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## E-Commerce, the Consumer Decision Process, and the Theory of Reasoned Action

By [Fred Volk](#)<sup>1</sup>

More and more companies are relying on e-commerce as a principal method of revenue. However, little is known about the behaviors of online shoppers. The focus of this research was to assess users' attitudes regarding online consumer behaviors. This research considers nine Internet behaviors across five consumer behavior processes: (a) Motivation and Need Recognition, (b) Information Search, (c) Alternatives Evaluation, (d) Purchase Decision and Purchase, and (e) Purchase Outcomes. The behaviors studied include: clicking on banner ads, reading e-mail advertisements, searching for product information in online stores and using search engines, using comparison engines and online reviews to evaluate alternatives, purchase products, and accessing online customer support via e-mail and websites.

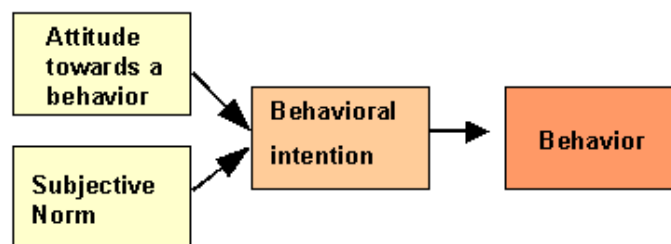


Figure 1. Theory of Reasoned Action.

Internet user attitudes and intentions to use the Internet for each of the behaviors were studied within the theoretical constructs of the Theory of Reasoned Action. The Theory of Reasoned Action (Fishbein, 1980) was adopted to examine the relationship between attitudes and future intention to participate in these behaviors. *It was hypothesized that the attitudinal component and the normative component of the Theory of Reasoned Action would be predictive of behavioral intention on each of the nine behaviors.*

## METHODS

Two hundred and ninety-two Internet users were recruited from university students, faculty, and staff (N=132), and Internet mailing lists (N=160) to answer an online survey. Students were given extra credit toward a course grade for their participation and for encouraging others to contact the web site and to answer the survey. All of the participants were given a chance to win a \$50 for participation in the survey. Sixty-four percent were female (N=186) and about 50% of the participants reported a household income of over \$50,000/year. Ethnicity, affluence, and area type (urban, suburban, or rural)

were representative across the sample.

The Theory of Reasoned Action portion of the survey included the Attitude (generalized assessment of the behavior, behavior and participant style fit, time management, variety, quality, and price outcomes) and the Normative (referent items and motivation to comply items for friends and family) components. Respondents were also asked to indicate the extent they intended to participate in each behavior in the next 12 months, as well as their past experience regarding each behavior including behavior satisfaction. Due to the broad focus of this research (nine behaviors) Fishbein's (1980) methodology was not strictly followed so that the response rate could be maximized.

## **RESULTS AND DISCUSSION**

### *E-Commerce Behaviors*

Stepwise regression analyses were employed to test the hypotheses. The hypotheses were partially supported with Attitude loading significantly on behavioral intention in all nine regression equations. The normative component of the Theory of Reasoned Action only loaded significantly on intention to use e-mail support. The regression equations accounted for between 15.9% and 50% of the variance respectively (see Table 1). This suggests that there is room for improvement in accounting for variance in regard to predicting intention to participate in e-commerce behaviors. There is obviously a gap in our understanding of users' attitudes regarding clicking on banner ads, using e-mail support, and accessing customer support websites with those regression equation accounting for less than 30% of the variance associated with behavioral intention. More acceptable R Square values (.30 to .39) were found in searching for product information behaviors, comparing alternative behaviors, and reading advertising e-mail. While these values are better than the aforementioned behaviors, they still indicate that the vast portion of attitude variance associated with behavioral intention (often 60 - 70%) is not understood. Since purchase behavior has been the focus of recent research, it is not surprising that the relationship between purchase and purchase intention is the most understood with 50% of the variance accounted for by the Theory of Reasoned Action regression equation.

## **CONCLUSIONS**

This study demonstrated that Internet user attitudes and intention to participate in e-commerce-related behaviors can be studied effectively within the theoretical constructs of the Theory of Reasoned Action. It has highlighted the need for further research in two meaningful areas: (1) the applicability of applying traditional social psychological theories to Internet behaviors, and (2) the clear identification of knowledge gaps in the consumer decision process with regard to online consumer behavior.

As discussed earlier, for the most part, the normative component did not load on behavioral intention. This certainly suggests that when we begin to examine social processes and behaviors relative to the Internet, we may find differences that are unexpected. This research focused on the context of the given behaviors rather than the target. It certainly is plausible that the target of the behavior is the aspect of this Theory that is most sensitive to the normative component. For example, clicking on banner ads in general is not sensitive to social referents, but clicking on a banner ad with socially unacceptable content would be sensitive to the normative component.

While this study certainly gives us some indication that the generally accepted social theory constructs may emerge differently (either slightly or drastically) when focusing on online behaviors, this research is by no means conclusive enough to alter or suggest an alternate Theory of Reasoned Action for online behaviors. This research does suggest, however, a line of investigation that focuses on the application of the Theory of Reasoned Action to online behaviors in a manner that is methodologically consistent with Fishbein (1980) is necessary to understand the applicability of these theoretical constructs to online consumer behavior.

What do these gaps identified in this research tell us regarding e-commerce and the Consumer Decision Process? Our understanding of the processes, and associated behaviors of the Consumer Decision Process regarding online behavior, is vastly incomplete. In industry, the focus of usability and research has been simplifying the purchase process rather than the complete user experience. Does it really matter if an e-commerce site has the best shopping cart interaction model or "one-click ordering" process? Yes, those things are important, but they are not sufficient to ensure the success of a

business. A successful and sustainable business is built on consideration of the complete customer experience. This research suggests further study of online consumer behaviors across the broad spectrum of the Consumer Decision Process, using traditional social theories, may be a fruitful area for identifying those factors that are critical to the success of Internet businesses.

**Table 1. Results Summary: R Square shows the percent of variance accounted for in predicting behavior using Theory of Reasoned Action regression equation**

Behavior	R Square
Clicking on Banner Ads	.16
Reading Advertising Email	.32
Product Information Search in Online Stores	.30
Product Information Search Using Search Engines	.36
Comparing Alternatives with Comparison Engines	.38
Comparing Alternatives with Online Reviews	.39
Purchase	.51
E-mail Support	.24
Accessing Customer Support Web sites	.17

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