

Online Shopping Patronage: Do Demographics and Psychographics Really Matter?

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This study examines how consumer demographics and psychographics may influence their online shopping patronage (i.e., the frequency of online purchases). Findings show that younger people and individuals with a higher income and education level are likely to shop online more frequently, while gender has no effect on the frequency of online shopping. This study also finds that propensity to trust, variety seeking, and impulsive buying are positively related to the frequency of online shopping, while risk aversion is negatively related to the frequency of online shopping. Theoretical and managerial implications are discussed.

Keywords: online shopping, online shopping patronage, demographics, psychographics

INTRODUCTION

Consumer spending on the Internet has been growing dramatically in recent years. According to the U.S. census data, the U.S. retail e-commerce sales reached \$160.41 billion during the first quarter of 2020, up 14.8% from the same quarter of 2019 and accounting for 11.8% of total retail sales, whereas the total retail sales reached 1364.20 billion during the first quarter of 2020, up only 2.1% from the same quarter of 2019, indicating a sharp difference between the increase in online sales and that in the total retail sales.

The rapid growth of online shopping undoubtedly generates considerable interest from the academic world. An extensive body of research has explored various aspects of consumers' online shopping behavior, including online shopping patronage as measured by the frequency of online purchases and/or money spent online (e.g., Forsythe & Shi, 2003, Hansen & Jensen, 2009, Li et al., 2015, Liao, Wang & Yeh, 2014), online shopping adoption (e.g., Allred, Smith, & Swinyard, 2006, Brashear et al., 2009, Donthu & Garcia, 1999, Soopramanien & Robertson, 2007), Online shopping intentions (e.g., Hausman & Siekpe, 2009, Hernandez, Jimenez & Martin, 2011, Kim, Shin, & Lee, 2009, Pappas et al., 2014, Smith et al., 2013), online shopping motivations (e.g., Childers et al., 2001), online shoppers' switching behavior (e.g., Singh, 2019), and consumers' attitude and trust toward online shopping (e.g., Dai et al., 2019, Gefen, Karahanna, & Straub, 2003, Hassanein & Head, 2007).

Among these studies, many have suggested that consumers' demographics and psychographics can influence their online shopping behavior. For example, Swinyard and Smith (2003) found that consumers' demographics can influence their likelihood of shopping online. Brashear et al. (2009) indicated how online shoppers' demographics and psychographics may differ from those of non-online shoppers. Hernandez, Jimenez, and Martin (2011) showed how consumers' demographics (age, gender, and income) may moderate their future online shopping intentions.

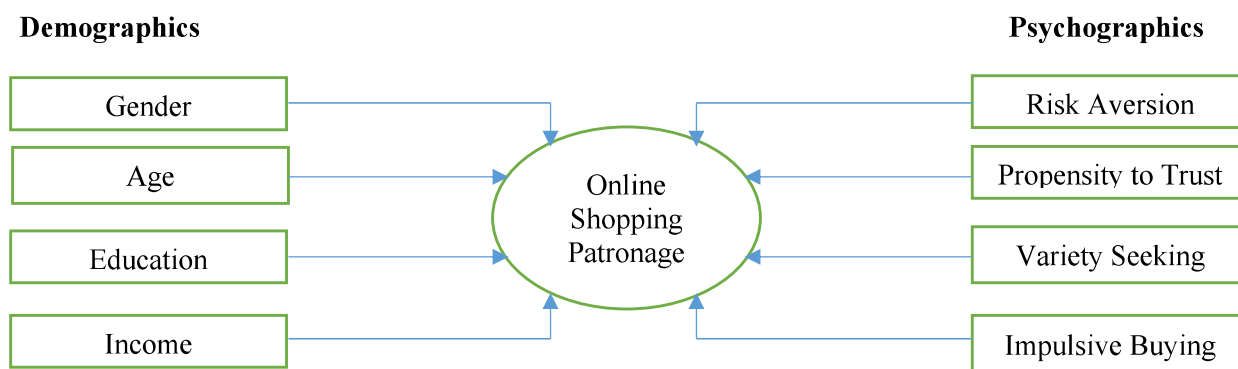
In the context of online shopping frequency, previous studies have generated mixed findings with respect to the effect of consumer demographics. For example, Liao, Wang & Yeh (2014) showed that consumers' gender and income have no effect on their online shopping frequency. Forsythe and Shi (2003), however, found that consumers' income is positively related to their frequency of online purchases, whereas age has no such effect. Moreover, little study has been done on the relationship between consumer psychographics and their online shopping frequency. Consumers' past online shopping frequency has largely been used as a predictor and moderator for their future online shopping intentions (Chiagouris & Ray, 2010, Pappas et al., 2014, Shim et al., 2001). What is lacking, however, is that what led to the different levels of consumers' online shopping frequency.

As such, the purpose of this study is to investigate and reassess whether and how consumer demographics (i.e., age, gender, income, and education) and psychographics (i.e., risk aversion, variety seeking, propensity to trust, and impulsive buying) may influence their online shopping patronage (i.e., the frequency of online purchases). The rest of this paper is organized as follows: first, a conceptual model is developed to study the impact of consumers' demographics and psychographics on their online shopping frequency. Second, a set of hypotheses are proposed to test those effects. Third, we describe the methodology and present the results to test the hypotheses. Fourth, findings and implications from this study are discussed. Finally, this study concludes with research limitations and future directions.

CONCEPTUAL MODEL

There is a long research tradition of studying the effect of consumer demographics and psychographics on their shopping behavior. In the traditional offline shopping environment, consumer demographics have been shown as a predictor of their shopping behavior. For example, Darian (1987) indicated that consumer demographics tend to influence their in-home shopping behavior (e.g., likelihood of in-home shopping). Similarly, Kim, Srinivasan, and Wilcox (1999) found that store shoppers' demographics are related to their shopping frequency. Studies have also shown that consumer psychographics can also influence their shopping behavior. For example, Bearden, Teel, and Durand (1978) demonstrated that consumer psychographics as well as demographics can influence their store choices (e.g., convenience vs. department stores). Gehrt and Carter (1992) indicated that consumer psychographics can serve as a predictor of their catalog patronage behavior. Finally, Ailawadi, Neslin, and Gedenk (2001) found that consumer psychographics can influence their usage of store brands and national brand promotions.

FIGURE 1
THE CONCEPTUAL MODEL



In the online shopping environment, numerous studies have illustrated that consumer demographics and psychographics can be a significant predictor of their online shopping behavior (e.g., Brashear et al., 2009, Donthu & Garcia, 1999, Hernandez, Jimenez, & Martin, 2011, Soopramanien & Robertson, 2007). In the context of online shopping patronage (i.e., the frequency of online purchases), however, mixed

findings have been found for the impact of consumer demographics. For example, income has been shown to significantly influence consumers' frequency of online purchases in Forsythe and Shi's (2003) study, but such effect was not found in Liao, Wang & Yeh's (2014) study. Furthermore, little is known concerning the impact of consumer psychographics on the frequency of their online purchases.

With this study, we intend to address such research gap and conflicting findings. Specifically, we investigate four common demographic factors (i.e., gender, age, education, and income) and four psychographic traits, including risk aversion, propensity to trust, variety seeking, and impulsive buying. These psychographic characteristics have been shown in the literature to be associated with consumers' online shopping behavior (e.g., Brashear et al., 2009, Donthu & Garcia, 1999, Guiot & Roux, 2010, Pavlou & Gefen, 2004, Zhang, Prybutok, & Koh, 2006). Figure 1 provides the conceptual model for the present study. As can be seen, consumer demographics and psychographics are assumed to influence their online shopping patronage.

HYPOTHESIS DEVELOPMENT

Demographics

A stream of research has analyzed the effect of consumer demographics on their offline shopping behavior (e.g., Bearden, Teel, & Durand, 1978, Darian, 1987, Gehrt & Carter, 1992, Kim, Srinivasan, & Wilcox, 1999). Similarly, in the online environment, studies have found that consumers' online shopping behavior can be affected by their demographics such as gender, age, education, and income (Allred, Smith, & Swinyard, 2006, Brashear et al., 2009, Dai et al., 2019, Donthu & Garcia, 1999, Forsythe & Shi, 2003, Rogers & Harris, 2003).

Gender has long been perceived as a predictor of consumers' online shopping behavior (Dai et al., 2019, Hansen & Jensen, 2009, Hernandez, Jimenez, & Martin, 2011, Rogers & Harris, 2003, Soopramanien & Robertson, 2007). Empirical results often suggest that females are the primary in-store shoppers (Darian 1987), whereas males are the more frequent shoppers in the online environment (Forsythe & Shi, 2003). For example, Forsythe and Shi (2003) found that males are more likely than females to be heavy online shoppers. Rodgers and Harris (2003) also explained why males are more satisfied with online shopping than females.

With respect to the relationship between age and online shopping behavior, studies have found that online shoppers tend to be younger than offline shoppers (Allred, Smith, & Swinyard, 2006, Donthu & Garcia, 1999, Swinyard & Smith, 2003). This is not surprising, considering that online shopping environment can be technological and complex, while younger people are more technology-savvy and have better physical and cognitive capabilities (Lambert-Pandraud, Laurent, & Lapersonne, 2005).

The literature also demonstrated that education is positively related to Internet usage including online shopping (Allred, Smith, & Swinyard, 2006, Lennon et al., 2007, Swinyard & Smith, 2003). For example, Swinyard and Smith (2003) found that consumers with a higher education level are more likely to be online shoppers. The reason may be because as consumers become more knowledgeable, they are more likely to adopt new technologies such as the Internet.

Finally, research has found that online shoppers often have a higher income level than offline shoppers (e.g., Donthu & Garacia 1999, Lennon et al. 2007, Soopramanien & Robertson, 2007, Swinyard and Smith 2003). In the context of online shopping frequency, Forsythe and Shi (2003) found that heavy online shoppers (i.e., those who purchase online all or most of the time when deciding to buy a product/service) tend to have a higher income level than moderate online shoppers (i.e., those who purchase online half of the time or less often when deciding to buy a product/service) or browsers.

Based on the above analysis, the following hypotheses are stated:

Hypothesis 1: Males shop online more frequently than females.

Hypothesis 2: Age is negatively related to the frequency of online shopping.

Hypothesis 3: Education is positively related to the frequency of online shopping.

Hypothesis 4: Income is positively related to the frequency of online shopping.

Risk Aversion

Individuals differ in terms of their risk tolerance. Some are risk averse who are unwilling to take risks when facing uncertainty and possible adverse consequences, while others are risk seeking or neutral. Consumers often perceive online shopping as having a higher level of risk than in-store shopping (Brashear et al., 2009, Donthu & Garcia, 1999), since online shopping has been associated with many types of risks, including financial risk (e.g., credit card theft), product performance risk, psychological risk, and online privacy and security concerns (Forsythe & Shi, 2003, Isabel & Roman, 2014). For example, Forsythe and Shi (2003) showed that product performance and financial risks are significant predictors for online shoppers' frequency of purchases. Based on the above analysis, the following hypothesis is proposed:

Hypothesis 5: Risk aversion is negatively related to the frequency of online shopping.

Propensity to Trust

Propensity to trust refers individuals' general attitude or tendency toward trusting others; in other words, do you believe that most people can be trusted and dependable (Alesina & La Ferrara, 2002, Gefen, 2000)? Individuals can differ in terms of their propensity to trust (McKnight, Cummings, & Chervany, 1998). Studies have found that individuals' propensity to trust is most effective under situations concerning unfamiliar actors (Bigley & Pearce, 1998), a phenomenon that is typical in the context of online shopping, considering that most online transactions are made among strangers. Numerous studies suggested that online shoppers' propensity to trust can enhance their level of trust toward online vendors, which in turn increases their online shopping intention (Gefen, 2000, Kim, Shin, & Lee, 2009, Pavlou & Gefen, 2004). Therefore, it is expected that consumers with a higher level of propensity to trust are likely to make more online purchases. Formally,

Hypothesis 6: Propensity to trust is positively related to the frequency of online shopping.

Variety Seeking

Variety seeking refers one's tendency to look for new and different things. Consumers engage in variety seeking due to their desire for change, exploration or the lack of familiarity with their choices (McAlister & Pessemier, 1982). The interactive nature of the online shopping environment allows consumers to easily access a wide variety of information and engage in price and product comparisons (Alba et al. 1997), which may increase online shoppers' variety seeking behavior. Rohm and Swaminathan (2004) identified four types of online shoppers, one of which are variety seekers (the largest group), who are substantially more driven by variety seeking across retail alternatives and product types and brands. Studies also found that online shoppers have a higher level of variety seeking than offline shoppers (Brashear et al., 2009, Donthu & Garcia, 1999). Therefore, it is reasonable to assume that variety seekers tend to shop online more frequently than their counterparts. Formally,

Hypothesis 7: Variety seeking is positively related to the frequency of online shopping.

Impulsive Buying

Impulsive buying describes a situation where "a consumer experiences a sudden, often powerful and persistent urge to buy something immediately" (Rook, 1987). As compared to planned purchases, impulsive buying is perceived as more arousing, exciting, spontaneous, emotional, extraordinary, and irresistible (Rook, 1987, Kacen & Lee, 2002, Wood, 2005). Considering that online shopping can be enjoyable, exciting, and emotional (Childers et al., 2001, Rohm & Swaminathan, 2004), the literature has demonstrated that online shoppers tend to have a higher level of impulsive buying tendency than offline shoppers

(Brashear et al., 2009, Donthu & Garcia, 1999). Similarly, Zhang, Prybutok, and Koh (2006) found a positive relationship between consumers' impulsive buying tendency and their online shopping behavior. Based on the above analysis, the following hypothesis is proposed:

Hypothesis 8: Impulsive buying is positively related to the frequency of online shopping.

METHODOLOGY

Sample

An online survey was created to collect data using Zoomerang's online shopper panel. Participants were first asked about the frequency of their online purchases as well as their demographics. They then answered a series of questions to measure their psychographics. The final sample consisted 3538 online shoppers. Table 1 summarizes the sample characteristics.

TABLE 1
SAMPLE CHARACTERISTICS

Characteristics	Measures	Frequency	Percentage (N = 3538)
Gender	Male	1957	55.3%
	Female	1581	44.7%
Age	29 years or younger	105	3.0%
	30 – 39 years	482	13.6%
	40 – 49 years	790	22.3%
	50 – 59 years	1082	30.6%
	60 – 69 years	784	22.2%
	70 years or older	295	8.3%
Education	Some school	26	0.7%
	High school diploma	480	13.6%
	Some college	1186	33.5%
	College	899	25.4%
	Some Graduate	234	6.6%
	Master's Degree	541	15.3%
	Doctor's Degree	172	4.9%
Income	Below \$20,000	216	6.1%
	\$20,000 - \$39,999	618	17.5%
	\$40,000 - \$59,999	754	21.3%
	\$60,000 - \$79,999	692	19.6%
	\$80,000 - \$99,999	496	14.0%
	\$100,000 - \$119,999	301	8.5%
	\$120,000 or more	461	13.0%
Number of Online Purchases During the Past 12 Months	1 – 9	749	21.2%
	10 – 29	1303	36.8%
	30 – 49	695	19.6%
	50 or more	791	22.4%

Measures

Online shopping patronage was measured as the number of online purchases made during the past 12 months (Hansen & Jensen, 2009, Shim et al., 2001). The following four categories were used: 1 = 1 – 9, 2 = 10 – 29, 3 = 30 – 49, and 4 = 50 or more.

Gender was measured as a dichotomy (1 = Male and 2 = Female). Age was measured using six categories: 1 = 29 or younger, 2 = 30 – 39, 3 = 40 – 49, 4 = 50 – 59, 5 = 60 – 69, and 6 = 70 or older. Education was measured using seven categories: 1 = some school, 2 = high school diploma, 3 = some college, 4 = bachelor’s degree, 5 = some graduate work, 6 = master’s degree, and 7 = doctorate. Income was also measured using seven categories: 1 = below \$20,000, 2 = \$20,000 – \$39,999, 3 = \$40,000 – \$59,999, 4 = \$60,000– \$79,999, 5 = \$80,000 – \$99,999, 6 = \$100,000 – \$119,999, and 7 = \$120,000 or more.

Risk Aversion was measured on a three-item scale, Variety Seeking was measured on a three-item scale, and Impulsive Buying was measured on a four-item scale. These three measures were adopted from Donthu and Garcia (1999) and Brashear et al. (2009). Propensity to Trust was measured on a four-item scale based on Gefen (2000) and Pavlou and Gefen (2004). All these items were measured using seven-point Likert scales (1 = “strongly disagree,” and 7 = “strongly agree”). The items measuring each construct were then averaged to create a scale score for further analysis.

RESULTS AND ANALYSIS

Confirmatory factor analysis was conducted to examine the validity of the measured variables. The results are provided in Table 2. As can be seen, all factor loadings were ranged from 0.56 to 0.93, well above Nunnally and Bernstein’s (1994) suggested cutoffs of 0.4.

TABLE 2
MEASUREMENT SCALES AND RESULTS FROM FACTOR ANALYSIS

Measurement Scales	Loading	α	CR	AVE	ASV	MSV
<i>Risk Aversion</i>						
I would rather be safe than sorry.	.87	.78	.87	.69	.02	.06
I want to be sure before I purchase anything.	.84					
I avoid risky things.	.77					
<i>Propensity to Trust</i>						
I generally trust other people.	.87					
I feel that people are generally reliable.	.93	.84	.90	.70	.01	.02
I feel that people are generally honest.	.92					
Most people do not keep their promises and commitments.	.56					
<i>Variety Seeking</i>						
I like to try different things.	.89	.90	.92	.79	.05	.13
I like a great deal of variety.	.91					
I like new and different styles.	.87					
<i>Impulsive Buying</i>						
I often make unplanned purchases.	.82					
I like to purchase things on a whim.	.83	.78	.84	.56	.07	.13
I think twice before committing myself.	.63					
I always stick to my shopping lists.	.70					

Note: α = Cronbach’s Alpha; CR = Composite Reliability; AVE = Average Variance Extracted; ASV = Average Shared Variance; MSV = Maximum Shared Variance.

The convergent validity was assessed by calculating Cronbach’s alpha, composite reliability, and average variance extracted (AVE). As shown in Table 2, Cronbach’s alpha estimates, ranging from .78 to .90, were all greater than the cutoff point of .70 as suggested by Nunnally and Bernstein (1994). Composite reliabilities ranged from .84 to .92, indicating satisfying levels of reliability for the constructs

(Bagozzi & Yi, 1988). Finally, all AVEs exceeded the recommended level of .50 (Fornell & Larcker, 1981). Therefore, the convergent validity was confirmed.

To assess the discriminant validity, we followed the procedure suggested by Fornell and Larcker (1981), which states that the AVE should be greater than the Maximum Shared Variance (MSV) and the Average Shared Variance (ASV). The results in Table 2 strongly support such notion. Therefore, the discriminant validity among the constructs was established.

To test the effect of demographics and psychographics on online shoppers' frequency of purchases, an ordinary least square regression was conducted, and the results are presented in Table 3.

TABLE 3
RESULTS OF REGRESSION ANALYSIS ON THE FREQUENCY OF ONLINE SHOPPING
(N = 3538)

Variable	Standardized Coefficient	t	Significance
<i>Gender</i>	-.008	-.436	.663
<i>Age</i>	-.142	-8.273	< .001
<i>Education</i>	.086	4.959	< .001
<i>Income</i>	.114	6.639	< .001
<i>Risk Aversion</i>	-.076	-4.449	< .001
<i>Propensity to Trust</i>	.077	4.711	< .001
<i>Variety Seeking</i>	.064	3.653	< .001
<i>Impulsive Buying</i>	.120	6.658	< .001
<i>Constant</i>		10.312	< .001

R² = .106; Adjusted R² = .104. Gender: 1 = Male, 2 = Female;

Based on the results in Table 3, younger people and individuals with higher income and education levels shop online more frequently than older people and individuals with lower income and education levels. Thus, Hypotheses 2, 3, and 4 are supported. No gender difference has been found. Therefore, Hypothesis 1 is rejected.

TABLE 4
GENDER DISTRIBUTION ACROSS DIFFERENT LEVELS OF
ONLINE SHOPPING FREQUENCY

Gender	Sample (N = 3538)	Frequency of Online Shopping (1-9 times) N = 749	Frequency of Online Shopping (10-29 times) N = 1303	Frequency of Online Shopping (30-49 times) N = 695	Frequency of Online Shopping (49 or more times) N = 791
<i>Male</i>	55.30% (1955)	62.08% (465)	53.72% (700)	50.65% (352)	55.37% (438)
<i>Female</i>	44.70% (1583)	37.92% (284)	46.28% (603)	49.35% (343)	44.63% (353)
		$\chi^2 = 14.05$ $p = .000$	$\chi^2 = 1.37$ $p = .242$	$\chi^2 = 5.96$ $p = .015$	$\chi^2 = 0.01$ $p = .943$

To further examine the gender effect, Table 4 presents the gender distributions across different levels of online shopping frequencies. Chi-square analysis was then used to compare the gender distribution of the whole sample with those of four levels of online shopping frequencies. As can be seen, the sampled gender distribution was significantly different from two of those four levels. Specifically, for online shoppers who only purchased one to nine times per year, there are significantly more males than females, whereas for those who purchased 30 to 49 times per year, there are significantly more females than males.

As a result, there is no clear evidence as to how gender may influence consumers' online shopping frequency. More research is certainly needed.

With respect to psychographics, as can be seen from Table 3, risk aversion has a significantly negative effect on the frequency of online purchases. Thus, Hypothesis 5 is supported. Results in Table 3 also show that online shoppers who scored high on propensity to trust, variety seeking, and impulsive buying made more purchases than those who scored low on these dimensions. Therefore, Hypotheses 6, 7, and 8 are supported.

DISCUSSIONS AND IMPLICATIONS

It is well documented in the literature that consumer online shopping behavior can be affected by their demographics and psychographics (Allred, Smith, & Swinyard, 2006, Brashear et al., 2009, Donthu & Garcia, 1999, Forsythe & Shi, 2003, Soopramanien & Robertson, 2007). The present study adds to this research stream by indicating how consumer demographics and psychographics can influence their online shopping frequency. Specifically, younger people and individuals with a high income and education level are likely to shop online more frequently. These results are consistent with the literature and reinforce the importance of examining consumer demographics as determinants of their online shopping behavior. However, gender was not found to be a significant predictor for the frequency of online shopping. This finding is consistent with Liao, Wang, and Yeh's (2014) study, suggesting that consumers' online shopping frequency may not differ in terms of their gender, as both males and females can be heavy online shoppers.

This study also provides an understanding of the role of consumer psychographics in their online shopping frequency, which has not been done in the literature. Specifically, online shoppers who scored high on propensity to trust, variety seeking, and impulsive buying are likely to shop more frequently than those who scored low on these factors. Online shoppers who are risk averse tend to shop less frequently than those who are risk seekers. These findings add to the online shopping literature, and certainly enhance our understanding of online shoppers.

Findings from this study have important implications for online businesses who intend to develop strategies to attract frequent online shoppers. As more and more consumers shop online, businesses need to understand that online shoppers differ from each other. Results from this study can certainly help them segment their online shoppers based on their demographics and psychographics and develop strategies accordingly. In addition, as younger people and individuals with a high level of education and income tend to shop more online, online businesses need to develop strategies (e.g., web page design and product offerings) to attract these potential heavy online shoppers. Finally, considering the effect of consumer psychographics on their online shopping frequency, businesses can design their e-tailing strategy in a way that mitigates the uncertainty, builds the trust, offers varying options, and creates the sensory and entertaining appeal to stimulate online shoppers' impulsive buying behavior.

LIMITATIONS AND FUTURE RESEARCH

Though this study provides valuable insights into understanding online shoppers, particularly their online shopping frequency, several limitations should be noted. First, this study does not consider the differences across different product categories. For example, search products carry a lower level of uncertainty than experience products. As a result, online shoppers may interact with these two types of products differently. In addition, males and females may purchase different types of products online. For example, Girard, Korgaonkar, and Silverblatt (2003) found that males are more likely to shop online for books and consumer electronics (e.g., personal computers, phones, and TVs), whereas females are more likely to purchase clothing and perfumes on the Internet. In other words, gender differences may be product specific. Future research may tackle these issues. Second, cultural differences exist in the context of online shopping. For example, Brashear et al. (2009) demonstrated that the effect of consumer demographics on their likelihood of shopping online can differ across different countries. This study was conducted in the United States. Future research may take other cultures into consideration. Finally, the present study

investigates four types of psychographic factors. Other psychographic measures certainly exist in the literature, such as price consciousness and need for uniqueness (Brashear et al., 2009, Guiot & Roux, 2010). Future research may extend this study by exploring other relevant variables.

REFERENCES

- Ailawadi, K.L., Neslin, S.A., & Gedenk, K. (2001). Pursuing the Value-Conscious Consumer: Store Brands Versus National Brand Promotions. *Journal of Marketing*, 65(1), 71-89.
- Alba, J., Lynch, J., Weitz, D., Janiszewski, C., Lutz, R., Sawyer, A., & Wood, S. (1997). Interactive Home Shopping: Consumer, Retailer, and Manufacturer Incentives to Participate in Electronic Marketplaces. *Journal of Marketing*, 61(3), 38-53.
- Alesina, A., & La Ferrara, E. (2002). Who Trusts Others? *Journal of Public Economics*, 85(2), 207-234.
- Allred, C.R., Smith, S.M., & Swinyard, W.R. (2006). E-Shopping Lovers and Fearful Conservatives: A Market Segmentation Analysis. *International Journal of Retail & Distribution Management*, 34(4/5), 308-333.
- Bagozzi, R.P., & Yi, Y. (1988). On the Evaluation of Structural Equation Models. *Journal of the Academy of Marketing Science*, 16(1), 74-94.
- Bearden, W.O., Teel, J.E., Jr., & Durand, R.M. (1978). Media Usage, Psychographic, and Demographic Dimensions of Retail Shoppers. *Journal of Retailing*, 54(1), 65-74.
- Bigley, G.A., & Pearce, J.L. (1998). Straining for Shared Meaning in Organization Science: Problems of Trust and Distrust. *Academy of Management Review*, 23(3), 405-421.
- Brashear, T.G., Kashyap, V., Musante, M.D., & Donthu, N. (2009). A Profile of the Internet Shopper: Evidence from Six Countries. *Journal of Marketing Theory and Practice*, 17(3), 267-281.
- Chiagouris, L., & Ray, I. (2010). Customers on the Web Are Not All Created Equal: The Moderating Role of Internet Shopping Experience. *The International Review of Retail, Distribution and Consumer Research*, 20(2), 251-271.
- Childers, T.L., Carr, C.L., Peck, J., & Carson, S. (2001). Hedonic and Utilitarian Motivations for Online Retail Shopping Behavior. *Journal of Retailing*, 77(4), 511-535.
- Dai, W., Arnulf, J.K., Lao, L., Wan, P., & Dai, H. (2019). Like or want? Gender differences in attitudes toward online shopping in China. *Psychology & Marketing*, 36(4), 354-362.
- Darian, J.C. (1987). In-Home Shopping: Are There Consumer Segments? *Journal of Retailing*, 63(2), 163-186.
- Donthu, N., & Garcia, A. (1999). The Internet Shopper. *Journal of Advertising Research*, 39(3), 52-58.
- Fornell, C., & Larcker, D.F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18(1), 39-50.
- Forsythe, S.M., & Shi, B. (2003). Consumer Patronage and Risk Perceptions in Internet Shopping. *Journal of Business Research*, 56(11), 867-875.
- Gefen, D. (2000). E-Commerce: The Role of Familiarity and Trust. *Omega*, 28(6), 725-737.
- Gefen, D., Karahanna, E., & Straub, D.W. (2003). Trust and TAM in Online Shopping: An Integrated Model. *MIS Quarterly*, 27(10), 51-90.
- Gehrt, K., & Carter, K. (1992). An exploratory assessment of catalog shopping orientations. *Journal of Direct Marketing*, 6(1), 29-39.
- Girard, T., Korgaonkar, P., & Silverblatt, R. (2003). Relationship of Type of Product, Shopping Orientations, and Demographics with Preference for Shopping on the Internet. *Journal of Business and Psychology*, 18(1), 101-120.
- Guiot, D., & Roux, D. (2010). A Second-hand Shoppers' Motivation Scale: Antecedents, Consequences, and Implications for Retailers. *Journal of Retailing*, 86(4), 355-371.
- Hansen, T., & Jensen, J.M. (2009). Shopping Orientation and Online Clothing Purchases: The Role of Gender and Purchase Situation. *European Journal of Marketing*, 43(9/10), 1154-1170.

- Hassanein, K., & Head, M. (2007). Manipulating Perceived Social Presence Through the Web Interface and Its Impact on Attitude Towards Online Shopping. *International Journal of Human-Computer Studies*, 65(8), 689-708.
- Hausman, A.V., & Siekpe, J.S. (2009). The Effect of Web Interface Features on Consumer Online Purchase Intentions. *Journal of Business Research*, 62(1), 5-13.
- Hernandez, B., Jimenez, J., & Martin, M.J. (2011). Age, Gender, and Income: Do They Really Moderate Online Shopping Behavior. *Online Information Review*, 35(1), 113-133.
- Isabel, P.R., & Roman, S. (2014). Is the influence of privacy and security on online trust the same for all type of consumers? *Electronic Markets*, 24(2), 135-149.
- Kacen, J.J., & Lee, J.A. (2002). The Influence of Culture on Consumer Impulsive Buying Behavior. *Journal of Consumer Psychology*, 12(2), 163-176.
- Kim, B., Srinivasan, K., & Wilcox, R.T. (1999). Identifying Price Sensitive Consumers: The Relative Merits of Demographic vs. Purchase Pattern Information. *Journal of Retailing*, 75(2), 173-193.
- Kim, G., Shin, B. & Lee, H.G. (2009). Understanding dynamics between initial trust and usage intentions of mobile banking. *Information Systems Journal*, 19(3), 283-311.
- Lambert-Pandraud, R., Laurent, G., & Lapersonne, E. (2005). Repeat Purchasing of New Automobiles by Older Consumers: Empirical Evidence and Interpretations. *Journal of Marketing*, 69(2), 97-113.
- Lennon, S., Kim, M., Johnson, K.K., Jolly, L.D., Damhorst, M.L., & Jasper, C.R., (2007). A Longitudinal Look at Rural Consumer Adoption of Online Shopping. *Psychology & Marketing*, 24(4), 375-401
- Li, J., Konus, U., Pauwels, K., & Langerak, F. (2015). The Hare and the Tortoise: Do Earlier Adopters of Online Channels Purchase More? *Journal of Retailing*, 91(2), 289-308.
- Liao, Y., Wang, Y., & Yeh, C. (2014). Exploring the Relationship Between Intentional and Behavioral Loyalty in the Context of E-tailing. *Internet Research*, 24(5), 668-686.
- McAlister, L., & Pessemier E. (1982). Variety Seeking Behavior: An Interdisciplinary Review. *Journal of Consumer Research*, 9(3), 311-322.
- McKnight, D.H., Cummings, L.L., & Chervany, N.L. (1998). Initial Trust Formation in New Organization Relationships. *Academy of Management Review*, 23(3), 473-490.
- Nunnally, C., & Bernstein, I.H. (1994). *Psychometric Theory*. New York, NY: McGraw-Hill.
- Pappas, I.O., Pateli, A.G., Giannakos, M.N., & Chrissikopoulos, V. (2014). Moderating Effects of Online Shopping Experience on Customer Satisfaction and Repurchase Intentions. *International Journal of Retail & Distribution Management*, 42(3), 187-204.
- Pavlou, P.A., & Gefen, D. (2004). Building Effective Online Marketplaces with Institution-Based Trust. *Information Systems Research*, 15(1), 37-59.
- Rogers, S., & Harris, M.A. (2003). Gender and E-Commerce: An Exploratory Study. *Journal of Advertising Research*, 43(3), 322-329.
- Rohm, A.J., & Swaminathan V. (2004). A Typology of Online Shoppers Based on Shopping Motivations. *Journal of Business Research*, 57(7), 748-757.
- Rook, D.W. (1987). The Buying Impulse. *Journal of Consumer Research*, 14(2), 189-199.
- Shim, S., Eastlick, M.A., Lotz, S.L., & Warrington, P. (2001). An Online Prepurchase Intentions Model: The Role of Intention to Search. *Journal of Retailing*, 77(3), 397-416.
- Singh, R. (2019). Why do online grocery shoppers switch or stay? An exploratory analysis of consumers' response to online grocery shopping experience. *International Journal of Retail & Distribution Management*, 47(12), 1300-1317.
- Smith, R., Deitz, G., Royne, M.B., Hansen, J.D., Grunhagen, M., & Witte, C. (2013). Cross-Cultural Examination of Online Shopping Behavior: A Comparison of Norway, Germany, and the United States. *Journal of Business Research*, 66(3), 328-335.
- Soopramanien, D.G.R., & Robertson, A. (2007). Adoption and Usage of Online Shopping: An Empirical Analysis of the Characteristics of "Buyers" "Browsers" and "Non-Internet Shoppers." *Journal of Retailing and Consumer Services*, 14(1), 73-82.
- Swinyard, W.R., & Smith, S.M. (2003). Why People (Don't) Shop Online: A lifestyle Study of the Internet Consumer. *Psychology & Marketing*, 20(7), 567-597.

- U.S. Census Bureau News. (2020, August 20). Retrieved from <https://www2.census.gov/retail/releases/historical/ecommm/20q2.pdf>
- Wood, M. (2005). Discretionary Unplanned Buying in Consumer Society. *Journal of Consumer Behaviour*, 4(4), 268-281.
- Zhang, X., Prybutok, V.R., & Koh, C.E. (2006). The Role of Impulsiveness in a TAM-Based Online Purchasing Behavior Model. *Information Resources Management Journal*, 19(2), 54-68.