

DOCUMENT RESUME

ED 051 516

CG 006 447

AUTHOR Davis, William L.; Taylor, Alan L.
TITLE Internal-External Control and Others' Susceptibility to Influence as Determinants of Interpersonal Attraction.
INSTITUTION Iowa State Univ. of Science and Technology, Ames. Dept. of Psychology.
PUB DATE May 71
NOTE 15p.; Paper presented at the Midwestern Psychological Association Convention in Detroit, Michigan, May 6-8, 1971
EDRS PRICE MF-\$0.65 HC-\$3.29
DESCRIPTORS *Attitudes, *Behavior, *Change Agents, Operant Conditioning, Opinions, Positive Reinforcement, *Reinforcement, Social Reinforcement, *Verbal Communication

ABSTRACT

The relationship between internal-external control of reinforcement and attraction to others who vary in susceptibility to persuasion was investigated. Internals are defined as persons who believe that reinforcement is contingent on their behavior, while externals are those who believe that reinforcement is independent of their actions and is controlled by chance or powerful others. Attraction was assessed after subjects were differentially successful in changing the opinions of two confederates. Results on a behavioral measure support the hypothesis that internals are more attracted to others they are able to influence, whereas externals do not differentiate their attraction on the basis of others' persuasibility. However, on an attitudinal measure, there was a trend for internals to be more attracted to the confederate with whom they were less successful. A possible resolution of these results is discussed. (Author/TL)

To be presented at
MPA, Detroit, 1971.

Internal-External Control and Others' Susceptibility to
Influence as Determinants of Interpersonal Attraction¹

William L. Davis and Alan L. Taylor

Iowa State University

U.S. DEPARTMENT OF HEALTH, EDUCATION
& WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED
EXACTLY AS RECEIVED FROM THE PERSON OR
ORGANIZATION ORIGINATING IT. POINTS OF
VIEW OR OPINIONS STATED DO NOT NECESSARILY
REPRESENT OFFICIAL OFFICE OF EDUCATION
POSITION OR POLICY

While considerable research has focused on the generality and correlates of individual differences in susceptibility to persuasive communications (Hovland & Janis, 1959), relatively few studies have investigated the perception and evaluation of individuals who differ on this dimension. Individuals who are perceived to be highly persuasible may be evaluated differently than less persuasible individuals for several reasons. For example, a number of studies have shown that one factor which influences a person's attraction to others is the extent to which they agree with his attitudes (Newcomb, 1961; Byrne, 1969). In general, individuals with similar attitudes are more attracted to each other than are those with opposing attitudes. Extending these findings, it is possible that individuals who can be persuaded to agree with one's own attitudes would be perceived as more attractive due to an increase in the proportion of similar attitudes. On the other hand, a highly persuasible individual might be perceived as an ingratiation and therefore evaluated less favorably, although the relationship between attraction and opinion conformity as an ingratiation tactic appears to be quite complex (Jones, 1964). A third possibility, and one that was investigated in the present study, is that the relationship between attraction and others' persuasibility is determined, in part, by certain personality characteristics of the perceiver. The purpose of this study was to examine the relationship between the personality construct of internal-external control of reinforcement and attraction to others who differ in their susceptibility to social influence.

The construct of internal-external control of reinforcement (I-E) was developed from social learning theory (Rotter, 1954), and refers to differences

ED051516

CG 006 447

in the expectancy that reinforcement is causally related to one's own behavior. At one end of the I-E dimension are individuals who believe that reinforcement is contingent upon their behavior (internals), while those at the other end believe that reinforcement is independent of their actions and is controlled by luck, chance, or powerful others. Several clusters of I-E studies have focused on the general hypothesis that internals are more likely than externals to engage in behaviors designed to control their outcomes. Supportive of this notion are studies showing an internal orientation to be positively associated with civil rights activities among Negro college students (Gore & Rotter, 1963; Strickland, 1965; Escoffery, 1967), protest behaviors concerning the Vietnam war (Carlson, James, & Correre, 1966), membership and participation in labor unions in Sweden (Seaman, 1966), and willingness to become involved in activities directed at alleviating alleged personal problems (Phares, Ritchie, & Davis, 1968). More closely related to the present research, Davis and Phares (1967) reported that internals tended to ask more questions about a person whom they expected to persuade than externals. Similarly, Lofcourt and Wise (1969) found that internal interviewers made more frequent eye movements and reported more observations of their interviewees than external interviewers. In another study, internals were less inclined to reciprocate interpersonal evaluations in an apparent attempt to control the nature of the evaluations they received from others (Jones & Shruger, 1968). Taken as a whole, these studies indicate that individuals who believe they are responsible for the reinforcements they receive are more likely to make active attempts to control these events.

If it is true that internals are more concerned about controlling reinforcement, as the aforementioned research suggests, it seems reasonable that they would be attracted to others who enhance their potentiality for control. Thus, a highly persuasible individual would provide the internal an opportunity to exercise a greater degree of control over his outcomes and would therefore be perceived as more attractive than one who resists his influence attempts.

Externals, on the other hand, should be less affected by the degree to which their persuasion attempts are successful since they tend to believe that outcomes are independent of their behavior. In other words, persuasibility, for externals, should be an irrelevant dimension in evaluating another individual since any changes in his behavior are viewed as independent of the external's own actions. Thus the aim of this study was to test the hypothesis that internals are more attracted to persons whom they can persuade than to those who resist their influence attempts, whereas externals are less likely to differentiate their attraction toward others on the basis of persuasibility.

Method

Subjects

The 23-item I-E scale (Rotter, 1966) was administered to several large introductory psychology classes at Iowa State University and was scored in the internal direction. From this pool, 15 males who scored in the upper 25% (internals, range 17-23) and 15 males who scored in the lower 25% (external, range 2-10) of the I-E distribution served as Ss in the study.

Procedure

Ss reported individually to the laboratory and in the order in which they signed up for the experiment. E had no knowledge of their scores on the I-E scale at the time of the experiment. Upon arrival S was taken to the experimental room which was partitioned into three sections so that no person in any section was able to see into the other sections. He was told that two other students, who were actually confederates, would be participating in the study with him. The first confederate was present in the room prior to Ss arrival. A few minutes after S was seated, the third participant (confederate) arrived and the experimenter then stated that this was a communication experiment and the purpose was to see how well people can communicate when they are

not able to see each other. Ss were then asked to fill-out a 15-item fraternity opinion questionnaire. A typical item was: "Do you think poor or disadvantaged students are discriminated against by fraternities?" Ss responded by indicating "yes" or "no." After the questionnaires were completed and collected E left the room under the pretext of scoring them. Ss were instructed not to talk while E was absent and reports from confederates confirmed that no S ever attempted conversation. When E returned, Ss were told that one of them would be randomly selected to serve as the communicator and the other two would be the listeners. In order to imply chance selection of S as the communicator, Ss drew a slip of paper from a box designating their role. The drawing was rigged by labeling all slips "communicator." Upon designation of S as communicator, the two confederates were identified as "Subject A" and "Subject B." Instructions were given to the effect that the communicator would present arguments or reasons for the answers he gave to the items on the fraternity questionnaire. Subjects A and B were told to listen to each of the communicator's arguments and then indicate their agreement or disagreement with the item by writing "yes" or "no" on a slip of paper which would be passed to the communicator. At this point, S was taken to another room by the experimenter in order that he be given "further instructions about the details of the procedure." S was then told that the real purpose of the experiment was to see how well he could persuade the other Ss to change their opinions about fraternities. He was given an answer sheet, previously filled out by the experimenter, showing his responses and those of the confederates to eight of the 15 items of the fraternity questionnaire. These eight items, he was told, were the ones on which the two other Ss had the same opinions, and therefore would be the targets of his persuasion attempt. In addition, he was given a set of eight prepared arguments, corresponding to the eight items, to use in attempting to persuade the other Ss. He was told that the other Ss did not know the true purpose of the experiment, nor did they know that he would

be using prepared arguments. As soon as S understood the procedure he was taken back to the experimental room to present his arguments. Responses of confederates were predetermined so that Subject A was successfully persuaded six out of eight times, while Subject B was successfully persuaded on only two out of eight attempts.

Since attitudinal similarity has been shown to be an important determinant of interpersonal attraction (c.f., Byrne, 1969) an attempt was made to equate for the degree of similarity in attitudes towards fraternities between S and the two confederates. The answer sheet given the subject prior to his persuasion attempts showed that both confederates disagreed with his opinions on four of the items and agreed with him on the remaining four. On these latter four items, in which there was initial agreement, S was required to argue for a position counter to his real attitude. Thus, S argued for the opposite opinion expressed by the two confederates, even when they initially agreed with him. By using this procedure it was possible to insure that attitudinal similarity would be equated at the end of the persuasion attempt. Even though one confederate changed his attitudes more than the other, both of them agreed with four of the S's attitudes (50% similarity) at the conclusion of his arguments.

Attraction Measures

After the argument for the final item was presented, the confederates were asked to leave the room and wait outside. E made sure that S understood the differential responses of the confederates by asking him to score his answer sheet. S then rated the two confederates, identified as "Subject A" and "Subject B," on separate nine-item questionnaires. The ratings were done on a seven-point scale and concerned such attributes as intelligence, knowledge of current events, grades at Iowa State, and success in getting along with others. The attraction measure consisted of two items embedded in the

questionnaire on which the confederates were rated for liking and desirability as a work partner. These items are similar to those used as attraction measures in previous research (Byrne & Nelson, 1965; Byrne & Clore, 1966).

As a final part of the experiment, S was taken outside and asked to sit at a table. The table was approximately 18 feet in length and was located about 12 feet from the door of the experimental room. Confederates A and B were already seated at opposite ends of the table and two empty chairs were positioned in such a way that S was forced to sit next to one or the other confederate. Before S sat down, the confederates were identified by E casually stating that he wished to make sure which subject was "A" and which was "B." Subjects A and B then nodded as they were pointed out. To control for any physical attractiveness effects or directional seating tendencies the confederate roles as A and B and their seating positions were counterbalanced. When seated at the table, S was asked to fill out a form for experimental credit toward his course grade and was then excused. Previous research has indicated that physical distance between individuals may serve as an index of attraction. For example, Mehrabian (1968) found an inverse relationship between seating distance and liking. Thus, the second measure of attraction consisted of Ss seating preferences in relation to the two confederates.

Results

Effectiveness of the Persuasibility Manipulation

In order to check the effectiveness of the persuasibility manipulation, subjects were asked to rate on a seven-point scale the extent to which the two confederates changed their opinions about fraternities. Mean rating of the high persuasibility confederate (HIP) was 5.93, while for the low persuasibility confederate (LOP) the mean was 2.40 ($F = 162.17, 1/28df, p < .01$), indicating that subjects correctly perceived differential amounts of attitude change by the confederates.

Attitudinal Measure of Attraction

Similar to the procedure employed by Byrne and his associates (Byrne, 1969) S's ratings of how much they would like the other person and his desirability as a work partner were summed to yield an attraction score. Mean attraction ratings of the HiP and LoP confederates by internals and externals are shown in Table 1. A 2 X 2 repeated measures analysis of variance (Winer, 1962) indicated that, although the I-E by Persuasibility interaction did not reach significance, there was a trend for internals to differentiate their attraction ratings of the confederates to a greater extent than externals ($F = 3.60, 1/28 \text{ df}, p < .10$). However, the direction of the internals' ratings was opposite to the predictions, since they tended to be more attracted to the LoP than HiP confederate.

Consistent with this latter result were significant I-E by Persuasibility interactions on ratings of the confederates' intelligence ($F = 6.40, 1/28 \text{ df}, p < .05$) and knowledge of current events ($F = 6.32, 1/28 \text{ df}, p < .05$). On these items internals rated the LoP confederate as more intelligent and more informed about current events than the HiP confederate. Externals' ratings of the two confederates on intelligence and knowledge of current events were in the same direction but the magnitude of the differences were smaller.

Additional results, aside from the I-E effects, showed that the HiP, as contrasted to the LoP, confederate was rated as less intelligent ($F = 36.10, 1/28 \text{ df}, p < .01$), less informed about current events ($F = 48.75, 1/28 \text{ df}, p < .01$), makes poorer grades in college ($F = 21.35, 1/28 \text{ df}, p < .01$), and is better able to get along with others ($F = 8.27, 1/28 \text{ df}, p < .01$). There were no overall differences between the ratings of the two confederates' attractiveness or how happy they would be in a fraternity ($p > .10$).

Behavioral Measure of Attraction

The behavioral measure of attraction consisted of observing whether S sat next to the HiP or LoP confederate. Consistent with the prediction, internals chose the HiP confederate in 12 of 15 cases ($\chi^2 = 5.40, 1 \text{ df}, p < .025$), in con-

trast to externals, who did so in only five of 15 cases ($X^2 = 1.67$, 1 df, $p > .10$). Comparing preferences for HiP versus LoP confederates by I-E produced a significant chi-square ($X^2 = 6.60$, 1 df, $p < .025$), indicating that seating preference depended on S's I-E status. Further analyses revealed no overall preference for the HiP versus LoP confederate ($X^2 = .47$, 1 df, $p > .25$). Thus, as indicated by the behavioral measure, internals tended to be more attracted to the person they were able to influence, whereas externals did not differentiate their seating choices on the basis of persuasibility.

Discussion

At first glance, the results of this study seem rather puzzling inasmuch as the data obtained from the behavioral measure of attraction provide support for the hypothesis, while the outcome of the attitudinal measure is in direct opposition to it. As predicted, internals preferred to sit next to the person they were successful in persuading whereas externals showed no significant preference for one confederate over the other. In contrast, on the attitudinal measure of attraction, internals tended to be more attracted to the confederate they were less successful in persuading than to the one who was highly persuasible, while again externals were less inclined to differentiate their attraction on the basis of others' persuasibility.

There are several possible explanations of the results. One is that internals perceived the low persuasibility confederate as more similar to themselves than the high persuasibility confederate. Previous research has indicated that internals are more resistant to influence than externals (Crowne & Liverant, 1963; Gore, 1962; Getter, 1966). In fact, Gore reported that internals tended to respond in the opposite direction of the experimenter's manipulative attempt. If resistance to influence is a part of the internals' self-concept, they would then see a greater degree of similarity between themselves and the low persuasibility confederate. Since perceived attitudinal similarity has been shown to be related

to attraction (Newcomb, 1961), internals therefore indicated greater liking for the low persuasibility confederate.

However, if perceived similarity were the only factor operating to produce attraction in this study it follows that internals would prefer to sit next to the low rather than high persuasible confederate. Of course, just the opposite occurred. Moreover, on the basis of perceived similarity, it might be expected that externals would be more attracted to the high than low persuasibility confederate. The attitudinal data, again, offer no support for this expectation. Thus, it may be that internals say they are more attracted to individuals who are similar to themselves in regard to resisting influence, but when they have to interact with others they prefer the individual who is susceptible to control. Internals may not particularly like highly persuasible individuals but nonetheless prefer to interact with them in order to maximize their potentiality of controlling outcomes. Even though internals may place greater value on the outcomes provided by low persuasibility others (as the attitudinal data suggests), they would also have a lower expectancy of obtaining these outcomes. In the framework of social learning theory (Rotter, 1954), a low expectation of obtaining valued reinforcements is analogous to anxiety. Thus, in order to avoid potentially anxiety-arousing situations, internals prefer not to interact with others who resist their control attempts.

The foregoing interpretation of the results of this study is similar to that offered by Jones and Daugherty (1959) in a study of the roles of complementarity and similarity in value and political orientation as determinants of attraction. In their study, a complementarity effect was found when subjects anticipated interaction with the other person. For example, subjects who scored high on the Mach IV Scale, evaluated a stimulus person with a similar orientation more negatively when they anticipated interaction with that person. However, when there was no anticipation of interaction neither complementarity nor similarity influenced subjects' evaluations. In other words,

subjects preferred others who complemented their orientations only when they believed they would be interacting with these individuals. Likewise, in the present study, internals preferred the confederate who complemented their I-E expectancy (i.e., high persuasive confederate), but only when they anticipated interaction with him. Prior to the behavioral measure, it is quite likely that subjects did not anticipate any face-to-face contact with the two confederates, and therefore complementarity was not a determinant of their attraction responses on the attitudinal measure. In fact, under these circumstances, perceived similarity seemed to play a greater role. Thus, the results of the present study suggest a reformulation of the original hypothesis. When internals anticipate interaction with others, they prefer an individual who is susceptible to influence. However, when they are asked to indicate their liking for others in the abstract, they prefer individuals who are similar to themselves. While this interpretation of the results seems plausible it is, nevertheless, post hoc. Additional research more directly manipulating anticipation of interaction and perception of similarity would be useful in explicating the relationship between I-E and interpersonal attraction, and would more generally facilitate our understanding of the relative effects of complementarity and similarity on evaluations of others.

References

- Byrne, D. Attitudes and attraction. In L. Berkowitz (Ed.), Advances in experimental social psychology. New York: Academic Press, 1969. Pp. 36-86.
- Byrne, D., & Clore, G. L., Jr. Predicting interpersonal attraction toward strangers presented in three different stimulus modes. Psychonomic Science, 1966, 4, 239-240.
- Byrne, D., & Nelson, D. Attraction as a linear function of proportion of positive reinforcements. Journal of Personality and Social Psychology, 1965, 1, 659-663.
- Carlson, H. J., James, W. H., & Correre, D. E. Attitudes on Vietnam, factual information and internal control. Paper read at Midwestern Psychological Association, Chicago, 1966.
- Crowne, D. P., & Liverant, S. Conformity under varying conditions of personal commitment. Journal of Abnormal and Social Psychology, 1963, 66, 547-555.
- Davis, W. L., & Phares, E. J. Internal-external control as a determinant of information-seeking in a social influence setting. Journal of Personality, 1967, 35, 547-561.
- Escoffery, A. S. Personality and behavior correlates of Negro American belief in fact control. Paper read at Eastern Psychological Association, Washington, D. C., 1968.
- Getter, H. A. A personality determinant of verbal conditioning. Journal of Personality, 1966, 34, 397-405.
- Gore, P. M. Individual differences in the prediction of subject compliance to experimental bias. Unpublished doctoral dissertation, Ohio State University, 1962.
- Gore, P. M., & Rotter, J. B. A personality correlate of social action. Journal of Personality, 1963, 31, 58-64.

- Horland, C. I., & Janis, I. L. (Eds.). Personality and persuasibility. New Haven, Conn.: Yale University Press, 1959.
- Jones, E. E. Ingratiation: a social psychological analysis. New York: Appleton-Century-Crofts, 1964.
- Jones, E. E., & Daugherty, B. N. Political orientation and the perceptual effects of anticipated interaction. Journal of Abnormal and Social Psychology, 1959, 59, 340-349.
- Jones, S. C., & Shrauger, J. S. Locus of control and interpersonal evaluations. Journal of Consulting and Clinical Psychology, 1968, 32, 664-668.
- Lefcourt, H. M., & Wine, J. Internal-external control of reinforcement and the deployment of attention in experimental situations. Canadian Journal of Behavioral Science / Rev. Canad. Sci. Comp., 1, 1969.
- Mehrabian, A. Relationship of attitude to seated posture, orientation, and distance. Journal of Personality and Social Psychology, 1968, 10, 26-30.
- Newcomb, T. M. The acquaintance process. New York: Holt, Rinehart, and Winston, 1961.
- Phares, E. J., Ritche, D. E., & Davis, W. L. Internal-external control and reaction to threat. Journal of Personality and Social Psychology, 1968, 10, 402-405.
- Rotter, J. B. Social learning and clinical psychology. Englewood-Cliffs: Prentice-Hall, 1954.
- Rotter, J. B. Generalized expectancies for internal versus external control of reinforcement. Psychological Monographs, 1966, 80, (1, Whole No. 609).
- Seeman, M. Alienation, membership, and political knowledge: a comparative study. Public Opinion Quarterly, 1966, 30, 353-367.
- Strickland, B. R. The prediction of social action from a dimension of internal-external control. Journal of Social Psychology, 1965, 66, 353-358.
- Winer, B. J. Statistical principles in experimental design. New York: McGraw-Hill, 1962.

Footnote

¹Requests for reprints should be sent to William L. Davis, Iowa State University, Department of Psychology, Ames, Iowa, 50010. The authors wish to thank Arnold Kahn and Elaine Davis for their helpful comments and suggestions.

Table 1.

Attraction Scores for the High and Low Persuasibility

Confederates by Internals and Externals

	Attraction Scores	
	Internals	Externals
High persuasible confederate		
M	8.00	8.60
SD	1.71	1.71
Low persuasible confederate		
M	9.87	8.47
SD	1.93	1.02

Abstract

The relationship between internal-external control of reinforcement and attraction to others who vary in susceptibility to persuasion was investigated. Attraction was assessed after subjects were differentially successful in changing the opinions of two confederates. Results from a behavioral measure of attraction supported the hypothesis that internals are more attracted to others they are able to influence, whereas externals do not differentiate their attraction on the basis of others' persuasibility. However, on an attitudinal measure, there was a trend for internals to be more attracted to the confederate they were less successful in persuading. A possible resolution of these results in terms of anticipation of interaction was discussed.