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ABSTRACT

Interpersonal attraction appears to increase under aversive conditions. Two distinct theories suggest that attraction results from either misattribution or fear reduction. To investigate the effects of misattribution and fear reduction on attraction, 36 male college students were ostensibly exposed to an electromagnetic field while an attractive female confederate recorded their cardiovascular data. Prior to the exposure, subjects were briefed on the apparent threat of the situation (low or high fear) and on the arousal they could expect from the field (low or high arousal). After ostensible exposure to the field, subjects completed a questionnaire assessing their liking for the confederate. An analysis of the results showed that fear had no effect on attraction, while expected arousal from the electromagnetic field did correlate with attraction, supporting the misattribution theory. (BL).

Attraction Under Aversive Conditions: Misattribution or Fear-Reduction?

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ABSTRACT

In a study designed to contrast the predictions of fear-reduction and misattribution models of attraction under aversive conditions, the fearfulness and expected arousal of 36 male subjects were orthogonally manipulated. Subjects were ostensibly exposed to an electromagnetic field while a female confederate recorded their cardiovascular data; their liking for her was assessed. Contrary to the predictions of the fear-reduction model, more fearful subjects were not more attracted to the woman. However, the predictions of the misattribution model were confirmed; subjects told to expect arousal from the field liked the woman more than did subjects who did not expect such arousal.

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Problem: One of the more intriguing and elusive issues to engage social psychologists in the past decade is the nature of interpersonal attraction under aversive conditions. It seems that situations which frighten people or make them nervous--conditions which would appear to be inimical to satisfaction and pleasure--may actually foster romance, increasing the liking that people have for others they meet in these trying situations (cf. Dutton & Aron, 1974). However, the question of why this occurs has created considerable controversy. Berscheid and Walster (1974) have suggested that such attraction results from misattribution of the arousal people feel when they become frightened or anxious. By contrast, Kenrick and Cialdini (1977) argue that a "fear-reduction" model is more parsimonious, and that such attraction is more likely caused by the amelioration of anxiety than by its mislabelling.

Unfortunately, the available evidence does not allow us to easily determine which of these models is better. White et al. (1981) have shown that misattributed arousal does enhance attraction, but they went to some lengths to dissociate the true source of the subjects' arousal--here, prior physical exercise--from the situation in which they encountered the target person. It is not at all certain that they would have attributed any of their arousal to the target person had she actually been present when they were exercising. Indeed, Kenrick et al. (1979) reported that subjects were not likely to see another person as the cause of their feelings when the true cause was salient; however, they were unable to support unequivocally the "fear-reduction" model.

Thus, the theoretical controversy lingers, in part because no one study has yet created a situation in which the two processes could be disentangled.

The present study was designed to remedy this ambiguity, orthogonally manipulating both the fear of the subjects and their expected arousal, and allowing an examination of the independent effects of misattribution and fear-reduction on attraction. Male subjects were ostensibly exposed to an electromagnetic field. The field was described in such a manner that made it appear either threatening or completely harmless, and subjects were told to expect either some arousal or none at all. Subjects' liking for a female confederate who was present during exposure to the field was assessed.

Under these conditions, the fear-reduction model would be supported if subjects reported greater liking for the confederate in the high-fear situations than in the low-fear conditions. After high-fear instructions, the quieting presence of the calm confederate should be maximally reinforcing, enhancing her attractiveness. Separately, the misattribution model would expect increased liking for the confederate under conditions of high arousal, regardless of the subjects' fear condition. High arousal subjects were explicitly informed that changes in their perceived arousal would be due to the field; if, despite the presence of the field, they felt more attracted to the confederate than low arousal subjects, the misattribution model would be supported. Thus, this study provided a means to evaluate the separate contributions of each model to attraction under aversive conditions. It was expected that both might significantly influence attraction.

Subjects. Thirty-six males participated, receiving extra credit in psychology courses.

Procedure. Subjects were recruited for a study of "the effects of electromagnetic fields on complex cognitive performance." The instructions each received upon his arrival at the laboratory manipulated the apparent threat of the situation and the arousal he could expect. Low fear subjects were informed

that there was "absolutely nothing to worry about," that similar fields surrounded common electrical appliances, and that an assistant who would be recording their heart rate and blood pressure during their exposure to the field would be collecting "interesting measurements", nothing more. By contrast, high fear subjects were warned that their field would be "relatively intense", that it would be an unusual experience, and that the assistant would be present as a precautionary measure.

Moreover, high arousal subjects were instructed that the field might affect their bodily activity and that they might notice an increase in heart rate and body temperature (cf. Storms and Nisbett, 1970). "In general," they were told, "the field may arouse you." Low arousal Ss were not told to expect such effects; instead, they were informed that they probably would not feel anything different from what they were already feeling.

After signing an informed consent slip which reinforced these instructions and completing a check on the fear manipulation, a subject was introduced to the female confederate and left with her in the field room. Each subject was seated in a comfortable chair surrounded by large foil plates (to which several pieces of humming electrical equipment were attached) with the confederate beside him. Pretesting had shown the confederate to be considered "quite attractive" by independent judges, and although blind to the subject's condition, she was unfailingly reassuring. She recorded his heart rate and blood pressure on three occasions during a fifteen minute period of "field exposure", maintaining a close interpersonal distance as he worked on several reasoning tasks. In fact, no field was generated, and subjects were not exposed to any radiation. Following this period, the subject completed a questionnaire which assessed his liking for the confederate; thereafter, he was thanked, and debriefed.

Results and discussion. Checks on the manipulations showed them to be effective. A multivariate analysis of variance on semantic differential self-ratings indicated that high-fear subjects expressed significantly more apprehension than low-fear subjects, and univariate analyses showed them to be generally more tense, worried, anxious, concerned, nervous, and fearful than their low-fear counterparts before entering the field (p's<.05). Similarly, high arousal subjects felt that both their alertness and arousal, and their heart rates had changed more as a result of the field than did low arousal subjects (p's<.05). Moreover, the systolic and diastolic blood pressures of the high arousal subjects actually did change more during the field than did those of low arousal subjects (p's<.05). Thus, the cognitive expectation of arousal apparently resulted in actual physiological reaction, and, indeed, both manipulations had their desired impact..

Embedded among these other items was a question that simply asked on a 19-point scale, "how much did you like the assistant who monitored your physical changes?" A clear effect of arousal emerged on this item, $F(1,32) = 4.9$, $p < .04$. High arousal subjects, those who were told to expect stimulation from the field, liked the woman more ($M = 15.7$) than did low arousal subjects, who did not expect such sensations ($M = 13.3$). Fear had no effect on liking for the confederate.

These data do not support the fear-reduction model. Despite their greater anxiousness, high fear subjects expressed no greater liking for the soothing confederate than did low fear subjects. It is conceivable that the presence of the woman was not calming; perhaps her distracting blood pressure measurements minimized her attractiveness. She was gentle and soft-spoken, though, and at the very least, we can suggest that the fear-reduction model does not have the generality which was originally hoped for it (cf. Kenrick et al., 1979).

The subjects' arousal condition did influence their liking for the

confederate, despite the saliency of the field as the source of their arousal. Though there was no actual field, high arousal subjects obviously believed that they were being affected by one. Yet the real physiological arousal caused by the manipulation seems to have been partially experienced as liking for the girl, results which support the misattribution model. Thus, even in the face of an unambiguous cause, arousal enhances attraction, while fear and trembling seem a much less certain way to a person's heart.

Conclusions. When the fearfulness and arousal of male subjects were straightforwardly manipulated, only the arousal of the men affected their attraction to a confederate. The fear reduction model does not have the generality that was once assumed for it, while an alternative model based on our misreading of our own emotional states seems more applicable here.

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