Can Internet Shoppers Be Described by Personality Traits?

By **By Gina M. Copas**

E-commerce retailers (e-tailers) have for some time focused on identifying the shopping habits and trends of their customers, as opposed to the Internet community as a whole. Historically, the Internet shopper profile is portrayed as a homogeneous group of affluent males (Lebhar-Friedman, Inc., 2000 & Enos, 2000). In fact, prior research has mostly focused on variables such as gender and age as characteristics of Internet purchasing behaviors. However, it has been theorized that there might be an Internet culture that is more influential on buying behavior than just ones gender or age (Ebiz, 1999). Frequent Internet users are considered to be part of an "Internet community", therefore it should be considered whether or not there are shared traits among online users.
Personality traits are used to describe the strong consistencies that people demonstrate in their behavior across time and situations. People display behaviors that fall into a continuum of trait extremes. This behavior can be malleable to the situation such as the differences in behaviors across various shopping venues. For example, while consumers may not hesitate to give their credit card to a cashier or give personal or credit card information over the phone, research has shown that many consumers are concerned with online security. Therefore, this study explores Internet purchasing behaviors and the following personality traits: Vigilance and Openness to Change.

Vigilance is a personality trait that relates to the tendency to trust versus being suspicious about others' motives and intentions. High scorers expect to be taken advantage of and may be unable to relax their vigilance when it might be advantageous to do so. Low scorers tend to expect fair treatment (Conn & Rieke, 1994). Research indicates that Internet purchasers are more trusting (Donthu & Garcia, 1999). It was hypothesized that greater vigilance scores would be associated with fewer online purchases and decreased comfort with Internet purchasing. Conversely, lower scores on the vigilance scale will correspond with more online purchases, increased comfort and more positive attitudes towards Internet purchasing.
Openness to change is a personality trait that relates to being open to new circumstances as opposed to wanting to stay in familiar situations. High scorers are open to change and enjoy experimenting with new ideas and situations. Low scorers like routine and are attached to familiar situations (Conn & Rieke, 1994). Internet purchasers have been described as more innovative (Donthu & Garcia) and not uncomfortable with using technology (Ebiz, 1999). It was hypothesized that higher openness to change scores would be associated with more online purchases and more positive attitudes and increased comfort towards Internet purchasing.

Self-reliance was also investigated as an Internet behavior characteristic, however, it will not be reported on for the purpose this article.

METHOD

Participants/Materials

Five hundred and thirty-five participants from Wichita State University including both undergraduate

and graduate business/marketing and psychology students participated in this study. All participants reported having access to the Internet. The ages of participants ranged from 18 to 51 and the average age was 23 (S.D. = 5.71).

Procedure

Data was collected by survey. Personality questions were selected from the 16PF Personality Inventory to identify Vigilance, Openness to Change, and Self-Reliance. Because of situational specificity, some survey questions were modified to measure the personality trait in the specific domain of E-commerce rather than general personality traits (Kazdin, 1998). There were 20, 5-point continuous scale questions pertaining to the frequencies of and attitudes towards Internet usage, specifically making online purchases. The survey was offered to every student in the participating classes and took approximately 15 minutes to complete.

RESULTS

The sample population accessed the Internet frequently, with 86.5% using the Internet to communicate at least weekly and 75% access the Web to explore and have "fun" at least weekly. Two-thirds of the population had long-term experience, over 4 years, using the Internet. Only 18% of the sample made regular online purchases (at least monthly); however, approximately half (55.4%) use the Internet to search for specific products at least weekly.

The mean vigilance score was 10.98 (S.D. = 2.75) out of a range of possible scores from 1 (trusting) to 16 (suspicious).

Table 1: Correlations: Vigilance by Internet Shopping Behaviors and Attitudes

Behavior/Attitude	Mean (Std Dev)	Significance
Buy products from online retailers a	1.84 (.87)	$r = -.156$, $p < .01$, $r2 = .03$
Buy products from online auctions a	1.38 (.69)	$r = -.087$, $p < .01$, $r2 = .01$
Comfortable shopping online b	3.06 (1.23)	$r = -.292$, $p < .01$, $r2 = .09$
Internet shopping saves money b	3.12 (.86)	$r = -.117$, $p < .01$, $r2 = .01$
Internet shopping is convenient	3.66 (.93)	$r = -.107$, $p < .05$, $r2 = .01$
Like Internet shopping b	3.12 (1.32)	$r = -.264$, $p < .01$, $r2 = .07$

Note: a: 1 = Never to 5 = Daily; b: 1 = Strongly disagree to 5 = Strongly Agree

The mean Openness to Change score was 15.04 (S.D. = 4.75) out of a range of possible scores from 0 (needs familiar) to 28 (open to change).

Table 2: Correlations: Openness to Change by Internet Shopping Behaviors and Attitudes

Behavior/Attitude	Mean (Stand Dev)	Significance
Buy products from online retailers a	1.84(.87)	$r = .333$, $p < .01$, $r2 = .11$
Buy products from online auctions a	1.38(.69)	$r = .215$, $p < .01$, $r2 = .05$

Search product information a	3.45(1.19)	r = .216, p <.01, r2 = .05
Make price comparisons a	2.60(1.17)	r = .355, p <.01, r2 = .13
Communicate with others a	4.39(.95)	r = .187, p <.01, r2 = .04
Have "fun" and explore a	4.01(1.1)	r = .279, p <.01, r2 = .08
Comfortable shopping online b	3.06(1.23)	r = .300, p <.01, r2 = .09
Internet shopping saves money b	3.12(0.86)	r = .234, p <.01, r2 = .06
Internet shopping saves time b	3.54(1.0)	r = .187, p <.05, r2 = .04
Internet shopping is convenientb	3.66(.93)	r = .214, p <.01, r2 = .05
Like Internet shoppingb	3.12(1.32)	r = .339, p <.01, r2 = .12

Note: a: 1 = Never to 5 = Daily; b: 1 = Strongly disagree to 5 = Strongly Agree

DISCUSSION

Results showed that Vigilance, or suspiciousness, was negatively associated with Internet purchasing behaviors that required commitment such as giving credit card or personal information. Vigilance was also negatively associated with Internet usage attitudes demonstrating a relationship between trust and Internet comfort levels. These results support the hypothesis that Vigilance as a personality factor can influence Internet shopping behaviors. The correlation between Vigilance and online shopping comfort accounted for 9% of the variance, which indicates that trust is an important issue when differentiating between online browsing behaviors and actually purchasing.

Results showed that the Openness to Change personality trait was positively associated with Internet behaviors and attitudes. This supports the hypothesis that Openness to Change as a personality factor can influence Internet shopping behaviors. The correlation between Openness to Change and making product price comparisons accounted for 13% of the variance, demonstrating that those who enjoy trying new things are quite willing to use technology as a shopping venue. The correlation between Openness to Change and actual online purchasing accounted for 11% of the variance in online behavior that required transmission of personal information and commitment; this is meaningful considering the volume of consumer dollars spent online.

The Census Bureau as reported in eBiz (Haney, February 16, 2001) stated that Internet retailing business increased 60% in a single year (from $17.3 billion in 1999 to $28 billion in 2000). This huge change in human behavior indicates that Internet consumer behavior is an important area of research. Understanding factors that distinguish between purchasers and non-purchasers may well be vital to retailers; both traditional and online. Internet retailers who zealously profile individuals' purchasing habits should be aware of population characteristics in order to retain their market and draw in consumers who do not make online purchases. E-commerce companies will want to use strategies that influence Internet shoppers to change their behavior from Internet shopping (searching online but purchasing elsewhere) to Internet purchasing; these strategies need to include user-friendly purchasing processes to ensure success during initial purchasing attempts as well as measures to increase consumer trust. Conversely, traditional retailers, who more moderately profile individual purchasing habits, will also want to have knowledge of population attributes in order to retain their market and regain market share lost E-commerce.

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