

CONSTRUCT DIFFERENTIATION AND THE RELATIONSHIP OF ATTITUDES AND BEHAVIORAL INTENTIONS

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Subjects differing in interpersonal construct differentiation completed both an attitude measure and a behavioral intentions measure (in which subjects' behavioral intentions in each of nine attitude-relevant interpersonal situations were assessed) toward a subject-selected target person. While the overall correlation between attitude and the behavioral intentions index was high ($r = .85$), low-differentiation subjects displayed significantly greater attitude-behavioral intentions consistency ($r = .95$) than did high-differentiation subjects ($r = .75$). Correspondingly low differentiation subjects exhibited significantly less variability in the evaluative direction of their behavioral intentions than did high-differentiation subjects (construct differentiation and variance in individuals' behavioral intentions were correlated, $r = .37$). The results are interpreted as suggesting that within a given domain, persons with developmentally less advanced cognitive systems place greater reliance on evaluative consistency principles in organizing their beliefs and behaviors and hence are more likely to exhibit attitude-behavior consistency than are persons with more developed systems.

THE "attitude-behavior problem" is one that has concerned communication theorists and researchers for several years. "Attitude," conceived of as a person's generalized evaluation of an object, has figured prominently in explanations of the effects of persuasive communication.¹ The presumption has

been that the attitude change produced by persuasive messages would eventuate in changes in overt behavior (so that, e.g., a change in one's attitude toward—evaluation of—Oldsmobiles would result in changes in one's conduct toward Oldsmobiles), and that in general one's attitudes are important determinants of one's behavior. The lack of this presumed close relationship is quite well-known, however, and requires no restatement.²

Several different approaches have been taken toward this problem. One general approach has been to predict behavior on the basis of factors other than attitude (attitude-toward-the-object). Fishbein and Ajzen's well-known behavioral intentions model, for instance, predicts behavior on the basis of one's attitude-toward-the-act and one's social-normative beliefs.³ But this gen-

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¹For discussion of this conception of attitude, see Martin Fishbein, "The Prediction of Behaviors from Attitudinal Variables," in *Advances in Communication Research*, ed. C. David Mortensen and Kenneth K. Sereno (New York: Harper and Row, 1973), p. 12; Chester A. Insko, *Theories of Attitude Change* (New York: Appleton-Century-Crofts, 1967), p. 2; and William J. McGuire, "The Nature of Attitude Change," in *Handbook of Social Psychology*, ed. Gardner Lindzey and Elliot Aronson, 2nd ed. (Reading, Mass.: Addison-Wesley, 1969), III, 149. Thus by attitude we mean what Fishbein has called attitude-toward-the-object, as contrasted with attitude-toward-an-act [Martin Fishbein, "Attitude and the Prediction of Behavior" in *Readings in Attitude Theory and Measurement*, ed. Martin Fishbein (New York: Wiley, 1967), p. 489]. The overwhelming common definition (and operational definition) of attitude is that of attitude-toward-an object, and thus is the sense in which "attitude" will be used in this report.

²Allan W. Wicker, "Attitudes versus Actions: The Relationship of Verbal and Overt Behavioral Responses to Attitude Objects," *Journal of Social Issues*, 25 (1969), 41-78.

³A convenient source is Martin Fishbein and Icek Ajzen, *Belief, Attitude, Intention, and Behavior* (Reading, Mass.: Addison-Wesley, 1975).

eral approach does not address the attitude-behavior problem directly. The question raised by the observed low correlations between attitudes and behaviors is not "How can we best predict behavior?" but is "Given that there is not the expected close relationship between general evaluations and behavior, what *is* the relationship?" That is, if one's interest is simply in predicting behavior, then something like Fishbein and Ajzen's behavioral intentions model might be an appropriate tool. But if one's interest is in understanding the attitude-behavior relationship—in understanding the relation of general evaluations of objects to conduct toward those objects—then the behavioral intentions model is not very helpful.

This is not to say that Fishbein and Ajzen have not contributed to an understanding of the attitude-behavior relationship. They have noted that not all behaviors are attitude-relevant, and hence that not just any behavior should be expected to be related to attitude; they have emphasized a distinction between single- and multiple-act behavioral criteria; and they have suggested that although attitudes may not be related to single-act behavioral criteria, attitudes should be related to multiple-act criteria, in that an attitude should reflect the general evaluative *pattern* of an individual's conduct with respect to an object.⁴

However, this does not quite suffice to explain the role of generalized evaluations in conduct. Fishbein and Ajzen are content simply to note that the high correlations between attitudes and multiple-act behavioral criteria suggest that multiple-act criteria can be used as alternative attitude measures; they do not go far in explaining why such a relationship should hold nor in specifying limits on that relationship.⁵

An alternative (and more direct) approach to the question of the relationship of attitudes and behaviors has been to look for factors that mediate attitude-behavior consistency.⁶ Although there is considerable diversity in the sorts of factors that have been investigated, comparatively little attention has been given to the possibility that there may be individual differences in the extent to which attitude-behavior consistency is exhibited.⁷

We hypothesized that construct differentiation might prove to be an individual-difference variable related to attitude-behavior consistency. As assessed by Crockett's Role Category Questionnaire, "construct differentiation" refers to the relative number of constructs (dimensions of judgment) a person has available for construing objects and events in a given domain.⁸ Interpersonal

Attitudinal Variables," p. 22; and Martin Fishbein and Icek Ajzen, "Attitudes Toward Objects as Predictors of Single and Multiple Behavioral Criteria," *Psychological Review*, 81 (1974), 64.

⁴See, e.g., Allan W. Wicker, "An Examination of the 'Other Variables' Explanation of Attitude-Behavior Inconsistency," *Journal of Personality and Social Psychology*, 19 (1971), 18-30; M. R. Jackman, "The Relation Between Verbal Attitude and Overt Behavior: A Public Opinion Application," *Social Forces*, 54 (1976), 646-668; K. K. Petersen and J. E. Dutton, "Centrality, Extremity, Intensity: Neglected Variables in Research on Attitude-Behavior Consistency," *Social Forces*, 54 (1975), 393-414.

⁷The outstanding exception to this lack of attention to possible individual differences has been recent work concerning the relationship of self-monitoring to attitude-behavior consistency; see Mark P. Zanna, James M. Olson, and Russell H. Fazio, "Attitude-Behavior Consistency: An Individual Difference Perspective," *Journal of Personality and Social Psychology*, 38 (1980), 432-440.

⁸Walter H. Crockett, "Cognitive Complexity and Impression Formation," in *Progress in Experimental Personality Research*, ed. Brendan A. Maher (New York: Academic Press, 1965), II, 47-90. Crockett's Role Category Questionnaire is commonly called a measure of "cognitive complexity," but the concept of cognitive complexity has received a host of conflicting definitions; what Crockett's instrument most directly measures is construct differentiation (the relative number of constructs in an individual's interpersonal construct system), and hence it seems most descriptive to characterize the instrument as a measure of differentia-

⁴Fishbein and Ajzen.

⁵See Fishbein, "The Prediction of Behaviors from

construct differentiation (differentiation in constructs for construing the conduct and personalities of other persons), as measured by Crockett's instrument, has been found to be positively related to other aspects of developed interpersonal construct systems such as construct abstractness and construct comprehensiveness,⁹ which suggests that differentiation is a good indicator of the general overall developmental level of the interpersonal construct system. Our hypothesis was that interpersonal construct differentiation might be related to attitude-behavior consistency in the interpersonal domain (i.e., to consistency between one's attitudes toward others and one's conduct toward those others), with greater consistency being exhibited by those perceivers with relatively less developed (less differentiated) interpersonal construct systems.

This hypothesis was based on the conjunction of two considerations. First, individuals with relatively undifferentiated interpersonal construct systems have been shown (in a variety of ways) to rely more heavily on considerations of evaluative consistency in their social-

cognitive systems than do comparatively more differentiated perceivers.¹⁰ For example, comparisons of impressions of others written by high- and low-differentiation perceivers have revealed that low-differentiation perceivers are more likely to form evaluatively one-sided sets of beliefs about others than are high-differentiation perceivers.¹¹ Investigations of the use of Heiderian balance schemes (which are based directly on considerations of evaluative consistency) have produced similar results: Subjects with relatively undifferentiated interpersonal construct systems are more likely than their more differentiated counterparts to employ balance schemes in learning social structures and are also more likely to continue to employ such schemes even when these have been disconfirmed.¹²

Second, attitude-behavior consistency has ordinarily been conceived of as evaluative consistency between attitude and act, as Ajzen and Fishbein have noted: "It is usually considered to be logical or consistent for a person who holds a favorable attitude toward some object to perform favorable behaviors, and not to perform unfavorable behaviors, with respect to the object. Similarly a person with an unfavorable attitude is expected

tion. For further discussion of cognitive complexity and construct differentiation, see Daniel J. O'Keefe and Howard E. Sypher, "Cognitive Complexity Measures and the Relationship of Cognitive Complexity to Communication: A Critical Review," *Human Communication Research*, in press.

⁹See, e.g., Barbara J. O'Keefe and Jesse G. Delia, "Construct Comprehensiveness and Cognitive Complexity," *Perceptual and Motor Skills*, 46 (1978), 548-550; Barbara J. O'Keefe and Jesse G. Delia, "Construct Comprehensiveness and Cognitive Complexity as Predictors of the Number and Strategic Adaptation of Arguments and Appeals in a Persuasive Message," *Communication Monographs*, 46 (1979), 231-240; Jesse G. Delia, Susan L. Kline, and Brant R. Bureson, "The Development of Persuasive Communication Strategies in Kindergarteners Through Twelfth-Graders," *Communication Monographs*, 46 (1979), 241-256; Julie A. Burke, "The Relationship of Interpersonal Cognitive Development of the Adaptation of Persuasive Strategies in Adults," Central States Speech Association Convention, 1979.

¹⁰For a more extensive review of research relevant to this claim, see Daniel J. O'Keefe, "The Relationship of Attitudes and Behavior: A Constructivist Analysis," in *The Message-Attitude-Behavior Relationship: Theory, Methodology, and Application*, ed. Donald P. Cushman and Robert D. McPhee (New York: Academic Press, 1980), pp. 117-148.

¹¹Crockett; Jesse G. Delia, "Cognitive Complexity and Organizational Aspects of Interpersonal Impressions," unpublished paper, Department of Speech Communication, University of Illinois at Urbana-Champaign, 1980.

¹²Jesse G. Delia and Walter H. Crockett, "Social Schemas, Cognitive Complexity, and the Learning of Social Structures," *Journal of Personality*, 41 (1973), 413-29; Allan N. Press, Walter H. Crockett, and Paul S. Rosenkrantz, "Cognitive Complexity and the Learning of Balanced and Unbalanced Social Structures," *Journal of Personality*, 37 (1969), 541-553.

to perform unfavorable behaviors, but not to perform favorable behaviors".¹³ That is, the kind of consistency under investigation in studies of attitude-behavior consistency is evaluative consistency, rather than "psychological" or "descriptive" consistency.

These two considerations directly suggest that persons with less differentiated interpersonal construct systems, by virtue of their greater reliance on principles of evaluative consistency, should exhibit greater consistency between their attitudes toward another and their conduct toward that other than should persons with more differentiated interpersonal systems. Moreover, if low-differentiation individuals are more reliant than high-differentiation persons on an evaluative consistency principle for organizing their behaviors toward another, low-differentiation individuals should display a relative evaluative homogeneity in their behaviors toward a particular person as compared with high-differentiation individuals.¹⁴

Hence in the present study, subjects differing in interpersonal construct differentiation completed both an attitude measure and a set of behavioral intention measures concerning a subject-selected target person. The relationship of attitude to behavioral intentions was then assessed separately for high- and low-differentiation subjects, with the prediction being that the attitude-behavioral intentions relationship should be significantly stronger for low-differentiation subjects than for high-differentiation subjects. The evaluative variability of subjects' behavioral intentions was

also assessed separately for high- and low-differentiation subjects, with the prediction being that low-differentiation subjects would display less variability in the evaluative direction of their behavioral intentions than would high-differentiation subjects.

Behavioral intention measures were employed in preference to assessments of overt behavior for two reasons. First, the not inconsiderable effort required to assess behavior directly seemed not justified by the preliminary character of the investigation; in the absence of any previous research bearing specifically on the issue at hand, it seemed unwise to attempt to move beyond a measure of behavioral intentions. Second, and more important, the nature of the relationship between behavioral intentions and behavior is such that the hypothesis can be most directly tested by examining individual differences with respect to behavioral intentions. While behavioral intentions are often very good predictors of overt behavior,¹⁵ in cases where the performance of a given act depends upon the occurrence of other events, then intentions may not be so highly correlated with behavior; for instance, when one's intentions are based on one's expectations about the actions of another and those expectations are disconfirmed, then one's prior intentions are not likely to be closely related to one's behavior. Such limitations on the relationship between behavioral intentions and behavior are discussed more extensively by Fishbein and by Ajzen and Fishbein.¹⁶ What this suggests for the present

¹³Icek Ajzen and Martin Fishbein, "Attitude-Behavior Relations: A Theoretical Analysis and Review of Empirical Research," *Psychological Bulletin*, 84 (1977), 889.

¹⁴For a more complete discussion of the theoretical bases for these hypotheses, see O'Keefe.

¹⁵See Fishbein, "The Prediction of Behaviors from Attitudinal Variables."

¹⁶Fishbein, "The Prediction of Behaviors from Attitudinal Variables"; Icek Ajzen and Martin Fishbein, "Factors Influencing Intentions and the Intention-Behavior Relation," *Human Relations*, 27 (1974), 1-15.

research is that the strongest and most direct test of the prediction concerning individual differences in attitude-behavior consistency will be one that avoids the effects of such limiting factors by focusing on behavioral intentions rather than overt behavior.

METHODS

Subjects and the Measure of Construct Differentiation

Subjects in the main study were 71 students enrolled in one of five undergraduate speech communication classes at a midwestern university. All subjects volunteered to participate in the study; participation was implicitly sanctioned by the instructor of each class. During an initial session, participants completed a version of the Role Category Questionnaire in which they described two peers, one liked and one disliked.¹⁷ Approximately 10 minutes were taken to write each description. Each description was subsequently scored for the number of interpersonal constructs it contained following the procedures of Crockett, Press, Delia, and Kenny.¹⁸ The total number of constructs in the two descriptions was taken as the subject's construct differentiation score. The scores were broken at the median into groups of high-differentiation ($n = 37$; range of scores from 25 to 46) and low-differentiation ($n = 34$; range of 9 to 24) subjects. This measure of interpersonal construct differentiation has well-established validity and reliability.¹⁹ Two coders' independent scorings of 27 of the protocols from the present sample

yielded an interrater reliability coefficient by Pearson correlation of .94.

Measures of Belief Consistency, Attitude, and Behavioral Intentions

Approximately three months after administration of the Role Category Questionnaire, subjects participated in the second phase of the study. This second part of the study was administered by a different investigator and care was taken so that the two sessions were not seen as related. In the second session, all students in the classes involved in the study completed the same assigned task regardless of whether they had participated in the first session.

The task of the second session was the completion of a questionnaire in which subjects briefly described and provided ratings of the one individual in the class toward whom the strongest feelings had been developed. All classes in the study were small (approximately 15 class members each) and thus it was reasonable to expect that each individual had developed a generalized evaluative orientation toward at least one class member. Participants were told orally and in writing that "it is clear that in interpersonal interaction with others, we come to develop feelings toward those others. To help us understand what is involved in this process, we would like you to think of the person in this class toward whom you have developed the strongest feelings (positive or negative)." Participants were then asked to briefly describe the selected class member in writing, to provide ratings of him or her on general evaluative scales, and to indicate intentions for behavior toward the selected class member in a variety of contexts. To minimize evaluation apprehension and fears of lack of confidentiality of responses, it was emphasized that the participant should not indicate the

¹⁷See Crockett.

¹⁸Walter H. Crockett, Allan N. Press, Jesse G. Delia, and Charles T. Kenny, "The Structural Analysis of the Organization of Written Impressions," unpublished paper, Department of Psychology, University of Kansas, 1974.

¹⁹See O'Keefe and Sypher (note 8).

identity of the selected class member in the written description.

The measure of evaluative consistency of beliefs. The evaluative consistency of beliefs about the target person was determined by coding the constructs in a subject's written impression as positively-valenced, negatively-valenced, or neutral/ambiguous, and then computing the proportion of valenced beliefs which were in the dominant evaluation (either positive or negative). This score ranged from .50 (maximally inconsistent beliefs, with an equal number of positively- and negatively-valenced beliefs) to 1.00 (maximally consistent beliefs, with all the valenced beliefs in one valence).²⁰ Such coding for evaluation obviously is dependent upon general normative understandings of the valence of interpersonal constructs, though such general cultural understandings can be supplemented by attention to the surrounding context within the written impression. In two previous studies such codings for evaluation have been found to correlate highly with subjects' own evaluative ratings of the elements in their written impressions (correlations of .91 and .97 for indices of evaluative consistency of beliefs derived from subject and experimenter codings).²¹ The codings employed in the present study were carried out by the second author. A second coder unconnected with the conduct of the present study also coded the beliefs in each impression; the interrater reliability

of the index of belief consistency based on the two codings was .96.

The attitude measure. Attitude toward the selected class member was measured by ratings on the four evaluative semantic differential scales developed by Fishbein and Raven for this purpose (beneficial-harmful, favorable-unfavorable, undesirable-desirable, bad-good).²² The attitude scales appeared on a separate page of the protocol immediately after a blank page provided for completing the written description; the scales were presented with evaluative polarity varied (as in the listing above). Standard instructions for the completion of the seven-point scales were provided. Each scale was scored +3 to -3; the overall attitude toward the selected class member was determined by summing the ratings on the four evaluative scales. Approximately two-thirds of the obtained overall attitude scores were positive in direction (and about one-third were negative); this distribution was similar for each of the two differentiation groups. Moreover, although the intensity of the attitudes varied considerably, the distribution of attitude intensities were similar for each differentiation group. For the low-differentiation group, the mean of the positive attitudes was +10.04 (range from +1 to +12), while the mean of the negative attitudes was -5.30 (range from -1 to -12). For the high-differentiation group, the positive attitude mean was +8.93 (range from +2 to +12), while the mean of the negative attitudes was -6.00 (range from -3 to -8). These means did not differ between differentiation groups: for positive attitudes, $t = 1.34$, 51df, NS; for negative attitudes, $t = .47$, 16df, NS.

The behavioral intentions measure. A

²⁰This belief consistency index has been employed previously in Delia (note 11); in that study high-differentiation subjects were found to form significantly less consistent impressions from supplied inconsistent information than did low-differentiation subjects.

²¹These correlations were computed from previously unanalyzed aspects of the data forming the basis for the research reports of Delia (note 11) and of Jesse G. Delia, Walter H. Crockett, Allan N. Press, and Daniel J. O'Keefe, "The Dependency of Interpersonal Evaluations on Context-Relevant Beliefs about the Other," *Speech Monographs*, 42 (1975), 10-19.

²²Martin Fishbein and Bertram H. Raven, "The AB Scales: An Operational Definition of Belief and Attitude," *Human Relations*, 15 (1962), 35-44.

multiple-act behavioral intentions index was developed through independent research with a group of 45 subjects drawn from the same population as the subjects participating in the main study. In developing the measure, a number of behavioral situations were constructed which were thought to be attitude-relevant for subjects within the population being studied. To determine that the behavioral situations were in fact attitude-relevant, a variant of the procedures suggested by Fishbein and Ajzen was employed.²³ The 45 subjects in the instrument-development study were asked to rate each behavioral situation on a nine-point scale indicating the extent to which a given behavior in the situation was attitude-relevant. All the situations were presented in the same form. For example, for one situation the subject was told, "Assume Person 1 had the opportunity to spend an evening with Person 2 as his/her companion at a formal social gathering. If Person 1 picked Person 2 as his/her companion for such an evening would Person 1 have a positive or negative attitude toward Person 2?" Subjects answered this question on a nine-point scale end-anchored by the phrases "Very Negative" and "Very Positive," with the midpoint labeled "Can't Say."

On the basis of this procedure, nine behavioral situations were selected for inclusion in the behavioral intentions index used in the main study. Each of the situations selected received a mean rating at least two scale points above the midpoint (range of means from 7.13 to 8.22, with seven of the nine means between 7.13 and 7.88) and had a standard deviation of less than 1.56 (range from .98 to 1.56). The nine situations

forming the behavioral intentions index called for consideration of the other as a companion at a formal social gathering, someone with whom to work out a compromise on an issue where goals conflict, a partner on a major graded out-of-class assignment, someone to spend time talking with at a large party, someone to seek advice from concerning a conflict in an important interpersonal relationship, someone to pool knowledge and skills with in solving a difficult problem, a companion at an informal social gathering, a companion for an afternoon at an amusement park, and a companion for an afternoon spent having a coke or beer and just talking. The situations were presented in the preceding order in the research protocol.

In the main study the nine-item behavioral intentions index was completed after the attitude measure. The index was presented on two separate pages of the questionnaire following the page containing the attitude measure; it was presented as nine specific questions, each to be answered in reference to the selected class member. For each of the nine behavioral situations, participants were instructed to assume that an opportunity existed to interact with the selected class member in each of the specified circumstances, and were asked to indicate the likelihood of the designated class member's being picked as an interactional partner given such opportunity. For example, for one behavioral situation, participants were told to "assume you have the opportunity to spend an evening with the person as your companion at a formal social gathering. How likely would you be to pick him/her as your companion for such an evening?" The response to each situation was made on a seven-point scale end-anchored by the phrases "Very Unlikely" and "Very Likely." The behavioral intentions ratings were

²³Fishbein and Ajzen, "Attitudes Toward Objects as Predictors of Single and Multiple Behavioral Criteria," p. 62.

scored -3 (unlikely) to $+3$ (likely) with a zero midpoint. The ratings were summed across the nine situations to yield an overall score for each subject indicating the evaluative direction of the set of behavioral intentions. This score could range from -27 to $+27$; the actual range was from -27 to $+27$.

RESULTS

Differentiation, Attitudes, and the Direction of Behavioral Intentions

The Pearson correlational analysis revealed a strong relationship between interpersonal attitudes and the overall direction of behavioral intentions. The

TABLE 1
CORRELATION OF ATTITUDE WITH BEHAVIORAL INTENTION FOR INDIVIDUAL SITUATIONS*

Situation	Total Sample	Low-Differentiation Subjects	High-Differentiation Subjects	z for High vs. Low
Companion at a formal social gathering	.71	.91	.56	3.61, $p < .001$
Someone to work out a compromise with on an issue where goals conflict	.71	.86	.62	2.29, $p < .05$
Partner on a major graded out-of-class assignment	.79	.83	.77	.68, NS
Someone to spend time talking with at a large party	.86	.91	.78	1.95, $p < .06$
Someone to seek advice from concerning an important interpersonal relationship	.79	.84	.52	2.60, $p < .01$
Someone to pool knowledge and skills with in solving a difficult problem	.66	.78	.55	1.82, $p < .07$
Companion at an informal social gathering	.82	.93	.73	2.94, $p < .01$
Companion for an afternoon at an amusement park	.73	.87	.61	2.51, $p < .05$
Companion for an afternoon spent having a coke or beer and talking	.75	.91	.62	3.23, $p < .001$
Mean for nine situations	.75	.88	.65	

*df = 69, 32, and 35, respectively, for total sample, low-differentiation subjects, and high-differentiation subjects.

correlation of attitude and the behavioral intentions index for the subject sample as a whole was .85 (69df, $p < .001$). The principal focus of the present research, however, was the differential strength of this relationship among high- and low-differentiation subjects, and thus separate correlations of attitude and the behavioral intentions index were computed for each of the two construct differentiation groups. The correlation was .95 among low-differentiation subjects (32df, $p < .001$) and .75 among high-differentiation subjects (35df, $p < .001$). Thus, while the relationship was highly significant for each group, the predicted difference in the strength of the attitude-behavioral intentions relationship for high- and low-differentiation subjects was found ($z = 3.46$, $p < .001$).

These same differences emerged at the level of the behavioral intention items considered individually. The mean attitude-behavioral intentions correlation (after r -to- z transformation) across the nine individual behavioral intention situations was .75 for the sample as a whole, but was .88 for low-differentiation subjects and .65 for high-differentiation subjects. In all nine situations, the attitude-behavioral intention correlation was higher for low-differentiation subjects than for high-differentiation subjects, and in eight of the nine situations that difference met or approached the .05 (two-tailed) significance level (see Table 1). Thus when considering either single-act or multiple-act behavioral criteria, the predicted differences in attitude-behavioral intentions consistency are observed.

Differentiation, Belief Consistency, and the Variability of Behavioral Intentions

In replication of previous findings, a significant difference in the evaluative consistency of high- and low-differentiation perceivers' beliefs was obtained

(means for high- and low-differentiation subjects of, respectively, .75 and .87; $t = 3.09$, 69df, $p < .01$; the correlation of construct differentiation and evaluative consistency of beliefs was $-.26$, 69df, $p < .05$).²⁴

The expected link of interpersonal construct differentiation to variability in behavioral intentions was examined through computing the variance of the nine behavioral intention ratings for each subject and then using these variances as the dependent measure in an analysis comparing high- and low-differentiation subjects. The predicted difference in variability of behavioral intentions was obtained (mean for high-differentiation subjects = 2.35; mean for low-differentiation subjects = .97; $t = 4.27$, $df = 54.56$, $p < .01$; the correlation of construct differentiation and the variability of behavioral intentions was .37, 69df, $p < .01$).²⁵ As might be expected, a

²⁴The effect of construct differentiation on the formation of evaluatively consistent impressions is revealed even more dramatically if the neutral/ambiguous beliefs are ignored and the impressions simply are contrasted for whether they are univalent (contain only positive or only negative beliefs) or bivalent (contain both positive and negative beliefs). Of the 34 low-differentiation subjects 26 formed univalent impressions, while only 14 of the 37 high-differentiation subjects did so (2×2 chi-squared = 10.75, $p < .01$).

²⁵It may be important to point out that what is being examined here is not "the variance of the behavioral intention scores" for low- and high-differentiation groups. Our concern is not with the variability of individual subjects' scores around a group mean; rather, our focus is the comparative within-subject variability of high- and low-differentiation subjects, and hence (as described in the text) we computed for each subject the variability (variance) of his or her nine single-act behavioral intention items around his or her own mean behavioral intentions score (across the nine items). Each subject thus had an individual variability-of-behavioral-intentions score, with the mean of those scores then computed separately for high- and low-differentiation groups. For comparing these group means, tests for "differences between variances" (e.g., an F-test) are not appropriate. Rather, Fisher's t -test for differences between means is called for, since what is being compared are two group means (which happen to be mean intra-individual variability scores). However, because the two groups had significantly different variances for those intra-individual variability scores

negative relationship between evaluative consistency of beliefs and the variability of behavioral intentions also was obtained ($r = -.37$, 69df, $p < .01$). The multiple correlation of construct differentiation and the evaluative consistency of beliefs with the variability of behavioral intentions was $R = .47$.²⁶

DISCUSSION

These results are quite clear-cut and require little explication. The overall relationship between attitude and the multiple-act behavioral intentions index ($r = .85$) was slightly larger than Fishbein and Ajzen's reported range of .60 to .75 for correlations between attitude and multiple-act behavioral criteria,²⁷ and

the mean correlation of attitude with the nine single-act criteria in the present investigation (.75) was strikingly higher than one might have anticipated on the basis of extant research. The nature of the research design no doubt contributed to these effects: The target class member for each subject was that class member toward whom the strongest feelings had been developed, a mix of positive and negative attitudes were obtained (so that the attitude-behavioral intentions correlation was not computed across a narrow range of attitudes), and direct and straightforward measurement procedures were employed (Fishbein and Raven's attitude scales, and a purified set of attitude-relevant behavioral intention measures).

Most important, these results directly support our predictions concerning individual differences in attitude-behavior consistency. In comparison to subjects with more differentiated interpersonal cognitive systems, those with less differentiated systems did exhibit greater evaluative consistency in their beliefs and between their attitudes and behavioral intentions (with correspondingly less variability in their behavioral intentions). Given that construct differentiation is positively associated with other aspects of developed systems (such as abstractness and comprehensiveness), these results do not show that differentiation *per se* is the critical factor at work here; but because construct differentiation is a good overall indicator of the relative developmental status of the interpersonal construct system, these results do indicate that individuals with relatively less developed interpersonal construct systems can be expected to exhibit greater consistency between their attitudes about another and their behavioral intentions toward that other than

($F(35,33) = 3.76$, $p < .02$)—thus violating the assumption of homogeneity of variance—and because the samples were of different sizes, the appropriate degrees-of-freedom figure is 54.56 (instead of the usual 69) as given by Hays and Winkler's formula for correcting degrees of freedom in such circumstances; see William L. Hays and Robert L. Winkler, *Statistics: Probability, Inference, and Decision* (New York: Holt, Rinehart and Winston, 1971), p. 347.

²⁶The differential effect of the evaluative content of the beliefs on the direction of behavioral intentions was also present in the data. An overall index of the evaluative tone of each subject's beliefs was formed by computing the proportion of the total number of beliefs in the written impression which were of positive valence (for a previous use of this index, see Delia, Crockett, Press, and O'Keefe). The correlation of this index with the evaluative direction of the behavioral intentions was significantly different for high- and low-differentiation subjects (correlations of .74 and .92, respectively; $z = 2.58$, $p < .05$). The relationship of the proportion-of-positive-beliefs to overall attitude also was different between the two differentiation groups (correlations of .72 and .93 for high- and low-differentiation subjects, respectively; $z = 3.02$, $p < .01$). This latter finding may have important implications for Fishbein's conception of the relationship of beliefs to attitude. Fishbein argues that attitude is a linear additive function of the certainty-weighted evaluations of the individual beliefs. To the extent that the proportion of positive elements in an impression correlates with the summation of the weighted belief evaluations, the present results point to a possible revision of Fishbein's analysis; his model may more accurately reflect the relationship of individual belief evaluations to attitude in low-differentiation perceivers than in high-differentiation perceivers. This matter is more extensively discussed in O'Keefe (note 10).

²⁷Fishbein and Ajzen, "Attitudes Toward Objects as Predictors of Single and Multiple Behavioral Criteria."

those with relatively more developed interpersonal construct systems.

Additionally, however, these results bear on Fishbein's and Fishbein and Ajzen's claims about the status of single- and multiple-act behavioral criteria. Fishbein notes that most attitude-behavior studies have used attitude to predict a single behavioral act, but that "on neither theoretical nor methodological grounds is there any basis for expecting an attitude score to predict (i.e., correlate with) single act criteria."²⁸ By contrast, he argues, attitude "should be consistently related to the *pattern* of behaviors that the individual engages in with respect to the attitude object,"²⁹ that is, to multiple-act behavioral criteria. And in general the present data are supportive of this analysis. The mean attitude-behavioral intentions correlation across the nine single-act criteria (.75) was indeed lower than the multiple-act correlation (.85).

But the present results also suggest the importance of individual developmental differences with respect to both single- and multiple-act criteria. Consider first single-act criteria. The mean attitude-behavioral intentions correlation across the nine behavioral intention situations was higher for low-differentiation subjects (.88) than for high-differentiation subjects (.65). In each of the nine situations, the attitude-behavioral intention correlation was higher for low-differentiation subjects than for high-differentiation subjects, and in eight of the nine single-act criteria that difference met or approached conventional significance levels. Thus even in the realm of single-act criteria, the predicted developmental differences in

attitude-behavioral intentions consistency emerge with some regularity.

Similar developmental considerations arise when considering multiple-act criteria. For example, Fishbein and Ajzen claim that multiple-act behavioral criteria can be construed as alternative measures of attitude.³⁰ The results of the present study, however, indicate that this claim might best be seen as limited to persons with developmentally less advanced cognitive systems in the domain under consideration; although the multiple-act behavioral intentions index was very highly correlated with attitude for the low-differentiation subjects in the present research, the correlation was substantially lower for high-differentiation subjects.

These results thus refine and elaborate the account given by Delia, Crockett, Press, and O'Keefe of the relationship between attitude and multiple-act behavioral criteria. Arguing for the importance of context-relevant beliefs as determinants of conduct, Delia et al. reasoned as follows:

The overall attitude is a function of beliefs about the object. When multiple-act criteria are employed, the chances of some particular belief becoming relevant [to one or another action context] increase. To the extent that a variety of contexts are sampled in the multiple-act measure, a large number of beliefs about the object come into play. Thus it is to be expected that the multiple-act criteria (by virtue of the variety of beliefs involved) will be significantly related to the generalized attitude.³¹

Although this analysis is satisfactory as far as it goes, the present results display the importance of differential reliance on evaluative consistency principles by persons with differentially developed cognitive systems. The lessened reliance on

²⁸Fishbein, "The Prediction of Behaviors from Attitudinal Variables," p. 14.

²⁹Fishbein, "The Prediction of Behaviors from Attitudinal Variables," p. 22, emphasis added.

³⁰Fishbein, "The Prediction of Behaviors From Attitudinal Variables"; and Fishbein and Ajzen, "Attitudes Toward Objects as Predictors of Single and Multiple Behavioral Criteria," p. 64.

³¹Delia, Crockett, Press, and O'Keefe, p. 18.

such consistency principles by persons with developmentally advanced systems suggests that such individuals should be more likely to engage in attitude-discrepant behavior and hence that multiple-act behavioral criteria should be less well correlated with overall attitude for such persons as compared to persons with developmentally less advanced systems. The results reported

here, of course, directly support this account. What remains to be seen is (1) whether it is construct differentiation *per se*, or some other aspect of developed cognition, that is the critical mediating cognitive characteristic, and (2) whether development in interpersonal cognitive systems influences attitude-behavior consistency in domains other than interpersonal conduct.

