ABSTRACT

FACIAL ATTRACTIVENESS AND HELPING BEHAVIOR ATTRIBUTIONS: ATTRACTIVE AND UNATTRACTIVE PERSONS ARE PERCEIVED OF AS UNHELPFUL

by Donald Francis Sacco

Three studies explored the relationship between facial attractiveness and attributions of prosocial behavior. On a between-subjects (Study 1) and within-subjects (Study 2) basis, participants were shown images of targets possessing low, average and high facial attractiveness and were asked to indicate their impressions of how helpful these targets should be as well as how helpful these targets actually are. In both studies, attractive and unattractive targets were seen as actually engaging is less helping behavior than targets of average attractiveness; participants also perceived a consistent gap in unattractive and attractive targets' actual helping behavior compared to how much they should help. Study 3 extended these findings by indicating that attractive and average targets are seen as more capable of helping than unattractive targets whereas both attractive and unattractive targets are seen as less willing to help than targets of neutral attractiveness. Perceptions of both attractive and unattractive targets' willingness to help mediated perceptions of how much these targets actually help. Perceptions of unattractive targets willingness to help also mediated perceptions of how much these targets should help. Finally, perceptions of unattractive targets' capability of helping mediated perceptions of how much they actually help and should help.

FACIAL ATTRACTIVENESS AND HELPING BEHAVIOR ATTRIBUTIONS:
ATTRACTIVE AND UNATTRACTIVE PERSONS ARE PERCEIVED OF AS
UNHELPFUL

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Fascination with human beauty has a strong historical presence. One need only briefly scan popular literature and scientific research for this to become apparent. From the story of Narcissus's inability to look away from his own reflection (Ovid, 2004), to the myriad references to beauty in literature (e.g., Homer, 1976; Wilde, 1998) and popular culture (e.g., Soul, 1963), to the extensive empirical literature exploring the physical and psychological traits associated with physical beauty (e.g., Eagly, Ashmore, Makhjani, & Longo, 1991; Rhodes, 2006), our interest in human beauty seems to pervade nearly every avenue of our lives. People commonly strive to be more attractive and many individuals consistently like to be in the presence of attractive others (e.g., Morrison, Morrison, & Hopkins, 2003; Silberstein, Striegel-Moore, Timko, & Rodin, 1988; Walster, Aronson, Abrahams, & Rottman, 1966). The current studies expand upon this research by exploring how targets' physical attractiveness influences our expectations for and attributions of helping behaviors.

What is Beauty?

One interesting aspect of physical attractiveness in the human form and face is that most individuals know it when they see it, and for the most part the same characteristics are consistently and often cross-culturally considered attractive. For example, females with a body mass index (BMI) of about 10-20 kg/m² and males with a BMI of around 21-22 kg/m² and a lower waist-to-chest ratio (WCR) are considered most attractive, at least in Western cultures (Swami et al., 2008). Women judged as attractive tend to have a waist-to-hip ratio (WHR) around .7, a cue that has been suggested to be associated with higher fertility; attractive males have a WHR closer to 1, which is thought to be an effect of high levels of testosterone and a cue to male mate quality (Singh, 1993).

Faces that are statistically averaged (i.e., an average of all facial dimensions), symmetric, and that possess a clear skin tone are consistently found to be most attractive (e.g., Ford & Beach, 1952; Langlois & Roggman, 1990; Rhodes, Proffitt, Grady, & Sumich, 1998). Interestingly, many of these characteristics have been shown to be indicators of biological fitness, which may help to explain the cross-cultural consistency in these preferences. For example, average faces are associated with developmental stability and heterozygosity, which may increase disease resistance (Gangestad & Buss, 1993). Furthermore, facial asymmetry is associated with inbreeding, premature birth, psychosis, and mental retardation; thus, humans across cultures prefer faces that are highly symmetric (Livshits & Kobylanski, 1991). Clear and smooth skin in faces is an outward marker of an individual's current health status; across cultures, individuals prefer faces that display a healthful skin tone and that are free of sores or blemishes (Buss, 2007). Finally, research has found that attractive persons tend to possess greater sexual dimorphism, display a more pleasant expression, engage in better grooming, and appear more youthful (e.g., Berry, 2000; Cunningham, 1986; Etcoff, 1999; Rhodes & Zebrowitz, 2002).

Stereotypes of Beauty and Ugliness: What Is Beautiful Is Good and What Is Ugly Is Bad?

Not only do people generally agree on what constitutes physical attractiveness, but individuals make systematic attributions about the characteristics, behaviors, traits, and abilities of individuals of varying levels of attractiveness. So well documented is this pattern of findings that Dion, Berscheid, and Walster (1972) have termed it the 'what is beautiful is good' stereotype (also known as the attractiveness halo effect). In their work, Dion and colleagues found that attractive faces were rated higher on positive personality traits (e.g., exciting, stable,

sincere, warm, sociable), and were believed to have more positive life outcomes such as greater marital happiness and career success. Research has also found that after a brief interaction via telephone, physically attractive persons are rated as more socially skillful and likable than their physically unattractive counterparts (Goldman & Lewis, 1977). In ecological settings, doctors even indicate that physically attractive patients are better patients and more psychologically well adjusted than their unattractive counterparts (Friedmeyer & Moore, 1977; Nordholm, 1980).

Interestingly, physically attractive individuals are considered good in ways consistent with the values of their culture. Specifically, although collectivist cultures (e.g., Korea) do not differentially rate physically attractive people as higher in potency (e.g., dominance/assertiveness) as is the case in Western cultures (e.g., North America), they do rate attractive targets as higher in integrity and concern for others, which are esteemed traits consistent with their more interdependent value systems (Wheeler & Kim, 1997). Furthermore, there is evidence that physically attractive persons are rated as more vocally pleasant than physically unattractive persons (Zuckerman & Driver, 1989). Subsequent research suggests that this ‘beauty is good’ stereotype is strongest for social competence, interpersonal ease, and social vitality/extraversion (Bassili, 1981; Dion, 1981; 1986). Taken together, these data indicate that individuals believe physically attractive persons possess more positive personality traits, engage in more positively valued behaviors, and lead more pleasant and productive lives than their physically unattractive counterparts.

Not only is physical beauty generally considered good, but physically unattractive persons are ascribed a host of negative characteristics. For example, men and women with unattractive bodies (e.g., unattractive WHRs and WCRs) are perceived to be lonelier, lazier and to be teased more often than individuals with attractive bodies (Swami et al., 2008). Individuals also report being less willing to hire or help women with unattractive bodies (facial information was not included in these studies; Swami, Chan, Wong, Furham, & Tovée, 2008). Other research has found that individuals associate disease-relevant cognition with obesity, a clear and powerful reflection of the negative associations individuals have towards those who are low in physical attractiveness (Park, Schaller, & Crandall, 2007). Using functional magnetic resonance imaging (fMRI), research also indicates that unattractive faces, processed both explicitly (i.e., answering the question, “Do you like or dislike this face?”) and implicitly (i.e., answering the question, “Is this a male or a female?”), lead to heightened activation of brain areas previously demonstrated to respond to aversive and disgust-inducing material (amygdala and insula; Krendl, Macrae, Kelley, Fugelsang, & Heatherton, 2006). Consistent with the stereotype that ‘unattractive is bad,’ research utilizing attractive, neutral and unattractive targets found that compared to neutral and attractive targets, unattractive targets were rated as lower on a host of valued traits (e.g., intelligence, kindness). Attractive and neutral targets only differed in that attractive targets were rated as more sociable than neutral targets; in all other domains, targets of neutral and high attractiveness were seen as equivalently more positive than unattractive targets (Griffin & Langlois, 2006).

Although this previous research seems to indicate that ‘beauty is good’ and ‘unattractiveness is bad,’ there are a handful of studies demonstrating that people do occasionally associate attractive people more so than unattractive persons with negative characteristics. For example, Cash and Janda (1984) note a dark side to being physically attractive: a ‘what is beautiful is self-centered’ stereotype. Cash and Janda find that physically attractive persons are perceived to be more vain or egotistical than are persons of average attractiveness. Thus, attractive individuals are seen as more entitled and less other-oriented than are individuals of

average attractiveness. This is consistent with research showing that high physical attractiveness is, in fact, associated with higher status; that is, individuals report higher perceptions of status for physically attractive persons, which could lead to a sense of entitlement and self-centeredness in those persons (e.g., Anderson, John, Keltner, & Kring, 2001; Webster, Jr. & Driskell Jr., 1983). Other research supporting this ‘beauty as self-centered’ framework comes from research indicating that compared to unattractive and neutral targets, attractive targets are perceived of as being more vain, more egotistical, as possessing a more bourgeois orientation (e.g., low likelihood of sympathizing with oppressed persons and being status-seeking), as well as perceived to be more likely to request a divorce and to have an extra-marital affair (Dermer & Thiel, 1975). Interestingly, assessments of cooperation using a prisoner’s dilemma game found that players’ initial impressions are that attractive people will be more cooperative than unattractive persons; relative to these expectations, attractive persons appear more selfish in initial rounds compared to their partner’s initial expectations, which ultimately results in less cooperation by others (Andreoni & Petrie, 2008).

The Current Research: Physical Attractiveness and Perceptions of Helping Behavior

Based on the findings of the attractiveness literature, the current research was designed to investigate how the beauty stereotype affects perceptions of helping behavior. Despite a long history of research on the attractiveness stereotype, quite little is known about the relationship between a target’s attractiveness and perceptions of their likelihood to help others. Understanding the role of physical attractiveness cues as they relate to prosocial behavior is a valuable enterprise. Humans are an ultrasocial species; historically speaking, living in groups solved numerous adaptive problems more effectively than individuals could alone, particularly as they relate to survival and reproduction (Campbell, 1983; Kenrick, Maner, & Li, 2005). However, in order to benefit from group living, individual members of groups are required to contribute to the group in ways that are personally costly; thus, an important characteristic of potential interaction partners involves perceptions of their inclination to behave prosocially (Buss et al., 1990). In essence, individuals prefer to interact with individuals who are likely to cooperate and behave prosocially, rather than with those who are likely to cheat and behave selfishly, a process that is informed by cues related to past behaviors and personal characteristics of potential interaction partners (Cosmides & Tooby, 1992). Because people are motivated to interact with and value those who act prosocially, understanding people’s beliefs about who is likely to act in a prosocial manner is quite important.

Thus, the current research was designed to explore the relationship between targets’ physical attractiveness and beliefs about targets’ prosocial inclinations. Specifically, these studies test whether or not perceivers believe that physically attractive persons are the most helpful types of social targets, whereas unattractive targets are seen as extremely unhelpful, comparatively speaking. Indeed, a pure ‘what is beautiful is good’ and ‘what is ugly is bad’ prediction would suggest that individuals would perceive highly physically attractive persons as most helpful, followed by persons of average attractiveness, with unattractive persons being seen as the least helpful (e.g., Dion et al., 1972).

However, more nuanced predictions for beauty and helping stem from the ‘what is beautiful is self-centered’ stereotype. Although the attractiveness halo effect is well documented, perceivers also hold the stereotype that physically attractive persons are vain, egotistical, snobbish, and unconcerned for the welfare of others (e.g., Cash & Janda, 1984; Dermer & Thiel, 1975). Such negative trait attributions are directly relevant to the domain of

helping behavior as helping behavior often requires self-sacrifice and concern for the welfare of others (Dovidio, Piliavin, Schroeder, & Penner, 2006). Thus, it seems plausible that the attractiveness halo effect will not extend to beliefs about helping behavior. Instead, this ‘beautiful-as-self-centered stereotype’ may lead perceivers to infer that attractive persons may be unhelpful to others.

However, there are also theoretically compelling reasons to predict that individuals may believe that unattractive persons are also unlikely to help others. First, this would be consistent with the straightforward ‘what is ugly is bad stereotype.’ Because helping behavior is a positively valued behavior, unattractive persons may be seen as less likely to engage in it. Based on the literature associating obesity and facial stigma to disease (e.g., Krendl, Macrae, Kelley, Fugelsang, & Heatherton, 2006; Park, Schaller, & Crandell, 2007), it could be the case that individuals may think that unattractive persons, because of this association with disease, may be the least likely to help. In one sense, people may draw this conclusion because they think that unattractive persons are simply bad and may be less willing to engage in helping behavior.

Conversely, individuals may view unattractiveness and its association with disease as a handicap (e.g., Park et al., 2007), which may lead to the conclusion that unattractive persons are *incapable* of helping others. There is some evidence that individuals do associate facial unattractiveness with lower general ability. Specifically, individuals with facial abnormalities are rated as less honest, less employable, less trustworthy, less optimistic, less effective, less capable, less intelligent and less popular than persons with normal facial appearances (Rankin & Borah, 2003). Even the work and accomplishments of physically unattractive persons receive less favorable judgments compared to attractive individuals (Landy & Sigall, 1974). Such perceptions may translate into the belief that unattractive persons actually have ‘less to give’ in the domain of helping behavior. In either case, the result would be the perception that unattractive persons are believed to be unhelpful.

With a variety of competing predictions stemming from multiple theoretical perspectives, the current studies were conducted to test these various hypotheses. In Studies 1 and 2, participants were asked to evaluate physically attractive, average and unattractive target faces on two dimensions: how much the target ‘actually helps’ others, as well as how much the target ‘should help’ others. These two questions were chosen to tap the descriptive and prescriptive norms surrounding the attractiveness stereotype. Whereas descriptive norms indicate what individuals usually do, prescriptive norms indicate what individuals should do (Eagly, 2009). In this case, how much individuals actually help corresponds to the descriptive norm of helping behavior, whereas how much individuals should help corresponds to the prescriptive norm regarding helping behavior. More importantly, by measuring both descriptive and prescriptive expectations, this may help clarify why perceivers hold the stereotypes they do about unattractive targets. As previously noted, unattractive targets could be seen as less helpful because they are generally bad (i.e., an unattractiveness halo), or because they are incapable of helping. By measuring beliefs about how much targets actually help, and how much targets ‘should help’ (i.e., cultural obligations) one can investigate whether unattractive targets are held to the same standards (i.e., are seen as capable as) as are other targets.

Study 3 was conducted to more directly address potential explanations for differences in perceptions of helping behavior across levels of target attractiveness. Specifically, it was hypothesized that individuals may perceive persons as more or less helpful for one of two reasons; 1) they may believe that such persons are unwilling to help, which pertains to personal motivation or 2) they may believe that such persons lack the skills and resources to help. Past

research indicates that both ability and willingness to help others are important factors when determining the likelihood of someone engaging in helping behavior (Pullins, Fine, & Warren, 1996). Based on these findings, Study 3 included assessments of targets' willingness and capability of engaging in prosocial behavior.

Study 1 Overview

Participants were shown images of male and female faces pre-rated by a separate set of participants as being of high physical attractiveness, average physical attractiveness, or low in physical attractiveness. Target attractiveness was manipulated on a between-subjects basis (target sex was a within-subjects factor). Participants were asked to indicate how much helping behavior each target actually performs, and how much helping each person should engage in. Predictions stemming from the 'what is beautiful is good' stereotype suggest that participants should indicate that attractive targets are believed to help the most, whereas the 'what is ugly is bad' stereotype would predict that unattractive persons would be believed to help the least. However, the 'what is beautiful is self-centered' stereotype suggests that because attractive persons are believed to be selfish and uninterested in the plight of others, participants may believe attractive targets engage in low levels of helping.

In the context of the current studies, tentative hypotheses were drawn about the role of attractiveness in perceptions of how much targets should help (i.e., the prescriptive helping norm). Specifically, it was hypothesized that prescriptive norms toward targets of varying attractiveness might be relatively fixed; that is, individuals may believe that targets should help relatively equally, regardless of attractiveness level. Such a prediction stems from theory indicating that because the general norm of reciprocity for members of social groups is so strong and because free-riding also carries strong consequences (Axelrod, 2006), individuals will generally endorse a relatively similar expectation regarding how much members should help. Conversely, individuals may hold *lower* prescriptive helping beliefs for unattractive targets as this would be consistent with previous research indicating that facially disfigured persons are seen as less capable than non-disfigured persons (Rankin & Borah, 2003). However, it is suggested that any gaps in participants' perceptions of how much targets actually do help compared to how much they should help will be the largest for the target group or groups who are perceived to engage in the least amount of *actual* helping behavior.

Participants

The sample for this study consisted of sixty participants (35 women, 25 men) with an average age of 20.8 years ($SD = 1.36$). Participants included fifty-eight Caucasian Americans; two participants did not provide information regarding ethnicity.

Materials

Materials for this study consisted of eighteen digitized gray-scale images, each approximately 200×250 pixels in size. All were images of Caucasians (9 women; 9 men), approximately 25 years in age. All were facing the camera, and displayed neutral facial expressions. Of these 18 images, 6 were (3 women) pre-rated as high in physical attractiveness,

6 (3 women) were pretested to be of average physical attractiveness, and 6 (3 women) were pretested to be low in physical attractiveness.¹

Procedure

Participants were approached individually at various locations on the campus of a large Midwestern university and were asked if they would be willing to participate in a paper-and-pencil study assessing social perception. Upon obtaining informed consent, participants were randomly assigned to the physically attractive, the neutral attractiveness, or the physically unattractive condition, on a between-subjects basis. Based on this random assignment, participants were provided with one of three experimental packets; one for assessing physically attractive targets, one for assessing targets of neutral physical attractiveness, or one assessing targets low in physical attractiveness. The instructions for the face judgments were as follows:

“People often have expectations both about how other people *actually* behave, compared to the general population as well as expectations about how other people *should* behave, compared to the general population. In the task that follows, you will see a number of individuals. You will first be asked to indicate how much helping behavior you think each of these individuals *actually* engages in, compared to other people. For example, how much do they *actually* donate to a charity or how much time do they *actually* volunteer for different non-profit organizations? You will then be asked to indicate how much helping behavior you think each of these individuals *should* engage in, compared to other people. For example, how much *should* they donate to a charity or how much time *should* they volunteer for different non-profit organizations?”

All participants received the above instruction set; however, the order of the ‘should’ versus ‘actual’ instructions and ratings was counterbalanced on a between-subjects basis.² After

¹ The male and female faces were pretested with an unrelated sample of participants ($n = 25$). A 2 (participant sex: male, female) $\times$ 2 (target sex: male, female) $\times$ 3 (target attractiveness: attractive, neutral, unattractive) mixed model ANOVA with repeated measures of the last two factors was conducted with target attractiveness level as the dependent measure (1 = *Extremely Unattractive*; 9 = *Extremely Attractive*). This analysis yielded a main effect of target sex, $F(1,23) = 6.32, p = .02$, partial eta squared = .216, such that female targets ($M = 4.79, SE = .15$) were rated as more attractive than were male targets ($M = 4.48, SE = .15$). There was also a main effect of target attractiveness, $F(2,46) = 398.97, p < .01$, partial eta squared = .945; follow-up analyses indicated that attractive targets ($M = 7.06, SE = .14$) were rated as more attractive than neutral targets ($M = 4.50, SE = .19$), $t(24) = 15.65, p < .01, d = 3.13$, and unattractive targets ($M = 2.27, SE = .14$), $t(24) = 26.96, p < .01, d = 5.39$; neutral targets were also rated as significantly more attractive than unattractive targets, $t(24) = 14.94, p < .01, d = 2.99$. Finally, there was an interaction between target sex and target attractiveness level, $F(2,46) = 6.87, p < .01$, partial eta squared = .230. This interaction was due to the fact that participants rated attractive female targets ($M = 7.48, SE = .15$) as significantly more attractive than attractive male targets ($M = 6.64, SE = .18$), $t(24) = 4.65, p < .01, d = .93$; participants did not rate neutral male and female targets or unattractive male and female targets as significantly different in attractiveness ($ts < 1; ps > .5$).

² Across all three studies, participant sex and target sex were included as factors in all omnibus tests. Studies 1 and 2 included counterbalancing factors as well. Participant sex had no significant impact on any of the theoretically relevant main effects and interactions in all three studies and will not be discussed further ($ps > .05$). Target sex qualified the interaction between target attractiveness and type of question in Studies 1, $F(2,48) = 5.59, p < .01$, partial eta squared = .189, and 3, $F(6,300) = 4.23, p < .01$, partial eta squared = .071. Analyzing the data separately for male and female targets in Study 1 indicated that the effects for female targets were stronger (male target interaction reduced to marginal significance). In Study 3, separate Target Attractiveness $\times$ Question Type interactions for male and female targets indicated that the effects were larger for female participants for perceptions of actual helping behavior (partial eta squared_{female} = .388, partial eta squared_{male} = .184) and willingness to help (partial eta squared_{female} = .354, partial eta squared_{male} = .289). In Study 2, no effects of target sex were documented

viewing each face, participants utilized a 9 point Likert scale (1 = *Less helping than the average person*; 9 = *More helping than the average person*) to assess their perceptions of each target's helping behavior. Specifically, participants responded to two questions for each face: one question assessing perceptions of how much each target should help ("*Compared to the average person, the person above should engage in...*") and one question assessing perceptions of how much each target actually does help ("*Compared to the average person, the person above actually engages in...*"). Upon completing these two assessments for each face, participants completed a demographic questionnaire, were thanked for their participation and were debriefed.

Results

Because this study was interested in participants' beliefs about how much targets in each attractiveness category actually help versus their beliefs about how much they should help, scale responses were averaged into 12 separate indexes of helping. Specifically, the three individual targets in each category of target sex and attractiveness level were averaged together, separately for the questions regarding participants' perceptions with respect to how much they should help and how much they actually do help. This resulted in composite scores for should and actual perceptions of helping averaged separately for attractive males, neutral males, unattractive males, attractive females, neutral females, and unattractive females. These scores were then subjected to a 2 (participant sex: male, female) x 3 (target attractiveness: attractive, neutral, unattractive) x 2 (question type: should help, actual help) x 2 (target sex: male, female) mixed model ANOVA with repeated measures over the last two factors. This analysis yielded a main effect of question type such that people believed that targets' actual helping behavior ($M = 4.68$, $SE = .09$) was lower than the level at which they should help ($M = 5.53$, $SE = .12$), $F(1,54) = 34.23$, $p < .01$, partial eta squared = .388. Importantly, this analysis revealed the predicted question type by attractiveness condition interaction, $F(2,54) = 7.23$, $p = .002$, partial eta squared = .211 (see Figure 1; top panel).

To better understand this two way interaction, two separate One-way ANOVAs were conducted: one for perceptions of actual helping and one for beliefs about obligations to help. The One-way ANOVA with perceptions of actual helping was significant, $F(2, 57) = 10.59$, $p < .01$, partial eta squared = .271. Post-hoc analyses (LSD tests) indicated that participants believed targets of neutral physical attractiveness engage in more actual helping behavior ($M = 5.32$, $SE = .16$) than do attractive ($M = 4.46$, $SE = .15$) or unattractive targets ($M = 4.38$, $SE = .17$), $ps < .01$, $ds = 1.23$ and 1.27 , respectively; perceptions of the actual helping behavior of physically attractive and unattractive targets did not differ, $p = .71$, $d = .12$. Participants' beliefs in how much targets should help did not vary by attractiveness condition, $F(2, 57) = .49$, $p = .61$, partial eta squared = .017.

Of additional interest may be the perceived 'helping gap' between beliefs about obligations to help (how much a target should help) and beliefs about actual helping behavior (how much a target actually helps). Thus, separate paired samples t-tests were conducted at each of the three levels of target attractiveness. These analyses indicated that no helping gap existed for neutral attractiveness targets; participants believed the actual helping behavior of targets of average attractiveness ($M = 5.32$, $SE = .16$) did not differ from how much they should help ($M = 5.41$, $SE = .16$), $t(19) = .60$, $p = .55$, $d = .13$. However, a helping gap between beliefs about how

($ps > .05$). Collectively, target sex effects only changed the magnitude of the results for male and female targets, but not the pattern of findings. As such, this variable will not be discussed further.

much targets actually help compared to how much they should help was observed for both attractive and unattractive targets. Participants believed that the actual helping behavior of attractive targets ($M = 4.46$, $SE = .15$) was significantly less than how much they should help ($M = 5.70$, $SE = .19$), $t(19) = 6.49$, $p < .01$, $d = 1.45$. Similarly, participants believed that the actual helping behavior of unattractive targets ($M = 4.38$, $SE = .17$) was lower than how much they should help ($M = 5.62$, $SE = .28$), $t(19) = 3.61$, $p < .01$, $d = .81$. Thus, although participants believed that unattractive, average, and attractive targets should be equally helpful, they believed that both unattractive and attractive targets' actual helping behavior did not meet this expectation.

Discussion

Remarkably, these initial findings indicate that both attractive *and* unattractive targets are not seen as living up to their normative expectations for helping behavior. These initial findings are consistent with a combined explanation utilizing the 'what is beautiful is self-centered' (Cash & Janda, 1984) and the 'what is ugly is bad' (Swami et al., 2008) stereotypes. Although participants believed that targets of all levels of attractiveness *should* be equally helpful, they also indicated that both attractive and unattractive targets are believed to engage in less helping behavior than targets of neutral attractiveness. At least in the context of helping behavior, these findings are inconsistent with a simple 'what is beautiful is good' stereotype, in which attractive individuals are assigned high ratings across valued positive traits (Walster et al., 1972). When it comes to beliefs about helpfulness, both attractive and unattractive targets are believed to be unlikely to help.

Interestingly, the first study indicates that these stereotypes seem to affect descriptive norms associated with helping behavior, rather than prescriptive norms. Whereas physical attractiveness determined individuals' beliefs about actual levels of helping behavior (descriptive), everyone agreed that regardless of attractiveness level, all individuals should help equivalently (prescriptive). Furthermore, people believed that the descriptive norm of helping for individuals of average attractiveness was consistent with the prescriptive norm related to helping behavior; that is, individuals believed that average targets' actual helping behavior was meeting the level of helping behavior they should be engaging in. Conversely, beliefs about both unattractive and attractive targets' actual levels of helping behavior were seen as inconsistent with, in this case lower than beliefs about how much they should help (i.e., a descriptive-prescriptive 'helping gap'). Of particular interest is that these data appear to indicate that unattractive targets are held to the same standards as targets higher in attractiveness, which does not provide support for the hypothesis that unattractive targets are held to lower normative standards in the domain of helping than are other targets.

Study 2 Overview

To clarify and replicate the results of the first study, a second study, similar to the first was run. However, target attractiveness was manipulated within-subjects rather than between-subjects. Thus, each participant saw attractive, average, and unattractive male and female faces. Although involving only minimal procedural changes, replicating the results of Study 1 using a within-subjects procedure is critical because estimates of the physical attractiveness of any given target have been shown to be relative judgments. For example, past research indicates that a face

presented in the context of less attractive faces received higher ratings of attractiveness than when paired with faces of similar attractiveness (Wedell, Parducci, & Geiselman, 1987). Furthermore, prior exposure to more attractive targets leads individuals to judge subsequent targets as less attractive than they otherwise would, again reflecting a contrast effect in ratings of physical attractiveness (Kenrick, 1980).

Thus, in Study 1 the exposure to only one level of attractiveness in the between-subjects design may have led each group to rely on different relative comparisons. Therefore, the results of evaluating targets' helping behavior may differ when exposed to only one type of target, because individuals exposed to attractive or unattractive faces may be relying on different comparators. If the effects of Study 1 were independent of relative comparison effects of judging the faces of only one level of target attractiveness, then Study 2 should replicate these findings. However, if judging how much targets of different levels of attractiveness actually do and should help rely on different judgment comparisons, judging targets of all levels of attractiveness in domains of helping behavior may lead to similar contrast effects found in previous attractiveness research (e.g., Wedell et al., 1987). By exposing all participants to targets of every level of physical attractiveness, the nature of the comparison process is experimentally constrained for participants, allowing for a more stringent examination of the hypotheses.

Participants

The sample for this study consisted of sixty participants (37 women, 23 men) with an average age of 20.6 years ($SD = 1.30$). Participants included fifty-two Caucasian Americans and five African Americans; three participants did not provide information regarding ethnicity.

Materials

Materials for this study consisted of the same eighteen grey-scale images used in Study 1.

Procedure

Participants were approached individually at various locations on the campus of a large Midwestern university and were asked if they would be willing to participate in a paper-and-pencil study assessing social perception. Upon obtaining informed consent, participants completed an experimental packet containing the facial images of 6 physically attractive, 6 neutral attractiveness, and 6 physically unattractive targets, half of which were male and half of which were female. Participants received the same instructions used in Study 1; however, participants saw all of the faces rather than faces only from one category of attractiveness. These images were presented one at a time to participants in a quasi-random design in order to obtain helping behavior ratings from each participant.

Participants again used a 9 point Likert scale (1 = *Less helping than the average person*; 9 = *More helping than the average person*) to assess their perceptions of each target's helping behavior (same questions and format as Study 1). As in Study 1, the order of the 'should' and 'actual' helping instructions and questions was counterbalanced between-subjects. Additionally, whether the first target they saw was attractive, unattractive, or average was also counterbalanced; the presentation order of subsequent targets varied randomly. After assessing all of the faces, participants completed a demographic questionnaire, were thanked for their participation and were debriefed.

Results

Similar to the first study, this second study investigated the effects of physical attractiveness on perceptions of actual helping and obligations to help others. As such, the three individual targets in each category of target sex and attractiveness level were again averaged together, separately for assessments of how much they should help and how much they actually do help. This resulted in composite scores for should and actual perceptions of helping averaged separately for attractive males, neutral males, unattractive males, attractive females, neutral females, and unattractive females. These scores were then subjected to a 2 (participant sex: male, female) $\times$ 2 (question type: should help, actually help) $\times$ 3 (target attractiveness: attractive, neutral, unattractive) $\times$ 2 (target sex: male, female) mixed model ANOVA with repeated measures over the last three factors. Although there were several lower order main effects that were of little theoretical significance, the analysis again yielded a main effect of question type, $F(1,58) = 31.89, p < .01$, partial eta squared = .355, such that individuals believed that targets should engage in more helping behavior ($M = 5.48, SE = .13$) than they actually perform ($M = 4.78, SE = .09$). Importantly, this analysis yielded a similar interaction between attractiveness condition and question type found in Study 1, $F(2,116) = 28.67, p < .01$, partial eta squared = .331 (see Figure 1; bottom panel).

To better understand this two-way interaction, two separate One-way ANOVAs were conducted, one for perceptions of actual helping and one for beliefs about obligations to help. For perceptions of actual helping behavior, there was a significant effect of target attractiveness, $F(2,118) = 38.69, p < .01$, partial eta squared = .396. Consistent with the findings of Study 1, follow-up paired samples t-tests indicated participants believed that the actual helping behavior of targets of neutral attractiveness ($M = 5.53, SE = .09$) was significantly greater than that of attractive targets ($M = 4.27, SE = .13$), $t(59) = -9.53, p < .01, d = 1.23$, and unattractive targets ($M = 4.43, SE = .16$), $t(59) = -7.81, p < .01, d = 1.01$; perceptions of the actual helping behavior of attractive and unattractive targets did not differ significantly, $t(59) = -.81, p = .42, d = .10$. Unlike Study 1, there was a significant effect of target attractiveness on perceptions of how much targets should help, $F(2,118) = 12.79, p < .01$, partial eta squared = .178. Follow-up paired samples t-tests indicated that participants believed that both attractive ($M = 5.61, SE = .14$), $t(59) = 3.66, p < .01, d = .47$, and average targets ($M = 5.70, SE = .12$), $t(59) = 4.36, p < .01, d = .56$, should help more than unattractive targets ($M = 5.16, SE = .17$); participants believed that attractive and neutrally attractive targets should help equally, $t(59) = -.96, p = .34, d = .12$. Thus, unlike Study 1, this within-subjects design showed evidence that less helping behavior was expected of unattractive targets.

Just as in Study 1, additional paired samples t-tests were conducted to investigate the perceived helping gap between beliefs about actual and obligatory helping behavior, separately at each level of target attractiveness. Replicating Study 1, there was no perceived helping gap for neutral targets; participants believed the actual helping behavior of targets of average attractiveness ($M = 5.53, SE = .09$) did not differ from how much they should help ($M = 5.70, SE = .12$), $t(59) = -1.37, p = .18, d = .18$. Again replicating Study 1, a helping gap was observed for both attractive and unattractive targets. Participants believed that the actual helping behavior of attractive targets ($M = 4.27, SD = .13$) was significantly less than how much they should help ($M = 5.61, SE = .14$), $t(59) = -8.14, p < .01, d = 1.05$. It was also the case that perceptions of unattractive targets' actual helping behavior were lower ($M = 4.43, SE = .16$) than perceptions of how much they should help ($M = 5.16, SE = .17$), $t(59) = -4.76, p < .01, d = .61$. Thus,

consistent with the results of the first study, individuals believed a descriptive-prescriptive gap existed in helping behavior for both attractive and unattractive targets.

Discussion

The results of this second study generally confirm those found in Study 1, albeit with some exceptions. Participants' perceptions of targets' actual levels of helping behavior were again consistent with the 'what is beautiful is self-centered' stereotype (e.g., Cash & Janda, 1984; Dermer & Thiel, 1975), as well as the 'what is ugly is bad' stereotype (e.g., Park et al., 2007). Specifically, both physically attractive and unattractive targets were believed to help others less than targets of neutral attractiveness. Moreover, the current study replicates the perceived helping gap (i.e., a descriptive-prescriptive disjunction; Eagly, 2009) between how much both attractive and unattractive targets should help and how much they are believed to help. Again replicating Study 1, no perceived helping gap was found for targets of neutral attractiveness. Such findings also offer confirmation that individuals' use of target cues, in this case physical attractiveness, leads to stronger variations in their descriptive stereotypes of targets' helping behavior compared to prescriptive stereotype content (Gill, 2004). Collectively, these first two studies provide evidence that contrary to the 'beauty is good' stereotype, both unattractive and attractive individuals are believed to be relatively unhelpful, and as failing to meet their obligations to help. Although these first two studies provide descriptive evidence that both target beauty and target ugliness lead to a descriptive-prescriptive disjunction in perceptions of helping behavior, neither study provides clear evidence as to why this is the case. Indeed, it may seem surprising that both highly attractive and unattractive targets are *both* perceived more negatively on the dimension of helping behavior, given the past literature (e.g., Dion et al., 1972; Eagly et al., 1991). Because the stereotypes regarding attractive and unattractive individuals are quite different, yet produce similar perceptions of helping behavior in both groups, it is likely that separate mechanisms are responsible for the results found in the previous two studies.

Because the 'what is beautiful is self-centered' (Cash & Janda, 1984) and 'what is ugly is bad' stereotypes (Park et al., 2007) produce similar perceptions of helping behavior for attractive and unattractive targets, it may be the case that individuals are reaching this conclusion via different evaluations for each class of target. Further unlike Study 1, the second study found that unattractive targets were held to lower standards for helping than were both neutral and highly attractive targets. Unattractive targets elicited significantly lower 'should help' ratings than did attractive targets, which may be indicative of the belief that unattractive targets are seen as relatively incapable of helping (Rankin & Borah, 2003). Thus, although the overall pattern of the within-subjects design does generally conform to the findings of Study 1, it does appear that fixing the relative differences between attractiveness groups by using a within-subjects design (i.e., ensuring that the relative comparisons are fixed within the study) does provide preliminary evidence that unattractive targets may be seen as lower in their capacity to help, which may help explain why unattractive targets are rated as relatively unhelpful.

Study 3 Overview

Study 3 was meant to more clearly explicate why participants believe the actual helping behavior of unattractive and attractive targets is consistently lower than that of neutral targets, and lower than how much they should be expected to help. In particular, Study 3 directly

investigates both perceptions of *capability* and *willingness* to engage in helping behavior as potential explanations for the previous results. Research exploring the formation of behavioral intentions indicates that they are a product of an individual's willingness to engage in the particular activity as well as one's perceived control over performing the task, which is closely related to efficacy or performance capacity (e.g., Ajzen, 1985; 1987). Thus, the degree to which individuals believe they are capable of performing a task and are willing to perform a task determines whether task performance actually occurs. To the extent that this is also a metacognitive process, it may be the case that individuals predict others' likelihood of behavior based on personal assessment of their willingness and ability to perform the behavior in question. In fact, past research on helping behavior has used this distinction between capacity and willingness to predict subsequent helping behavior (e.g., volunteering to be a mentor; Pullins, et al., 1996).

A within-subjects design similar to that used in Study 2 was implemented in Study 3. In addition to measuring beliefs about targets' actual helping and how much targets should help, this study also asked participants to indicate their beliefs about how *willing* and *capable* targets were of engaging in prosocial behavior. Consistent with research associating unattractive and disfigured persons with inability (e.g., Rankin & Borah, 2003), it was predicted that unattractive targets would be rated as relatively incapable of helping, compared to targets of average and high attractiveness. Such a finding could potentially help explain why participants in Study 2 indicated a lower obligation for helping (should help) for unattractive targets; that is, if participants indicate that they believe unattractive targets are less capable of providing help, it follows that they would believe that these targets should have to help less. Conversely, although it is predicted that participants will view attractive targets as highly capable of helping (consistent with the 'what is good stereotype'), it is hypothesized that participants will view these targets as less willing to help, which would be consistent with the 'what is beautiful is self-centered' stereotype (Cash & Janda, 1984). One alternative hypothesis is that individuals will apply the 'what is ugly is bad' stereotype more broadly (i.e., more than just as associated with disease) and will possess the belief that unattractive targets are both incapable and unwilling to help. These hypotheses were tested in the third study.

Furthermore, Study 3 also allowed for secondary analyses comparing how perceptions of willingness and capability to help relate to perceptions of actual helping behavior and perceptions of how much targets should help. Although the a priori predictions for these secondary analyses are less clear, a sensible prediction is that perceptions of capability may mediate perceptions of unattractive targets' actual and should helping behavior, whereas perceptions of willingness may mediate perceptions of attractive targets' actual and should helping behavior. However, it may also be that perceptions of willingness to help mediate perceptions of unattractive targets' actual helping behavior as well as how much they should help, which would be evidence for a broad application of the 'what is ugly is bad' stereotype.

Participants

The sample for this study consisted of 57 participants (33 women, 24 men). Participant age was not recorded; participants' education level was recorded: $M = 1.5$ years of college). Participants included fifty Caucasian Americans, three African Americans, two Asian Americans, and one Hispanic American; one participant did not provide ethnicity information.

Materials

Materials for this study consisted of the same eighteen grey-scale images used in the first two studies.

Procedure

Participants reported to a laboratory in groups of up to five. Upon obtaining informed consent, participants were seated at individual computers to complete the experimental procedures. Participants viewed the images of attractive, neutral, and unattractive targets one time in a random order on a computer (Medialab software was used for this procedure). The experiment took place in two blocks. In the first block, the following instructions were used to assess participants' perceptions of each target's capability and willingness to engage in helping behavior:

“People often have an idea about how *capable* other individuals are of engaging in a certain behavior, compared to the general population as well as how *willing* other individuals are to engage in a certain behavior, compared to the general population. In the task that follows, you will see a number of individuals. You will first be asked to indicate how *capable* you think each of these individuals is of engaging in helping behavior, compared to other people. For example, how *capable* (e.g., able) are they of donating to a charity or how much time are they *capable* of volunteering for different non-profit organizations? You will then be asked to indicate how *willing* you think each of these individuals is to engage in helping behavior, compared to other people. For example, how much are they *willing* to donate to a charity or how much time are they *willing* to volunteer for different non-profit organizations?”

The question order of capacity and willingness were counterbalanced. To replicate the results of the first two studies, the second block asked participants to again indicate their beliefs about how much each target ‘should help’ and how much each target ‘actually helps.’ The order of these questions was counterbalanced and the wording of the questions was identical to that of the previous studies. Using the same 9 point Likert scale as utilized in the first two studies (1 = *Less helping than the average person*; 9 = *More helping than the average person*), participants answered four questions about each target: how capable each target is of helping, how willing each target is to help, how much each target actually helps, and how much each target should help. After assessing all of the faces on these four helping dimensions, participants completed a demographic questionnaire, were thanked for their participation and were debriefed.

Results

Primary Analyses.

In this third study, the central goal was to compare participants' beliefs about how much attractive, average, and unattractive targets should help, actually do help, are capable of helping, and are willing to help. As such, the three individual targets in each category of target sex and attractiveness level were averaged together, separately for their scores regarding participants' perceptions with respect to how capable each category of target is of helping, how willing they are to help, how much they should help, and how much they actually do help. This resulted in composite scores for should, actual, capable, and willingness perceptions of helping averaged separately for attractive males, neutral males, unattractive males, attractive females, neutral females, and unattractive females. These scores were then subjected to a 2 (participant sex:

male, female) x 4 (question type: should help, actually helps, capable of helping, willing to help) x 3 (target attractiveness: attractive, neutral, unattractive) x 2 (target sex: male, female) mixed model ANOVA with repeated measures over the last three factors. Although some main effects achieved significance, the results yielded the predicted interaction between question type and target attractiveness, $F(6,330) = 23.02, p < .01$, partial eta squared = .295 (see Figure 2).

To better understand this two-way interaction, separate analyses of perceivers' beliefs about targets' helpfulness (actual helping) and obligations to help (should help) were conducted to see if the results of Study 2 replicated. One-way ANOVAs with target attractiveness level as the independent variable and ratings of how much targets actually help and should help yielded results similar to Study 2. Replicating the previous studies, the One-way ANOVA with perceptions of actual helping as the dependent measure yielded a significant effect of attractiveness, $F(2,112) = 31.96, p < .01$, partial eta squared = .363. Follow-up paired samples t-tests indicated that targets of average attractiveness were perceived as more helpful ($M = 5.56, SE = .11$) than attractive targets ($M = 4.27, SE = .13$), $t(56) = -8.23, p < .01, d = 1.09$, and unattractive targets ($M = 4.74, SE = .15$), $t(56) = 6.23, p < .01, d = .83$. Furthermore, unattractive targets were rated as engaging in more actual helping behavior than attractive targets, $t(56) = -2.40, p < .01, d = .32$. Thus, individuals again indicated a belief that targets of neutral attractiveness are actually more helpful than physically unattractive and attractive targets; novel to this third study is the fact that *attractive* targets are perceived to be the least helpful class of targets.

The One-way ANOVA with perceptions of how much targets should help also yielded a significant effect of attractiveness, $F(2,112) = 11.65, p < .01$, partial eta squared = .172. Similar to the second study's results, follow-up paired samples t-tests indicated that participants believed both attractive ($M = 5.97, SE = .14$), $t(56) = 3.50, p < .01, d = .46$, and average targets ($M = 6.01, SE = .12$), $t(56) = 5.03, p < .01, d = .67$, should help more than unattractive persons ($M = 5.35, SE = .16$); participants believed that attractive targets and average targets should help the same amount, $t(56) = -.28, p = .78, d = .04$. Thus, a consistent theme emerging from the results of Studies 2 and 3 is that unattractive targets are held to a lower prescriptive standard for helping than are neutral or attractive targets. Paired sample t-tests were again conducted to better understand the relationship between perceptions of how much targets should help (prescriptive standard) and actually help (descriptive standard), separately across the three levels of attractiveness. In all cases, perceptions of actual helping behavior were significantly lower than perceptions of how much they should help (all $ps < .01$; magnitudinal difference for each class of target: $d_{\text{attractive}} = 1.43, d_{\text{neutral}} = .49, d_{\text{unattractive}} = .42$). In particular, the results for attractive and unattractive targets are consistent with the prescriptive-descriptive gap in perceptions of helping found in the previous two studies. Study 3 also indicated a small helping gap for neutral targets, however, this was the only study to find such an effect and it was relatively weak.

Analyses of participants' perceptions of how capable and willing targets are of helping offered a novel extension of the first two studies. A One-way ANOVA with perceptions of helping capability as the dependent measure yielded a significant effect of attractiveness, $F(2,112) = 19.97, p < .01$, partial eta squared = .263. Follow-up paired samples t-tests indicated that both attractive ($M = 5.75, SE = .13$), $t(56) = 4.01, p < .01, d = .53$, and average targets ($M = 5.91, SE = .12$), $t(56) = 7.58, p < .01, d = 1.00$, were seen as more capable of helping than unattractive persons ($M = 5.35, SE = .16$); participants believed that attractive targets and average targets are equally capable of helping, $t(56) = -1.02, p = .31, d = .14$.

The One-way ANOVA with perceptions of willingness to help as the dependent measure, yielded a significant effect of attractiveness, $F(2,112) = 35.24, p < .01$, partial eta squared = .386. Follow-up paired samples t-tests indicated that targets of average attractiveness were perceived as more willing to help ($M = 5.89, SE = .10$) than were attractive targets ($M = 4.52, SE = .12$) $t(56) = -8.14, p < .01, d = 1.08$, and unattractive targets ($M = 4.83, SE = .15$), $t(56) = -7.83, p < .01, d = 1.04$; unattractive and attractive targets were perceived of as equally unwilling to help, $t(56) = -1.50, p = .14, d = .20$. Taken together, these data indicate that attractive targets are seen as able but unwilling to help, consistent with the ‘what is beautiful is self-centered’ stereotype. However, unattractive targets are seen as low in both the capacity and willingness to help. These findings for unattractive targets support a broad ‘what is ugly is bad stereotype’ (Park et al., 2007).

Secondary Analyses.

By asking participants to indicate how capable and willing each type of target was of engaging in helping behavior, it was possible to see if perceptions of capability and willingness mediated perceptions of how much targets actually help and should help. In order to conduct these analyses, it was necessary to use within-subjects mediation. To conduct such mediational analyses, certain a priori conditions must be met: 1) the variable of attractiveness must significantly affect perceptions of the outcome variable (either perceptions of how much targets actually help or should help) and 2) the variable of attractiveness must significantly affect perceptions of the mediating variable (either perceptions of willingness or capability of helping); these conditions can be tested with the pair-wise comparisons from the previous ANOVA results (West, Biesanz, & Kwok, 2004).

Based on these requirements, five mediational models were capable of being assessed; a comparison of the difference in perceptions of willingness to help for attractive targets and neutral targets on perceptions of actual helping behavior, comparisons of the difference in perceptions of capability of helping for unattractive targets and neutral targets on perceptions of actual helping behavior as well as how much these targets should help, and comparisons of the difference in perceptions of willingness to help for unattractive and neutral targets on perceptions of actual helping behavior as well as how much these targets should help. To test for mediation, each predictor is regressed on the dependent measures separately (actually helps or should help); if the independent variable (β_1) is significant, this provides evidence for partial mediation. Furthermore, if the constant of the equation (β_0) is not significantly different from zero, then this is taken as evidence of a full mediational pathway (West et al., 2004).

In all five mediational models, evidence for partial mediation was found (all $ps < .03$ for tests of β_1). The difference between attractive and neutral targets’ willingness to help did not fully mediate perceptions of actual helping behavior, $\beta_0 = -.363, t(55) = -2.26, p = .03$. However, the difference in perceptions of unattractive targets’ willingness to help fully mediated perceptions of both how much they actually help, $\beta_0 = -.107, t(55) = -.77, p = .45$, as well as how much they should help, $\beta_0 = -.266, t(55) = -1.50, p = .14$. Finally, perceptions of unattractive targets’ capability to help mediated perceptions of how much they actually help, $\beta_0 = -.314, t(55) = -1.92, p = .06$, and partially mediated perceptions of how much they should help, $\beta_0 = -.358, t(55) = -1.99, p = .05$. Collectively, these results indicate that perceptions of both unattractive and attractive targets’ willingness to help are responsible for perceptions of how much these targets actually help; however, this effect on perceptions of actual helping behavior is fully mediated by perceptions of willingness to help for unattractive targets whereas it is only partially

mediated by perceptions of willingness to help for attractive targets. For unattractive targets, perceptions of willingness to help were also fully responsible for perceptions of how much these targets should help. Perceptions of helping capability for unattractive targets also explained perceptions of these targets' actual helping behavior and partially mediated perceptions of how much these targets should help.

Discussion

Similar to the first two studies, Study 3 found that individuals believe that targets of average attractiveness are more helpful than are attractive and unattractive targets. Consistent with Study 2, individuals believed that attractive and neutral targets should be more helpful than unattractive targets. Although Study 3 documented a descriptive-prescriptive gap in helping perceptions for neutral targets similar to that found for unattractive and attractive targets in all three studies, this was the only study to show this effect and it was relatively small. Thus, the descriptive-prescriptive gap in helping perceptions tends to consistently be associated with targets considered physically attractive or unattractive. Interestingly, this study extended the previous findings in a number of ways. First, it was found that compared to targets of neutral and high attractiveness, unattractive targets are seen as deficient in their capability to help. Second, unattractive and attractive targets were seen as equally less willing to engage in helping behavior compared to targets of neutral attractiveness. The results for attractive targets supported the 'what is beautiful is self-centered' stereotype (e.g., Cash & Janda, 1984) whereas the results for unattractive targets supported a broad 'what is ugly is bad' conceptualization (e.g., Park et al., 2007).

Furthermore, tests of within-subjects mediation offered a casual framework for perceptions of actual helping behavior and perceptions of how much targets should help with respect to attractive and unattractive targets. Specifically, perceptions of willingness to help mediated perceptions of how much targets actually help for both attractive and unattractive targets (full mediation for unattractive targets versus partial mediation for attractive targets). Perceptions of unattractive targets' willingness to help also mediated perceptions regarding how much they should help. Finally, perceptions of unattractive targets' capability of helping mediated perceptions of how much they actually help as well as how much they should help (partial mediation). These results indicate that perceptions of willingness and capability are important mechanisms responsible for differential perceptions of attractive and unattractive targets' actual helping behavior as well as perceptions regarding how much they should help.

General Discussion

Across cultures, there is a general consensus on what physical beauty is. A beautiful man or woman has a face and a body that is indicative of resistance to disease and in possession of physical health, fertility, and good genes to pass along to offspring (e.g., Rhodes, 2006; Singh, 1993; Swami et al., 2008). Although further identifying what is physically attractive and why such characteristics are considered attractive is indeed an important research endeavor, of similar importance is the development of a more comprehensive understanding of how our knowledge of attractiveness influences our perceptions, attributions and behaviors regarding persons of varying levels of physical attractiveness. In the current series of studies, the starting point for contributing to this understanding utilized existing theory on physical attractiveness in order to

apply it to one of the most fundamental interpersonal domains; that of prosociality and helping behavior.

Of primary interest was determining if variations in targets' physical attractiveness influence perceptions of how helpful individuals should be and how helpful they actually are. Knowing who is likely to be helpful can be useful in determining who could realistically provide assistance, while perceptions of who should be helpful can determine how punitive we are likely to be should they fail to aid us in a time of need. Understanding the prosocial inclinations of others has been so historically important that it has been argued humans evolved a specific 'cheater detection' module for accurately identifying good social exchange partners and punishing poor exchange partners (Cosmides & Tooby, 1992). Indeed, individuals across cultures indicate that the most important characteristic when choosing a partner is kindness (Buss et al., 1990). Collectively, it seems that one of the most important qualities when judging others tends to be related to their overall level of prosociality as measured by perceptions of kindness and appropriate social exchange behavior.

In developing specific hypotheses for these initial studies, three different previously documented findings were utilized. Theories directly related to the 'what is beautiful is good' (e.g., Dion et al., 1972) and 'what is ugly is bad' (e.g., Dermer & Thiel, 1975; Griffin & Langlois, 2006) stereotypes, in their most basic forms, would have predicted that as a target's physical attractiveness increases, he or she would be perceived to actually engage in more helping behavior; that is, the halo of positivity assigned to attractive persons (i.e., the attribution of positive traits based simply on high levels of physical attractiveness) results in the prediction that people would perceive of attractive people as actually more helpful than unattractive persons, with individuals of average attractiveness falling somewhere in between.

However, other research indicates that there is a competing stereotype that individuals also hold, the 'what is beautiful is self-centered' stereotype, indicating that attractive persons are egocentric, unconcerned for the welfare of others and have an elevated sense of entitlement (Cash and Janda, 1984; Dermer & Thiel, 1975). These theories were particularly interesting in the context of the current studies because the focus on perceptions of helping behavior sets up a competing hypothesis. Specifically, rather than attractive targets being seen as high in helpfulness, attractiveness stereotypes may lead attractive targets to be seen as unhelpful; that is, people may think the egocentrism of attractive targets reduces their likelihood of actually engaging in helping behavior.

All three studies tested these competing hypotheses on both a between-subjects (Study 1) and within-subjects (Studies 2 & 3) basis. Collectively, the results of these studies support both a 'what is ugly is bad' as well as a 'what is beautiful is self-centered' pattern of results. That is, targets that were high in physical attractiveness as well as those of low physical attractiveness were seen as engaging in less actual helping behavior than targets of average attractiveness and unattractive and attractive targets were considered equally unlikely to actually engage in helping behavior.

Furthermore, the results indicated that participants thought that average targets' actual helping behavior actually met their obligations for helping (Studies 1 and 2), whereas unattractive and attractive targets' actual helping behavior was seen as significantly less than how much people thought they should help. Thus, whereas targets of average attractiveness were generally seen as fulfilling their helping obligations, unattractive and attractive targets' helping behavior was rated as consistently lower than the level of helping that they should engage in. The fact that attractiveness cues produced stronger and more stable effects with

respect to perceptions of actual helpfulness seems to indicate that physical attractiveness has a greater impact on descriptive norms regarding attractiveness stereotypes compared to prescriptive norms regarding how individuals ought to behave (Eagly, 2009).

Study 3 extended these results by assessing perceptions of both capacity and willingness to help, along with the dimensions assessed in the first two studies, to better understand the patterns of perceived actual and should helping behavior across target attractiveness. This design was adopted based on two related ideas: 1) if individuals apply the ‘what is beautiful is self-centered’ stereotype (Cash & Janda, 1984; Dermer & Thiel, 1975), then they should indicate that attractive targets are unwilling to help; that is, because attractive targets have a sense of entitlement, they will not see any need to be prosocial and 2) if individuals apply the ‘what is ugly is incapable’ stereotype then they should indicate that unattractive targets are unable to help, but if they apply the ‘what is ugly is bad’ stereotype more broadly, then they should indicate that unattractive targets are also unwilling to help. Extending the results of the first two studies, Study 3 found that attractive and unattractive targets were perceived to be equally less willing to engage in helping behavior, compared to targets of average attractiveness. Furthermore, unattractive targets were also perceived to be less capable of helping compared to attractive and average targets (perceptions of capability of helping did not differ between neutral and attractive targets).

Importantly, Study 3 also found that perceptions of targets’ willingness and capability of helping mediated perceptions of how much attractive and unattractive targets actually help and should help. Consistent with the ‘what is beautiful is self-centered’ stereotype, perceptions of attractive targets’ willingness to help partially mediated perceptions of their actual helping behavior. Collectively, individuals believe that attractive targets are unwilling to help and these perceptions of unwillingness are responsible for reduced perceptions of attractive targets’ actual helping behavior. Such results are consistent with the ‘what is beautiful is self-centered’ framework (e.g., Cash & Janda, 1984; Dermer & Thiel, 1975) and suggest that perceptions of willingness are a primary mechanism responsible for this stereotype. For unattractive targets, perceptions of willingness to help significantly mediated perceptions of how much these targets actually help and should help; that is, unattractive targets are seen as unwilling to help and such perceptions are responsible for reduced perceptions of how much they actually help and should help. Finally, perceptions of unattractive targets’ capability of helping mediated perceptions of how much they actually help and how much they should help (partial mediation); that is, unattractive targets are seen as incapable of helping and these perceptions are responsible for reduced perceptions of unattractive targets’ actual helping behavior as well as perceptions regarding how much they should help. These results are consistent with a broad ‘what is ugly is bad’ stereotype (e.g., Park et al., 2007) and suggest that perceptions of both willingness and capability are primarily responsible for this stereotype, at least as it pertains to helping behavior.

The fact that these mediational pathways were stronger for unattractive targets is consistent with previous literature suggesting that unattractiveness is more detrimental than attractiveness is beneficial. Specifically, past research has found that trait judgments of attractive and neutral targets are more similar in their positivity, whereas judgments of unattractive targets across these traits are uniformly more negative when compared to neutral or attractive targets (e.g., Griffin & Langlois, 2006). Biologically speaking, physical characteristics of disease and low genetic quality have a greater impact on judgments of targets than do similar cues of elevated genetic fitness; at least in nature, identifying and avoiding extremely poor quality partners is of greater adaptive significance than identifying and courting partners of

extremely high genetic quality (Zebrowitz & Rhodes, 2003). The importance of identifying low quality individuals based on biological cues may help explain why stronger effects for unattractive targets are found in the current research with respect to perceptions of prosocial behavior.

These results advance the literature on the consequences of physical attractiveness by showing how the stereotypes associated with being more or less attractive have a meaningful impact on individuals' perceptions of these persons' helping behavior. A fundamental tenet of social psychology is the idea that humans are social because it is adaptive; that is, groups perform many tasks more efficiently and effectively than individuals could do alone, such as aiding in offspring care, providing protection, as well as gathering food and as such, we evolved into an ultrasocial species (e.g., Brewer, 2004; Kenrick, Maner, & Lee, 2005). Because group living requires some amount of prosocial behavior from its members, it is inherently valuable to identify good social exchange partners. Although there are many cases where individuals use past information to determine whether someone would be a good exchange partner (e.g., "Have they helped me in the past?"), many occasions require us to use potentially less valid cues, such as when we see someone for the first time (e.g., smiling, similarity; see Fetchenhauer, Groothuis, & Pradel, in press). The current studies looked specifically at one such cue; a target's physical attractiveness. Collectively, the results were consistent with a combination of theoretical orientations. Rather than providing general support for the 'what is beautiful is good stereotype,' the three studies reported here provide support for both the 'what is beautiful is self-centered' stereotype (e.g., Cash & Janda, 1984) as well as a broad application of the 'what is ugly is bad' stereotype.

Psychology research has already documented the intense negative impact of stereotypes not only on perceivers' judgments and behavior toward the target (Kunda & Sinclair, 1999), but also on the target via self-fulfilling prophecies; that is, the perceiver behaves in a manner that leads the target to behave in ways that confirm the stereotype (e.g., Word, Zanna, & Cooper, 1974). Most of this research has explored the impact of gender and racial stereotypes on judgment and behavior toward targets; much less research has explored the specific ways in which attractive and unattractive people are perceived and why people may hold those perceptions. The current research begins to address that question by not only indicating how much helping behavior individuals think people of various levels of physical attractiveness actually engage in, but also why individuals might hold those perceptions in the first place. Specifically, the current studies indicate that people believe that attractive persons do not help because they are unwilling whereas they believe that unattractive persons do not help because they are both unwilling and incapable of helping.

Across the current studies, the effects were generally stronger for female, as opposed to male targets (see Footnote 2). According to evolutionary theory, physical attractiveness is a more important component when judging women compared to men (fitness value via physical traits). Specifically, Parental Investment Theory (PIT; Trivers, 1972) argues that because women's initial investment in offspring is greater than men's, it is adaptive for women to focus on cues related to resources and investment and men to focus on cues to fertility, such as physical attractiveness. Furthermore, intrasexual competition for mates may lead women to be attentive to the physical attractiveness of other women as an adaptation to be aware of the most threatening competition for their current mate (Buss & Schmitt, 1993). Thus, both men and women may be especially attuned to female attractiveness, but for very different reasons (e.g., Sacco, Hugenberg, & Sefcek, 2009) and this may be partially responsible for the larger effect for

female target attractiveness documented in the current series of studies. These stronger effects for female targets would also be consistent with Social Role Theory (Eagly, 1987), which posits that the division of labor between men and women leads women to assume more communal roles (and males more agentic roles), which are associated with the unselfishness and friendliness associated with higher levels of prosocial behavior.

These results may have significant real world implications. For example, previous research has found that decisions to hire persons are biased based on racial stereotypes (e.g., Dovidio & Gaertner, 2000). In the context of jobs that involve a great deal of self-sacrifice or jobs related to helping (e.g., nurse, therapist, daycare worker), one's level of physical attractiveness may play a significant role in hiring decisions. Interestingly, attractive and unattractive individuals may experience similar negative outcomes, but for potentially different reasons. For attractive persons, they may be seen as unfit for the job because the person making the hiring decision believes they simply will be less willing to be helpful. For unattractive persons, they may be seen as unfit for the job because they are seen as less willing to help, less capable of helping, or both. Because the current studies indicated that perceptions of willingness and capability of helping are responsible for perceptions of actual helping and how much targets should help, such stereotypes as they relate to attractive and unattractive persons may have a variety of negative employment repercussions.

Future research might benefit by experimentally manipulating whether an attractive or unattractive target fails to engage in a normative helping behavior (e.g., failing to assist in picking up a dropped folder of papers) and then asking people why they think the person failed to engage in the helping behavior. Participants' responses could help confirm the findings of the current studies. Furthermore, assessing participants' emotional reactions to the failed helping behavior of attractive and unattractive persons would be interesting as well. For example, individuals experience the emotion of anger toward those who fail to do something because they are lazy (i.e., unwilling) but feel pity toward persons who fail to do something because they lack the ability; furthermore, this anger leads to punishment motivation whereas pity does not (Weiner & Kukla, 1970). It would be interesting to see if pity towards an unattractive person's perceived lesser capability negated an angry reaction toward their lack of helping. If this were true, perhaps individuals really only react negatively when attractive persons fail to help. Consequently, perhaps it would be the case that individuals are more willing to punish and more likely to assign a higher punishment to an attractive person that fails to help than an unattractive person that fails to help.

Future studies would also benefit by exploring how the type of helping behavior may influence the pattern of helping perceptions found in the current studies. Specifically, these studies defined helping more broadly as donating to charity and/or volunteering for a non-profit organization; however, these were confounded in the current studies and could not be analyzed separately. It may be the case that attractive persons are expected to be especially helpful in situations requiring resources because of a perceived higher level of status (e.g., Anderson et al., 2001). However, some forms of helping do not require tangible resources, other than time, such as volunteering at a soup kitchen. In these situations, individuals may think that unattractive persons should help as much as targets that are attractive or neutrally attractive. In each of these cases, this could lead to shifts in the descriptive-prescriptive helping gaps that were documented in the current series of studies.

One of the major limitations of the current studies is that participants were not asked to behave or interact with the different targets. Future research would benefit by exposing

participants to targets of various levels of attractiveness and having them choose who they would prefer to interact with, such as by asking them to pick a partner during an experimental task in which high performance could earn them money. Such a task would introduce a level of outcome dependency (e.g., Neuberg & Fiske, 1987) which would make the task consequential for participants. In this case, would general enjoyment of being in the presence of an attractive person override the stereotype that attractive persons tend to be less helpful, as documented in the current series of studies? Another limitation of the current studies is that participants were neither asked to self-report their own level of attractiveness nor were their facial images recorded so an independent sample of participants could evaluate their level of physical attractiveness. For example, past research indicates that exposure to images of more attractive others makes individuals feel less attractive (e.g., Little & Minnion, 2006). Such social comparison effects and the emotions that they engender may significantly impact individuals' actual judgments and reactions to targets of varying attractiveness levels.

It is also the case that future research would benefit by testing the distinction between failing to help and actually engaging in harmful behavior. Specifically, the current studies indicate that the 'what is beautiful is self-centered' and 'what is ugly is bad' stereotypes lead to perceptions that attractive and unattractive targets are more likely to fail to help, compared to targets of neutral attractiveness. The current research does not indicate which category of targets is most likely to engage in greater (or reduced) actual harmful behavior. However, the results of the current studies, particularly the third study, make this an interesting empirical question. Because unattractive targets are seen as less capable in the domain of prosocial behavior and are seen as generally more incapable across domains than neutral or attractive targets (Rankin & Borah, 2003), it may be the case that these individuals would also be seen as less capable of engaging in harmful behavior as well. Conversely, because the current studies indicated that the 'what is ugly is bad' stereotype is more impactful than the 'what is beautiful is self-centered' stereotype, perhaps this halo of negativity associated with unattractive persons would lead individuals to see them as more likely to engage in harmful behavior than attractive or neutral targets.

Conclusion

Across three studies, it was found that physical attractiveness plays a significant role in individuals' perceptions of a target's level of prosociality. Specifically, both unattractive and attractive individuals are believed to engage in less helping behavior than persons of average attractiveness. These studies also indicated that attractive persons are believed to be unwilling to help and that this mediates perceptions of their reduced actual helping behavior. Unattractive persons, on the other hand, are seen as less willing and capable of helping and these mediate perceptions about their actual helping behavior as well as how much they should help.

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Figure 1.

Figure 2.