

## Contrast Effects and Judgments of Physical Attractiveness: When Beauty Becomes a Social Problem

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Three studies were conducted to test the hypothesis that judgments of average females' attractiveness or dating desirability will be adversely affected by exposing judges to extremely attractive prior stimuli (i.e., judgments will show a "contrast effect"). Study 1 was a field study in which male dormitory residents watching a popular TV show, whose main characters are three strikingly attractive females, were asked to rate a photo of an average female (described as a potential blind date for another dorm resident). These subjects rated the target female as significantly less attractive than did a comparable control group. Two other studies demonstrated analogous effects in a more controlled laboratory setting. In addition, the third study indicated a direct effect of informational social influence on physical attractiveness judgments. Implications are discussed, with particular attention to mass media impact.

Within the past several years, social psychologists have gathered a wealth of data attesting to the central importance of physical attractiveness in interpersonal interaction (see Berscheid & Walster, 1974, for a review). This variable has been found to have a particularly profound effect in dating situations (e.g., Berscheid, Dion, Walster, & Walster, 1971; Brislin & Lewis, 1968; Byrne, Ervin, & Lamberth, 1970; Stroebe, Insko, Thompson, & Layton, 1971; Walster, Aronson, Abrahams, & Rottman, 1966). Brislin and Lewis (1968), for instance, found a correlation of .89 between perceived physical attractiveness and the "desire to date."

It has been noted that physical attractiveness has generally been used as an independent variable in social psychological research (Berscheid & Walster, 1974; Gross & Crof-

ton, 1977). As Gross and Crofton (1977) put it, "beauty has been conceptualized as an invariant 'cause' in previous studies" (p. 86). Nevertheless, a number of studies have shown that judgments of attractiveness can be influenced by other information likely to affect interpersonal attraction in general, such as knowledge of a target person's attitudinal similarity (Walster, cited in Berscheid & Walster, 1974), information that she/he possesses positively valued traits (Gross & Crofton, 1977), actual acquaintance with the target person (Cavior, 1970), or association of the target person with a highly attractive other (Meiners & Sheposh, 1977). In addition to these situational variations, judgments of physical attractiveness have been found to vary across cultural and racial groups (e.g., Cross & Cross, 1971; Marshall & Suggs, 1971), although Berscheid and Walster (1974) suggest that modern mass media may soon obscure any such differences in favor of Western standards. These authors also suggest that socialization of romantic preference is accomplished through the mass media and that "few advertisements or popular movies and novels depict mundane levels of physical attractiveness" (p. 167). If the media do influence one's standards of attrac-

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tiveness, while at the same time suggesting that only highly beautiful or handsome others are appropriate as love objects, one might expect an inverse relationship between exposure to mass media and the extent to which an individual's standards for the attractiveness of a romantic partner are "realistic."

In fact, if one can extrapolate the findings from research into other areas of perceptual judgment, there is reason to be concerned about even the short-term impact of mass media on our judgments of the attractiveness of the more mundane potential romantic partners around us. One consistently reported finding in perceptual judgments is a "contrast" effect, that is, judgments of moderate stimuli in a series are found to be displaced away from extreme or distant stimuli. This effect has been found for judgments of physical dimensions such as weight (e.g., Heintz, 1950; Sherif, Taub, & Hovland, 1958), length of lines (e.g., Krantz & Campbell, 1961); and shape (Helson & Kozaki, 1968); as well as social stimuli such as attitudes (Hovland, Harvey, & Sherif, 1957), pleasantness of facial expressions (Manis, 1971), criminal acts (Pepitone & DiNubile, 1976), and personality impressions (Simpson & Ostrom, 1976). If such effects can be presumed to generalize to judgments of physical attractiveness, prior exposure to highly unattractive individuals would result in an enhanced perception of the attractiveness of an "average" person, with the reverse being true of exposure to very attractive persons. Some additional implications would follow from the existence of such an effect in this realm. In our mass-media-oriented culture, where we are bombarded with highly attractive females, such exposure should produce a rather high "adaptation level" (Helson, 1964), resulting in lowered assessments of the beauty of average "real world" females. Given the particularly high relationship between such judgments and dating desirability, such exposure might also lead to an analogous decrement along this latter dimension as well.

It should be noted that in this case, there are at least two bodies of literature that might lead one to expect that such contrast effects would *not* hold in this realm. First, there is evidence that perceptual contrast will

not be induced by stimuli that, although sufficiently distant from the stimulus along the relevant dimension, possess other characteristics that lead subjects to consider them to belong to different "universes of discourse" (Helson, 1971). Brown (1953), for instance, had subjects lift a tray between judgments of a series of weights. Although a similarly heavy anchor weight produced a contrast effect, lifting the tray had no effect on judgments. Similarly, Bevan and Pritchard (1963) found that shape judgments were not affected by grossly deviant or oversized stimuli. If media females are not considered to belong to the same category or "universe of discourse" as real-life females, their beauty might be discounted and fail to influence judgments of nonmedia females. Second, since physical attractiveness has been shown to have the qualities of a reinforcer (e.g., Byrne, Ervin, & Lamberth, 1970; Dion, 1977), and since contextual association with reinforcing events has been shown to enhance the attractiveness of a target person (Clore & Byrne, 1974; Lott & Lott, 1974), exposure to an average female in a context of highly attractive females might be expected to lead to a classical conditioning effect such that the average female would actually come to be judged more positively. Similarly, in a context of highly unattractive females, she should come to be judged more negatively if such a process applied here. Three studies were therefore performed to test the hypothesis that exposure to extreme attractiveness stimuli would produce contrasted judgments of a target person of average attractiveness.

Study 1 was a field study in which subjects were asked to judge a potential blind date for a fellow dormitory resident. One group of subjects was students who were watching the TV program "Charlie's Angels" (whose main characters are three beautiful women), whereas controls consisted of residents of the same dormitory (sampled during the same night) who were not watching this show at the time they were run.

### Study 1

#### *Method*

*Subjects.* Subjects were 81 male dormitory residents at Montana State University. They partic-

ipated in groups of 1-6 on the evening of February 1, 1977.

*Procedure.* Two male confederates entered a dormitory room during one of two time periods (during the hour preceding "Charlie's Angels," or during the hour at which "Charlie's Angels" was aired).<sup>1</sup> They explained to the students in the room:

*Confederate A:* Listen, could I just interrupt you guys for 30 seconds? We're having a major philosophical dispute here and we need to do an informal survey to resolve the question. You see, we have a friend coming to town this week and we want to fix him up with a date, but we can't decide whether to fix him up with her or not, so we decided to conduct a survey.

*Confederate B:* You see, I don't think she looks very good.

*Confederate A:* But I think she looks pretty good. At any rate, we want you to give us your vote on how attractive you think she is. (Confederate A begins to hold up the picture, but it is faced away from subjects so they can't see it).

*Confederate B:* Right, on a scale of 1 to 7, with 1 being very unattractive, 4 being exactly average, and 7 being beautiful.

*Confederate A:* (turns over photo) Now, nobody say anything until everyone makes up his own mind, and be honest—give your honest opinion.

*Confederate B:* Remember, 1 is very unattractive, 4 is right in the middle, and 7 is very attractive.

Confederate A held up the picture, allowed each subject to make a silent judgment, and then had the subjects give their responses. They thanked the subjects, left the room, and immediately recorded the time, condition, and each subject's response independently. Agreement between the two confederates was 100% in all instances.

*Stimulus photo.* The stimulus photo was an 8 cm × 5 cm black and white yearbook snapshot taken from a series of slides pretested in earlier research (Kenrick & Gutierrez, Note 1). A group of 11 undergraduate males from the population used in the present research had given this photo a mean rating of 4.11 on a scale analogous to that used by the subjects in our field study.

## Results

Subjects' data were broken down into four groups. Those watching "Charlie's Angels" constituted the "experimental" group, whereas those watching another TV program earlier in the night were designated as control subjects. To control for the possibility that ratings by experimental subjects may have been due simply to their having been made at a later hour, two additional control

groups were included. Subjects in these groups were not watching TV but were sampled either during the "Charlie's Angels" time slot or during the preceding hour. The data from the group watching "Charlie's Angels" were plotted against the data from all control groups, using a planned orthogonal contrast. It was expected that the "Charlie's Angels" group would show lowest mean ratings of the target's attractiveness. Although subjects were cooperative in making silent independent judgments, the group mean was used as the unit of analysis in the contrast presented below.

In line with predictions, results indicated relatively lowest ratings by viewers of "Charlie's Angels" ( $M = 3.43$ , vs. 4.00 combined  $M$  for the controls),<sup>2</sup>  $F(1, 24) = 5.03$ ,  $p < .03$ . This contrast accounted for 84% of the between-groups variance. A similar test using the individual subject as the unit of analysis resulted in  $F(1, 77) = 7.39$ ,  $p < .01$ .

## Discussion

Results of Study 1 were directly in line with predictions, indicating relatively lowest ratings of an average female by subjects who were observing highly attractive media females. Nevertheless, since subjects were not randomly assigned to conditions, our results are open to several interpretations. First, "Charlie's Angels" viewers may have been more negative in their rating of the target female because of the immediate influence of the beautiful media stimuli. Second, the effect may have been due to the fact that these viewers were more negative because of a chronic tendency to expose themselves to highly attractive females depicted in the

<sup>1</sup> All subjects who were watching television during this time slot were tuned to this program, which was quite popular at the time this study was run (sixth in the Nielsen ratings).

<sup>2</sup> Five groups of subjects (19 total) were watching "Charlie's Angels." Respective means and number of groups were 4.31 ( $n = 3$ ) for non-TV watchers sampled during the "Charlie's Angels" time slot and 4.08 ( $n = 8$ ) and 3.82 ( $n = 12$ ) for TV watchers and non-TV watchers, respectively, who were sampled during the previous time slot. A test of the residual effects was not significant.

media. Both of these possibilities would be consistent with our hypotheses. A third possibility, however, is that some other difference may have existed to make "Charlie's Angels" viewers more generally negative in their judgments of females. Although we can offer no intuitively compelling reasons to assume this to be the case, it seems best to consider our hypothesis confirmation in Study 1 as suggestive evidence only at this point. Study 2 was designed to offer a more direct test of our hypothesis by manipulating exposure to media beauty in subjects randomly assigned to conditions.

### Study 2

#### Method

*Subjects.* Subjects were 48 male undergraduates enrolled in introductory psychology at Montana State University, who participated in small groups of 3-5.

*Procedure.* Subjects arrived for an experiment entitled "personality" and were told:

This is a study of first impression formation. We are interested in determining how much we can tell about a person from only a brief encounter or glance. Many people assume that we can tell quite a bit from a person's face alone. It is assumed that we can tell whether someone is honest or dishonest, sociable or unsociable, et cetera from their eyes or mouth, for instance. Advertisements, books, and magazines often include a certain type of face in an attempt to present a certain image to the public—of an intelligent scientist, an overworked housewife, a dedicated businessman, a vivacious and happy young model, and so on. As part of the present investigation we've given intensive psychological tests and interviews to a group of students and interviewed several of their friends and acquaintances as well. We've developed a personality profile for each of these persons. You will be seeing only a yearbook photo of one of these people, and your task will be to simply give your honest first impression of what that person is really like. You may not feel that you have enough information to respond to each dimension, but simply take your best guess, since accuracy or inaccuracy of impression formation is what we're interested in.

Following this, subjects were instructed not to communicate with one another verbally or nonverbally, since the experiment necessitated completely independent judgments. Seating was arranged so that observation of other subjects' written responses was not possible. For experimental subjects, a black and white slide of an attractive female in a magazine advertisement<sup>3</sup> was turned on during the verbal instructions, and the experimenter pointed to it (as if to give an example) as he mentioned the "young

model." Control subjects heard the same instructions but were not exposed to the magazine ad. Following the instructions, all subjects were shown a slide of a female of average attractiveness (the same one used in the first study) and were given a "personality rating" sheet to fill out on her. The rating form contained several bipolar scales (likable-unlikable, reasonable-unreasonable, courteous-rude, selfish-unselfish, warm-cold, sincere-insincere, responsible-irresponsible, beautiful-ugly, kind-cruel). The ratings of the target person along the dimension beautiful-ugly constituted the main dependent variable. It was predicted that she would be rated as significantly less beautiful following exposure to the attractive female advertisement.

#### Results

In line with predictions, ratings of the target person indicated that she was seen as significantly less beautiful by subjects exposed to the advertisement,  $F(1, 46) = 7.10$ ,  $p < .01$ . Mean ratings were 4.41 for the experimental group and 3.52 for the controls (higher ratings indicate that the target person was seen as relatively *less* beautiful).<sup>4</sup> These results parallel those of the first study and cannot be explained as due to self-selection of subjects.

### Study 3

The first two studies were concerned with the indirect influence of contextual stimuli on judgments of attractiveness. They demonstrated that exposure to beautiful media females could result in lowered assessments of a female of average attractiveness. A third study was conducted to provide an additional test of the question addressed in the first two studies while also examining the more direct impact of informational social

<sup>3</sup> This slide was an advertisement for Wella Balsam, depicting the popular model Farrah Fawcett-Majors. In pretesting, a group of 21 undergraduates (11 males, 10 females) from the same population used in the study proper gave this slide a mean rating of 6.67 on the 7-point scale analogous to that used in Study 1.

<sup>4</sup> None of the other adjectives showed any effect of the manipulation except "responsible-irresponsible." Subjects exposed to the advertisement saw the target as significantly more responsible. Although these results were not predicted, they may fit with Stephan, Berscheid, & Walster's (1971) finding that under some circumstances, males who judge a female as sexually attractive may also see her as relatively "careless" and "uninhibited."

influence (Deutsch & Gerard, 1955) on judgments of attractiveness. We are often exposed to our peers' assessments of members of the opposite sex, and a number of classical social psychological findings suggest that peers' judgments can influence assessments even of "objective" reality (e.g., Asch, 1951; Crutchfield, 1955; Sherif, 1935). Given the interpersonal importance of attractiveness judgments, it is of some interest to determine the applicability of this classical effect in the present realm.

Also of some interest was the question of whether exposure to peer evaluations would influence judgments of persons not directly commented on. That is, would exposure to peer evaluations produce an alteration of *standards* that would generalize to judgments of other persons (not directly evaluated)?

Finally, the third study included female subjects as well as males. Since physical attractiveness judgments have been found to influence interpersonal behaviors between same-sex as well as opposite-sex persons (see Berscheid & Walster, 1974, for a review), it is of interest to determine the applicability of our findings to same-sex assessments.

### Method

*Subjects.* Subjects were 98 undergraduates (49 males, 49 females) enrolled in introductory psychology at Montana State University who participated in groups of 2-7. One subject was deleted because of suspicion regarding the male confederates.

*Procedure.* Subjects arrived for an experiment entitled "pretesting stimuli" and were led to a small room containing several chairs and a slide projector. In half the conditions, two male confederates posed as subjects and always sat together in the back row of two rows of five chairs. The experimenter explained:

As the sign-up sheets indicated, we're interested in having you help us pretest some stimuli for an experiment we'll be running at the start of next semester. What that experiment will involve is seeing how well people judge personality from only a small amount of information. We'll be showing people a photograph including only a person's face and asking them to judge the person's overall personality. We've found in the past, however, that these judgments are often influenced by other irrelevant factors, so we'll be asking you to make an objective judgment of several photographs so we can control for these irrelevant factors next semester. All right, for the first six photographs you'll be rating the physical attractiveness of each face.

*Prior stimuli.* Subjects were then given a sheet containing six 9-point scales labeled 1 (extremely unattractive) and 9 (extremely attractive). They were further instructed to observe each slide carefully for 40 sec, at which point a blank screen would appear that would signal them to make their judgment. For all conditions Slides 2, 3, and 5 were held constant. These slides showed black and white yearbook photographs of females previously judged to be "average" in attractiveness (Kenrick & Gutierrez, Note 1). Half the subjects saw highly attractive slides in Slots 1, 4, and 6, whereas the other half saw unattractive slides in these positions. Attractive and unattractive slides were also yearbook photos selected in the same manner as the "average" photos.

*Confederate comments.* Half of each group heard the confederates make comments about the third and fifth (average) slides. These comments were negative in the groups exposed to the high-attractive series (e.g., "What a dog," nonverbal utterances of displeasure) and positive in the groups exposed to the low-attractive series (e.g., "You can set me up with her," nonverbal utterances of attraction). After Slide 5 had been rated, the experimenter mentioned that any comments might influence the others in the room and asked that the subjects refrain from giving any public responses to the stimuli. (For controls, this request was made before Slide 1 was shown.)

*Target person.* After Slide 6 had been rated, subjects were told that the next slide would be "evaluated on a completely different dimension" and were handed a sheet that asked them to check one of seven sentences ranging from "I would find this person extremely desirable as a date" to "I would find this person extremely undesirable as a date." Female subjects were instructed to evaluate the female as a potential date for a male friend. This final photo was selected in the same manner as the other "average" slides (2, 3, and 5) and was, like them, held constant for all subjects.<sup>5</sup>

Subjects were then fully debriefed and were probed for suspicion. All reported having clearly heard the confederates' comments (when they were made), and most generally reported in informal discussion that they found them obnoxious and did not feel they

<sup>5</sup> Although this photo was not rated on physical attractiveness within the context of the present study (as the other average photos used were) we did have it rated on a 7-point scale like that used in the first two studies (1 = extremely unattractive, 4 = average, 7 = extremely attractive) by 66 undergraduates (34 males, 32 females) from the same subject pool during the following academic year. The mean rating obtained was 4.42 for this group. Note that the polarity here is reversed from that of the 7-point "dating desirability" scale used in Study 3, and this should be read as 3.58 if one wishes to make direct comparison. We would suggest that the reader who chooses to do so should keep in mind that there may well be some slippage in making such a conversion.

were influenced. Nevertheless, as might be expected, other males had in several cases spontaneously joined in verbal agreement with the confederates' comments during the experimental session. Data were therefore treated using the group as the unit of analysis.

#### Predictions.

1. It was expected that exposure to attractive prior stimuli would lead to relatively decreased ratings of the target person's dating desirability.

2. It was further expected that subjects' ratings of the physical attractiveness of Slides 3 and 5 (the "average" slides for which comments were made) would be affected in the direction of the confederates' comments. Since this would have resulted in decreased ratings of these two slides in the attractive condition (since negative comments were made here) and increased ratings in the unattractive condition (since positive comments were made here), this would have shown up as an interaction between the confederate comment factor and the attractiveness factor.

3. In addition, we were interested in seeing whether confederates' comments would indirectly enhance the influence of the prior stimuli on ratings of the final target person (by further heightening standards in the attractive condition, and vice versa). This would also have shown up as an interaction effect, as indicated in Prediction 2 above.

#### Results

**Manipulation check.** Comparisons between attractive and unattractive slides in Positions 1, 4, and 6 yielded differences significant beyond the .001 level in each instance. Mean ratings of the three attractive slides were 7.00, 7.74, and 7.82 for the attractive and 4.24, 3.26 and 2.36 for the unattractive series, respectively. Discounting the effects of the independent variables (discussed below), the overall mean ratings for Slides 2, 3, and 5 (constant slides in series) were 5.18, 5.00, and 5.51, respectively.

**Sex of subject.** Prior to the analysis using the whole group mean as the unit of analysis, an analysis dividing each group into male and female subjects was performed. This analysis indicated that sex of subject yielded no main effects or interactions on any of the dependent variables, except for ratings of Slide 5, for which a main effect of subject sex was obtained,  $F(1, 29) = 8.26$ ,  $p < .01$ . Females rated this slide as more attractive ( $M = 5.91$ ) than did males ( $M = 5.19$ ).

Table 1

*Influence of Stimulus Attractiveness and Confederate Comments on Ratings of Prior Stimuli and Target Person, Study 3*

Item rated	Attractiveness of prior stimuli			
	Attractive		Unattractive	
	Confed- erate com- ment	Con- trol	Confed- erate com- ment	Con- trol
Slide 3 <sup>a</sup>	4.63	5.08	6.04	5.00
Slide 5 <sup>a</sup>	4.30	5.02	6.96	6.08
Target person <sup>b</sup>	4.33	4.16	3.34	2.78

<sup>a</sup> Higher ratings indicate *more* positive ratings of female's beauty on a 9-point scale.

<sup>b</sup> Higher ratings indicate *less* desirability as a date on a 7-point scale.

**Main analyses.** Ratings of the target person's "dating desirability" showed the predicted main effect of prior stimuli (P),  $F(1, 14) = 15.01$ ,  $p < .002$ . As expected from our earlier results, subjects exposed to the attractive prior slides gave significantly lowered ratings of the target person (see Table 1). As indicated in the predictions section above, a significant interaction of prior stimuli and confederates' comments (C) would have indicated that the comments further enhanced the standards set by the prior stimuli. The  $F$  for the interaction term was less than 1, thus failing to support this suggestion. The C "main effect" was also nonsignificant,  $F(1, 14) = 1.51$ .

**Prior stimuli and confederate comments.** On the slides for which confederates made direct comments, ratings were, as predicted, lowered in the attractive condition (where negative comments were made) and enhanced in the unattractive condition (where positive comments were made). This showed up as a significant  $P \times C$  interaction on Slide 5,  $F(1, 14) = 4.66$ ,  $p < .05$ , and a marginally significant effect on Slide 3,  $F(1, 14) = 4.41$ ,  $p < .06$  (see Table 1). In addition, there was a significant main effect of prior stimuli on Slide 5,  $F(1, 14) = 25.50$ ,  $p < .001$ , as well as a similar trend on Slide 3,  $F(1, 14) = 3.91$ ,  $p < .07$ , indicating relatively lower ratings in

the context of highly attractive stimuli.<sup>6</sup> Since confederates' comments should have canceled out for the C effect, *F*s were, not surprisingly, less than 1 for ratings of both Slide 3 and Slide 5.

### General Discussion

The results of Study 3 were consistent with those of the first two studies in supporting the existence of a contrast effect phenomenon for judgments of physical attractiveness. This effect occurred despite the fact that the attractive stimuli in the first two studies were drawn from a different "universe of discourse" than that from which the target person was drawn. To the extent that the beauty of media females may have been "discounted" due to this factor, it was not sufficient to remove the adverse contrast effect. Similarly, the contrary prediction based on a simple application of classical conditioning principles (i.e., that reinforcement value of attractive photos would generalize to an average target photo in the same series) was not borne out. This result is consistent with other findings suggesting that simple generalization of affective reactions to attraction objects is often overruled by other (e.g., cognitive) factors (Kenrick & Johnson, 1979).

### Possible Implications

*Media impact (the "Farrah factor").*<sup>7</sup> The present results support the suggestion that our initial impressions of potential romantic partners will be adversely affected if we happen to have been recently exposed to posters, magazines, television, or movies showing highly attractive individuals (or if such stimuli are concurrently present). Kenrick and Gutierrez (Note 1) found analogous results to those obtained here, using stimuli randomly chosen from advertisements in best-selling magazines. Their results indicated, not surprisingly, that media females are indeed selected from a highly skewed distribution with regard to physical attractiveness.

Whether or not our obtained effects are long lasting cannot be determined from the present series of studies. Even if such effects are very short-lived, however, they could still

be of some consequence, influencing the desirability of females who happen to meet a male immediately following or during exposure to such media. Of some interest in this regard is a recent study by Snyder, Tanke, and Berscheid (1977), which suggests that initial judgments of a target's attractiveness may function as a self-fulfilling prophecy. In the Snyder et al. study, targets who were perceived to be unattractive actually came to behave in a less friendly and likable manner than targets who were regarded as attractive. Further, there is other research showing that the judged physical attractiveness of a computer date actually determines the likelihood of seeking further interaction with that person (Walster et al., 1966).

Thus, let us imagine a scenario involving a college-age male who, like the subjects in our first study, is engrossed in an episode of a television show containing unusually beautiful females in the central roles (the examples are not hard to come by, especially given the recent conscious and concerted effort of TV network producers to place very highly attractive women in starring roles). He is briefly introduced to a neighbor who happens to be a female of average physical attractiveness. Our data suggest that his immediate assessment of her attractiveness and dating desirability will be lower than might otherwise be the case. Based on the findings of Dion (1977), he might be expected to subsequently reduce his visual attention to her (thus retarding any return of his "adaptation level" to mundane levels). He might also act in such a manner as to inhibit demonstrations of friendliness on her part, following Snyder et al. (1977), and also be less likely to seek to interact with her in the future, in line with the findings of Walster et al. (1966).

*Individual differences in history of exposure.* Research on perceptual judgment in other areas suggests that the judgment of a stimu-

<sup>6</sup> Ratings of Slide 2 were also significantly more negative when it followed an attractive slide in Position 1,  $F(1, 14) = 9.23, p < .01$ .

<sup>7</sup> This term was coined by the editors of *Human Behavior* magazine (February 1979 issue) for the effect we have been investigating in this series of studies.

lus is determined by both the immediate stimulus context and by a "pooled" estimate of the judge's past experience with stimuli in the same realm of discourse (Helson, 1964, 1971). Given the male college student's vast history of exposure to female facial stimuli, the manipulations in Studies 2 and 3 could only be seen as having a transitory impact, likely to be erased by relatively short exposure to real-world females. Nevertheless, given a tendency to selectively attend to and actively seek visual exposure to highly beautiful females (Dion, 1977), our results suggest the possibility that "chronic" standards for physical attractiveness may be somewhat inflated, particularly among individuals who are exposed to relatively more mass media (whose pooled estimate of a facial stimulus is based on a highly skewed and "nonrepresentative" sample). Note in this regard that there is evidence that the average adolescent in this society has spent more time watching television than in school (Gerbner & Gross, 1976).

We have focused our discussion thus far on the effects of media beauty, but it should also be pointed out that our results have potential implications for other realms as well. For instance, some individuals may be chronically exposed to unusually high levels of attractiveness by virtue of their occupation (e.g., airline pilots, bartenders in Playboy clubs, undergraduates at UCLA, etc.). If these individuals are themselves unattractive, the effects of such exposure may be particularly adverse, leading to the adoption of unrealistically high standards and consequent dissatisfaction with those females actually available to them and likely to be interested in them (at least according to the "matching" hypothesis; Berscheid & Walster, 1974).<sup>8</sup>

*Cognitive influences.* Social psychologists have recently shown renewed interest in studying subjects' phenomenological reconstructions of the social situations they are faced with. Social behavior seems to be influenced not simply by "objective" environmental stimuli but also by the subjects' tendency to interpret these stimuli, selectively attend to them, and selectively recall them (e.g., Berkowitz, 1978; Snyder & Uranowitz, 1978). When the present research is consid-

ered in the light of such findings, some additional researchable implications unfold. Given the rewarding nature of attractiveness, individuals may well selectively notice the atypically attractive persons in their environments and selectively recall them (perhaps even actively generating images of such persons in their absence). Thus, an individual whose everyday activities expose him or her to a "representative" sample of opposite-sex persons may nevertheless *construct* a "biased" adaptation level.

It should be noted at this point that we have not elucidated the cognitive mediators underlying our obtained effect. Although such a question is not relevant for the social implications we have touched on, it would be of some theoretical interest to investigate the cognitive processes responsible for our effect. It seems unlikely, for instance, that contrast effects obtained in this realm (and in other realms of social judgment) are due to "receptor fatigue," as the analogous effects obtained with purely sensory phenomena might be (Helson, 1964), unless one posits a relatively central and higher order mechanism for such judgments. On the other hand, an explanation in terms of "scale usage" effects (e.g., Anderson, 1975; Parducci, 1965) cannot deal with the results of Studies 1 and 2 and must be stretched a great deal to account for the results of Study 3.

#### *Influence of Peer Evaluations on Attractiveness Judgments*

In addition to demonstrating indirect contextual influences on judgments of attractiveness, the results of the third study indicated that information regarding peer judgments will influence evaluations of physical beauty. Subjects' judgments tended to conform to evaluative comments expressed by confederates in this study. Since subjects' judgments were private in this case, these results would seem to be an instance of what Deutsch and Gerard (1955) have referred to as "informational" as opposed to "normative" social in-

<sup>8</sup> Our thanks to an anonymous reviewer for this suggestion.

fluence. This latter effect would also seem to have clear "real-life" analogues. It has been noted that initial preinteraction encounters are strongly influenced by visual characteristics (Levinger, 1974), and very often such first visual encounters are accompanied by friends' explicit evaluations of the target individual's attractiveness. In fact, students can often be observed actively seeking peer evaluations of the attractiveness of potential romantic partners with whom relationships have progressed to what Levinger (1974) has termed the level of "surface contact."

The results of Study 3 showed only a direct effect of confederates' comments on physical attractiveness judgments, whereas general "standards" for dating desirability were not influenced by these comments. It is possible that long-term exposure to peers with either very high or very low "standards" would result in a more general effect, but the present methodology (in which only two females were evaluated by the peer models) does not allow for any such determination.

#### *Influence of Media Depictions of Males on Females' Judgment*

The present series of studies used only female target persons. Although physical attractiveness has generally been found to be more important for females than for males (e.g., Berscheid et al., 1971; Efran, 1974; Stroebe et al., 1971; Walster et al., 1966), attractiveness has not been found to be insignificant for men, by any means. These same studies, for instance, have shown physical attractiveness to be significant in importance for males as well, and Berscheid and Walster (1974) point out that although females consistently report physical attractiveness to be less important in their judgments of males, the findings with regard to *behavioral* measures are sometimes contradictory (e.g., Byrne et al., 1970). It seems likely that the present findings would have similar implications for judgments of males, although this remains to be empirically verified.

#### Reference Note

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*ness: The people's case against Farrah Fawcett.* Paper presented at the meeting of the American Psychological Association, Toronto, August 1978.

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