
COMMENTARY

Whither Fact, Artifact, and Attitude: Reflections on the Theory of Reasoned Action

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In response to Fishbein and Middlestadt's (1995) study, the theory of reasoned action is evaluated in the context of general attitude theory. Although the theory has been theoretically interesting and practically useful, concerns are raised regarding its implementation, with particular respect to measurement, falsifiability, and testability issues. The theory provides a solid foundation for the study of consumer behavior, but participants in the debate over affect or belief-based attitude mediation should consider additional attitude theories that build on and complement the theory of reasoned action.

Few would argue the contributions made to the study of attitudes and consumer behavior by Fishbein. At a time when critics called for abandoning the study of attitudes (e.g., DeFleur & Westie, 1963; Deutscher, 1966, 1969; Wicker, 1969, 1971), Fishbein's work was largely responsible for preserving and renewing interest in the construct. The links to marketing generated by the model of reasoned action are direct. Consequently, it has been one of the most widely used models by marketing managers, at least partly due to the diagnostic direction it provides. If more favorable attitudes are desired, create more favorable beliefs or get rid of unfavorable beliefs and so on. The model also possesses some intuitive appeal as well. Assuming at least limited rationality, beliefs should drive behavior.

Despite the contributions, the literature is filled with dialogues between

proponents of the model and those arguing that the model is misspecified (e.g., Brown & Stayman, 1992; Mittal, 1990). In particular, the latter group suggests that the model needs a parameter reflecting the direct impact of affect on attitude change. Although this debate has been lengthy, its resolution does not appear imminent. In fact, critical tests of models are rarely resolved in favor of one side or the other (see Greenwald, 1975). Hence, rather than pitting various models against each other, a more fruitful approach may be to establish the relevant domain of each.

Research examining belief-based, affect-based, and anything else-based attitudes as predictors of intention and/or behavior is interesting in its own right so long as it is competently conducted and speaks to an attitudinal process issue (e.g., how do different kinds of attitudes influence behavior). Affect (or anything but salient beliefs and their evaluative aspects) does not belong in the Fishbein model because Fishbein says it does not. It is a definitional issue. When anything else is entered, it is outside the realm of behaviors that the model was intended to address. Fishbein's definition does not, however, preclude other models from including constructs mediating/moderating attitude's relation with other behaviors. To that end, attitude researchers have long considered quite different definitions of attitude (e.g., Eagly & Chaiken, 1993, p. 1) and have built well-specified and well-defined models that provide adequate representations of behaviors in a variety of domains. Considerable work still remains to be done in this area.

Fishbein's (1963) expectancy-value model and his most recent defense of it (Fishbein & Middlestadt, 1995) should be considered in the broader context of the study of attitudes in general. Historically, one primary reason for studying attitudes is utilitarian. At least initially, it was expected that knowing a person's attitude would enable us to anticipate that person's behavior in the presence of the attitude object. Researchers believed that a simple paper-and-pencil measure of attitudes could be created (Thurstone, 1928) and used to predict respondents' future behavior. Likert (1932; see also Likert, Roslow, & Murphy, 1934) developed simple attitude scales on which respondents selected from five choices (ranging from *strongly disagree* to *strongly agree*) to indicate their favorability to an attitudinal statement. Osgood, Suci, and Tanenbaum's (1957) semantic differential (in which respondents evaluate the applicability of a series of bipolar adjectives for an attitude object) is both simple and, according to Eagly and Chaiken (1993), "... the most popular way of measuring attitudes in contemporary research" (p. 55).

This motivation to find a simple predictor of future behavior is understandable at both theoretical and applied levels. It is not simply an anti-intellectual response against complexity, and it does not reflect a shortsighted hope that the world is a fundamentally simple place. Theoretically, we expect latent constructs that intervene between stimuli and observable response to have observable correlates. It is partly from the measurement of these observable

correlates that we infer the presence of the construct (attitude). For the inference to be valid, we must rule out other more plausible explanations for our observations. One concern is that our measure itself creates the construct. We also expect the measurement of the construct to be simpler than the observable (behavior) we hope to predict. Otherwise, we may measure the behavior at multiple points in time and use past behavior as the best predictor of future behavior (see Mischel, 1968). With respect to attitudes, a simple measurement is expected to reduce the possibility of influencing the construct being assessed. From an applied perspective, easily (and inexpensively) measuring an intervening construct indicating consumers' tendency to behave (assuming theoretical reliability and validity) may have profound profit-related consequences.

Historically, this quest to measure and use attitudes to predict behavior produced modest correlations between paper-and-pencil measures of attitude and behavior. Wicker's (1969) review argues that, in general, all kinds of attitudes predicting all kinds of behavior yielded correlations of about .3, on average. Attitudes seemed to predict about 10% of the variance in observed behavior. Critics (e.g., Bem, 1967) claimed that attitudes were at best epiphenomenal—justifications of past behavior with no bearing on future behavior, easily mutable, and, at worst, wholly nonexistent. Wicker (1969) found "little evidence to support the postulated existence of stable, underlying attitudes within the individual which influence both his verbal expressions and his actions" (p. 75).

Fishbein's model (Ajzen & Fishbein, 1973; Fishbein, 1967) substantially improved the predictability of specific behaviors from specific behavioral intentions. These intentions, in turn, were predictable from attitudes toward the behavior and perceived normative expectations about reference groups and the individual's motivation to comply with those expectations. In this formulation, an attitude is viewed as a function of an individual's beliefs about the object and the evaluative aspects of those beliefs. Although this represents a significant accomplishment, recall one original reason for studying attitudes. Specifically, the quest for a simple measure able to predict future behavior is somewhat at odds with the Fishbein solution. Even if the linkage between intention and behavior is assumed,¹ the methodology associated with determining the elements of the model is far from simple. At its core, the model suggests that at least four steps are involved in predicting behavior. First, the salient beliefs of a relevant sample must be measured. Second, the expectancy values regarding those beliefs are obtained from a sample of the target population. Third, the samples' perceptions of the normative beliefs with respect to the behavior are measured. Finally, the samples' intention to engage in the

¹The model predicts behavioral intention, rather than behavior. The relation between intention and behavior is then an empirical question (noted by Fishbein and Ajzen in an exchange with Songer-Nocks, 1977).

target behavior is measured. These final three steps are often conducted in a single survey. This is not simple, and the authors do not claim that it is.

In spite of attention to method, weak correlations between intention and behavior may nonetheless be obtained. When this occurs, Fishbein and Ajzen (1974, 1977) suggested that the target, action, context, and time in which attitudes and behaviors are measured may not correspond to each other. As noted by Fishbein and Middlestadt (1995), all parameters of the model must correspond in these four elements for the predictors to forecast the criterion successfully. And, even with correspondence between predictors and criterion on these four elements, it is still possible to obtain low correlations or correlations between predictors and criterion based on something other than beliefs. In this latter case, however, Fishbein and Middlestadt (1995) suggested that these other variables involved in attitude formation and change "best be viewed as methodological artifacts . . ." (p. 184).

The model's impact notwithstanding, several issues need to be raised, and some summary comments about each are in order. I address them in the paragraphs that follow.

DOES THE MERE MEASUREMENT OF PREDICTORS INFLUENCE THE CRITERION?

Work suggests that merely measuring an individual's intention to engage in a behavior increases the likelihood that the behavior will be performed (Morwitz, Johnson, & Schmittlein, 1993). Although the precise mechanism whereby this occurs is not fully understood, it does call into question the results of earlier studies linking behavioral intent to behavior (e.g., Ajzen, 1985; Fishbein & Ajzen, 1975). There are many ways in which measurement may influence the constructs being measured. First, attitude and beliefs may not exist in memory prior to their assessment. Rather, they may be constructed by respondents during the completion of a survey. For example, I may have never considered my attitude toward contributing to Amnesty International, but in the course of completing a survey which presents relevant beliefs I find them reasonable; suddenly, giving to Amnesty International seems like a good idea. Second, subjects may become aware (via the survey) that their measured beliefs, evaluations, and perceived norms are relevant to a particular behavioral intention (also described on the survey). This may be the first time that respondents have ever been forced to evaluate their beliefs and behavioral intentions systematically with respect to a particular behavior. A good deal of compelling evidence demonstrates respondents' propensity to engage in survey-induced cognitive work that has profound behavioral consequences (Feldman & Lynch, 1988;

Fischhoff, 1991; Hirt & Sherman, 1985; Payne, Bettman, & Johnson, 1992; Sherman, 1980). This appears especially likely when expectancy values regarding beliefs, perceptions of normative beliefs, and behavioral intentions are all measured in the same survey.

Finally, a related but somewhat different concern (whether the predictors are present prior to measurement) is that respondents may desire to maintain consistency (either for themselves privately or because they wish to appear consistent to others). This is by no means a recent issue. In their discussion of Fishbein and Ajzen's (1972, 1975; Ajzen & Fishbein, 1973; Fishbein, 1967) work, Schuman and Johnson (1976) noted, "Methodologically, since they make little or no attempt to dissociate measurement of behavioral intention and measurement of behavior, the extent to which consistency is evoked by the experimenter himself [*sic*] remains unknown" (pp. 172-173). In sum, the apparent consistency among beliefs, attitude, intent, and behavior may have less to do with the hypothesized relation among them than the shared method variance.

IS THE MODEL FALSIFIABLE?

Given earlier exchanges, as well as the previous discussion, the model appears to be unfalsifiable. Evidence implicating dual mediation, or mediation through extraneous factors (e.g., affect), as well as apparent failures of belief to mediate attitude change are dismissed on the grounds just described and by Fishbein and Middlestadt (1995). Evidence indicating the failure of behavioral intention to predict behavior is ruled irrelevant to the model itself. In part, these rejections are due to sound methodological grounds, as well as the evolution of the model itself. The remainder of the rejections seems due to the model's specification and the logical difficulty in teasing out noncognitive factors that mediate attitude change. What really is the difference between a cognitive and a noncognitive factor? This distinction may be one of degree rather than kind. The expression of affect (especially on a survey) involves considerable cognitive processing. At any rate, correctly categorizing *affect* and *cognition* is a difficult task involving serious skill.

To illustrate this problem of nonfalsifiability, consider an example from Fishbein and Middlestadt (1995). The authors argued that the effect of noncognitive factors (e.g., attitude toward an ad [Aad]) on attitude toward a candidate [attitude toward an object (Ao)] are eliminated when the appropriate set of predictors (an expectancy-value measure of salient beliefs) is measured. Aad measures (assumed noncognitive) were collected via semantic differential scales, and cognitive measures were collected via the standard belief elicitation and appraisal technique. For the sake of argument, we

could just as easily assume that the cognitive factors are noncognitive and the noncognitive factors cognitive. Assume that I really dislike a candidate but know little about her. When I am asked specific belief statements in the context of a survey (perhaps about her position on an issue that I find attractive), my judgments of belief may be filtered through the strong affect I hold for the candidate (and perhaps through a need for balance, the affect I hold for the issue). Thus, I may infer a constellation of beliefs that I attribute to the candidate based solely on the affect I have for the candidate. Consequently, the beliefs may be epiphenomenal consequences of affect, rather than part of a preexisting set of beliefs organized in long-term memory. The type of survey measures described cannot distinguish between affect-generated beliefs and preexisting, strongly held beliefs of the type hypothesized by Fishbein and Middlestadt. In a similar vein, the noncognitive factors may be much more cognitive (and perhaps less affective) than believed. Specifically, a semantic differential scale elicits a judgment of affect associated with the ad (with its attendant cognitions). Consequently, pure affect (whatever that is) really is not being measured, but a subjective judgment of affect is.

Although one could debate these issues *ad infinitum*, not much is likely to be gained with respect to the basic concerns of the model or attitude theory in general. A more fruitful question may be to address exactly what evidence would suffice for both camps to agree that the model has been falsified.

IS THE MODEL TESTABLE?

If attitudes, beliefs, intentions, and behavior may be created during the measurement of the model's parameters, and (a) their salience influences subjective estimates of engaging in the target behavior, or (b) owing to consistency pressures, respondents express optimistic behavioral intentions, how is the model to be empirically tested? Not only does the model appear nonfalsifiable on theoretical and practical grounds, but empirically it appears untestable due to methodological issues. Although the use of holdout samples may address some of these issues, a further problem exists. Fishbein repeatedly has pointed out the necessity of soliciting beliefs from an appropriate sample, but the practical implications of doing so (especially in the context of testing the theory) become problematic. Different groups often hold different salient beliefs (Kerlinger, 1984; Kluegel & Smith, 1986; van der Pligt & Eiser, 1984). And even if random assignment is used to equate groups, nonsystematic differences would add error, increasing the likelihood of a Type II error.

DO THE METHODOLOGICAL REQUIREMENTS OF THE
MODEL (IRRESPECTIVE OF THE AFOREMENTIONED
POINTS) VIOLATE THE QUEST FOR SIMPLICITY SO THAT
THE PRACTICAL CONSEQUENCES SEEM
THEORETICALLY UNINTERESTING?

Over the years, the model has taken on more and more specification. As a consequence, a good deal of the appeal of attitude as an evaluative summary with behavioral implications has been lost. The appeal of a simple measure seems especially problematic with respect to the arguments regarding correspondence of time, action, context, and target. In a strictly conceptual sense, the addition of specific factors may be entirely tenable. However (for reasons already described), when these factors are translated into specific questions on a survey, the instrument becomes overspecified. A practical implication is that the model tends to calibrate an individual with respect to his or her ability to predict his or her own intention. This leaves open the question of whether the stated behavioral intention corresponds to overt behavior. When predicting behavior is not the goal, however, the model may do quite well in diagnosing remedial marketing action (e.g., changing beliefs).

SOME SUGGESTIONS

Meta-analyses have implicated affect independent of cognition in attitude change (e.g., Brown & Stayman, 1992). Interested readers may consider a number of other attitude models that have successfully integrated the roles of affect and cognition (e.g., Chaiken's, 1987, heuristic systematic model, HSM; Petty's & Cacioppo's, 1986, Elaboration Likelihood Model, ELM). As an illustration, consider Fazio's (1990) Motivation and Opportunity Determine Processing (MODE) model. Fazio's model suggests conditions under which both Fazio's process model and Fishbein's model can account for attitude-behavior consistency. Specifically, when individuals have both the motivation and the opportunity to engage in the deliberative, effortful, attribute-based processing entailed by the theory of reasoned action model, they will. This seems most likely when individuals display high levels of involvement and/or when purchasing big-ticket items, and the negative consequences of a poor choice are severe. When either motivation or opportunity to process carefully is lacking, individuals may simply retrieve an affective categorization of the attitude object and behave consistently with it. This seems especially likely when the negative consequences of poor choice are far outweighed by the prohibitive cognitive costs of carefully evaluating salient relevant beliefs.

We may do well to ponder the quest to establish a simple measure of an internal latent construct that allows us to predict individuals' behavior. What do we want from (a) our attitude construct and (b) our attitude-behavior models? One starting point may be a more complete analysis of the behavior we are attempting to predict. Is the quest for a simple measure more reflective of our sloth and wishful thinking, or is there evidence that attitudes do exist as simple summary judgments which may be linked to beliefs and/or affect and may predict behavior?

Finally, to ground the debate in experience, consider the difficulty faced by a person who grew up in the extended family of the Grateful Dead in expressing her personal view of their music:

At this point in time the Dead's music is associative: *it's difficult to separate thought from feeling* [italics added]. Thoughts fall apart and regroup, just like a Grateful Dead composition: a wedding, births attended, Grandma Tessels' rugalah and Hammentashen, the Carnegie Deli at dawn, long runs on Mt. Tam, roaming the archives of the Smithsonian in asbestos-protection space suits, Sandhill Cranes at the Dead's Bar Cross Ranch, learning how to drive a tractor, college graduations—family values in its truest sense. And then it becomes clear for a moment: the Grateful Dead were always about letting life in, inviting it to your door, and joy—trust and fun with an attitude of grace." (Cohen, 1995, p. 117)

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