Not Just in the Eye of the Beholder: Beauty as a Status Characteristic in Mixed Sex Dyads

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The physical attractiveness bias, or the tendency to attribute positive characteristics to people perceived as attractive, offers attractive individuals a range of advantages in the social world. Incorporating concepts from research on attractiveness bias and expectation states theory, this study examined the communication behaviors of pairs working on a decision-making task in order to measure the influence of attractiveness and gender on social status hierarchy. Sixty-eight undergraduate students were separated into pairs that varied by gender and attractiveness rating and were videotaped while performing an interactive task. Researchers measured the dominant (interruptions, gestures, total talk time, speech initiation) and submissive (affirmations, head nods, smiling) communication behaviors exhibited by participants and used this information to infer status hierarchies for each pair. Attractive individuals displayed a range of dominant behaviors. In line with these findings, when participants evaluated their partners after the task, those who were described as attractive were also described as possessing other positive traits, such as intelligence and thoughtfulness. Results overall suggest that gender and physical attractiveness operate as status characteristics and, specifically, that physical attractiveness may elevate social status in face-to-face interaction.

INTRODUCTION

The physical attractiveness bias, or the tendency to attribute positive characteristics to attractive people, is ubiquitous in the social world and gives widespread advantages to attractive individuals. Not only are attractive people often perceived as possessing unrelated positive traits (Webster & Driskell, 1983), but they are also known to receive social (Benson, Karabenick, & Lerner, 1976), academic (Ritts, Patterson, & Tubbs, 1992), legal (Castellow & Wuensch, 1990), political (Lewis & Bierly, 1990), occupational (Hosoda, Stone-Romero, & Coats, 2003), and economic (Loh, 1993) advantages over less attractive people.

These benefits represent forms of status and power, whose processes social psychologists have modeled in a variety of ways, including social-role theory (Eagly, 1987) and communication accommodation theory (Giles, Taylor, & Bourhis, 1973). Expectation states theory (EST) has been described as a "leading explanation of social influence" and "the most systematic and empirically well-documented theory of status processes in groups currently available" (Kalkhoff & Thye, 2006, p. 219; Ridgeway, 2006, p. 347). Joseph Berger and colleagues developed EST to explain how status operates in small, task-oriented groups (Berger, Cohen, & Zelditch, 1972). While these groups emerge naturally in a range of contexts, they are of particular importance in the workplace, where teamwork is often required to achieve specific objectives. In light of the well-documented application of the attractiveness bias in this context (Vo, 2001), EST can be used to help discern the impact of physical attractiveness on group communication. Within this framework, attractiveness serves as a diffuse status characteristic that signals task competence in small groups (Webster & Driskell, 1983).

The Physical Attractiveness Bias

In a seminal study by Dion, Berscheid, and Walster (1972), participants attributed more socially desirable personality traits, such as friendliness and interestingness, to more attractive individuals. Participants also expected attractive targets to lead happier and more successful lives compared to unattractive targets. Research from the past several decades reveals the pervasiveness of this bias in many facets of social life. Several meta-analyses have reviewed such investigations and considered the range and intensity of the bias across different domains. In one review, Feingold (1992) found that attractive males and females were judged as more sociable, dominant, sexually warm, mentally healthy, and socially skilled but were not judged as more intelligent or competent. Eagly, Ashmore, Makhijani, and Longo (1991) found that attractiveness has a strong impact on perceptions of social competency and extraversion and a moderate impact on

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perceptions of intelligence and authority, but little impact on perceptions of integrity and concern for others. Jackson, Hunter, and Hodge (1995) argue that the bias is more diffuse, documenting its effects on diverse measures of competence. Though opinion varies on the strength and scope of this phenomenon, these reviews converge on a bias that moderates perceptions of traits not directly related to outward appearance.

Physical attractiveness can also impact decisions and behaviors. Research suggests that helping behavior increases when the recipient of the help is attractive. Benson, Karabenick, and Lerner (1976) found that people were more willing to help mail a graduate admissions application for more attractive individuals, and West and Brown (1975) found that attractive individuals received more donations in emergency conditions. Similarly, more room is given to attractive people on sidewalks (Dabbs & Stokes, 1975). These findings extend to evaluative judgments. Teachers judge physically attractive students as more intelligent, as having higher academic ability, and as better adjusted than unattractive students (Ritts, Patterson, & Tubbs, 1992; Lerner & Lerner, 1977). Evaluations of vocal performance, peer essays, and college admission interviews are positively associated with attractiveness (Landy & Sigall, 1974; Shahani, Dipboye, & Gherlein, 1993; Wapnick, Darrow, Kovacs, & Dalrymple, 1997). Preference and perceptions of competence of political candidates have been correlated with candidate physical attractiveness (Adams, 1977; Lewis & Bierly, 1990). Attractive people are less likely to be asked for identification when purchasing alcohol (McCall & Nattrass, 2001). Research on evaluations of legal proceedings using undergraduate and graduate student participants reveals a strong attractiveness bias in the courtroom as well. Unattractive victims are considered to be more responsible for attacks than attractive victims in mock rape trials, defendants are less likely to be judged guilty if they are attractive or if the victim is unattractive, and attractive defendants are given more lenient sentencing (Thornton & Ryckman, 1983; Jacobson, 1981). Similarly, research on sexual harassment suggests that a jury is least likely to vote a defendant guilty when the defendant is attractive and the plaintiff is unattractive (Castellow & Wuensch, 1990).

Moreover, researchers have documented biases in favor of attractive people on several job-related outcomes such as ranking, hiring decisions, promotions, predicted success, employment potential, and performance evaluations (Hosoda, Stone-Romero, & Coats, 2003). Less attractive female job applicants are less likely to be hired regardless of qualifications, and employees' attractiveness increases wage levels and wage growth (Marlowe, Schneider, & Nelson, 1996; Loh, 1993). And both professional and student raters believed that attractive candidates had personalities best suited for the job, would outperform others, and had a better chance of getting the job (Gilmore, Beehr, & Love, 1986).

While most research confirms the advantageousness of being perceived as physically attractive, a handful of studies reveal exceptions to the rule. This "dark side" of attractiveness operates largely through perceptions of vanity (Eagly et al., 1991). Attractive people are perceived as vainer than less attractive people, more egotistical, more materialistic, and more likely to have failed marriages as a result of extramarital affairs

(Dermer & Thiel, 1975). Other exceptions involve behaviors resulting directly from this bias. Sigall and Ostrove (1975) found that in a mock trial with undergraduate jurors, attractive defendants received harsher sentences on crimes related to attractiveness, such as swindling. Additionally, attractive women were not hired for stereotypically masculine jobs, such as managerial positions (Cash & Jonda, 1984). While these findings may seem to reveal an equally disadvantageous side of the attractiveness bias, research generally points to physical attractiveness as an advantage in social life (Eagly et al., 1991).

Expectation States Theory

Despite the pervasiveness of attractiveness bias, few researchers have addressed physical attractiveness as a status characteristic (Jackson et al., 1995; Webster & Driskell 1983). It is possible that attractiveness gives advantages in everyday interaction and across the lifespan similar to those of race, gender, education, and age. In turn, attractiveness could operate as a status characteristic as outlined by expectation states theory in the same way that being male or Caucasian operates (Webster & Driskell, 1983). While previous reviews have examined this bias from alternate theoretical frameworks, including implicit personality theory (Eagly et al., 1991), expectancy theory (Feingold, 1992), and accommodation theory (Haas & Gregory, 2005), the present research uses an expectation states perspective to explore physical attractiveness as an index of social status. We propose that the attractiveness bias can be best understood through status hierarchies within small groups, as expectation states theory (EST) "accounts for a broader range of attractiveness effects" than other theories in the social psychology field (Jackson et al., 1995).

EST emerged from a research program developed by Joseph Berger and colleagues testing status differences in social interaction (Berger et al., 1972). According to EST, members of task groups form performance expectations about each other unconsciously when there are no cues about who will be most competent at the task. These performance expectations, or expectation states, form and maintain power hierarchies within groups (Berger et al., 1972). Status Characteristics Theory (SCT) is a branch of EST in which performance expectations are based on culturally determined status characteristics (known as diffuse status characteristics) that provide cues about how successful each group member will be at the task. Diffuse status characteristics are those in which (a) one status group or "state" is valued more than other states and (b) those with the more valued state are deemed more competent on a variety of tasks (Berger et al., 1972; Correll & Ridgeway, 2003). Gender and race are the most robust examples of diffuse status characteristics (Webster & Hysom, 1998). For example, men are stereotypically believed to be more competent at a variety of tasks, even those not explicitly, or stereotypically, related to gender. Within the framework of SCT, when there is no obvious indication of who will be most successful at a task in an unstructured group, expectation states will be higher for men because they hold the more culturally valued gender status.

SCT is defined by a set of principles that characterize the relationship between status beliefs and behaviors (Correll & Ridgeway, 2003; Kalkhoff & Thye, 2006). According to the principle of *salience*, a significant status

characteristic must differentiate group members, or must be relevant to the task. Next, the *burden of proof* rests on the disadvantaged group member, who must prove that a salient status characteristic should not be considered when expectations are formed. In other words, a female in a group of mostly males will have to prove that her low gender status is not relevant to the specific task. The principle of *aggregation* explains that all salient status characteristics combine to form an aggregate expectation of each group member. Therefore, if both race and gender are salient in the situation, an African-American woman will have a lower expectation state than an African-American man. Lastly, these aggregated performance expectations create a social structure that informs group interaction, maintaining and perpetuating the social order. Group members with high performance expectations are given more opportunities to participate in tasks, participate more often, are evaluated positively by the group, and influence the group. The social hierarchy outlined by SCT only applies if all members of the group are *task-oriented* and *collectively oriented*, the two scope conditions of the theory. Group members are task-oriented if they are motivated to successfully complete the task and collectively oriented if they believe that it is necessary to take each other's opinions into account when performing the task (Correll & Ridgeway, 2003). Extensive empirical evaluation of EST, typically using graphical representations to map out the relative performance expectations and status expectations of participants, has produced significant evidence supporting the theory (Correll & Ridgeway, 2003).

The previously discussed pattern of bias suggests that physical attractiveness is consistent with status characteristics like gender, race, age, or social class in influencing perceptions and behavior in small groups. There has been only one other attempt to evaluate physical attractiveness as a status characteristic. Webster and Driskell (1983) manipulated the attractiveness of student photographs and had participants gauge their comparative expectations of the pictured individuals. Participants completed a questionnaire describing their expectations for an attractive student compared to an unattractive student of the same sex. The authors found that raters had high expectations of attractive people, both specific (competent at flying a plane) and general (competent in most situations). These findings qualify physical attractiveness as a status characteristic according to EST.

The current study departs from methodology typically employed in EST research in two significant ways. First, we expand on Webster and Driskell's (1983) research on same sex targets by evaluating mixed sex targets. The aggregation assumption says that all status characteristics influence performance expectations. Therefore, if gender and attractiveness are salient during a task, attractive males should possess the highest overall expectation advantage and unattractive females should possess the lowest expectation advantage. Second, like most EST experiments, Webster and Driskell's (1983) study used an experimental setting in which participants formed expectations of target individuals without ever interacting with them in person. By contrast, the current study is interested in how these expectation states manifest themselves in face-to-face interaction.

Status Differences in Communication Behaviors

Several studies have used EST to explore verbal and nonverbal communication behaviors that signify status differences within task groups. Findings from studies that directly observe behavior suggest that communication cues serve to reinforce preconceived performance expectations based on status characteristics (Ridgeway, Berger & Smith, 1985). Dovidio, Heltman, Brown, and Ellyson (1988) found that men displayed more power in gender-neutral tasks compared to women and attributed this outcome to men's conventionally higher gender status. Additional research on communication behaviors reveals that individuals in subordinate roles exhibit more hesitant and supporting behaviors, such as questions, affirmations, looking while listening, head nods, and smiling. Conversely, high-status individuals exhibit dominant behaviors, such as interruptions, directives, talking more, talking first, looking while speaking, hand gestures, and chin thrusts (Athenstaedt, Haas, & Schwab, 2004; Dovidio et al., 1988; Helweg-Larson, Cunningham, Carrico, & Pergram, 2004; Karakowsky, McBey, & Miller, 2004; Ridgeway et al., 1985).

It is important to note that these behaviors are also linked to gender-specific behaviors that exist part-and-parcel of perceived power differences between the sexes. Some exceptions seem to be a result of gender socialization as opposed to social status *per se* (though these concepts are interrelated insofar masculinity conventionally signals high status; Athenstaedt et al., 2004). For example, many scholars suggest that smiling is a gender-related behavior signaling warmth and positivity, not an indicator of low status or submissiveness (Athenstaedt et al., 2004; Dovidio et al., 1988; Hecht & LaFrance, 1998; Helweg-Larson, 2004). Ridgeway et al. (1985), on the other hand, argue that in task settings, nonverbal behavior between members of the opposite sex represents disparities in status and power independent of sex roles. Manipulating both physical attractiveness and gender could contribute to knowledge about the derivations of these status and sex differences in interaction.

THE PRESENT STUDY

The current study examined several verbal and nonverbal communication behaviors known to be indicative of either high or low status. High-status behaviors included length of time talking, speech initiation (first person to initiate speech), interruptions, and nonverbal gestures. Low-status behaviors included affirmations, smiling, and head nodding. These behaviors were selected for their variety, their ease of observation with video footage, and their presence in the literature.

Incorporating concepts from the physical attractiveness bias, expectation states theory, and communication behaviors, we examined whether communication behaviors between individuals varied by sex and attractiveness reflect status hierarchies. We hypothesize the following:

Hypothesis 1: Participants' attractiveness will be generalized to other positive traits.

Hypothesis 2: Attractiveness differences will be present for each communication behavior.

(a) Attractive participants will speak first, interrupt more, gesture more, and speak more overall compared to unattractive participants.

(b) Unattractive participants will affirm, head nod, smile, and write more compared to attractive participants.

Hypothesis 3: Gender differences will be present for each communication behavior.

(a) Male participants will speak first, interrupt more, gesture more, and speak more overall compared to female participants.

(b) Female participants will affirm, head nod, smile, and write more compared to male participants.

Hypothesis 4: Attractiveness differences for communication behaviors will vary by gender.

(a) Attractive males will use the most dominant communication behaviors.

(b) Unattractive females will use the most submissive communication behaviors.

Together, these hypotheses suggest that individuals possessing both forms of high status under examination (male and attractive) will communicate in a manner that represents their elevated status. Conversely, individuals possessing lower status (female and unattractive) will project low status. When attractiveness is held constant, gender will be the only salient status characteristic.

Methods

Participants and research staff

Sixty-eight volunteer participants were recruited through flyers and an online classifieds forum from the student population of a moderately sized southeastern liberal arts university and were arranged into 34 mixed sex dyads. Participants' ages ranged from 18 to 24 years, with a mean of 20.1. Thirty-three participants described themselves as Caucasian, 24 as Asian or Indian, six as African American, and five as Hispanic. No participants reported previous knowledge of their partner beyond recognition from a university course.

Fifteen undergraduate students (11 females and 4 males) served as attractiveness raters. The majority of these individuals were advanced students in the psychology honors program at the university. No raters were assigned participants whom they knew personally, and all raters signed a confidentiality agreement protecting the identity of participants.

Procedure

We implemented a between-group design in order to compare the verbal and nonverbal communication behaviors of college aged men and women working together on a task. So as not to give away the purpose of the study, volunteers were led to believe that they were participating in two sessions of research examining the relationship between personal values and ethical decision-making. Sessions were conducted in a laboratory room at the university.

In the initial research session, participants completed the Rokeach Values Survey (see Appendix 1). This questionnaire requires the respondent to rank order two different sets of 18 values according to person-

al importance. Examples of values included in the survey are "a comfortable life," "true friendship," "honesty," and "wisdom." Photographs of participants were taken in a standardized fashion and cropped below the shoulders. The researcher informed participants that the photograph would help maintain organization of the study files. Raters reported their subjective judgments of the physical attractiveness of participant photographs on a likert scale of 1 – 6, with 1 representing the lowest rating and 6 representing the highest rating. Each participant was rated by at least four raters, of whom at least one was male. The 33 participants with an average rating of 1 – 3.49 were designated a low attractiveness status and the remaining 35 with an average rating of 3.5 – 6 were designated a high attractiveness status.Because research shows that status is more salient in mixed sex settings, participants were placed into mixed sex pairs (Athenstaedt et al., 2004). Each pair was assigned to one of four groups:

Group 1: Attractive Male; Attractive Female (8 pairs)

Group 2: Unattractive Male; Unattractive Female (9 pairs)

Group 3: Attractive Male; Unattractive Female (9 pairs)

Group 4: Unattractive Female; Attractive Male (8 pairs)

Participants returned for a second research session at the same time as their assigned partner. They were instructed to sit next to each other and complete an ethical decision making exercise for 12 minutes (see Appendix 2). This videotaped task included descriptions of five ethical dilemmas adapted from Victor Grassian's book, *Moral Reasoning: Ethical Theory and Some Contemporary Moral Problems*. One example is entitled "A Poisonous Cup of Coffee":

> Tom, hating his wife and wanting her dead, puts poison in her coffee, thereby killing her. Joe also hates his wife and would like her dead. One day, Joe's wife accidentally puts poison in her coffee, thinking it's cream. Joe has the antidote, but he does not give it to her. Knowing that he is the only one who can save her, he lets her die. Is Joe's failure to act as bad as Tom's action? Why?

Participants were provided with only one copy of task instructions and dilemmas. They were able to move on to the next dilemma after arriving at an agreement or compromise about the previous one. As stated previously, the scope conditions of EST are task orientation, or motivation to complete the task successfully, and collective orientation, or the understanding that the opinion of others is important for the task. The ethical dilemma exercise used in this research meets both of these conditions, as both partners are led to believe that the task is an important element of the research and know that they must collaborate in order to proceed through the task.

Immediately following the discussion, participants completed a questionnaire about their personal performance on the task, the performance of their partner, and their perceptions of their partner (see Appendix 3). Responses were reported on a 1 – 5 scale from "Strongly Disagree" to "Strongly Agree." Examples of these statements include, "I found this task to be difficult," "My partner performed well on this task," "My partner was open to new ideas," and "My partner was attractive." During debrief, par-

Table 1. Means and standard deviations for communication behaviors.

			Verbal			Nonverbal		
			Dominant		Submissive	Dominant	Submissive	
			Talk Time	Interruptions	Affirmations	Gestures	Head Nods	Smiles
Male	Attractive	Mean	129.8	2.2	9.5	5.9	2.8	5.3
		SD	53.1	2.1	6.7	4.0	3.9	4.5
	Unattractive	Mean	136.1	2.6	10.6	8	4.8	5.7
		SD	47.6	1.9	7.8	6.1	5.8	4.0
	Total	Mean	133	2.4	10	6.9	3.8	5.5
		SD	49.8	2.0	7.2	5.1	5.0	4.2
Female	Attractive	Mean	119.1	3.5	9.7	6.3	5	7.6
		SD	51.1	3.3	5.5	5.5	54.3	5.8
	Unattractive	Mean	103.2	2.6	11.3	4.3	3.4	7.7
		SD	49.8	2.4	7.3	4.4	4.5	4.8
	Total	Mean	110.7	3	10.6	5.2	4.6	7.7
		SD	50.3	2.9	6.5	5.0	5.0	5.2
Total	Attractive	Mean	124.6	2.8	9.6	6.1	4.4	6.4
		SD	51.6	2.8	6	4.7	4.8	5.3
	Unattractive	Mean	119.2	2.6	11	6.0	4.1	6.7
		SD	50.9	2.2	7.4	5.5	5.1	4.5
Total	Total	Mean	121.8	2.7	10.3	6.0	4.2	6.6
		SD	50.9	2.5	6.8	5.0	5.0	4.8

ticipants were not informed of the existence or results of their attractiveness rating. Instead, they were told that this research focuses on the communication behaviors both partners exhibited as well as the influence of reported perceptions on their interaction. As an attractiveness check, participants' perceptions of their partners' physical attractiveness correlated significantly with the attractiveness rating assigned previously,

Table 2. Group means and standard deviations by gender for head nods.

Group	Gender	Mean	SD
Attractive Male - Attractive Female	Male	3.3	5.4
	Female	7	6.4
Unattractive Male - Unattractive Female	Male	5	5.9
	Female	4.9	6.1
Attractive Male - Unattractive Female	Male	2.4	2.3
	Female	1.9	1.3
Unattractive Male - Attractive Female	Male	4.5	6.0
	Female	5.0	4.0

Table 3. Group means and standard deviations by gender for smiles.

Group	Gender	Mean	SD
Attractive Male - Attractive Female	Male	4.1	2.0
	Female	7.6	7.4
Unattractive Male - Unattractive Female	Male	4.0	2.9
	Female	8.0	4.0
Attractive Male - Unattractive Female	Male	6.3	5.9
	Female	7.4	5.7
Unattractive Male - Attractive Female	Male	7.6	4.3
	Female	7.6	4.3

Pearson's $r(68) = .31$, $p < .05$.

Four undergraduate research assistants coded the middle eight minutes of video footage for each pair. The middle section was taken to avoid using footage prior to task orientation when participants were introducing themselves or after task orientation in the event that a pair completed the task early. Athenstaedt et al. (2004) also used a middle section of footage for analyses of gender differences. Assistants were provided with definitions of each behavior and participated in a training session on correct coding procedures. The verbal behaviors coded were speech initiation, total talk time in seconds, frequency of interruptions (dominant behaviors), and affirmations (submissive behavior). Nonverbal behaviors coded were gestures (dominant behavior), head nods, and smiling (submissive behaviors). Research assistants also recorded which participant of the pair elected to write the pair's answers on the assignment sheet. The primary researcher coded speech initiation (the first person to initiate speech). All research assistants coded the same footage of two pairs of participants in order to establish inter-rater reliability. Intraclass correlation coefficients were calculated for affirmations ($ICC = .421$, $p < .05$), gestures ($ICC = .961$, $p < .05$), head nods ($ICC = .543$, $p < .05$), smiles ($ICC = .969$, $p < .05$), and talk time ($ICC = .971$, $p < .05$).

Results

The first hypothesis, that the attractiveness of participants would be generalized to other positive traits, was confirmed. Participants who described their partners as attractive also described them as intelligent ($r(68) = .375$, $p < .05$), open to new ideas ($r(68) = .253$, $p <. 05$), capable ($r(68) = .271$, $p < .05$), thoughtful ($r(68) = .357$, $p < .05$), articulate ($r(68) = .459$, $p < .05$), warm ($r(68) = .316$, $p < .05$), engaging ($r(68) = .218$, $p < .05$) and funny ($r(68) = .32$; $p < .05$), but not significantly as helpful ($p > .05$) or ethical ($p > .05$).

The second, third, and fourth hypotheses—that physical attractiveness would im-

Table 4. Group means and standard deviations by gender for gestures.

Group	Gender	Mean	SD
Attractive Male - Attractive Female	Male	5.4	3.6
	Female	6.0	4.4
Unattractive Male - Unattractive Female	Male	9.1	7.1
	Female	4.3	4.6
Attractive Male - Unattractive Female	Male	6.3	4.4
	Female	4.2	4.5
Unattractive Male - Attractive Female	Male	6.9	5.1
	Female	6.5	6.7

pact communication behaviors and that this effect would vary by gender—were partially supported. We chose to use a confidence interval of 90% due to the decrease in sample size to 68 participants over all four groups. Square root log transformations for interruptions, affirmations, gestures, and head nods were performed to correct positive skew. We performed a 2 (attractive, unattractive) × 2 (male, female) analysis of variance (ANOVA) for each communication behavior in order to determine the influences of physical attractiveness and gender on communication between partners. First, gender main effects were examined exclusively. Smiles ($F(1, 68) = 3.457$, $p < .10$, $\eta p^2 = .051$), talk time ($F(1, 68) = 3.163$, $p < .10$, $\eta p^2 = .047$), and writer ($F(1, 68) = 22.74$, $p < .10$, $\eta p^2 = .263$) had marginally significant main effects. Females smiled more and talked less compared to males (see Table 1). They also served the role of "secretary" more often than men, writing down the pair's answers to the task. Only speech initiation approached significance for attractiveness ($F(1, 68) = 16.34$, $p < .10$, $\eta p^2 = .203$); attractive participants were usually the first to initiate conversation with their partner.

Next, the interactions of the ANOVAs were examined in order to establish that the effect of physical attractiveness on communication varies by gender. Speech initiation ($F(1, 68) = 3.72$, $p < .10$, $\eta p^2 = .055$) and head nods ($F(1, 68) = 5.17$, $p < .10$, $\eta p^2 = .075$) had significant interactions.

Means and standard deviations for all numeric communication behaviors are listed in Table 1. Notably, unattractive men ($M = 4.8$, $SD = 5.8$) head-nodded more than attractive men ($M = 2.8$, $SD = 3.9$). Attractive females ($M = 6.3$, $SD = 5.5$) gestured more than unattractive females ($M = 4.3$, $SD = 4.4$). Attractive females ($M = 119.1$, $SD = 51.1$) spoke more than unattractive females ($M = 103.2$, $SD = 49.8$).

Chi-square tests were performed as a factorial test for the categorical variables of writer ($\chi^2 (1) = 14.435$, $p < .05$) and speech initiation ($\chi^2 (1) = 3.29$, $p < .05$). M-H estimates were 8.57 for the writer and 6.06 for speech initiation.

Next, we examined group means in order to discern patterns of communication across attractiveness and gender. Tables 2-4 show group means for behaviors that display trends consistent with the hypothesis. As shown in Table 2, attractive females head-nod less when paired with unattractive males ($M_{Female} = 5$, $SD = 4$) than with attractive males ($M_{Female} = 7$ $SD = 6.4$). While the factorial ANOVA for smiling revealed only a main effect for sex, unattractive males smile almost twice as much when paired with attractive females ($M_{Male} = 7.6$, $SD = 4.3$) than with unattractive females ($M_{Male} = 4$, $SD = 2.9$; see Table 3). As shown in Table 4, attractive males gesture approximately the same amount as attractive females ($M_{Male} = 5.4$, $SD = 3.6$, $M_{Female} = 6$, $SD = 4.4$) but attractive males gesture more than unattractive females ($M_{Male} = 6.3$, $SD = 4.4$, $M_{Female} = 4.2$, $SD = 4.5$).

DISCUSSION

The primary objective of this investigation was to determine whether attractiveness influences communication behaviors in face-to-face interaction, while also replicating previous findings that attractiveness, like gender, operates as a status characteristic. More generally, we were interested in whether participants' perceptions of their partners provide further insight into the

cognitive bias for physical attractiveness. If communication between partners is an expression of relative status, then broad physical attractiveness bias can be understood through the expectation states perspective.

Hypothesis 1

Participants evaluated attractive individuals more positively, establishing the presence of an attractiveness bias among pairs. This finding reinforces previous research showing that attractive individuals are perceived favorably in both social (e.g., open, thoughtful, articulate, warm, engaging, funny) and intellectual (e.g., intelligent, capable) domains (Eagly et al., 1991; Jackson et al., 1995). Furthermore, the finding that attractive individuals were not assumed to be helpful or ethical aligns with Eagly's findings that the attractiveness bias has little to do with integrity or concern for others (Eagly et al., 1991). This pattern of attractiveness bias has a clear and consistent effect throughout the literature. According to expectation states theory, group members and partners evaluate individuals with the more valued characteristic positively. In this case, attractive individuals received approving feedback about their social and cognitive abilities based on their task performance, suggesting that attractiveness possesses the evaluative quality of a status characteristic.

Hypotheses 2-4

The hypothesis that attractiveness affects communication behaviors was supported by several observed behaviors, suggesting that attractiveness is a status characteristic operative in casual conversation and task performance. Because an interaction between attractiveness and gender was only found for two behaviors, the relationship between these characteristics and the relative strength of each remains unclear.

This investigation successfully replicated previous research that identified gender as an overt status characteristic in communication. Males talked more than females, verbally expressing their power by speaking more overall during the task (Dovidio et al., 1988). Females smiled more than males, which is consistent with suggestions that smiling is a gender-specific behavior and not necessarily a behavior exhibited by other low status traits as an indication of power (Athenstaedt et al., 2004; Dovidio et al., 1988; Hecht & LaFrance, 1998; Helweg-Larson, 2004). Females also tended to take on note-taking duties during the task. While this could be a submissive act, it could also result from a separate assumption that college-aged females have more legible handwriting than males.

The behaviors of speech initiation and head nods had significant interactions with participants' attractiveness and gender. Speech initiation was measured as the order in which partners spoke, recording which participant initiated speech. Attractive males spoke first more often than unattractive males, and attractive females spoke first more often than unattractive females. Overall, males spoke first more often than females. These results confirm previous findings that individuals who initiate speech have higher status and are likely to participate more frequently (Dovidio et al., 1988, Ridgeway et al., 1985).

The submissive behavior of head nodding also yielded a significant attractiveness-by-gender interaction. Unattractive males nodded their heads more than attractive males, signifying the influence of attrac-

tiveness on status among males. Furthermore, attractive females nodded their heads more toward attractive males than toward unattractive males, suggesting that the status difference between men and women was moderated by attractiveness. In light of previous research showing that head nods are a form of submission (Helweg-Larson et al., 2004), the head-nodding behavior of attractive females suggests that they are less willing to express submission to unattractive males than to attractive males.

With the exception of significant results for speech initiation, most visible trends for attractiveness were found in nonverbal communication behaviors. No significant effects were found for verbal affirmations or interruptions, which is inconsistent with literature depicting these behaviors as indicators of dominance and power in verbal communication (Athenstaedt et al., 2004, Karakowsky, 2004). It is possible that the experimental context prevented either of these behaviors from generating significant results. Partners were introduced for the first time immediately before the ethical decision making task began, so they likely wanted to interact in a socially desirable and supportive manner in order to make a good impression. This would include encouraging their partner through affirmations and abstaining from interruptions. Additionally, the experimental design primed participants with notions of morals and ethics, which may have influenced them to act accordingly. The research design required that partners were collectively oriented (i.e., interested in one another's opinions) in accordance with the scope conditions of expectation states theory. In this case, they were required to come to an agreement about their answer for each ethical situation's question in order to proceed with the task. This personal investment in the other participant's ideas probably facilitated a supportive climate with multiple affirmations and infrequent interruptions, regardless of status characteristics. In fact, participants of the current study used as many affirmations in eight minutes as the participants in Athenstaedt et al.'s (2004) study used in twelve minutes. Athenstaedt et al. (2004) found sex differences for interruptions with mixed sex couples who were familiar with each another. Similarly, Karakowsky et al. (2004) found interruption differences for discussion groups when indicators of participants' level of task competence were present. In light of the present research, these findings suggest that familiarity with a partner and clear indicators of ability influence status hierarchies as reflected by some verbal behaviors.

Limitations and Suggestions for Future Research

Several limitations of this investigation should be considered. First, the sample size could have limited statistical power. In the future, group sizes should exceed ten pairs each. A larger sample size could have yielded significant results for all observed trends. A large initial participant pool would also allow researchers to foreground individuals on either end of the attractiveness spectrum. Researchers could either eliminate individuals with average attractiveness ratings from participation or include them to examine the effects of an "average" status. By contrast, the present study dichotomized all ratings, even those in the average range.

Another limitation of this study was the inter-rater reliability of behavioral coding by research assistants. Intraclass correlation

coefficients for affirmations (.421) and head nods (.543) were not sufficient. While it is possible that more extensive reliability tests (requiring all assistants to code more than the footage of two pairs for reliability purposes) could have revealed satisfactory reliability, the coding of affirmations and head nods was inconsistent. In this case, future research should consider using fewer coders or implementing more extensive training for behavioral coding procedures.

Participant behavior may have been biased due to the Hawthorne effect, in which individuals tend to act differently because they know that they are being watched, or in this case because of the presence of a video camera. For example, feelings of nervousness could directly impact the communication behaviors in question; a timid participant may smile or talk more or less in front of a camera. In addition, although participants completed their post-test questionnaires in separate rooms, they were still present in the same workspace and often exited simultaneously. Close proximity to partners could have influenced participants to evaluate their partner positively.

Future research on the cognitive bias of physical attractiveness should continue to use an expectation states perspective to explain attractiveness as a function of status in society. Specifically, in the context of group interaction, it should examine same sex pairs in addition to mixed sex pairs. Holding sex constant could reveal important patterns about attractiveness as a status characteristic within either males or females. Future research could also examine the interaction between attractiveness and other status characteristics besides sex, such as race or age. Furthermore, in addition to the communication behaviors observed here, other advantages of status characteristics outlined by expectation states theory should be measured, such as persuasive ability, participation rate, and opportunity to participate.

Some scholars have suggested that the scope conditions of expectation states theory are expandable. Studies have demonstrated the operation of diffuse status characteristics even in settings that are not both collectively oriented and task-oriented (Correll & Ridgeway, 2003; Foschi, Lai, & Sigerson, 1994). While further research in this area is needed, this evolution of EST would be helpful for considering the specific settings in which physical attractiveness operates as a status characteristic. Without collective orientation, interruption and affirmation behaviors could increase. Continuing research on attractiveness as a status characteristic should consider expanding scope conditions beyond the small work group to individually evaluative tasks (e.g., standardized testing) or to unobtrusive research designs.

Overall, this investigation contributes to research on the attractiveness bias, confirming a cognitive halo effect for physical attractiveness vis-à-vis other culturally positive traits. Our results are consistent with previous findings suggesting that gender and attractiveness are status characteristics which construct and maintain status hierarchies within small group interactions. Specifically, we extended previous work on attractiveness bias with same sex dyads to mixed sex dyads and examined status hierarchies in both verbal and nonverbal communication behaviors.

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APPENDIX 1

Values Questionnaire

On this page are 18 values listed in alphabetical order. Your task is to arrange them in order of their importance to YOU, as guiding principles in YOUR life. Study the list carefully and pick out the value which is most important for you. Put this value on line 1.Then pick out the value which is second most important for you. Put this value on line 2. Then do the same for each of the remaining values. The value that is least important should be placed on line 18. Work slowly and think carefully. If you change your mind, feel free to change your answers. The end result should truly show how you really feel.

1_____	A COMFORTABLE LIFE
2_____	AN EXCITING LIFE
3_____	A SENSE OFACCOMPLISHMENT
4_____	A WORLD AT PEACE
5_____	A WORLD OF BEAUTY
6_____	EQUALITY
7_____	FAMILY SECURITY
8_____	FREEDOM
9_____	HAPPINESS
10_____	INNER HARMONY
11_____	MATURE LOVE
12_____	NATIONAL SECURITY
13_____	PLEASURE
14_____	SALVATION
15_____	SELF-RESPECT
16_____	SOCIAL RECOGNITION
17_____	TRUE FRIENDSHIP
18_____	WISDOM

WHEN YOU HAVE FINISHED, GO TO THE NEXT PAGE

Below is another list of 18 values. Arrange them in order of importance, the same as before.

1_____	AMBITIOUS
2_____	BROADMINDED
3_____	CAPABLE
4_____	CHEERFUL
5_____	CLEAN

6_____ COURAGEOUS
7_____ FORGIVING
8_____ HELPFUL
9_____ HONEST
10_____ IMAGINATIVE
11_____ INDEPENDENT
12_____ INTELLECTUAL
13_____ LOGICAL
14_____ LOVING
15_____ OBEDIENT
16_____ POLITE
17_____ RESPONSIBLE
18_____ SELF-CONTROLLED

APPENDIX 2

TASK DIRECTIONS:

Below is a description of 5 ethical dilemmas adopted from Victor Grassian's book, *Moral Reasoning: Ethical Theory and Some Contemporary Moral Problems*. Please read each dilemma carefully with your partner. Discuss the questions that the dilemmas pose and any relevant moral issues that apply.

You and your partner must come to an agreement about each dilemma. Once you have agreed, please explain your answer in the box provided below each dilemma. You may not proceed to the next dilemma until you and your partner agree on an answer to put down.

You have 15 minutes for this task. Please take your time. You are not required to address all 5 dilemmas.

1. A Poisonous Cup of Coffee

Tom, hating his wife and wanting her dead, puts poison in her coffee, thereby killing her. Joe also hates his wife and would like her dead. One day, Joe's wife accidentally puts poison in her coffee, thinking its cream. Joe has the antidote, but he does not give it to her. Knowing that he is the only one who can save her, he lets her die. Is Joe's failure to act as bad as Tom's action? Why?

2. The Partiality of Friendship

Jim has the responsibility of filling a position in his firm. His friend Paul has applied and is qualified, but someone else seems even more qualified. Jim wants to give the job to Paul, but he feels guilty, believing that he ought to be impartial. That's the essence of morality, he initially tells himself. This belief is, however, rejected, as Jim resolves that friendship has a moral importance that permits, and perhaps even requires, partiality in some circumstances. So he gives the job to Paul.

Was he right?

3. The Overcrowded Lifeboat

In 1842, a ship struck an iceberg and more than 30 survivors were crowded into a lifeboat intended to hold 7. As a storm threatened, it became obvious that the lifeboat would have to be lightened if anyone were to survive. The captain reasoned that the right thing to do in this situation was to force some individuals to go over the side and drown. Such an action, he reasoned, was not unjust to those thrown overboard, for they would have drowned anyway. If he did nothing, however, he would be responsible for the deaths of those whom he could have saved. Some people opposed the captain's decision. They claimed that if nothing were done and everyone died as a result, no one would be responsible for these deaths. On the other hand, if the captain attempted to save some, he could do so only by killing others and their deaths would be his responsibility; this would be worse than doing nothing and letting all die. The captain rejected this reasoning. Since the only possibility for rescue required great efforts of rowing, the captain decided that the weakest would have to be sacrificed. In this situation it would be absurd, he thought, to decide by drawing lots who should be thrown overboard.

As it turned out, after days of hard rowing, the survivors were rescued and the captain was tried for his action. If you had been on the jury, how would you have decided? Why?

4. A Callous Passerby

Roger Smith, a quite competent swimmer, is out for a leisurely stroll. During the course of his walk he passes by a deserted pier from which a teenage boy who apparently cannot swim has fallen into the water. The boy is screaming for help. Smith recognizes that there is absolutely no danger to himself if he jumps in to save the boy; he could easily succeed if he tried. Nevertheless, he chooses to ignore the boy's cries. The water is cold and he is afraid of catching a cold – he doesn't want to get his good clothes wet either. "Why should I inconvenience myself for this kid," Smith says to himself, and passes on.

Does Smith have a moral obligation to save the boy? If so, should he have a legal obligation as well? Why?

5. The Torture of the Mad Bomber

A madman who has threatened to explode several bombs in crowded areas has been apprehended. Unfortunately, he has already planted the bombs and they are scheduled to go off in a short time. It is possible that hundreds of people may die. The authorities cannot make him divulge the location of the bombs by conventional methods. He refuses to say anything and requests a lawyer to protect his fifth amendment right against self-incrimination. In exasperation, some high-level official suggests torture. This would be illegal, of course, but the official thinks that it is nevertheless the right thing to do in this desperate situation.

Do you agree? If you do, would it also be morally justifiable to torture the mad bomber's innocent wife if that is the only way to make him talk? Why?

APPENDIX 3

Please read each item carefully and circle the one answer that works best. Because this process involved both you and your partner, your perceptions of your partner are important. Describe your experience with the ethical discussion honestly, and state your opinions as accurately as possible. Please make sure your answer is marked in the correctly numbered space.

[1 = Strongly Disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5 = Strongly Agree]

1. I found this task to be difficult.
2. I think my partner found this task to be difficult.
3. I performed well on this task.
4. My partner performed well on this task.
5. My partner and I agreed on most issues we discussed.
6. My partner was intelligent.
7. Based on this task, I believe my partner and I have similar values.
8. My partner was open to new ideas.
9. My partner was capable.
10. My partner was thoughtful.
11. My partner was articulate.
12. My partner was attractive.
13. My partner was warm.
14. My partner was ethical.
15. My partner was engaging.
16. My partner was funny.
17. My partner was helpful.
18. My partner and I got along.
19. My partner appreciated my input.
20. I appreciated my partner's input.

21. Did you know your partner before participating in this task? If so, how well?
22. Task partners often disagree. If this happened in your discussion, how did you and your partner try to come to an agreement?