Physical Attractiveness in Social Interaction: II. Why Does Appearance Affect Social Experience?

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This study was undertaken to determine precisely how physical attractiveness affects people's social participation in everyday life. The following results were obtained: (a) For males, physical attractiveness related positively to the quantity of social interaction with females and negatively to that with males; for females, attractiveness did not relate to the quantity of socializing. (b) Attractiveness related positively to the affective quality of social experience for both sexes. (c) Attractive males were more assertive and were lower in fear of rejection by the opposite sex. Attractive females were less assertive and were lower in trust of the opposite sex. (d) For both sexes, assertiveness related positively to the quantity and quality of social participation. Fear of rejection led males to interact less with females and more with males and to have poorer quality interactions overall. (e) Social competence was shown to mediate part of the influence of beauty on males' interaction patterns. For females, the effects of social competence on social interaction were shown to be opposite to those of attractiveness, suggesting that they have independent influences. The results were interpreted in terms of the importance of understanding how and why physical appearance may influence people's day-to-day social experiences.

Ever since the pioneering review of Berscheid and Walster (1974), social psychologists have been sensitive to the importance of physical attractiveness in person perception. Evidence abounds that attractive people are judged more positively on a wide variety of dimensions (Dion, Berscheid, & Walster, 1972), and are preferred, at least hypothetically, as heterosexual interaction partners (Brislin & Lewis, 1968; Tesser & Brodie, 1971; Walster, Aronson, Abrahams, & Rottmann, 1966). Unfortunately, although the role of beauty in impressions may be well documented, its influence in ongoing, longterm social interaction is not. The vast majority of studies of the "what is beautiful is good" stereotype deal with first impressions of others who are not known to the subject and about whom limited information is available. In contrast, the bulk of our social contacts occur with people whom we have met previously and about whom at least minimal information exists. Consequently, the effects of physical attractiveness in everyday life require further elaboration. This task constituted the first goal of the present research. Our second goal was concerned with the causal question: Why does physical attractiveness influence social participation? Berscheid and Walster (1974) noted that only tentative explanations could be offered. If beauty has compelling social effects, it is vital to delineate how this occurs.

There is ample justification for distinguishing actual behavior from impersonal social judgments. For one reason, our folklore embraces many axioms about what it means to be beautiful, and these beliefs may influence ratings in a manner different from the way beauty affects real life (Nisbett & Wilson, 1977). For another, the effects of appearance may change substantially as more information is available about the target per-

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son and as a relationship develops. Yet few studies exist examining the impact of a person's attractiveness on his or her social participation, and these tend to focus on global measures that do not lend themselves to detailed analysis. Krebs and Adinolfi (1975) found that sociometrically accepted individuals of both sexes were more attractive than isolates, and less attractive than rejecteds. In a related vein, Herold (1979) found that college students' social satisfaction correlated positively with attractiveness. On the other hand, Berscheid, Walster, and Campbell (Note 1) reported that females who were attractive in college were less satisfied with life 20 years later.

Much more precise information was provided by Reis, Nezlek, and Wheeler (1980). Because the present study builds on their results, we will discuss this research in some detail. They utilized the social interaction diary (Wheeler & Nezlek, 1977), a standardized technique that permits identification and assessment of various parameters relevant to socializing. This procedure required subjects to complete a brief fixed-format record for every social contact that lasted 10 minutes or longer. From these records, summary indexes describing numerous quantitative and qualitative variables were derived, both across all interactions and specific to same-, opposite-, and mixed-sex groupings. Their primary results were as follows: (a) Relative to unattractive males, attractive males interacted more often and for longer periods with a greater number of different females. Conversely, they interacted less with fewer male friends. For females, attractiveness did not relate to the quantitative aspects of social participation. (b) For both sexes, attractiveness correlated positively with reported intimacy and satisfaction. This correlation increased over time. (c) Attractive males felt that a greater percentage of their interactions with females were mutually initiated rather than self- or other-initiated, implying but not demonstrating greater social confidence. These data provided the first comprehensive look at the impact of appearance on everyday social life.

The present study was designed to enhance our knowledge about these findings in three

ways. The first deals with a potentially serious artifact in those data, which might be labeled the marketplace economy effect. That study was conducted with first-year college student subjects. The male/female ratio at the university was 60/40, and first-year females typically socialize with males from all 4 years of college. As a result, females would experience fewer selection pressures, because the larger group of available males ensures a partner(s) for any interested female. On the other hand, first-year males are generally limited by convention to first-year females, putting the less attractive and therefore less socially desirable males at a disadvantage. This marketplace reasoning may be responsible for the sex difference found: Attractiveness correlated strongly with the quantitative aspects of interaction for males but not for females. This explanation would be interesting in its own right, but it differs substantially from a social competence perspective.

To investigate and eliminate this explanation, the present study was conducted with college seniors. The same argument, *mutatis mutandis*, would predict a reversal of the previous results. Senior males have a large pool of available females, whereas senior females must compete with younger females, putting unattractive females at a relative disadvantage.

The second aim of the present study was to find out why attractiveness relates to social participation. There are few studies available that directly assess the reasons why pretty people seem to have a social advantage. One possibility, the simpler one, is that we seek out attractive others because they are more aesthetically pleasing to look at and because we have been taught that "what is beautiful is good" and therefore desirable. Numerous studies support this proposition (e.g., Brislin & Lewis, 1968; Dion et al., 1972; Tesser & Brodie, 1971). On the other hand, a more insidious and significant self-fulfilling prophecy may be occurring. As Snyder, Tanke, and Berscheid (1977) demonstrated, merely believing another person to be attractive may be sufficient to alter their behavior. If appearance plays an important role in how people are responded to (Hildebrandt & Fitzgerald, 1978) and evaluated (Dion, 1972) from infancy, a lifetime of differential treatment might well be responsible for variations in the behavior of attractive and unattractive persons, in terms of personality, self-confidence, or social style. (Models positing this sort of mechanism have recently been proposed by Adams, 1977, and Langlois & Stephan, 1981.) Once such individual differences have been established, they would be likely to perpetuate themselves, even if later partners had no stereotype or preference regarding attractiveness. After all, interaction with a more skillful other is more enjoyable. It is therefore important to see whether the more permanent and hence consequential individual differences that we might expect on the basis of stereotypy have occurred.

A final purpose of the present research was replication of our earlier results. In particular, two findings require replication. The first concerns the absence of any correlation between beauty and quantity of interaction for females. Certainly this conclusion contradicts popular wisdom and a wealth of studies that assess people's beliefs. However, it parallels a similar sex difference found by Byrne. Ervin, and Lamberth (1970). More importantly, it is consistent with Deaux's (1977) notion that males are more status-assertive in their social orientation, meaning that they seek to gain status by their social activities. Because a partner's attractiveness can be a potent social asset (Sigall & Landy, 1973), most males would prefer beautiful females as friends. However, the matching hypothesis predicts that a male's probability of success is directly related to his own appearance. Hence, the more attractive a male, the greater his access to socially desirable females, and the more likely he is to seek them out. Among females, according to Deaux, status differentials are either irrelevant or meant to be minimized. Consequently, the choice of interaction partners would not depend on beauty. Given the potential importance of this interpretation, we deem it useful to replicate the finding.

The second result warranting replication was alluded to previously. We found that attractive individuals reported more qualitatively rewarding interactions over time, particularly with the opposite sex. By their senior year, we would anticipate age trends to stabilize. Does beauty produce more gratifying interactions and does this hold true regardless of sex of partner?

To address these issues, a sample of male and female college seniors kept the Rochester Interaction Record for a 2-week period. Consistent with our earlier study, the first set of predictions was that attractiveness would relate to interaction quantity for males only and would relate to interaction quality for both sexes. The second set of hypotheses was concerned with the potential mediators of these effects, which we will refer to as social competence factors. These include social skills and social attitudes. Reis et al. (1980) speculated that attractive males would be more socially skilled than their unattractive counterparts, based on a history of more extensive, enjoyable, and natural interactions with females. A background of positive social feedback would seem to instill greater ability in social relations. This contention was supported by Goldman and Lewis (1977), who found that attractive males were judged to be more skillful in an anonymous telephone conversation. Unattractive males in our prior study had fewer, less satisfying, and less comfortable contacts with females. Such negative experience would likely lead a male to avoid females and to prefer the less anxiety-provoking company of males. Huston (1973) described a similar attitude, arguing that unattractive males were higher in fear of rejection by the opposite sex, a trait that we believe will relate to withdrawal from initiation and interaction with females. The only support we have found for this prediction comes from Krebs and Adinolfi (1975), who found that unattractiveness in males related to selfprotective constraint and asociability.

For females, the arguments are more complex. Attractive women may well be more sought out than unattractive women (Huston, 1973). In this case, less assertiveness would be required of them to form an adequate social life. Less attractive women may need to assert themselves more in initiating and maintaining social contacts. Secondly, our culture teaches females to be wary of males "who are only interested in their looks." Because attractive females are more likely to have experienced such episodes (or at least have been more likely to interpret ambiguous events in terms of this salient a priori justification), we would expect them to be less trustful of men than unattractive females.

Our hypotheses regarding potential mediators of the attractiveness effects can therefore be summarized as follows: Among males, attractiveness will be associated with greater social assertiveness and less fear of rejection by females. Among females, attractiveness will be linked with lesser social assertiveness and lesser trust of males.

A brief note about the nature of the social interaction records is in order. This technique was developed by Wheeler and Nezlek (1977) to permit investigation of the specific parameters of social participation as they naturally occur in everyday life. The procedure requires subjects to complete a short fixed-format entry for every interaction of 10 minutes or longer that occurs during a specified interval. Two new scales were added for this study, and others were refined. From the subjects' entries, indexes of duration, extensiveness, intimacy, disclosure, satisfaction, initiation, influence, and sex composition were compiled, both over all interactions and sorted into various categories (same-, opposite-, and mixed-sex, for example, or best vs. less-close friends). These variables have been effective in portraying the individual's social experience and therefore will be used as the critical data.

Method

Subjects and General Overview

Subjects were 43 males and 53 females enrolled in a moderately sized, academically oriented, private Northeastern university. All were seniors and all lived on campus. They completed the interaction records for a period ranging from 7 to 18 days in November; this time period was chosen to minimize conflict with holidays and examinations. The mean number of days was 14.53, with a standard deviation of 1.98. All records were adjusted by computing indexes on a per day or per interaction basis. Pictures were taken at the conclusion of the recordkeeping period and were rated at another university. Attitudes and social skills were also assessed subsequent to the record-keeping period.

Procedure

Subjects were recruited from a student directory for a "research project on social interaction." The only requirement was that they had to be seniors living on campus. During a brief meeting, the importance of understanding interaction patterns was explained and the students' role as collaborators in this naturalistic research was stressed. They were also told they would be paid \$20 for their participation. However, they were asked to volunteer only if the opportunity to engage in the research itself was sufficiently interesting. No other academic or intrinsic incentives were provided.

The interaction record, a sample of which is shown in Figure 1, was to be completed for every interaction that lasted 10 minutes or longer. An interaction was defined as any encounter with another person(s) in which the participants attended to one another and adjusted their behavior in response to one another. Examples were provided (e.g., sitting next to someone in a lecture was not appropriate, whereas talking during the lecture for 10 minutes was), and the various categories were discussed until everyone felt comfortable with the forms. A more detailed description may be found in Wheeler and Nezlek (1977). We suggested to subjects that they fill out the records at a uniform time, such as before going to sleep. A scratch sheet was provided to facilitate memory. To encourage daily recording, subjects were asked to return their completed forms and pick up blank ones every few days. Throughout the study, a collaborative, nondeceptive atmosphere was maintained, which we believe aided the gathering of valid data. Confidentiality of the records was emphasized and closely guarded throughout.

At the conclusion of the record-keeping period, a brief interview with one of the researchers was held. During that session, the interviewer probed for difficulties, ambiguities, and potential sources of inaccurate data. In particular, subjects were urged to inform us of anything that might have impeded their accuracy. Based on their responses, the data of five participants were discarded. Immediately following the interview, subjects were photographed to obtain physical attractiveness ratings. They then completed a number of personality scales, within which a short form of the Texas Social Behavior Inventory (Helmreich & Stapp, 1974), a measure of social selfesteem, was included.

Two further sessions were scheduled with subjects, both within a few days to 2 weeks of the interview. During one, conducted by different researchers, the social skills measures were administered. During the second session, the fear of rejection and trust scales were completed. These were collected during a separate session to avoid possible confounding with the other measures. Subjects were then paid their \$20 and informed more fully about the hypotheses of the study.

Physical Attractiveness Ratings

At the conclusion of the final interview, subjects were informed that we wished to investigate the effects of physical attractiveness. Slides were to be evaluated at another university and would never be shown on their home campus or used for any other purposes. Further, they were allowed to reclaim their slides at any point. One subject declined to be photographed.

Uniform midthigh to over-the-head pictures were taken against a bare white wall. All subjects were asked to smile, and the most favorable of a minimum of two slides (as judged by the investigators) was used. Subjects



Figure 1. Sample copy of the Rochester Interaction Record.

had not been forewarned that they would be photographed; we sought to depict their everyday appearance. Furthermore, no subjects were aware that we were interested in attractiveness during the record-keeping period. The 96 final slides were then grouped by sex and randomly arranged within sex. They were judged by an introductory social psychology class of 57 females and 30 males at another university 200 miles away. This university is essentially similar in its orientation and in the type of students it attracts. Although a group rating session was used, the need for independent ratings was highlighted, and the students remained silent throughout. They were instructed to use their personal standards of physical attractiveness. Each slide was judged on the same 1-15 scale, with 15 indicating greater attractiveness. To provide a general orientation, the entire set of slides was shown once. They then were judged on a second viewing, at the rate of 20 seconds per slide. All of the female slides were shown first, followed by the males.

Social Competence Measures

Self-esteem. Social self-esteem was assessed by a short-form version of the Texas Social Behavior Inventory, a 15-item self-report measure (Helmreich & Stapp, 1974). The alpha internal consistency of this scale in our sample was .82.

Rejection and trust. Since we could find no preexisting standardized measures of fear of rejection or trust, scales of these attitudes had to be devised. Sixteen items were written for each scale, primarily based on their face validity. (For example, fear of rejection: "Many times I am reluctant to initiate interactions with females because I am afraid they won't like me"; trust: "One must be careful in a social relationship with a member of the same sex, so as not to get used.") Each item appeared twice, once referring to males and once to females. Thus, within each scale, 8 items referred to the same sex and 8 referred to the opposite sex. The total 32 items were randomly interspersed and presented under the heading "Beliefs about Males and Females."

Time pressures precluded pretesting these scales with a normative sample. However, factor analyses with varimax rotations performed separately for females and males revealed either one or two significant factors for each scale. Across these analyses, two pairs of items did not load on a significant factor and were therefore discarded. This resulted in four 7-item scales, each of which showed a good range of scores and no ceiling effects. Alpha reliability coefficients were generally good (for males: fear of rejection by opposite sex = .73, fear of rejection by same sex = .48, trust of opposite sex = .77, trust of same sex = .53; for females: fear of rejection by opposite sex = .75, fear of rejection by same sex = .74, trust of opposite sex = .67, trust of same sex = .64).

Social skills. All subjects were contacted by telephone and scheduled for individual testing by an undergraduate research assistant who was not connected with the other aspects of the research and was unaware of the variables or the hypotheses. During that session, they completed the Dating and Assertion Questionnaire (DAQ), an 18-item scale developed by Levenson and Gottman (1978) as a measure of social competence in dating and assertion situations. The questionnaire assesses the subject's likely response and discomfort in a series of specific social situations. For example, a sample dating item asks how comfortable subjects would be talking to opposite-sex strangers who introduced themselves at a party. A sample assertion item asks how comfortable subjects would be insisting on an appointment with a Dean who has a resisting secretary.

In this session, subjects also completed a series of other social competence measures: the Social Avoidance and Distress Scale (Watson & Friend, 1969), Fear of Negative Evaluation Scale (Watson & Friend, 1969), Rathus Assertiveness Schedule (Rathus, 1973); and Behavioral Role-Playing Assertion Test (McFall & Lillesand, 1971). Generally, these produced weak results that did not amplify those found for the DAQ. For space reasons, they will be omitted from this presentation. However, copies of these results are available from the first author on request.

Construction and Nomenclature of Interaction Variables

From the raw interaction records, composite indexes were created in the following manner: length—mean reported length of all interactions; per day—mean reported number of interactions per day; time per day mean reported length summed across all interactions per day; list—number of different individuals interacted with during the entire record-keeping period, corrected for the number of days; and percentage—percentage of all interactions falling into each category. Intimacy, selfdisclosure, other-disclosure, pleasantness, satisfaction, initiation, and influence were all computed as the mean value reported across all interactions. Each of the five categories of the nature variable indicated the proportion of all interactions that fell into that classification.

These variables were then subdivided in accordance with the sex composition of the encounter: same sexinteractions including up to three other persons of the same sex; opposite sex-interactions including up to three members of opposite sex; mixed sex-interactions including three others, at least one of each sex; and group-interactions including more than three other people. Overall measures incorporated all interactions. The same- and opposite-sex categories were then further divided to distinguish the processes inherent in close and less close relationships. Interaction partners were first rank-ordered by their frequency of occurrence. Where duplicate sets of initials appeared, subjects were asked to provide distinguishing middle initials. Each of the interaction measures was then computed for subjects' three best friends (i.e., satisfaction, intimacy, and so on for those interactions in which each of the three most frequently reported partners participated) and other friends (i.e., those interactions including friends ranked fourth through last). The appropriateness of frequency to define closeness has been discussed earlier (Wheeler & Nezlek, 1977). In their sample, 93% of respondents named one of the three most frequent interactants as their best friend. In this sample, the corresponding figure was 90% for same-sex friends. Fifty-one percent of subjects nominated one of their three most frequent opposite-sex partners as a boyfriend or girlfriend, with another 36% referring to this person as a best platonic opposite-sex friend.

A small number of the categories listed above contained no observations for some subjects. These entries were treated as missing data in the analysis.

The reliability of the journal entries could not be assessed formally, owing to the anonymity of the initials used to report partners. However, 17 roommate pairs participated in the study and could be identified in each other's records. The number of times each roommate's initials appeared in the other's records was computed for days they both kept the diaries. The intraclass correlation coefficient between their reports, which does not correct for mean or variance differences within a pair, was .81, indicating a substantially high degree of mutual recording.

Results

Accuracy of the Interaction Records

During the postrecord-keeping interview, a number of standard questions were asked. To ensure that any sex differences were not due to differential accuracy with the records, one-way analyses of variance contrasting the responses of males and females were calculated. All produced F(1, 94) values nonsignificant at p < .25. Mean values for both sexes combined are presented below to demonstrate that subjects experienced minimal difficulties with the record-keeping process: (a) degree of difficulty recording interactions (1 = no difficulty, 7 = very much difficulty), M = 3.00; (b) perceived accuracy (1 = very accurate, 7 = very inaccurate), M = 2.47; (c) student's guess of the percentage of interactions he or she failed to record, M = 6.53; (d) number of interactions recorded that were less than 10 minutes, M = .99; (e) extent to which the record keeping interfered with his or her interactions (1 = no interference, 7 = a great deal of interference), M = 1.64; (f) perceived accuracy of other students in the study (1 = very accurate, 7 = very inaccurate), M = 3.10.

These self-reports are not objective measures of accuracy. However, to the extent that one might reasonably expect them to reveal difficulties, they indicate that subjects experienced few problems with the records and believed them to be accurate.

Ratings of Physical Attractiveness

Because ratings of physical attractiveness often show gender-specific differences, analvses of the ratings were conducted. Male and female judges agreed strongly on their relative attractiveness judgments: Mean ratings correlated .96 for female stimulus persons and .96 for male stimulus persons. Differences appeared in the mean ratings, however. Female stimuli were seen as more attractive than male stimuli, F(1, 92) = 21.53, p < .001. This difference was also larger for female judges than male judges, because the Sex of Stimulus Person \times Sex of Judge interaction was highly significant, F(1, 92) = 57.50, p < 100.001. Cell means are shown in Table 1. It should be noted that both of these effects were also found in our earlier study and that the cell means are similar in both studies.

The bottom section of Table 1 presents the average standard deviation of each stimulus person's ratings; that is, the extent to which judges disagreed about each person's attractiveness. There was a significant sex of rater effect, F(1, 92) = 267.60, p < .001, indicating that female judges varied more among themselves in their perceptions of a given stimulus person than did male raters. No other effects were significant.

Given that the relative ratings correlated

Table 1Mean Rating and Mean Variability of PhysicalAttractiveness

Stimulus persons	Male raters	Female raters
	Attractiveness	,
Males		
М	5.24	4.83
SD	1.27	1.44
Females		
М	6.36	6.68
SD	1.77	1.66
N	Aean SD across ra	ters
Males	1.84	2.40
Females	1.92	2.41

Note. There were 51 female and 43 male stimulus persons and 57 female and 30 male judges. Larger numbers indicate greater rated attractiveness.

strongly, these effects probably reflect systematic differences in how one sex evaluates the attractiveness of the other, rather than any unique characteristics of individual stimulus persons. To avoid confounding, each subject's level of physical attractiveness was calculated by averaging the mean rating he or she received from female raters with that obtained from male raters. This overall average was used in all subsequent analyses.^{1,2}

Physical Attractiveness and Social Interaction

Presentation of our results will be clearer if the analytic strategy is described first. The hypotheses entail two issues: the relationship of physical attractiveness to social interaction, and identification of the social traits responsible for this association. Accordingly, all analyses take the form of simple Pearson correlations between attractiveness and interaction. Readers interested in sex of subject and partner differences in the interaction variables themselves are referred to Wheeler, Reis, and Nezlek (Note 2). Attractiveness was correlated with each of the quantitative and qualitative indexes discussed above, across all interactions, and separately for same-sex, opposite-sex, mixed-sex, and group composition. Same- and opposite-sex pairings were further subdivided into those interactions involving the subject's best, second-best, and third-best friends. Correlations for these subdivisions generally reiterated those found across all partners. In the interest of simplicity, they will be presented only when a differential pattern for the various friends deviated from the general result and therefore shed light on the phenomena.

Our reliance on such a large number of correlation coefficients also warrants brief notice. Given the large number of variables involved, some significant results may be anticipated by chance alone (at p < .05, 1/20). Our only recourse is to examine the overall pattern of results. We will give greatest weight to those effects that demonstrate construct validity; that is, those that appear repeatedly on variables measuring similar or related characteristics. Isolated effects will be noted minimally.

Quantitative Aspects of Social Interaction

Table 2 presents the correlations between physical attractiveness and five quantitative aspects of social interaction. For males, significant correlations were obtained indicating that attractive males interacted with more different females, had more interactions with females, spent more time with females and less with males, had shorter interactions with males and in mixed-sex company, and had a greater percentage of their total interactions with females only. Thus, the predicted pattern of results was confirmed. Relative to

¹ The fact that the sample means fell below the scale midpoint suggests that this may have been a relatively neutral to unattractive sample. Although this qualification cannot be ruled out, we believe that this pattern may also be due to the method of photography and rating used. The absence of professional lighting and makeup may have made subjects appear less attractive than persons pictured in high-quality media. Our sample was randomly selected from the population of all students at this university. Hence, they represent the spectrum prevalent there. However, cautious readers may wish to interpret results referring to "attractive subjects" as pertaining to "neutral to moderately attractive subjects."

² Separate analyses using the mean attractiveness rating by each sex produced identical results to those to be reported here. This is not surprising given their correlation of .96. It would appear that the sex-of-rater effects noted earlier are not relevant to social interaction or to a within-sex ranking. Copies of these analyses are available from the first author on request.

Table 2Physical Attractiveness Correlations WithInteraction Quantity

Measure	Males	Females
Same list	.19	26
Opposite list	.49	06
Same percent	32	.05
Opposite percent	.48	.04
Mixed percent	05	17
Group percent	35	18
Interactions per day (overall)	.15	25
Same	16	15
Opposite	.45	11
Mixed	.05	32
Group	21	31
Time per day (overall)	08	26
Same	42	10
Opposite	.25	07
Mixed	03	32
Group	20	24
Length (overall)	26	.00
Same	32	01
Opposite	.04	.12
Mixed	28	.02
Group	09	.03

Note. For females, n = 51; for males, n = 43. At p < .05, male r > .30, female r > .27. Fuller explanation of the measures used can be found in the section labeled "Construction and Nomenclature of Interaction Variables."

their less attractive counterparts, attractive males socialized more with females.

By and large, the pattern of correlations for females was also as predicted. Physical attractiveness was not significantly related to interaction quantity, reaffirming the same result found by Reis et al. (1980). Attractive females did report fewer mixed-sex interactions, less time in mixed-sex and group interactions, less time in mixed-sex and group company, and fewer same-sex interaction partners. These figures are sparse. However, they suggest a relative disadvantage for attractive females, because they involve deficits without corresponding increments in other categories.

These findings may be clarified by a scatterplot. Figure 2 depicts the distribution of values for physical attractiveness and opposite-sex interactions per day. The relatively good fit of the points around the regression line can be seen in the right-hand figure (males). The left-hand figure (females) is widely dispersed and shows no apparent clustering.

Separate analysis of the indexes for close and less close friends clarified the results for males. The correlations between attractiveness and number of interactions per day with the first-, and second- and third-best female friend were .11, .27, and .27 (the latter two rs approach significance at p < .10). With all other friends, this correlation was .51 (p <.001). More strongly, attractiveness did not correlate significantly with time and percentage of interactions with the first three female friends, but it did for other friends (time: r = .39, percentage: r = .51, both ps < .001). Evidently, attractive males expanded their interaction with females by increasing contact with less close female friends.

Same-sex interaction quantity revealed an interesting pattern when examined separately for close and other friends. Percentage, number of interactions, and time all revealed negative correlations with attractiveness for the top three friends but showed positive correlations for other friends (percentage: r = -.47 vs. .20, interactions per day, r = -.26 vs. .36, time per day, r = -.39 vs. .19, all differences were significant at p < .05). Thus, attractive males increased their interactions with more superficial male friends at the expense of time spent with closer male friends.

Separate analyses by which friend did not explain the lack of relationship found for females.

Qualitative Aspects of Social Interaction

Table 3 presents the correlations between interaction quality and physical attractiveness. As predicted, males' attractiveness correlated consistently with rated intimacy, selfdisclosure, and other-disclosure in all of the composition categories. In contrast, pleasantness and satisfaction, the two measures of affective quality, showed no significant correlations for males. Among females, intimacy and disclosure correlated similarly with attractiveness, although their magnitude was diminished sufficiently to make most nonsignificant. Primarily in same- and op-



Figure 2. Scatterplot for physical attractiveness and opposite-sex interaction.

posite-sex categories, these relationships attained marginal significance (p < .10). Overall pleasantness and satisfaction were significantly correlated with attractiveness for females, stemming predominantly from same-sex interactions. Pleasantness was also related significantly to attractiveness in opposite-sex and mixed-sex groupings. For both sexes, these data were not influenced by the closeness of the interaction partner.

Regarding initiation and influence, we hypothesized that attractiveness would be positively related to self-perceived initiation in opposite-sex interaction by males and negatively related to initiation by females. Consistent with traditional sex roles, males reported opposite-sex interaction as self-initiated more often than females (male M =3.84, female M = 4.23, t(94) = 2.98, p < .01). Although the correlations within each sex only approached significance, the sex difference strongly supported the prediction. Attractive males reported more frequent selfinitiations than unattractive males; in contrast, attractive females felt they had selfinitiated less often than unattractive females (z difference = 2.18, p < .03). Breakdowns revealed that these effects arose primarily from the best three friends rather than from others.

The Role of Social Competence

Before examining the influence of social competence in mediating the relationship between physical attractiveness and social interaction, we will briefly note the sex effects that emerged. On the DAQ, females appeared somewhat more assertive than males $(M_{\rm s} = 59.41 \text{ vs. } 56.26, F(1, 83) = 5.61, p < 1000$.02), mostly due to a difference on the dating subscale (Ms = 29.37 vs. 26.48, F(1, 83) =11.31, p < .001). The general assertiveness subscale yielded no sex difference, nor did the Rathus Assertiveness Schedule (RAS) and the social self-esteem measure (Texas Social Behavior Inventory). Males were higher than females on the Social Avoidance and Distress Scale (Ms = 4.77 vs. 3.22, F(1, 83) =4.20, p < .05), indicating that they felt more anxious and avoidant in social situations. Finally, fear of rejection and trust both showed no sex differences. However, both sexes feared rejection by the opposite sex

more than by the same sex (males: 15.39 vs. 9.88, females: 14.10 vs. 9.31, F(1, 91) = 32.25, p < .001) and trusted the same sex more than the opposite sex (males: 15.93 vs. 14.06, females: 16.25 vs. 12.88, F(1, 91) = 120.37, p < .01). Neither of these differences interacted with subject sex.

Table 3Physical Attractiveness Correlations WithInteraction Quality

Measure	Males	Females
Intimacy (overall)	.56	.26
Same	.49	.26
Opposite	.49	.23
Mixed	.38	.15
Group	.29	.14
Self-disclosure (overall)	.50	.26
Same	.45	.23
Opposite	.38	.29
Mixed	.45	.14
Group	.31	.21
Other-disclosure (overall)	.48	.25
Same	.44	.26
Opposite	.36	.17
Mixed	.35	.14
Group	.28	.16
Pleasantness (overall)	.12	.41
Same	.14	.40
Opposite	.01	.27
Mixed	05	.27
Group	06	.26
Satisfaction (overall)	.14	.33
Same	.21	.32
Opposite	.01	.21
Mixed	12	.21
Group	08	.23
Initiation (overall)	19	.05
Same	07	03
Opposite	25	.21
Mixed	06	.00
Group	03	09
Influence (overall)	07	.08
Same	.04	.15
Opposite	23	07
Mixed	05	.11
Group	.08	.07

Note. All items are scored so that larger numbers correspond to greater satisfaction, intimacy, and so on. Initiation and influence are scored so that larger numbers indicate greater other-initiation and influence. To be significant at p < .05, male r > .30, female r > .27. Fuller explanation of the measures used can be found in the section labeled "Construction and Nomenclature of Interaction Variables."

Table 4

Correlations of Physical Attractiveness and Social Competence

Measure	Males	Females	
DAO	.43**	39**	
Dating assertiveness	.42**	12	
General assertiveness	.30*	46**	
RAS	.19	27*	
SAD.	24	01	
Social self-esteem	.23	16	
Fear of rejection			
Opposite sex	45**	.00	
Same sex	21	.05	
Trust			
Opposite sex	02	29*	
Same sex	.19	.03	

Note. DAQ = Dating and Assertion Questionnaire; RAS = Rathus Assertiveness Schedule; SAD = Social Avoidance and Distress Scale. * p < .05. ** p < .01.

Social Competence and Physical Attractiveness

Table 4 presents the correlations between the various social competence measures and rated physical attractiveness. The most striking result is that the DAQ and beauty correlated positively among males but negatively among females. Thus our hypothesis was strongly confirmed. Appearance had diametrically opposed consequences for the social assertiveness of females and males. This reversal was clearest on the general assertiveness subscale of the DAQ. Additionally, a similar pattern appeared on the dating assertiveness subscale for males and on the RAS for females. Two other competence variables, although nonsignificant, produced trends consistent with this result. Attractiveness correlated positively with social self-esteem among males but negatively among females. These correlations differed from each other at p < .06. Secondly, social avoidance and distress tended to be higher among less attractive males than their attractive counterparts.

Fear of rejection and trust also supported our hypotheses. As predicted, fear of rejection was negatively correlated with appearance among males. The more attractive a male was rated by the judges, the less he feared rejection by females. On the other hand, trust of the opposite sex correlated significantly with rated beauty among females, so that the more attractive a woman was, the less she trusted males.

Social Competence and Social Interaction

We next examined the relationship of social competence to the interaction records. These data are important in and of themselves, because there are no available studies documenting the connection between assessed social competence and people's actual social experiences in everyday life. For this reason, the following section includes a full presentation of these results.

As shown in Table 5, the DAO correlated significantly with a wide range of interaction variables among males.³ Males who were higher in dating assertiveness and to a lesser extent higher in general assertiveness demonstrated the following pattern of social participation: more interactions with more different females for a greater time per day; a greater percentage of their interactions with females, and a lesser percentage with males. and greater reported intimacy, self-disclosure, other-disclosure and pleasantness of interaction in all composition categories. In other words, males who were more assertive associated with females more frequently and found all of their interactions more involving. The possibility that this may reflect a general social competence factor is supported by a similar pattern of correlations for social self-esteem and fear of rejection by the opposite sex. The more males feared such rejection, the fewer females they interacted with, the less often they socialized with females (favoring more contact with males instead, in terms of time, frequency, and percentage), and the less intimate and disclosing their interactions with both sexes. To summarize this section, among males, social competence skills were strongly related to having more interaction with females than males and to more intimate and enjoyable interactions across the board.

Table 6 presents the comparable correlation coefficients for females. Generally, the pattern of significant relationships is less widespread than for males. However, social self-esteem revealed a fascinating reversal. Whereas for males, high self-confidence predicted more interaction with the opposite sex and less interaction with the same sex, among females, high self-confidence was linked with more same-sex and less opposite-sex contact. This can be seen for the percentage, interactions per day, and time variables.

More consistent with the males' data were the results for interaction quality. High social self-esteem and dating assertiveness tended to be positively related to intimacy, pleasantness, and satisfaction, although mostly in opposite-sex interactions. High fear of rejection by the opposite sex also led to less frequent contact with males and less pleasant interactions generally. Although not listed in Table 6, the Social Avoidance and Distress Scale also predicted satisfaction in oppositesex interactions (r = -.37, p < .01), as well as in other categories (rs range from .23 to .28), indicating that greater satisfaction was found among less distressed women. Trust of the opposite sex was predicted to be a central determinant of females' interaction patterns. Although the results were weak, they were in the appropriate direction. The more a female trusted males, the less she interacted with females and the more time she spent with males.

Initiation and influence yielded results worth brief mention. Across all composition categories, greater self-influence was reported by males high in trust of the opposite sex (r = -.40, p < .01), high in social self-esteem (r = -.27, p < .10), low in social avoidance and distress (r = .40, p < .01), and low in fear of rejection by the opposite sex (r = .26, p < .10). These correlations were similar across all four composition categories. Fear of opposite-sex rejection also predicted more self-initiated same-sex interactions (r = -.27, p < .10), whereas social avoidance and distress predicted more otherinitiated opposite-sex interactions (r = .27,p < .10). These two correlations are important because they suggest that fear of rejec-

³ For ease of inspection, only correlations that approached significance at p < .10 are listed in Tables 5 and 6.

tion or high social avoidance may lead a male to seek out same-sex partners, while interacting with females only when sought after. Greater self-influence was reported by females high in social self-esteem (r = -.28, p < .05), general assertiveness (r = -.36, p <

Measure	DAO	Dating	General	Self-esteem	Rejection by	Trust of
111cusure				<u> </u>	opposite_sex	opposite sex
Same list						
Opposite list	.40	.32	.31	.23	36	
Percent			,			
Same	43	32	36	30	.46	
Opposite	.47	.43	31	.39	50	
Mixed						25
Group	26	30				
Interactions per day						
Overall						
Same			30		.30	
Opposite	.40	.42		.29	37	
Mixed						26
Group						
Time per day						
Overall				.27		
Same	28		33		.31	
Opposite	.39	.39	/	.41	39	
Mixed						25
Group						
Intimacy						
Overall	.44	.39	.32	.32	35	
Same	.41	.38	.26	.31	32	
Opposite	.36	.39			34	
Mixed			.25			
Group	.33	.30	.25	.27		
Self-disclosure						
Overall	.42	.40	.25	.32	40	
Same	.38	.36		.32	40	
Opposite	.27	.36			25	
Mixed	.36	.31	.29		26	
Group	.43	.42	.27	.35		
Other-disclosure						
Overall	.39	.35	.26	.35	36	
Same	.36	.31		.37	37	
Opposite	.34	.39		.27	30	
Mixed						
Group	.25					
Pleasantness						
Overall	.34	.29	.32			
Same				r		.25
Opposite	.27	.32				
Mixed						
Group						
Satisfaction						
Overall	.25		.29	.33		
Same			.27	.30		.25
Opposite						
Mixed				.31		
Group						

Social Competence Correlated With Interaction: Males

Note. All correlations with p < .10 are tabled. To be significant at p < .05, male rs > .30, female rs > .27. DAQ = Dating Assertion Questionnaire. Fuller explanation of the measures used can be found in the section labeled "Construction and Nomenclature of Interaction Variables."

Table 5

.01), and low in fear of rejection by males (r = .27, p < .05, for opposite-sex interactions only). Finally, dating assertiveness was

greater among females who reported greater other-initiation (r = .33, p < .05), consistent with traditional sex-role attitudes.

Table 6

Social Competence Correlated With Interaction: Females

	DAQ	Dating assertiveness	General assertiveness	Self-esteem	Rejection by opposite sex	Trust of opposite sex
Same list	.29		.37	.48	,	
Opposite list		•		.27	27	
Percent						
Same				.33	.27	34
Opposite				39		
Mixed						.24
Group			.27			
Interactions per day						
Overall				.28	27	
Same				38		- 25
Onnosite				100	- 36	
Mixed					- 29	
Group	25		33	28	.2.7	
Time per day	.25		.55	.20		
Overall					- 27	
Same				22	21	
Omnosito				.33	27	24
Minod	26		77	34	21	.24
Crown	.20		.27	24		
Group	.28		.34	.24		
Intimacy				V		
Overall						
Same	•			21		
Opposite				.31		
Mixed						
Group						
Self-disclosure						
Overall						1
Same						
Opposite						
Mixed						
Group						
Other-disclosure						
Overall						
Same						
Opposite		.26				
Mixed						
Group						
Pleasantness						
Overall					35	
Same						
Opposite	.32	.37		.25	51	
Mixed					28	
Group						
Satisfaction						
Overall	.24		.24	.36		
Same						
Opposite	.38	.29	.31	.40	26	
Mixed			.29	.31		
Group						
~P						

Note. All correlations with p < .10 are tabled. To be significant at p < .05, male rs > .30, female rs > .27. DAQ = Dating Assertion Questionnaire. Fuller explanation of the measures used can be found in the section labeled "Construction and Nomenclature of Interaction Variables."

Does Social Competence Mediate the Relationship Between Physical Attractiveness and Social Interaction?

The final question concerns the issue of causality: How is it that physical attractiveness comes to influence people's social interaction? To address this subject, a partialing procedure was used. Based on our review of the literature, two causal paths seemed viable. The first will be referred to as the mediational path: As a result of a person's physical attractiveness, differential levels of social competence are acquired. These in turn affect social participation. The second hypothesis is one of independence: Although both physical attractiveness and social competence relate to social interaction, their ef-

Table 7

Correlation:	s of Attractiveness	and Social
Interaction,	Controlling for So	cial Competence

MalesNumber of opposite- sex persons.49.38Interactions per day Opposite sex.41.28Time per day Same sex.41.28Time per day Same sex.25.07Percentage with Same sex.25.07Percentage with Same sex.44.27Intimacy Same sex.44.27Intimacy Same sex.44.27Intimacy Same sex.49.40Self-disclosure Same sex.47.33Opposite sex.35.27Other-disclosure Same sex.35.25Initiation Opposite sex.35.25Initiation Same sex.26.49Satisfaction Same sex.26.49Satisfaction Same sex.19.43Initiation Opposite sex.25.35	Variable correlated with:	Zero-order r	Partial r		
Number of opposite- sex persons.49.38Interactions per day Opposite sex.41.28Time per day Same sex.33.33Opposite sex.25.07Percentage with 		Males			
sex persons.49.38Interactions per day Opposite sex.41.28Time per day Same sex.25.07Percentage with Same sex.25.07Percentage with Same sex.44.27Intimacy Same sex.44.27Intimacy Same sex.49.40Self-disclosure Same sex.47.33Opposite sex.49.40Self-disclosure Same sex.35.27Other-disclosure Same sex.35.25Initiation Opposite sex.35.25Initiation Same sex.28.28FemalesPleasantness Same sexSame sex.26.49Satisfaction Same sex.19.43Initiation Opposite sex.19.43Initiation Opposite sex.25.35	Number of opposite-				
Interactions per day Opposite sex .41 .28 Time per day Same sex .41 .28 Time per day Same sex .25 .07 Percentage with Same sex .25 .07 Percentage with Same sex .42 .27 Intimacy Same sex .44 .27 Intimacy Same sex .44 .27 Intimacy Same sex .44 .27 Intimacy Same sex .49 .40 Self-disclosure Same sex .47 .33 Opposite sex .35 .27 Other-disclosure Same sex .48 .35 Opposite sex .35 .25 Initiation Opposite sex .26 .49 Satisfaction Same sex .19 .43 Initiation Opposite sex .25 .35	sex persons	.49	.38		
Opposite sex.41.28Time per day Same sex 43 33 Opposite sex.25.07Percentage with Same sex.25.07Percentage with Same sex.44.27Intimacy Same sex.44.27Intimacy Same sex.44.27Intimacy Same sex.49.40Self-disclosure Same sex.47.33Opposite sex.47.33Opposite sex.35.27Other-disclosure Same sex.35.25Initiation Opposite sex.36.40Opposite sex.26.49Satisfaction Same sex.27.35Opposite sex.19.43Initiation Opposite sex.25.35	Interactions per day				
Time per day Same sex	Opposite sex	.41	.28		
Same sex 43 33 Opposite sex.25.07Percentage with Same sex.25.07Percentage with Same sex.44.27Intimacy Same sex.44.27Intimacy Same sex.44.27Intimacy Same sex.49.40Self-disclosure Same sex.47.33Opposite sex.35.27Other-disclosure Same sex.48.35Opposite sex.35.25Initiation Opposite sex.2828FemalesPleasantness Same sexSame sex.26.49Satisfaction Same sex.19.43Initiation Opposite sex.19.43Initiation Opposite sex.25.35	Time per day				
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$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Intimacy				
Opposite sex.49.40Self-disclosure.33Same sex.47.33Opposite sex.35.27Other-disclosure.35Same sex.48.35.25Initiation.35Opposite sex.35.25.25Initiation.28Opposite sex.2828.28FemalesPleasantnessSame sex.36.40.49Satisfaction.26Same sex.27.35.35Opposite sex.19.43.43Initiation.25.35	Same sex	.51	.42		
$\begin{array}{c ccccc} Self-disclosure \\ Same sex .47 .33 \\ Opposite sex .35 .27 \\ Other-disclosure \\ Same sex .48 .35 \\ Opposite sex .35 .25 \\ Initiation \\ Opposite sex .35 .25 \\ Initiation \\ Opposite sex .28 \\ \hline \end{array}$	Opposite sex	.49	.40		
Same sex.47.33Opposite sex.35.27Other-disclosure.27Same sex.48.35Opposite sex.35.25Initiation.2828Opposite sex2828FemalesPleasantness Same sexSame sex.36.40Opposite sex.26.49Satisfaction.27.35Opposite sex.19.43Initiation.25.35	Self-disclosure				
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Other-disclosure Same sex.48 <th <="" colspan="2" td=""><td>Opposite sex</td><td>.35</td><td>.27</td></th>	<td>Opposite sex</td> <td>.35</td> <td>.27</td>		Opposite sex	.35	.27
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Initiation Opposite sex2828 Females Pleasantness Same sex .36 .40 Opposite sex .26 .49 Satisfaction Same sex .27 .35 Opposite sex .19 .43 Initiation Opposite sex .25 .35	Opposite sex	.35	.25		
Opposite sex2828FemalesPleasantness Same sex.36.40Opposite sex.26.49Satisfaction Same sex.27.35Opposite sex.19.43Initiation Opposite sex.25.35	Initiation				
FemalesPleasantness Same sex.36.40Opposite sex.26.49Satisfaction.43Same sex.27.35Opposite sex.19.43Initiation.25.35	Opposite sex	28	28		
PleasantnessSame sex.36.40Opposite sex.26.49Satisfaction.27.35Opposite sex.19.43Initiation.25.35		Females			
Same sex.36.40Opposite sex.26.49Satisfaction	Pleasantness				
Opposite sex.26.49Satisfaction	Same sex	.36	.40		
SatisfactionSame sex.27.35Opposite sex.19.43Initiation.25.35	Opposite sex	.26	.49		
Same sex.27.35Opposite sex.19.43Initiation.25.35	Satisfaction				
Opposite sex.19.43Initiation.25.35	Same sex	.27	.35		
Initiation Opposite sex .25 .35	Opposite sex	.19	.43		
Opposite sex .25 .35	Initiation				
	Opposite sex	.25	.35		

fects may be separate. If the mediational hypothesis is correct, then partialing social competence out of the physical-attractive-ness-social-interaction correlations found to be significant earlier should reduce them to nonsignificance. On the other hand, the independence hypothesis specifies that partialing should leave these correlations largely unaltered, since the effects are mutually exclusive.⁴

For both sexes, the most important and representative correlations found in Tables 2 and 3 were recomputed, partialing out the potential mediators identified in Tables 4, 5, and 6. Looking at the data for males first, this meant removing the effects attributable to dating assertiveness and fear of rejection by the opposite sex. As can be seen in Table 7, partialing consistently reduced but did not eliminate the interaction-attractiveness correlations.⁵ For example, appearance correlated .41 (p < .01) with the number of opposite-sex interactions per day; controlling for dating assertiveness and fear of rejection, this correlation dropped to .28 (p < .10). Apparently, part of the effect of appearance on social interaction may be mediated by attractiveness-related differences in social competence; however, an independent influence remained.

For females, a more complex picture emerged. The only major interaction variables to relate strongly to appearance were pleasantness and satisfaction. Partialing general assertiveness, trust of the opposite sex, and the RAS (cf. Table 4) out of these correlations *increased* the magnitude of these effects, as listed in the lower half of Table 7. This was particularly true for opposite-sex interactions. This result indicates cooperative suppression (Cohen & Cohen, 1975), in which two variables, although negatively related to each other, nonetheless both relate

⁵ The zero-order correlations of Table 7 may differ somewhat from those of Tables 2 and 3 due to missing data on the social competence measure.

⁴ The astute reader will note that other paths may be viable also. For example, competence might affect attractiveness, in that more attractive persons might pay more attention to grooming. Although studies of these paths might be fruitful, we sought here only to examine the mediating link suggested by the reasoning proposed earlier: that attractiveness has long-term effects due to its impact on social competence.

positively to a third variable. For example, recall that attractiveness and general assertiveness both correlated positively with opposite-sex satisfaction. However, they correlated negatively with each other (r = -.46). Together, they enhance each other's utility by accounting for different proportions of variance and by suppressing irrelevant error variance in each other. This means that the components of beauty and social skill that relate to satisfaction are not related to each other. Instead, different aspects of these variables are responsible for their negative relationship. More simply put, attractive women were more satisfied with their contacts in spite of the fact that their lesser assertiveness predicted that they would be less satisfied. Cooperative suppression was found for the following opposite-sex variables: pleasantness, satisfaction, initiation (which are shown in Table 7) intimacy, self-disclosure, otherdisclosure, and length, which also increased when partialed but by lesser amounts. Rather than mediating the effects of appearance, social competence produced contrary consequences.

Discussion

We will begin by summarizing the results that bear on our initial hypotheses, (a) For males, physical attractiveness related positively to the quantity of social interaction with females and negatively to that with males: for females, attractiveness did not relate to the quantity of socializing. (b) Attractiveness related positively to the quality of social experience for both sexes. Attractive males had more intimate and disclosing interactions across all partners. Attractive females' interactions were generally more satisfying, pleasant, intimate, and disclosing. (c) Attractive males were more assertive and were lower in fear of rejection by the opposite sex. Attractive females were less assertive and were lower in trust of the opposite sex. (d) For both sexes, assertiveness related positively to the quantity and quality of social participation. Fear of rejection by females led males to interact less with females and more with males and to have poorer quality interactions overall. (e) Social competence mediated part of the influence of beauty on

males' interaction patterns. For females, the effects of social competence on interaction were opposite to those of attractiveness, suggesting that they operate divergently.

The finding that physical attractiveness related to interaction quantity among males and not females verifies the result found by Reis et al. (1980). More importantly, it eliminates the potential marketplace explanation for this finding. Apparently, the advantages that attractive males have in social participation are not due to differential selection pressures brought on by the pool of available alternatives. Thus it seems safe to conclude that males' beauty is of greater consequence, insofar as amount and distribution of socializing is concerned, than that of females.

Clearly, this finding contradicts many beliefs pervasive in popular culture, which hold that a woman's beauty is the major determinant of her access to males. Perhaps more importantly, it also contradicts studies showing that attractiveness plays a focal role in females' popularity (e.g., Berscheid, Dion, Walster, & Walster, 1971; Coombs & Kenkel, 1966). It may well be that this precept is so ingrained in our culture that it serves as an explanation whenever possible, despite minimal validity. This is what Nisbett and Wilson (1977) referred to as an a priori theory; a cultural belief applied to a given situation simply because of its salience and superficial applicability, even though it may not be correct. If this is true, future researchers must be cautious to distinguish actual behavioral differences from those that are part of this mythical belief system.

Of course, this begs the important question: Why wasn't interaction quantity related to females' beauty as it was for males? One potential explanation arises from the social competence data. Attractive males were generally more assertive and less fearful of women. It therefore seems likely that they would approach women more readily. Given a woman's likely response to being sought by a socially desirable person, the attractive male would probably gain approval. In support is the correlation found between attractiveness and opposite-sex self-initiation. On the other hand, attractive women were less assertive than unattractive women and reported more other-initiated opposite-sex encounters. In other words, they were more likely to wait to be approached by others. perhaps because of cultural stereotypes about their social demand. These same cultural stereotypes might induce most males to evaluate their chances of acceptance as small, however, resulting in fewer initiations than might be expected from the attractiveness myth. A male fearful of rejection might estimate his probability of acceptance as higher with a less attractive woman and pursue her instead (Huston, 1973). Such a female is also more assertive, as we saw earlier, facilitating further interaction. To summarize this line of argument, people's beliefs about the role of appearance in acceptance and rejection may actually inhibit the social contacts of beautiful females, both due to their own lack of skills and because of probability estimates by males. Doubtless some males do approach attractive females, precluding a negative corelation between appearance and quantity of interaction. A pattern of essentially no relationship results, as was depicted in Figure 2.

A complementary accounting is afforded by Deaux's (1977) postulates about the social orientations of males and females. According to Deaux, males are status assertive, seeking to enhance their social standing through their relationships. Attractive males, possessing a valuable social asset, would assess their lot more favorably and pursue the company of attractive women. After all, the companionship of an attractive female can enhance one's status (Sigall & Landy, 1973). Unattractive males, aware of the matching hypotheses and more afraid of rejection, would simply be less likely to try. Females are more status neutralizing in Deaux's system, in that they strive to eliminate differences in social rank, preferring closeness instead. Tangible assets such as beauty play less of a determining role. The absence of one type of relationship, such as with a male of great social desirability, would simply lead to accepting another, since the material assets of one's partner are not quite so important as the relationship itself.

The contention that a compensatory mechanism may be involved for females is supported by the finding of a positive correlation between beauty and interaction quality. Attractive females reported more satisfying and pleasant interactions. Perhaps this is indicative of having more choice among potential partners, giving one greater freedom to socialize with rewarding friends and rebuff others. A greater feeling of personal control over social time would be part of this pattern as well. It is tempting to argue that attractive females may in fact be more skilled, at least in domains other than assertiveness, as a result of their history of positive social feedback. Our data do not support this hypothesis. For one, attractive women were not more skilled on any of the competence measures we collected. More importantly, Table 6 revealed that social competence, particularly dating assertiveness, related to interaction quality favorably. Attractive women were more satisfied even though they possessed less of the skills that favor satisfaction. This is the suppressor effect noted in Table 7. The implication is that somehow beauty overcomes and then supplements the affective experience that might be expected for a less socially competent person.

To what may we attribute this augmenting effect? One possibility stems from the selffulfilling prophecy demonstrated by Snyder et al. (1977). In that study, males were told that an anonymous female telephone partner was either attractive or unattractive. When subjects thought she was pretty, their conversation changed sufficiently to elicit more positive behavior in return. It may be that this occurs regularly in the lives of attractive females. People expect them to be more socially adept (Dion et al., 1972) and are probably more pleased to share their company. Others' behavior is more positive, inducing similar behavior on the attractive females' part and creating a generally enjoyable experience for both. Therefore, despite a certain skills deficit, attractive females may partake in more favorable social episodes. This point certainly warrants future research. Interestingly, the argument accounts neatly for Berscheid et al.'s (Note 1) finding of lesser satisfaction in later life among college beauties. After having learned to enjoy socializing enhanced in large part by the reactions of others to one's appearance rather than one's social competence, a deficiency endures that becomes consequential once beauty fades and other people no longer provide the spark.

The picture for males is considerably simpler. As Reis et al. (1980) found, attractive

males relied more heavily on interaction with females, in terms of percentage, frequency of events, time, and number of different others. In that study, appearance predicted variance percentages in the range of 25%; in this study approximately 16% of the variance was accounted for (medium effects in Cohen's [1980] guidelines). At least part of this relationship was mediated by social competence. For those variables demonstrating the effect, the amount of variance accounted for dropped from approximately 16% to 9% when social competence was controlled. In other words, about half of the attractiveness effect may be mediated in this way. More intuitively, recall that attractive males were more assertive and less afraid of rejection by women, in addition to participating in interactions that they felt were more intimate and disclosing. A pattern emerges of more meaningful experiences and greater skill, or at least willingness, to solicit social contact. It seems obvious that a history of positive social feedback would create such proficiency. More importantly, interaction with more intimate, disclosing, assertive, and unafraid males is likely to be more gratifying in and of itself, making them more desirable partners regardless of their appearance. The fact that the mediation hypothesis accounted for only part of the variance suggests, however, that beauty still does have an impact on males' interactions, probably in much the same manner as discussed earlier for females. If people hold "what is beautiful is good" expectations for males (Dion et al., 1972), then their expectations ought to elicit more favorable responses from attractive males. In fact, Andersen and Bem (1981) have shown this, using the Snyder et al. (1977) telephone call paradigm (although the direction differed for androgynous and traditional women). Consequently, beautiful males may add selffulfilling prophecies to their social competence advantage.

A few words on our methodology are in order. Although the controls might have been tighter in the laboratory, we see two major advantages to this naturalistic paradigm. The first is the assessment of how appearance actually affects social behavior in everyday life; the second is the emphasis on underlying causal processes. Speaking to the first issue, many of our results imply that people's naive postulates about beauty differ substantially from what truly occurs. Much of the literature is based on perceptions of hypothetical stimulus persons, making it probable that these studies are more informative about the stereotype than about actual behavior. Certainly such knowledge is useful; however, it is equally important to document and understand how appearance influences people's real experiences. The Rochester Interaction Record is a standardized instrument providing a reliable and accurate assessment of social participation. By its various scales, it enables examination of many of the parameters that more global scales overlook. By directing the respondent's attention to single incidents one at a time, it eliminates many of the errors that might be attributable to biased information scanning and processing. Most importantly, the method of tabulation furnishes quantitative estimates of various specific aspects of social participation as they naturally occur in everyday life. As we have seen, some of these related to physical attractiveness, whereas others did not.

Once the veridical effects of beauty have been established, it is possible to focus on the mechanisms by which it influences ongoing behavior. In the absence of experimental manipulation (which would be impossible in a naturalistic setting lasting 2 weeks), partialing techniques provide strong tests of whether the data are consistent with theoretically derived causal networks. Often, researchers give causal-like explanations for hypotheses derived from nonlaboratory data. We wish to emphasize the necessity for testing these notions within the field context. In this research, those tests bore fruit. We found that supply-and-demand issues were of little importance in predicting attractiveness effects: we also found that although social competence mediated part of the impact of beauty on social interaction, an independent influence remained.

Consideration of social consequences imbues physical attractiveness with more importance than is typically thought. Many think of it as a superficial factor with limited impact. Berscheid and Walster (1974) speculated that its effects might occur primarily in first-time or short-term encounters. However, we have seen that attractiveness influenced both sexes' social competence in a manner consistent with traditional sex roles, that attractive males socialized more with females and less with males, and that attractive persons' interactions were more qualitatively rewarding, generally across both close and less close friends. Would anyone judge these phenomena to be superficial or of limited importance? We think not. Because perceptions of beauty and their social ramifications bear heavily on these behaviors, beauty is a vital and significant variable worthy of investigation.

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