

PREDICTION OF ADOLESCENTS' CIGARETTE SMOKING INTENTIONS:
A TEST OF THE MEDIATIONAL ADEQUACY OF THE AJZEN-FISHBEIN MODEL*

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The objective of this study is to test the mediational adequacy of the Ajzen-Fishbein (1975) model. Triandis has proposed a competing model for the prediction of intentions. Intentions are predicted by the person's affect (A) toward the behavior, social factors (S), and the value of perceived consequences (C), according to the following equation:

$$BI = W_1A + W_2S + W_3C.$$

As with the Ajzen and Fishbein model, the relative contribution of the three components is determined by multiple regression procedures.

Although many differences exist in the way each of these terms are defined in each model, the most important difference between the Ajzen and Fishbein model and the Triandis model is Triandis' inclusion of the "C" term in addition to the "A" term.

Whereas Ajzen and Fishbein define the attitude to the act (A_{act}), in terms of all salient beliefs that a person has about the act, Triandis limits his A term to beliefs that link emotions to the act at the moment of action and his C term to beliefs that link the act to future consequences. C is measured by:

$$\sum_{i=1}^n (P_{Ci}) (V_{Ci}) \text{ where}$$

P_{Ci} equals the perceived probability that the act will have the consequences i, and, V_{Ci} equals the value of the consequence i. In effect, Triandis is proposing that affect (A) is determined separately from perceived consequences (C), while Ajzen and Fishbein are proposing that A_{act} is determined by perceived consequences.

Given the similarity which exists between the manner in which A_{act} and A are operationalized (when A_{act} is measured by the semantic differential) and given the similarity between A_{act} and C (when A_{act} is measured by the perceived consequences of all salient beliefs) the purpose of this paper is to determine if Triandis' hypothesis concerning the dual nature of attitude leads to a better theoretical model for the prediction of intentions. If Triandis' hypothesis is correct, then inclusion of both attitudinal terms in the Ajzen and Fishbein model should improve predictive accuracy. This result would imply that the Ajzen and Fishbein model, as presently formulated, is inadequate to mediate both types of attitudinal variables.

Method

A detailed description of the methodology is available in Chassin, et al. (1981).

Results

The Ajzen and Fishbein model was evaluated using four different versions; either the simple semantic differential A_{act} (SA_{act}) or the multiplicative A_{act} (XA_{act}) combined with either normative beliefs alone (NB) or

with the full normative component (normative beliefs X motivation to comply with these beliefs) (NB·MC). All four versions of the model significantly predicted subjects' intentions. The simplest version of the model (SA_{act} -NB) proved to be the most consistently successful; therefore, only data from that version of the model will be reported.

The bivariate correlations between SA_{act} and XA_{act} for each smoking status and each grade ranged from .33 to .51 ($p < .001$). The magnitude of these correlations although relatively high, are not as high as the Ajzen and Fishbein model predict they should be. To determine whether or not the Triandis hypothesis results in superior predictive ability, the test for significance in hierarchical analysis was used. This test was used because the three variable Ajzen and Fishbein model differs from the two variable Ajzen and Fishbein model only in the addition of one term. The inclusion of the third variable significantly increased predictive accuracy among ex-smokers in high school (3%) and among regular smokers in middle school (7%) and high school (3%).

It is perhaps significant that perceived consequences made a significant contribution to the explanation of intentions for those adolescents who had the greatest experience with smoking (i.e., regular smokers and older ex-smokers). This implies that smoking prevention programs aimed at this more experienced segment of adolescents should emphasize the consequences of continued smoking to a greater extent than for the less experienced adolescents.

References

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- Triandis, H. C. (1979), "Values, Attitudes, and Interpersonal Behavior," Nebraska Symposium on Motivation, 195-259.
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Footnote

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