moderation by gender and ethnicity supports this idea, providing some insight why hierarchies may continue to reproduce and persist (Bourdieu, 1985; Kohn & Schooler, 1969). That is, our data suggest that members of historically disadvantaged groups become more system-justifying, rather than system-changing, when they believe that they are higher ranking vis-à-vis others. Thus, one area of future research is to explore whether the experience of being in an upper rank (or being promoted to an upper rank) would lead minorities to identify less with their groups, or even engage in discrimination of their own group members. Some empirical work supports this contention, finding that women who achieved success in male-dominated environments were, at times, likely to oppose the rise of other women (Drexler, 2013; Staines, Tavris, & Jayaratne, 1974). Understanding the conditions that lead members of historically disadvantaged groups to either justify the system or to behave as agents of change would have important theoretical implications in understanding the effects of rank and upward mobility.

Physical attractiveness and social class

Why is physical attractiveness related to people's perceptions of their social class? Like wealth, education, and occupational prestige, physical attractiveness is associated with systematic privilege and favored social treatment. Indeed, in the social world, there are numerous social advantages for those who are physically attractive; for example, studies have shown that attractive individuals earn substantially more (Hamermesh, 2011), are more likely to get hired and promoted (Rhode, 2010; Shahani-Denning, 2003; Watkins & Johnston, 2000), and are more likely to receive favorable attention compared to their less attractive counterparts (e.g., Dion, Berscheid, & Walster, 1972). From career to mate selection, the effects of physical attractiveness on one's social fate are by no means inconsequential, and the biases against those who are unattractive are substantial (Rhode, 2010). Thus, to a large extent, physical attractiveness is a major feature of social life, one that confers prestige and determines numerous consequential social outcomes, including one's access to resources and the type of treatment that people receive in the social system. Therefore, physical attractiveness is relevant to the concept of social class, because class, as many scholars have pointed out (e.g., Brown, Fukunaga, Umemoto, & Wicker, 1996; Centers, 1949), denotes prestige, privilege and access to resources within the context of a social hierarchy.

Self-Perceived attractiveness

The experiments showed that self-perceived attractiveness can bias people's judgments in consequential ways, altering their organizational preferences (Study 2 and Study 5), explanations for social events (Study 3), and behavior toward social equality (Study 4). These findings document how seemingly mundane and innocuous social cues can also influence the acceptability of social inequality (e.g., Savani & Rattan, 2012) and the willingness to legitimize existing social systems (Kay & Jost, 2003).

Although prior research has shown that self-perceived attractiveness relates to people's personality and social behavior (see Feingold, 1992 for a meta-analysis), much of the work on this topic is correlational, and thus it is unclear why judgments of self-perceived attractiveness are related to people's behavior, attitudes and beliefs. The present investigation deepens our theoretical and empirical understanding of self-perceived attractiveness by showing that it can influence how people think and behave – not only because of self-esteem as prior research would suggest (e.g., Feingold, 1992) – but because it can also shape people's perceptions of their social class.

Organizations are situations (Davis-Blake & Pfeffer, 1989) in which physical attractiveness is particularly relevant. A large body of research has documented the numerous advantages of being physically attractive in the workplace (Hamermesh, 2011; Rhode, 2010: Shahani-Denning, 2003). Moreover, some recent reports suggest that the attractiveness bias is a conscious process for many managers. For example, a recent survey (Newsweek, 2010) showed that corporate hiring managers value physical attractiveness as a more important attribute than education when it comes to evaluating applicants. In that particular survey, physical attractiveness was endorsed as the third most important attribute when evaluating applicants (below experience and confidence), while college education was endorsed as the fourth most important attribute. In addition, nearly 60% of respondents in that survey advised applicants to spend as much time and money on "making sure they look attractive" as they would in perfecting a resume (Newsweek, 2010). Moreover, almost 70% of respondents in that survey also acknowledged that physical attractiveness influences how employees are evaluated for their performance.

Of course, the importance of attractiveness differs across organizations, although scholars have found that the attractiveness bias is pervasive and exists even in contexts where attractiveness is irrelevant to the type of work that people perform (Hamermesh, 2011; Rhode, 2010). What seems clear is that organizations are situations that prime concerns about physical attractiveness and physical appearance. By placing a premium on physical attractiveness and by frequently encouraging attention to physical appearance, organizations can inadvertently influence the types of mindsets and decision logics that their employees should adopt (e.g., Pfeffer & Devoe, 2012).

Finally, we note that while in Studies 1 and 5 the relationships between self-perceived attractiveness and subsequent measures of inequality were explained by subjective social class, in the other studies, social class only partially accounted for the effect of self-perceived attractiveness on the dependent measures. We think that future research should continue to explore the underlying processes by which self-perceived attractiveness influences people's subsequent attitudes and beliefs, as it is clear from these results that it is an important psychological variable.

Hierarchy and inequality

Consistent with prior scholarship (e.g., Kraus et al., 2009; Kraus & Keltner, 2013; Piff et al., 2012), we also found that higher class perceptions were associated with a greater tendency to support social inequality. As scholars have previously pointed out (e.g., Bobo & Kluegel, 1993; Schmitt et al., 2003), membership in privileged groups comes with numerous social advantages and opportunities. Because these social advantages and opportunities are consequential, members of privileged groups are thus more likely to espouse certain attitudes and beliefs that justify disparities in status and rank between different social groups to protect their privileged status (e.g., Kraus, 2013; Kraus et al., 2009). The same underlying process extends in the present work: those who identified themselves as part of the upper class were more likely to endorse self-serving

beliefs that justify group-based dominance and inequalities in the existing system – beliefs which are in line with the motivation to legitimize and maintain one's elevated social position (Kraus, 2013). In other words, those who believe that they are in a privileged position are more likely to embrace inequality because it is in their interest to do so, as prior scholarship has found (e.g., Schmitt et al., 2003).

The findings of the present investigation also showed the malleable nature of people's views on inequality: people were prone to endorse hierarchy or equality to the extent that they saw themselves as more or less privileged in society. These findings highlight how people's readiness to accept or reject inequality depends on their perceived position in the social class hierarchy, an observation that complements work on group status and dominance (e.g., Brandt, 2013; Knowles, Lowery, Hogan, & Chow, 2009; Morrison & Ybarra, 2008). If the evidence from the present investigation suggests that people's stance on inequality is so malleable – such that they readily embrace hierarchies when they believe they are at the top, but reject them when they believe they are at the bottom - then the evidence also complements the observation that people do not necessarily dislike a hierarchical setup (Zitek & Tiedens, 2012), unless they feel they are in a subordinate position and getting the short end of the stick.

Conclusion

The present research showed that even a subtle and seemingly unrelated factor could affect people's attitudes toward inequality and social hierarchies. If what we see in the mirror after we wake up in the morning can affect our attitudes and beliefs about how the world should be, then society's cultural preoccupation with physical appearance may have more far-reaching consequences than were previously imagined. Investing in our physical appearance may not just "give us a new face, but it may also give us a whole new point of view in life" (Peiss, 1999).

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Appendix A

- I feel as though I know what it's like to belong to a high social class.
- 2. I feel as though I am part of the elite group in society.
- 3. I feel as though I can identify with the lives of the rich.
- 4. I feel I can identify with those who have a lot of money.
- 5. I feel as though I am part of with those who live a life of wealth and privilege.
- 6. I feel as though I am part of the elite.

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