The Effects of Sensation Seeking and Misattribution of Arousal on Dyadic Interactions Between Similar or Dissimilar Strangers

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Byrne's bogus stranger paradigm has been employed in previous research by Williams, Ryckman, Gold, and Lenney (1982) to test the general prediction that individual differences in sensation seeking moderate the relationship between attitudinal similarity and attraction. Unfortunately, however, this procedure did not provide high and low sensation seekers with an actual opportunity to interact with individuals who had attitudes similar or dissimilar to their own. The present experiment was designed to remedy this situation by replacing the bogus stranger procedure with a modified version of Bales' Interaction Process Analysis so that an examination of actual dyadic interaction between high and low sensation seekers with similar or dissimilar attitudes could be effected. The results demonstrated unequivocally that high and low sensation seekers differ in their interactional styles when discussing an issue with attitudinally similar or dissimilar strangers. Specifically, low sensation seekers were reluctant to interact with dissimilar others, whereas high sensation seekers were much more talkative and assertive under the same conditions. The data further indicated that a misattribution of arousal manipulation had an impact on the conversational styles of low and high sensation seekers. The misattribution explanation removed the aversive arousal elicited by dissimilarity for low sensation seekers, making them more talkative and assertive when interacting with dissimilar others. While the misattribution explanation had a lesser impact on the behavior of high sensation seekers, it did remove the aversive arousal elicited by similarity, thereby making them more talkative under misattribution than under no misattribution conditions.

Many studies indicate that there is a strong, positive relationship between attitude similarity and attraction (see Byrne, 1969, 1971; Clore, 1976). The general finding is that we like individuals who are attitudinally similar to us and dislike those who are dissimilar to us. Clore and Byrne (1974) have developed a reinforcement-affect model to explain this relationship. They maintain that attitudinal similarity is rewarding, whereas dissimilarity is punishing, and that we tend to like people who reward us and dislike those who punish us. While there is considerable support for this proposition (see Byrne, 1969, 1971; Griffitt, 1974), there have been some notable exceptions where the relationship has not been found. Ajzen (1974) demonstrated, for

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example, that subjects' attraction toward a person increased with the desirability of the personality traits used to describe him or her, irrespective of the degree to which these traits were similar to ones possessed by the subjects. Russ, Gold, and Stone (1979) found also that people were more attracted to a dissimilar than to a similar stranger when the dissimilar other was perceived as having information that could be used to solve a perplexing problem, a result consistent with Mehrabian's (1975) description of the dissimilar stranger as representing a potentially more fertile source of novel information. The similarity-attraction relationship has been attenuated also when attitudinal similarity is associated with negative characteristics of a target (e.g., Cooper and Jones, 1969; Fromkin, 1972; Jellison and Zeissett, 1969; Lerner and Agar, 1972; Novak and Lerner, 1968; Taylor and Mettee, 1971).

While the aforementioned investigations have shown generally that various situational variables can moderate the attitude similarity-attraction relationship, studies focusing directly on the impact of individual difference variables have typically yielded unimpressive results (see Byrne, 1971). Two recent studies, however, utilized aspects of Zuckerman's (1974, 1978) theory of sensation seeking and did demonstrate that the personality dimension of sensation seeking moderates the typical relationship between attitude similarity and attraction (Thornton, Ryckman, and Gold, 1981; Williams, Ryckman, Gold, and Lenney, 1982). Specifically, Zuckerman's theory posits that high sensation seekers prefer relatively high levels of arousal which result from participating in thrill-or-adventure-oriented activities. These individuals find the arousal engendered by novel or unpredictable experiences enjoyable; low sensation seekers, in contrast, experience such arousal as aversive and seek to minimize or avoid it. Therefore, given the evidence that exposure to attitudinally dissimilar people is more arousing than exposure to attitudinally similar people (Clore and Gormly, 1969; Gormly, 1971), Williams et al. (1982) maintained that low sensation seekers would find the idea of interacting with a dissimilar stranger especially aversive, because the arousal created by such dissimilarity would be unpleasant to them. High sensation seekers, on the other hand, would be more likely to experience the arousal elicited by dissimilarity in a positive way. They would, therefore, be more attracted to a dissimilar stranger than would low sensation seekers. Williams et al. expected further that low sensation seekers would be attracted more to a similar stranger than would high sensation seekers, since low sensation seekers would find such an interaction safe and unarousing, whereas high sensation seekers would anticipate that the interaction would be boring in that it might provide little challenge or unpredictability. Berlyne (1960) has pointed out that boredom is an aversive drive state generated by information that is highly predictable. It is characterized by restlessness and irritability and a searching for alternative paths to restore equilibrium. Thus, Williams et al. predicted that the expectation of a boring interaction would be aversively arousing for high sensation seekers. Their data strongly supported this theorizing.

Additionally, Williams et al. found that low sensation seekers showed an increased attraction to a dissimilar stranger after they were given an opportunity to misattribute their arousal to another source (i.e., to their nervousness at participating in an experiment). Since low sensation seekers dislike dissimilar others because of the aversive arousal elicited by dissimilarity, the removal of such arousal via the misattribution explanation allowed them to express more positive attitudes toward the dissimilar strangers. In regard to the attitudes of high sensation seekers toward the similar others, Williams et al. found that they showed an increased attraction toward similar strangers after they misattributed their arousal to another source. Since high sensation seekers dislike similar others because of the aversive arousal elicited by similarity, its removal through the use of a misattribution manipulation apparently allowed them to express more positive attitudes toward similar strangers.

While the Williams et al. study shows clearly that individual differences in sensation seeking moderate the typical attitude similarity-attraction relationship, it has a major limitation that is shared by virtually all other research investigations in this area. All of these studies employ Byrne's (1971) bogus stranger paradigm, a procedure which does not provide subjects with an actual opportunity to interact with individuals who have similar or dissimilar attitudes to their own. Instead the experiments are terminated once the attitude similarity manipulation has occurred, and the subjects' attitudes of attraction toward the fictitious strangers have been assessed. Yet the distinction between attitudes and behavior is a critical one. Most socially significant questions involve overt behavior rather than attitudes based upon self-reports, and the assumption that attitudes routinely translate into comparable behaviors has not been demonstrated (Schuman and Johnson, 1976; Wicker, 1969).

The present experiment was conducted to remedy this situation by eliminating the bogus stranger procedure and by utilizing instead an analysis of actual dyadic interactions between attitudinally similar or dissimilar strangers, through the use of a modified version of Bales' (1950, 1970) Interaction Process Analysis. This procedural modification is important because it provides an opportunity to analyze differences in both the quantity and quality of the interactions of high and low sensation seekers who have been paired with people who actually agree or disagree with them on an important topic. The Bales method also allows for the investigation of the misattribution of arousal on the quantity and quality of the interactions.

The theoretical rationale for making predictions concerning the nature of the interactions is based once again upon Zuckerman's theory of sensation seekers, as utilized and extended in the Williams et al. study. In addition, the predictions rest upon findings in the small-groups literature which indicate that attraction is related to both quantity and quality of interaction. Specifically, several investigations have shown that people tend to communicate more with those they like than with those they dislike; they also communicate

with people they like in a positive way and with people they dislike in a negative fashion (French, 1941; Lott and Lott, 1961; Moran, 1966). Thus, since Williams et al. found that low sensation seekers were more attracted to similar others than high sensation seekers immediately prior to an anticipated discussion, we predict that, when given an actual opportunity to interact with such people, low sensation seekers will interact more with them than high sensation seekers. Since attitude similarity is highly pleasant for low sensation seekers, they should also interact more positively (e.g., express more agreements) and assertively (e.g., attempt to give more opinions, suggestions, and information) with similar others than will high sensation seekers. In contrast, low sensation seekers should make fewer positive remarks and talk less to dissimilar others than high sensation seekers since Williams et al. have shown that attitude dissimilarity is particularly unpleasant for them and results in lowered attraction by them for people who disagree with them. Under these conditions, low sensation seekers should also be more reluctant to make assertive comments for fear of eliciting unpleasant disagreements from the dissimilar strangers.

Finally, Brodt and Zimbardo (1981) found that women who were socially anxious (i.e., aversively aroused during social interactions) became more talkative and assertive in dyadic interactions when they were able to misattribute their anxiety to a negative source (i.e., a high intensity noise). Accordingly, we expect subjects to talk more under misattribution than under no misattribution conditions. Furthermore, if, as suggested by Williams et al., low sensation seekers believe that their feelings of negative arousal are caused by a source other than the dissimilar strangers, they should talk more and be more positive and assertive when interacting with the dissimilar strangers, in comparison to low sensation seekers who do not receive the misattribution manipulation. This prediction is based on the assumption that the aversive arousal associated with dissimilarity is responsible for the low sensation seekers' dislike of dissimilar others. Thus, once the arousal is attributed to another source, low sensation seekers should feel relieved and pleasant and should, therefore, proceed to interact more (and more positively and assertively) with the dissimilar others. In contrast, since high sensation seekers find similar others aversive, they should interact more (and more positively and assertive) with them once their aversive feelings have been misattributed to another source, in comparison to high sensation seekers who do not receive the misattribution manipulation.

Method

Experimental Design

The design was a $2 \times 2 \times 2$ between-subjects factorial. The independent variables consisted of a misattribution explanation (misattribution-no misattribution), attitude similarity of the dyad (similar-dissimilar), and subjects'

sensation-seeking tendencies (high-low). The dependent variables consisted of measures of attraction and of the quantity and quality of the interactions. The unit of analysis was the dyad.

Subjects

One hundred and sixty undergraduate women participated in this experiment in order to fulfill a research requirement in the introductory psychology course.

Instrumentation

Sensation seeking scale. This questionnaire was entitled, "Interest and Preference Survey" and was adapted from Zuckerman, Kolin, Price, and Zoob (1964). It contains 40 forced-choice items which assess attitudes toward a variety of activities which involve arousal. Scores could range from 0 to 40, with higher scores indicating high sensation seeking tendencies. A median split of the distribution of scores on this measure was used to classify participants as high or low sensation seekers (Mdn = 29).

Survey of attitudes. This measure assessed subjects' attitudes on a number of issues, including abortion, drug laws, war, and sports (Russ, Gold, and Stone, 1979). Each issue was followed by six statements of belief regarding the topic. For example, the topic of abortion involved response alternatives ranging from (1) "I strongly believe that abortion is justified," to (6) "I strongly believe that abortion is never justified."

Interpersonal judgment scale. This scale contains eight items which evaluate the discussion partner (see Byrne, 1971). Each item is followed by seven alternative statements of evaluation, and subjects were asked to choose one of the alternatives that best represented their evaluation of their discussion partner. For example, one item is followed by statements of belief ranging from (1) "I dislike this person very much," to (7) "I like this person very much." A second item refers to the subjects' desire to work with their partner again. Scores for subjects on these two items were combined, and the average score was used as a measure of attraction. Subjects' scores could range from 1 to 7. Also included in this scale is an item referring to the subjects' perception of similarity between themselves and their partners. This item serves as a manipulation check for the similarity-dissimilarity manipulation.

Dyadic Interaction Assessment

Subjects' discussions of their views on abortion were taperecorded. The quantity of interactions comprised the total amount of talking. The total number of comments made in each dyad was extracted from the tapes. A comment was defined as a single idea unit.

A modified version of Bales' (1950, 1970) Interaction Process Analysis (IPA) was employed to code the quality of the interactions between subjects.

These data were coded into 4 general areas, namely, positive socio-emotional responses, negative socio-emotional responses, attempted answers in the task area, and questions in the task area. Subjects' statements were coded into these four areas by two independent raters. Inter-rater reliability across the four areas was .86 (p < .001). Positive responses included tension release (laughs, jokes) and agreements. Negative responses included showing tension (e.g., withdrawal from discussion), antagonism, and disagreement. Attempted answers in the task area involved making assertive statements, including giving opinions, suggestions, and information. Questions in the task area included asking for opinions, suggestions, and information.

Procedure

In a group setting, subjects answered the sensation seeking questionnaire and the attitude survey and were then told they would be contacted for a second session which would involve discussion groups.

Participants were classified as high or low in sensation seeking via a median split of the sample distribution and then were paired with a person of the same sensation seeking status who either agreed or disagreed with them on the issue of abortion. The 6-point scale measuring their attitudes had the following alternatives: (1) I strongly believe that abortion is justified; (2) I believe that abortion is justified; (3) I slightly believe that abortion is justified; (4) I slightly believe that abortion is never justified; and (6) I strongly believe that abortion is never justified. Agreement on the issue was defined as an exact match between subjects on the scale or at most, a one-point scale discrepancy, but a discrepancy on the *same* side of the issue (e.g., 2 and 3, and 4 and 5, but never 3 and 4). Disagreement was defined as score pairs on opposite sides of the issue (e.g., 1 and 4, 1 and 5, 2 and 6, or 3 and 4).

In a second session, the assembled dyads were asked to discuss the abortion issue for ten minutes and were told that their discussions would be recorded so that they could be used in another study involving the expression of student attitudes on important issues. The female experimenter told the participants that they were paired because they agreed (or disagreed) about the abortion topic.

Subjects in the misattribution of arousal condition were then given statements referring to the aversive arousal effects that being in a psychology experiment might have on students (see Williams et al., 1982, for the complete instructions). Subjects in the control condition (no misattribution) received no message. The experimenter then turned on the taperecorder and left the room while the participants discussed the issue. At the end of the ten minute period, she returned, turned off the recorder and asked subjects to complete the Interpersonal Judgment Scale. Finally, subjects were thoroughly debriefed and given ample opportunity to ask questions about the experiment which were subsequently answered.

Results

Perceived Similarity Manipulation Check

An analysis of variance performed on the Interpersonal Judgment Scale item which measures perceived similarity between the subjects and their discussion partners indicated that subjects in the similar condition (M = 5.66) did, in fact, perceive significantly greater similarity than did subjects in the dissimilar condition (M = 4.80), [F(1,152) = 18.40, p < .001]. There were no other significant main effects or interactions.

Total Amount of Interaction Analysis

A 2 (Sensation Seeking) \times 2 (Similarity) \times 2 (Misattribution) analysis of variance was performed on the total amount of interaction between subjects in the dyads. The analysis revealed a significant main effect for the misattribution manipulation [F(1,72) = 5.10, p < .05], indicating that subjects talked more in the misattribution condition (M = 65.12) than in the no misattribution condition (M = 52.58), as predicted. Furthermore, this main effect was moderated by a significant interaction between sensation seeking and misattribution [F(1,72) = 4.47, p < .05], indicating that low sensation seekers talked more under misattribution (M = 67.05) than under no misattribution conditions (M = 42.75) (Neuman-Keuls, p < .05). No difference for high sensation seekers in the misattribution (M = 63.20) and no misattribution (M = 62.40) conditions was evident.

Finally, a marginal three-way interaction between sensation seeking, similarity, and misattribution was found [F(1,72) = 3.08, p < .10]. See Table 1 for

Table 1

Means and Standard Deviations for Total Amount of Interaction under Various Experimental Conditions

Attribution Condition	Attitudes of the Stranger				
	Similar to Subject		Dissimilar to Subject		
	High Sensation Seekers	Low Sensation Seekers	High Sensation Seekers	Low Sensation Seekers	
No Misattribution					
M	58.90	48.40	65.90	37.10	
SD	25.27	20.05	28.01	15.04	
N	10	10	10	10	
Misattribution					
M	65.70	59.20	60.70	74.90	
SD	23.38	28.40	31.54	23.24	
N	10	10	10	10	

a listing of the means and standard deviations for this interaction. In accordance with prediction, high sensation seekers (M=65.90) talked more than low sensation seekers (M=37.10) with attitudinally dissimilar strangers [t (18) = 8.60, p < .001] under no misattribution conditions. However, contrary to expectation, low sensation seekers (M=48.40) talked less than high sensation seekers (M=58.90) to similar others [t (18) = 3.08, p < .01]. Nevertheless, low sensation seekers did talk more to similar others (M=48.40) than to dissimilar others (M=37.10) under no misattribution conditions (Neuman-Keuls, p < .05).

Tests between means revealed further that low sensation seekers talked much more with dissimilar others under misattribution (M = 74.80) than no-misattribution (M = 37.10) conditions (Neuman-Keuls, p < .001). Also, as anticipated, high sensation seekers talked more to similar others under misattribution (M = 65.70) than no misattribution (M = 58.90) conditions [t (18) = 1.88, p < .05].

Interaction Process Analysis

Separate 2 (Sensation Seeking) \times 2 (Similarity) \times 2 (Misattribution) analyses of variance were conducted on each of the four dependent interaction process dimensions.

Positive social-emotional responses. Subjects made more positive remarks in the misattribution conditions (M = 22.55) than in the no misattribution condition (M = 16.32) [F(1,72) = 4.67, p < .05]. There was a tendency also for subjects to make more positive comments when interacting with similar (M = 21.78) than with dissimilar (M = 17.10) others [F(1,72) = 2.64, p < .10].

The interaction between sensation seeking and similarity was significant [F(1,72) = 4.16, p < .05]. Tests between means indicated that, contrary to prediction, high sensation seekers (M = 24.85) made more positive remarks than low sensation seekers (M = 18.70) to similar others [t(18) = 6.21, p < .05], while low sensation seekers (M = 19.90) did not make fewer positive remarks than high sensation seekers (M = 14.30) to dissimilar others [t(18) = 1.02, p > .005]. See Table 2. None of the other main or interaction effects was significant.

Negative socio-emotional responses. Subjects made more negative remarks to dissimilar (M = 3.72) than to similar (M = .30) others [F (1,72) = 22.39, p < .001]. Also, high sensation seekers (M = 2.82) made more negative remarks than low sensation seekers (M = 1.20) [F (1,72) = 5.04, p < .05].

These main effects are conditioned by a sensation seeking by similarity interaction [F(1,72) = 2.86, p < .10]. Analysis by Neuman-Keuls revealed that high sensation seekers made more negative remarks to dissimilar (M = 5.15) than to similar (M = .50) others [p < .05]. Low sensation seekers did not show a similar effect. Instead, low sensation seekers (M = 2.30) made

Table 2

Means and Standard Deviations for Number of Positive Responses by High and Low Sensation Seekers to Similar and Dissimilar Strangers

	Sensation Seeking Tendency		
Stranger's Attitude	High Sensation Seekers	Low Sensation Seekers	
Similar		1	
М	24.85	18.70	
SD	15.92	11.16	
N	20	20	
Dissimilar			
M	14.30	19.90	
SD	8.68	15.54	
N	20	20	

fewer negative remarks to dissimilar others than high sensation seekers (M = 5.15)[p < .05]. None of the remaining main or interaction effects was significant.

Assertive responses. The interaction between sensation seeking and misattribution was significant [F(1,72) = 5.57, p < .05]. Inspection of this interaction revealed that low sensation seekers became more assertive under misattribution (M = 36.40) conditions than under no misattribution (M = 24.05)conditions [t (18) = 12.10, p < .001]. This effect was conditioned by a significant three-way interaction [F(1,72) = 5.48, p < .05] which showed, as predicted, that low sensation seekers became more assertive when talking to dissimilar others under misattribution conditions (M = 40.90) in comparison to their behavior under no misattribution conditions (M = 19.30)[t(18)= 13.25, p < .001]. Contrary to prediction, however, low sensation seekers (M = 28.50) were not more assertive than high sensation seekers (M = 31.70)when talking to similar others under no misattribution conditions [t(18) < 1,n.s.]. However, in line with prediction, high sensation seekers (M = 41.20) were more assertive than low sensation seekers (M = 19.30) when talking to dissimilar others in the no misattribution condition [t(18) = 8.66, p < .001]. See Table 3. None of the main effects or the remaining interactions was significant.

Questioning responses. Subjects tended to ask more questions in the misattribution (M=5.72) than in the no misattribution (M=3.98) condition [$F(1,72)=3.44,\,p<.10$]. The interaction between sensation-seeking and similarity was significant [$F(1,72)=4.95,\,p<.05$], indicating that high sensation seekers ask more questions when interacting with dissimilar (M=7.15) than with similar (M=3.90) others (p<.05) while low sensation seekers did not differ in the number of questions asked when interacting with similar (M=4.65) or dissimilar (M=3.70) others. None of the other main or interaction effects was significant.

Table 3

Means and Standard Deviations for Number of Assertive Responses under Various Experimental Conditions

Attribution Condition	Attitudes of the Stranger				
	Similar to Subject		Dissimilar to Subject		
	High Sensation Seekers	Low Sensation Seekers	High Sensation Seekers	Low Sensation Seekers	
No Misattribution					
М	31.70	28.80	41.20	19.30	
SD	14.76	11.44	20.68	12.21	
N	10	10	10	10	
Misattibution					
М	34.40	31.90	32.20	40.90	
SD	14.76	14.16	18.77	9.55	
N	10	10	10	10	

Ancillary Analysis of Attraction

An analysis of variance was conducted on attraction data collected following the discussion. It showed a significant main effect for attitude similarity [F(1,152)=6.62, p<.05], indicating that subjects were more attracted to similar (M = 6.18) rather than dissimilar (M = 5.91) partners. This main effect was conditioned by a significant sensation seeking by similarity interaction [F(1,152)=6.70, p<.05], which indicated that low sensation seekers were less attracted to dissimilar (M = 5.74) than similar (M = 6.25) partners (p<.05) and that they (low sensation seekers) were less attracted than high sensation seekers (M = 6.09) to dissimilar partners (p<.05). None of the other main or interaction effects was significant.

Discussion

The results of this experiment demonstrate unequivocally that high and low sensation seekers differ in their interactional styles when discussing an issue with attitudinally similar or dissimilar strangers. Specifically, low sensation seekers are less willing to interact with dissimilar strangers than with similar strangers, but high sensation seekers, in contrast, do not show this reluctance. Instead, relative to low sensation seekers, high sensation seekers interact more with dissimilar strangers and are very willing to express directly their opinions on an issue and on disagreements with their partners. Their disagreements should not be seen, however, as an attempt to derogate their partners and to prove their own superior knowledge on the abortion issue for

two reasons. First, they did not show *only* highly assertive behaviors during the discussions. Instead they exhibited also a willingness to learn from their partners by asking questions and soliciting information from them on the issue, suggesting a cognitive, problem-solving orientation and not one of dogmatically attempting to prove their superiority. Second, high sensation seekers expressed a high degree of liking for their partners following the discussion, a stance generally incompatible with being highly competitive and hostile toward others (Neely, 1975).

It is apparent also that the misattribution manipulation relieved subjects' anxiety about participating in the group discussions. Subjects became more talkative, positive, and assertive generally after receiving the misattribution instructions. More importantly, the misattribution manipulation had an impact on the conversational styles of high and low sensation seekers. It removed the aversive arousal elicited by dissimilarity for low sensation seekers and, as a result, they became more talkative and assertive when interacting with dissimilar others, relative to their behavior under no misattribution conditions. They did not, however, make more positive remarks under misattribution conditions nor did they show increased attraction toward the dissimilar strangers following the discussions. The misattribution manipulation had a lesser impact on the behavior of high sensation seekers. While it did cause them to talk more to similar others (in comparison to their behavior under no misattribution conditions), it did not make them more assertive or positive, as predicted.

There also were several other unanticipated outcomes for high sensation seekers in relation to their discussions with similar others under no misattribution conditions. For example, they were more talkative and made more positive remarks to similar others than low sensation seekers. We had assumed that high sensation seekers would anticipate that the discussions with similar others would be boring and that, as a consequence, they would talk less and make fewer positive remarks to similar others than low sensation seekers. This assumption may have been partially in error. While high sensation seekers may have initially reacted negatively to the information that they would be discussing a topic with another who held a similar view on the topic of abortion, they may have quickly adopted strategies to enliven the discussions. As Zuckerman points out, high sensation seekers are rarely the victims of a lack of opportunity or restriction of environment. Instead they will improvise or vary their behavior to avoid boredom (Zuckerman, 1979, pp. 10-11). One primary way of making a boring situation more bearable is through the use of humor. In the present experiment, the positive remarks category included both agreements with the other person and tension release, as evidenced by laughing and joking. A reanalysis of the taperecorded data focusing on these two dimensions of the general category showed that high sensation seekers did not agree more with similar others than low sensation seekers on the abortion issue, but they did engage in considerably more

laughing and joking than sensation seekers with similar discussion partners. This behavior may be seen as a means of enlivening the situation and of subtly creating more challenging and controversial discussions.

In conclusion, the present experiment provides validational evidence for the position that low and high sensation seekers differ in their conversational styles in discussions with similar and dissimilar others. It also shows that a misattribution of arousal manipulation serves to moderate these styles, particularly for low sensation seekers.

References

Ajzen, I. (1974). Effects of information on interpersonal attraction: Similarity versus affective value. Journal of Personality and Social Psychology, 29, 374-380.

Bales, R. (1950). Interaction process analysis. Cambridge, Massachusetts: Addison-Wesley.

Bales, R. (1970). Personality and interpersonal behavior. New York: Holt, Rinehart and Winston.

Berlyne, D.E. (1960). Conflict, arousal, and curiosity. New York: McGraw-Hill.

Brodt, S., and Zimbardo, P. (1981). Modifying shyness-related social behavior through symptom misattribution. Journal of Personality and Social Psychology, 41, 437-449.

Byrne, D. (1969). Attitudes and attraction. In L. Berkowitz (Ed.), Advances in experimental social psychology (Vol. 4, pp. 36-89). New York: Academic Press.

Byrne, D. (1971). The attraction paradigm. New York: Academic Press.

Clore, G., and Byrne, D. (1974). A reinforcement-affect model of attraction. In T. Huston (Ed.), Foundations of interpersonal attraction (pp. 143-170). New York: Academic Press.

Clore, G., and Gormly, J. (1969). Attraction and physiological arousal in response to agreements and disagreements. Paper presented at the meeting of the Psychonomic Society, St. Louis.

Cooper, J., and Jones, E. (1969). Opinion divergence as a strategy to avoid being miscast. *Journal of Personality and Social Psychology*, 13, 23-30.

French, J.R.P., Jr. (1941). The disruption and cohesion of groups. Journal of Abnormal and Social Psychology, 36, 361-377.

Fromkin, H. (1972). Feelings of personal undistinctiveness: An unpleasant affective state. Journal of Experimental Research in Personality, 6, 178-185.

Gormly, J. (1971). Sociobehavioral and physiological responses to interpersonal disagreement. Journal of Experimental Research in Personality, 5, 216-222.

Griffitt, W. (1974). Attitude similarity and attraction. In T. Huston (Ed.), Foundations of interpersonal attraction (pp. 285-308). New York: Academic Press.

Jellison, J., and Zeisset, P. (1969). Attraction as a function of the commonality and desirability of a trait shared with another. Journal of Personality and Social Psychology, 11, 115-120.

Lerner, M., and Agar, E. (1972). The consequence of perceived similarity: Attraction and rejection, approach and avoidance. *Journal of Experimental Research in Personality*, 6, 69-75.

Lott, A.J., and Lott, B.E. (1961). Group cohesiveness, communication level, and conformity. Journal of Abnormal and Social Psychology, 62, 408-412.

Mehrabian, A. (1975). Affiliation as a function of attitude discrepancy with another and arousal-seeking tendency. *Journal of Personality*, 43, 582-590.

Moran, G. (1966). Dyadic attraction and orientational consensus. Journal of Personality and Social Psychology, 4, 94-99.

Neely, W. (1975). Eye contact and interpersonal attraction in cooperative and competitive situations. Unpublished doctoral dissertation, University of Maine at Orono.

Novak, D., and Lerner, M. (1968). Rejection as a consequence of perceived similarity. Journal of Personality and Social Psychology, 9, 147-152.

Russ, R., Gold, J., and Stone, W. (1979). Attraction to a dissimilar stranger as a function of level of effectance arousal. Journal of Experimental Social Psychology, 15, 481-491.

Schuman, H., and Johnson, M.P. (1976). Attitudes and behavior. Annual Review of Sociology, 2, 161-207.

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- Taylor, S., and Mettee, D. (1971). When similarity breeds contempt. Journal of Personality and Social Psychology, 20, 75-81.
- Thornton, B., Ryckman, R.M., and Gold, J.A. (1981). Sensation seeking as a determinant of attraction toward similar and dissimilar others. The Journal of Mind and Behavior, 2, 85-91.
- Wicker, A.W. (1969). Attitudes versus actions: The relationship of verbal and overt behavior responses to attitude objects. *Journal of Social Issues*, 25, 41-78.
- Williams, S., Ryckman, R.M., Gold, J.A., and Lenney, E. (1982). The effects of sensation seeking and misattribution of arousal on attraction toward similar or dissimilar strangers. *Journal of Research in Personality*, 16, 217-226.
- Zuckerman, M. (1974). The sensation seeking motive. Progress in Experimental Personality Research, 7, 80-148.
- Zuckerman, M. (1978). Sensation seeking. In H. London and J. Exner (Eds.), Dimensions of personality (pp. 487-559). New York: John Wiley and Sons.
- Zuckerman, M. (1979). Sensation seeking: Beyond the optimal level of arousal. Hillsdale, New Jersey: Erlbaum.
- Zuckerman, M., Kolin, K., Price, L., and Zoob, L. (1964). Development of a sensation seeking scale. Journal of Consulting Psychology, 28, 477-482.