Shipping and Return Shipping Prices and Online Purchase Intentions: The Role of Gender and Product Price Category

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ABSTRACT

Given the nature of online retail transactions, shipping becomes an integral factor in seller pricing and consumer buying decisions. This study examines the role of shipping and return shipping prices on consumer intentions to purchase goods in the e-commerce market. It also provides evidence on how gender and product price category moderate the relationship between shipping prices, return shipping prices, and purchase intentions. Data was collected from respondents in the United States. The results show that both the shipping price and the return shipping price negatively affect consumer purchase intentions. The study finds that the initial shipping price negatively impacts purchase intentions more for inexpensive product categories, whereas return shipping price negatively affects purchase intentions more for expensive products. Women are found to be more sensitive to initial shipping prices than men, whereas men are more sensitive to return shipping, but only for the expensive product category. The study makes a unique contribution by examining how shipping prices and return shipping prices affect consumers' initial purchase intentions, and the role gender plays in that relationship.

I.   INTRODUCTION

Pricing decisions are one of the most important choices that retailers make (Han et al., 2017). A retailer's pricing decisions can lead to competitive advantages and affect product demand by consumers. Pricing strategy is a "reasoned choice from a set of alternative prices (or price schedules) that aim at profit maximization within a planning period in response to a given scenario" (Tellis, 1986, p. 147). Various pricing decisions require cross-functional analysis, integrating the disciplines of marketing, accounting, and economics (Hornby and Macleod, 1996). Whereas the relationship between product pricing decisions and consumer behavior has been examined extensively, the impact of shipping and return shipping prices on purchase decisions is still an underdeveloped area of research (Pei and Paswan, 2018).

The share of sales accounted for by e-commerce has grown exponentially, accounting for $461 billion of consumer purchases in 2017 (U.S. Census Bureau, 2017). Online shopping takes place in a market where there is an inherent physical separation between the buyer and seller. Given the "spatial separation between customers and retailers" (Lewis, 2006, p. 13), the shipment of goods presents important considerations for both sellers and buyers. While online retailers face increasing costs for shipping (Chao, 2015; Lojistic.com, 2017), sellers must strike a balance between bearing the costs of shipping and sharing those costs with consumers through higher product prices or separate shipping charges. In general, consumers are reluctant to pay for shipping (Bower and Maxham, 2012; Chao, 2015). Higher shipping prices are associated with reduced ordering rates (Lewis et al., 2006) and have been shown to lead to shopping cart abandonment by consumers (Smith, 2014).

Return policies also play an economically significant role in business-to-consumer transactions. In 2015, consumers in the United States returned an estimated $369 billion in merchandise to retailers (Appriss Retail, 2018). Online sales have a higher incidence of returns; on average, consumers return thirty-three percent of online purchases, as opposed to nine percent of goods purchased in physical stores (Ellis, 2017; Reagan, 2016; Wharton.edu, 2007). Consumers have identified return polices as the second-most crucial factor in online purchases, following only the product price in importance (Choi et al., 2004). One part of a seller's return policy is the price of return shipping charged to customers. Retailers may find it challenging to charge return shipping to customers, as high and perceived unfair return shipping prices are known for lowering consumers' post-return purchases. For example, customers who were charged for return shipping on product returns significantly decreased their post-return spending at the retailer during the subsequent two years (Bower and Maxham, 2012).

Although the effect of return shipping has been examined on *post-purchase* consumer behavior (Bower and Maxham, 2012; Oghazi et al., 2018), there is a gap in existing research related to how shipping prices, along with return shipping prices, influence consumers' *initial* purchase decisions. Thus, this study aims to examine the following three research questions:

1.   Do shipping prices and return shipping prices impact customer purchase intentions?

2. Do shipping prices and return shipping prices affect purchase intentions differently based upon the product price category (inexpensive versus expensive products)?

3. Do shipping and return shipping prices affect purchase intentions differently based upon the gender of the consumer?

The remainder of the paper is organized as follows. Section II presents a review of the relevant literature. In Section III, the theoretical background and hypotheses development are presented. Section IV explains the research methodology, experimental design, and results. Post hoc analyses follow the results. Finally, Section V discusses the theoretical and practical implications of the findings, the limitations of the study, and suggestions for future research.

II.   LITERATURE REVIEW

A. Shipping Price and Purchase Intentions

Research examining whether shipping prices influence a customer's purchase intentions have provided mixed findings. Several studies have provided evidence that shipping prices are not incorporated in buying decisions. Hamilton et al. (2010) provide evidence that consumers focus on a product's base price rather than the total charges that include a shipping fee. Clark and Ward (2008), in an examination of online auctions, find that winning bidders do not incorporate shipping prices in their bids. Contrary to these findings, other studies have shown that customers are sensitive to shipping prices when making purchase decisions. Chakravarti et al. (2002) show that when prices are partitioned (i.e., separate prices for a product, added features, and warranty) consumers give attention to the various components, and the component prices affect the purchase decisions they make. Free shipping has been shown to lead to higher-order frequency and purchases that are of smaller average value (Lantz and Hjort, 2013). Using data from an internet retailer specializing in non-perishable grocery and drugstore items, Lewis (2006) shows that shipping prices are negatively related to order incidence and discounting shipping for larger orders is associated with larger average order size.

B. Return Policies and Purchase Intentions

Sellers can use a variety of factors in return policies to create competitive advantages (Padmanabhan and Png, 1997). Whereas there is a limited amount of research examining the relationship between return shipping prices and customer purchase intentions, several studies have examined the broader context of return policies and their effect on buyer and seller decisions. Mukhopadhyay and Setoputro (2004) present an analytical model where both price structure and return policy impact demand, and they suggest that price and return policies should be simultaneously optimized to maximize the seller's profits. Wang (2009), using the endowment effect as a theoretical framework, suggests that the signaling effect of a lenient return policy increases purchase likelihood. In an empirical analysis, Smith (2005) shows that easy-to-return items have a positive influence on purchase decisions. Lenient return policies have also been shown to lead to increases in

sales volume and increase a customer's likelihood to purchase a product (Bechwati and Siegal, 2005; Chu et al., 1998).

Return policies are seller commitments that assure satisfaction to the buyer. Consumers are likely to perceive lenient return policies as signaling mechanisms of product quality. Thus, return policies are similar to warranties, as both are "default-contingent signals" that convey product quality (Zhang et al., 2017, p. 192). Whereas a performance warranty protects against defects that might become apparent to the consumer over an extended period, liberal return policies provide consumers with the ability to return goods for unsatisfactory attributes that become apparent soon after the purchase (Moorthy and Srinivasan, 1995). Thus, lenient return policies can be used as a signal of high product quality (Moorthy and Srinivasan, 1995). This line of reasoning extends beyond traditional product warranties, as many return policies do not require a product to be defective for it to be returned.

The consideration of return policies is particularly important to the nature of online transactions; the buyer does not "experience" the good before ordering and is allowed to return items after delivery if the products do not meet their preferences (Che, 1996, p. 18). Thus, lenient return policies act as a warranty in the sense that they guarantee customer satisfaction with the product. Lenient return policies can be used as signals of high product quality (Boyer and Hult, 2005; Glover and Benbasat, 2010), and lenient return policies foster satisfaction and trust in online purchase environments (Chang et al., 2013; Martín and Jiménez, 2011; Wang et al., 2004).

C. Return Policies and Gender

Beyond biological differences, gender differences manifest themselves in social behaviors (Boissin et al., 2011; Dimoka et al., 2011; Gefen and Straub, 1997). Research results suggest that men and women make purchase decisions differently (Benko and Pelster, 2013) and possess different buying habits (Gustafson, 2015). Gender differences extend to behaviors related to product returns and warranties as well. Males have been shown to have higher levels of product dissatisfaction and subsequent emotional dissonance associated with purchases (Powers and Jack, 2015). This emotional dissonance has a significant impact on product return frequency for men (Powers and Jack, 2013).   Men also experience greater satisfaction from warranties; warranties lower cognitive uncertainty associated with online buying, something that males value more than females (Martín et al., 2011b). In their study on extended service contracts, Chen et al. (2009) find that women are more risk-averse than men, perceive high-priced products as more reliable, and are less likely to purchase extended service contracts. Based on gender differences, Martín and Jiménez (2011, p. 276) conclude that "when addressing males, e-vendors should focus on offering warranty conditions and returning the product."

III.   THEORETICAL BACKGROUND AND HYPOTHESES DEVELOPMENT

Evidence suggests that the price of initial shipping plays a role in online buying. First, it is proposed that high shipping prices deter consumers from making purchases. It could also be argued that the shipping price impacts purchase intentions for inexpensive items more than expensive products because shipping price, as a percentage of the product price, is typically higher for inexpensive products than for expensive products. Finally, women

are more sensitive to prices than men (Radojka and Filipović, 2017), and this price sensitivity will likely extend to shipping prices. Accordingly, the following hypotheses are proposed:

H1:   Shipping price negatively impacts purchase intentions.
H1a: Shipping price negatively impacts purchase intentions for inexpensive products more than expensive products.
H1b: Shipping price negatively impacts purchase intentions for females more than males.

Lenient return policies foster satisfaction and trust in online purchase environments (Martín and Jiménez, 2011; Wang et al., 2004). Consumers may perceive lenient return policies as a short-term warranty on the quality and suitability of the product. Such guarantees are important in on-line sales where customers cannot assess the quality of products, as compared to the "touch-and-feel" experience that storefronts offer (Akçay et al., 2013; Gefen et al., 2003). As one component of lenient return policies, lower return shipping prices assure that unsatisfied consumers can cheaply return goods that are defective or because of dissatisfaction.

When comparing product price categories, consumers might be less likely to return low-priced items, making lenient return policies or free return shipping less important to a consumer's initial purchase decision. Anderson et al. (2009) show that lower prices lead to the perception of higher value to the consumer, which, in turn, reduces the likelihood that the customer will return purchased goods. Prior research also shows that consumers are more likely to buy warranties for expensive products (Chen et al., 2009). Given that lenient return policies act as a warranty against customer dissatisfaction, it follows that lenient return policies are perceived as more important for higher-priced product categories.

Lenient return policies, including low-price return shipping, should lower cognitive uncertainty associated with online buying and act as a warranty against post-purchase dissatisfaction. Men are more likely to purchase warranties (Chen et al., 2009); thus, men are expected to perceive a higher value of low-cost return shipping, and the importance of low-cost return shipping likely influences purchase intentions for men more than women.
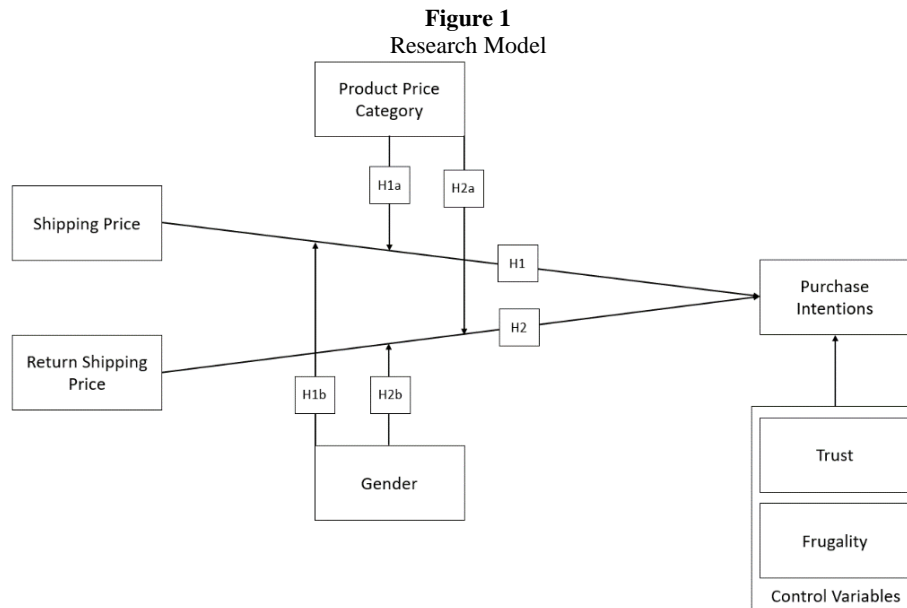
Therefore, it is proposed:

H2:   Return shipping price negatively impacts purchase intentions.
H2a: Return shipping price negatively impacts purchase intentions for expensive products more than inexpensive products.
H2b: Return shipping price negatively impacts purchase intentions for males more than females.

IV.   RESEARCH METHODOLOGY AND EXPERIMENTAL DESIGN

The research model developed and used in this study is presented in Figure 1.

Figure 1
Research Model

Data was collected through an online survey created on Qualtrics. Each respondent was asked to agree to a consent form, view a website, and answer questions about a shopping vignette. Respondents were asked to assess their intention to buy a product given its product price, shipping price, and return shipping price. The dependent variable, purchase intention, is the likelihood that a shopper will purchase a product (Barber et al., 2012). Perceived trust and frugality were used as control variables, as both items are known to impact purchase decisions (Bansal and Zahedi, 2014). Trust relates to the belief that the seller will fulfill its commitment despite the shopper's dependence and vulnerability. Higher levels of trust lower the risk beliefs associated with online purchases and, hence, are associated with higher purchase intentions (Gefen et al., 2003). Frugal shoppers look for bargain purchases that provide higher value, and frugality is related to the tendency of shoppers to exercise restraint in making purchases (Bansal and Zahedi, 2014). Thus, frugality has an inverse relationship with purchase intention. The constructs for purchase intention, perceived trust, and frugality were measured using existing scales (Table 1 and Appendix A). Subjects were also asked to provide demographic information, such as age, gender, and US state location. Four attention check questions, along with one manipulation check question about the perceived price of the product, were included in the survey as well.

Table 1
Operationalization

Construct	Definition	References
Purchase Intention (Dependent Variable)	The likelihood that a shopper will purchase a product.	Barber et al. (2012)
Trust	The belief that the seller will fulfill its commitment despite the shopper's dependence and vulnerability.	Bansal et al. (2015)
Frugality	The tendency of a shopper to exercise restraint in making purchases.	Lastovicka et al. (1999); Shoham and Brencic (2004); Bansal and Zahedi (2014)

Data was collected from Amazon Mechanical Turk (MTurk) workers. Data collection using MTurk workers is recognized to be of high quality and reliability (Hibbeln et al., 2017). The study was conducted using a 2x2x2 design and was implemented using eight scenarios (Table 2); the factors used were Product Price Category (High/Low), Shipping Price (High/Low), and Return Shipping Price (High/Low). Subjects were randomly assigned scenarios, and each respondent viewed only one scenario. The high product price category included a camera ($250), and the low product price category included shoes ($10). The high initial and return shipping prices were $10 for the shoes and $30 for the camera. The low initial shipping and return shipping prices were $0 (free) for both product price categories.

Table 2
Experiment design and sample demographics

	Experiment Design				Sample Demographics	
Scenario	Product	Product Price Category	Shipping Price	Return Shipping Price	Male Subjects	Female Subjects
1	Shoes	Inexpensive	Low	Low	23	24
2	Shoes	Inexpensive	Low	High	28	21
3	Shoes	Inexpensive	High	Low	22	25
4	Shoes	Inexpensive	High	High	19	22
5	Camera	Expensive	Low	Low	12	22
6	Camera	Expensive	Low	High	18	17

| 7 | Camera | Expensive | High | Low | 20 | 24 |
| 8 | Camera | Expensive | High | High | 14 | 24 |

V.   RESULTS

A.   Data Analysis

A total of 661 MTurk workers from across the United States took the survey. There were four attention check questions; subjects were asked questions about prices (product price, shipping price, and return shipping price), the website name, the website specialty, and the product offered (shoe or camera). Respondents (n=488) who answered the attention check questions correctly were retained for further analysis. Subjects also responded to a question about the perceived expensiveness of the product (on a scale of 1-3). Only those subjects that answered the low-priced product (shoes) as inexpensive or the high-priced product (camera) as expensive were included in the final data analysis (n=349). Thirteen subjects who responded to the survey more than once were removed from the sample. The final sample included 336 subjects, consisting of 156 males and 179 females. Male subjects ranged in age from 20 to 71 years (mean=36.0, s.d.=11.5), while female ages ranged from 18 to 68 years (mean=37.0, s.d.=10.3).

B. Convergent Validity, Discriminant Validity, and Reliability Analysis

Before proceeding with the hypotheses tests, analyses were performed to ensure convergent validity, discriminant validity, and reliability of the constructs. To test convergent validity, the loadings and cross-loadings in exploratory factor analysis (EFA) were examined (Table 3). All items loaded on to their intended construct at values exceeding 0.7 (Fornell and Larcker, 1981). Next, the average variance extracted (AVE) value for each construct was calculated (Table 4), and all values exceed the commonly accepted threshold of 0.5 (Fornell and Larcker, 1981; Hair et al., 2010). Based on the analysis, the requirements of convergent validity are met.

The discriminant validity was tested in two ways. First, the cross-loadings in EFA indicate that all items have high loading on the appropriate construct and lower cross-loadings on measures for other variables (Table 3). Next, the square roots of AVE values were larger than all other absolute values of interconstruct correlations in the model (Table 4) (Fornell and Larcker, 1981). These results show that the model demonstrates adequate discriminant validity.

Finally, two methods were used to examine the reliability of the items used in this study; Cronbach's alpha (Alpha) and composite reliability (CR) were calculated for all the constructs (Table 4). Except for frugality, the values for both measures exceed the customarily accepted levels of 0.7 (Hair et al. 2010; Hair et al. 2014). Frugality had an Alpha value lower than .7 (Alpha=0.613) but showed adequate CR (CR=0.806). These results indicate that the measures have acceptable reliability. After satisfying the requirements of the measurement model, latent constructs were created by averaging the item scores (Ray et al., 2005).

Table 3
Exploratory factor analysis (EFA)

Items	Purchase Intention	Shipping Price	Return Shipping Price	Trust	Frugality
Purchase Intention 1	**0.938**	-0.131	-0.061	0.166	-0.046
Purchase Intention 2	**0.941**	-0.149	-0.068	0.165	-0.084
Purchase Intention 3	**0.937**	-0.190	-0.055	0.155	-0.002
Purchase Intention 4	**0.921**	-0.165	-0.052	0.145	0.026
Shipping Price 1	-0.181	**0.940**	0.093	-0.014	-0.052
Shipping Price 2	-0.186	**0.954**	0.069	-0.002	-0.031
Shipping Price 3	-0.181	**0.960**	0.073	0.015	-0.045
Return Shipping Price 1	-0.067	0.066	**0.983**	0.000	0.008
Return Shipping Price 2	-0.059	0.071	**0.987**	-0.004	-0.018
Return Shipping Price 3	-0.068	0.091	**0.979**	-0.022	-0.027
Trust 1	0.110	-0.011	0.009	**0.949**	-0.007
Trust 2	0.154	-0.026	0.000	**0.958**	-0.005
Trust 3	0.162	0.014	-0.012	**0.961**	-0.001
Trust 4	0.171	0.014	-0.027	**0.926**	-0.026
Frugality 1	0.022	-0.058	-0.028	-0.053	**0.896**
Frugality 2	-0.093	-0.041	-0.001	0.027	**0.894**

Table 4
Assessment of the measurement model and interconstruct correlation

	AVE	Alpha	CR	Purchase Intention	Shipping Price	Return Shipping Price	Trust	Frugality
Purchase Intention	0.916	0.970	0.978	**0.957**				
Shipping Price	0.934	0.965	0.977	-0.217	**0.966**			
Return Shipping Price	0.962	0.980	0.987	-0.055	0.238	**0.981**		
Trust	0.896	0.961	0.972	0.348	0.006	0.040	**0.947**	
Frugality	0.683	0.613	0.806	-0.051	-0.054	0.049	0.052	**0.826**

AVE=Average Variance Extracted; Alpha=Cronbach's Alpha; CR=Composite Reliability; bold values on the diagonal are the square root of AVE; other values are interconstruct correlations.

C. Hypotheses Tests

Table 5 provides a summary describing the hypotheses, the statistical methods used, and the conclusions reached. Hypotheses H1 and H2 were tested using linear regression. These hypotheses were tested using intention to purchase as the dependent variable, shipping price and return shipping price as independent variables, and trust and frugality as control variables. Regression results for the entire sample (Table 6) show that shipping

prices and return shipping prices deter purchase intentions, thus supporting H1 and H2. Intention to purchase and the control variables exhibited the expected relationships. The control variable trust had a significant positive relationship with intention to purchase, while frugality showed a marginally negative relationship.

Table 5
Overall Result Summary

	Hypotheses	Statistical Method	Conclusion
H1	Shipping price negatively impacts purchase intentions.	Regression	Supported
H1a	Shipping price negatively impacts purchase intentions for inexpensive products more than expensive products.	T-Test	Supported
H1b	Shipping price negatively impacts purchase intentions for females more than males.	T-Test	Supported
H2	Return shipping price negatively impacts purchase intentions.	Regression	Supported
H2a	Return shipping price negatively impacts purchase intentions for expensive products more than inexpensive products.	T-Test	Not Supported
		Structural Moderation	Supported
H2b	Return shipping price negatively impacts purchase intentions for males more than females.	T-Test	Not Supported
		Structural Moderation	Marginally Supported

Table 6
Regression Results for Hypotheses H1a and H2a

	N	R Square	Shipping Price	Return Shipping Price	Trust	Frugality
Overall	335	0.227	-0.300 (6.722) ***	-0.071 (1.710) *	0.479 (6.223) ***	-0.168 (1.600) †

Note: Path coefficients are given. T-values shown in parentheses. Significance level: *** p<.001; **p<.01; *p<.05; †p<.10; ns for not significant

T-tests were conducted to examine Hypotheses H1a, H1b, H2a, and H2b. Regression results (Appendix B) were calculated for four subsets of the overall sample (Male Only, Female Only, Inexpensive Product, Expensive Product). The coefficients and standard errors of these four models were used to calculate t-test statistics used for H1a, H1b, H2a, and H2b (Sanchez, 2013). The results (Table 7) show that shipping prices deter purchase intentions more for inexpensive products than expensive products (supporting H1a), and the shipping price also deters purchase intentions more for females than males (supporting H1b). No significant differences were found for return shipping between product price categories or genders. Thus, the results of the t-tests do not support H2a or H2b.

Table 7
T-test statistics for hypotheses H1a, H1b, H2a, and H2b

		Shipping Price			Return Shipping Price		
		Coefficient	Standard Error	T-value	Coefficient	Standard Error	T-value
Product Price Category	Inexpensive	-0.360	0.063	1.750	-0.023	0.057	0.991
	Expensive	-0.205	0.061	*	-0.104	0.058	ns
Gender	Female	-0.399	0.059	2.604	-0.045	0.055	0.627
	Male	-0.163	0.070	**	-0.097	0.063	ns

Note: Coefficients and standard errors from regression results in Appendix B. T-tests examined using methodology suggested in Sanchez (2013). Significance level: *** p<.001; **p<.01; *p<.05; †p<.10; ns for not significant

Where the t-tests did not support the hypotheses (H2a and H2b), structural moderation was used whereby the path coefficients were compared across two models to determine if they were significant in one model and not another (Bansal et al., 2015). Examining the regression equations in Appendix B, return shipping is significant for expensive product category but not for the inexpensive product category, thus providing support for H2a through structural moderation. When comparing coefficients between genders, return shipping is only marginally associated with males (p<.10) and not significantly related to female subjects. Thus, structural moderation provides marginal support to H2b.

A. Post hoc Analysis

Only marginal statistical support was found for H2b. Therefore, further analysis of the impact of return shipping is warranted. According to Che (1996), lenient return policies are best suited where consumers are sufficiently risk-averse or the retail costs are high. Given the propensity of males to value warranties more than females, the value of the return policy should be higher for males when purchasing higher-priced, expensive products. Therefore, for expensive products, return shipping prices should negatively impact purchase intentions for males more than females. Two additional regression models were analyzed for the expensive product category, segregating males and females into separate groups (Appendix C). The coefficients and standard errors of these two models were used to calculate t-tests (Table 8). The t-tests did not yield a statistical difference between males and females and the relationship between purchase intentions and return shipping for the expensive product category. However, comparing the two regression models in Appendix C shows the path coefficient for return shipping is significant for males, but not females. Thus, for expensive items, there is statistically significant support of H2b through structural moderation.

Table 8
T-test statistics for post hoc analysis of hypothesis H2B for expensive product category

		Shipping Price			Return Shipping Price		
		Coefficient	Standard Error	t-value	Coefficient	Standard Error	t-value
Gender	Male	0.023	0.095	3.059	-0.179	0.091	1.245
	Female	-0.356	0.081	**	-0.033	0.076	ns

Note: Coefficients and standard errors from regression results in Appendix C. T-tests examined using methodology suggested in Sanchez (2013). Significance level: *** p<.001; **p<.01; *p<.05; †p<.10; ns for not significant

For additional post hoc testing, the mean average purchase intentions for males and females were compared separately (Table 9) for each of the eight scenarios (see Table 2 for scenario descriptions). T-tests were performed to compare males and females for each of the eight scenarios. Female subjects had a significantly higher intention to purchase in scenario 6 (p=.041). In scenario 7, women had lower purchase intentions; however, the difference was only marginally significant (p=.070). The results show that men and women react in the opposite way to scenarios 6 and 7. This analysis suggests that women base their initial purchase decision on the shipping price and are indifferent between low and high return shipping prices, especially for an expensive product.

Table 9
Purchase intention mean averages by gender for eight scenarios

Scenario	Gender	Purchase Intention Mean Average
1	Male	7.38
	Female	7.92
2	Male	6.81
	Female	6.81
3	Male	6.14
	Female	4.89
4	Male	5.76
	Female	5.08
5	Male	6.13
	Female	6.41
6	Male	4.21
	Female	6.53
7	Male	5.44
	Female	3.71
8	Male	3.80
	Female	3.58

Note: Scenario descriptions are included in Table 2.

VI.   DISCUSSION

A.   Conclusion

Although merchandise returns are significant in e-commerce transactions, the effect of return shipping prices on purchase intentions remains an under-researched area. This study is among the first studies to examine the relative role of shipping and return shipping prices on purchase intentions in the online environment, thus adding to the management decision-making, marketing, and accounting literature. The results show that online users base their purchase decisions on both shipping prices and return shipping prices. Finding that return shipping price affects purchase intentions shows that consumers contemplate returning goods at the time goods are purchased. By examining

the role of gender in online buying, the study adds to the research on the effect of gender differences in consumer behaviors. Using detailed contextual analysis across several purchasing scenarios, the results show that women are more sensitive to initial shipping prices than men, and, for expensive products, men are more sensitive to return shipping prices than women.

B. Managerial Implications

The study has several managerial implications. First, the study helps sellers better understand the effect of the initial shipping and return shipping prices on consumers' intentions to make online purchases. Thus, it provides insights that can assist business managers in developing pricing strategies. Both shipping prices and return shipping prices are shown to influence consumer purchase intentions, and both should be included in the overall strategy in online marketing. However, the results show that the impact of shipping prices on purchase intentions is contextual. Based on this study's findings, e-commerce companies should manage their return policies by segmenting those policies based on the price category of the product. Also, retailers could target their shipping and return shipping based upon the gender orientation of products.

C. Limitations

The study does have inherent limitations. First, the study uses a scenario that limits its generalizability, and the scenario may not have been perceived as a realistic purchase decision by the participants. Additionally, the study included only two types of shipping costs—free or a fixed price. Some online retailers provide free shipping contingent on whether the goods purchased in a basket purchase exceed a specific price. For example, Amazon offers free shipping for non-prime members if the total price of goods purchased exceeds $25 (Amazon.com, 2020). Finally, the study used low-price and expensive products from two different product categories. It could be argued that there are differences in purchase intentions across apparel (shoes) and electronics (cameras), and these differences in product categories lead to different choices based upon gender. For example, Hjort and Lantz (2012) provide evidence that delivery and return policies affect actual online purchase behavior differently based upon the type of product purchased.

D. Suggestions for Future Research

Future research could look into other variables such as user age and personality; it could also examine other products and product categories. The current study includes shipping as a separate, partitioned charge, with no change to the initial product price. Future research might examine how consumers react to return shipping prices when the initial shipping price is consolidated in the product price. Schindler et al. (2005) show that consumers differ in their sensitivity to shipping prices based upon a measure of skepticism; more skeptical buyers prefer the shipping price to be bundled with the product price. This line of research could be extended to include consumer skepticism measures when examining how return shipping prices impact consumers' intentions to purchase. Other important issues that can be considered in conjunction with shipping prices and return shipping prices are shipping time to delivery along with the length of

the return window. Finally, future research could examine whether consumers perceive free shipping or free return shipping as a benevolent act on the part of sellers and whether the perception of benevolence affects purchase intentions (White and Yuan, 2012).

ACKNOWLEDGEMENT

APPENDIX

Appendix A
Survey Questions

Variable	Item	Scale	Scale of 1-10
Purchase intention	Item 1	The level of my intent to buy the product as shown in the scenario is:	Very low………Very high
	Item 2	I believe that I will:	Not buy the product at all… ……………Buy the product for sure
	Item 3	I would consider purchasing this product.	Strongly disagree……Strongly agree
	Item 4	I am interested in trying out this product.	Strongly disagree……Strongly agree
Shipping cost	Item 1	I believe that the shipping cost is	Very inexpensive……Very expensive
	Item 2	I believe that the shipping cost is	Appropriate………Inappropriate
	Item 3	I believe that the shipping cost is	Quite reasonable...Quite unreasonable
Return shipping cost	Item 1	I believe that the return shipping cost is	Low………Very high
	Item 2	I believe that the return shipping cost is	Appropriate………Very high
	Item 3	I believe that the return shipping cost is	Reasonable………Unreasonably high
Trust	Item 1	I believe that the website is:	Not honest at all………Very honest
	Item 2	I believe that the website is:	Not dependable at all….Dependable
	Item 3	I believe that the website is:	Not reliable at all………Very reliable
	Item 4	In general the level of my trust for the website is:	Very low………Very high

Frugality	Item 1	I believe that spending a little extra money to get a better and long-lasting quality product is:	Not a good idea at all….. ………………….A very good idea
	Item 2	I am very concerned about low prices, but I am equally concerned about product quality.	Strongly disagree……Strongly agree

Appendix B
Regression Results, Coefficients and Standard
Errors for t-tests of Hypotheses H1a, H1b, H2a, and H2b

		N	R Square	Shipping Price	Return Shipping Price	Trust	Frugality
Product Price Category	Inexpensive Product	184	0.271	-0.360 (5.749) ***	-0.023 (.413) ns	0.607 (5.570) ***	-0.102 (.733) ns
	Expensive Product	151	0.186	-0.205 (3.343) ***	-0.104 (1.794) *	0.350 (3.353) ***	-0.267 (1.745) *
Gender	Male Only	156	0.176	-0.163 (2.337) **	-0.097 (1.550) †	0.528 (4.584) ***	-0.055 (.358) ns
	Female Only	179	0.295	-0.399 (6.808) ***	-0.045 (.817) ns	0.452 (4.343) ***	-0.204 (1.412) †

Note: Path coefficients are given. T-values indicated in parentheses. Significance level: *** $p<.001$; **$p<.01$; *$p<.05$; †$p<.10$; ns for non-significant

Appendix C
Regression results, coefficients and standard errors for post hoc analysis

		N	R Square	Shipping Price	Return Shipping Price	Trust	Frugality
Gender	Expensive Product – Male	64	0.188	0.023 (.239) ns	-0.179 (1.964) *	0.426 (2.750) **	-0.066 (.308) ns
	Expensive Product – Female	87	0.273	-0.356 (4.400) ***	-0.033 (.432) ns	0.336 (2.382) **	-0.278 (1.255) ns

Note: Path coefficients are given. T-values shown in parentheses. Significance level: *** $p<.001$; **$p<.01$; *$p<.05$; †$p<.10$; ns for non-significant

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