

Student Perception About Trust Barriers Regarding Online Purchase Intention

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Abstract - Online business (e-business) since the begging of pandemic, specially s-commerce has skyrocketed. Trust is something that makes consumers decide to shop online, and their behavior vary depending on the territory and culture. This research explores student attitudes towards the barriers that they face when shopping online in Croatia. The aim is to explore if there is a relationship between trust barriers in online shopping and online purchase intention among students. Further, to analyze whether those attitudes significantly differ between man and woman students. Also, previous researches state that a credible source influences consumer trust therefore we investigate if there is a significant relation between a credible source and the trust barriers in online shopping. Students' perception about trust barriers in online shopping were surveyed with a questionnaire in which 243 respondents participated. For testing the hypothesis descriptive statistics, Independent sample t-test, and Pearson correlation were used. Based on the analyzed data, results indicate that there is a significant relationship between the online purchase intention and trust barriers. Further, findings indicate that there is statistically significant difference between man and woman attitudes regarding trust barriers in online shopping. Also, credible source (micro influencer/ celebrity) plays a significant role in the perception of trust barrier related to the inability to judge product or service quality online among participants.

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1. Introduction

Pandemic has notably changed shopping habits. Restrictions like face-to-face contact increased the need to go online and use digital media in economy and society [1]. Online trading according to the 2018 McKinsey report, has an impact in four areas [2] relating to the dimensions of sustainability, namely financial benefits, job creation, buyer benefits, and social equity.

Trend in e-commerce is that the growing e-commerce markets arise at a double-digit rate like India [3] and China, especially regarding electronics. The use of social media and being actively involved on social media platforms (Facebook, Twitter, Youtube, etc.) impacts change in developing marketing strategies. S-commerce uses social media with actions that include promotion of products and services with social activities, and Web2.0 [4]

Many companies have realized that since reaching to customers is much faster and cheaper through platforms where significant role have influencers. Influencer marketing became more of a rule then exception in today's online environment regarding product or service placement. In an online environment a third-party influence, like influencer type, represents a significant factor of effective marketing tool since influencer characteristics differ and may differently influence consumers opinion related to making buying decisions [5].

The purpose of the research was to explore students' attitudes towards perceived risks they face when shopping online and whether male and female students perceive those risks differently or not. Finally, authors explore whether a third-party influence like influencers on social media can impact respondents' attitude in a significant and positive way since most of sample participants are tech savvy use social networks.

2. Literature review

This part of paper presents what trust barriers are, what types of trust barriers are researched in the context of online shopping. Further we analyze if a third-party person like influencer may be significant in the process of buying online.

2.1. Trust Barriers in Online Shopping

Based on a previous literature review consumer trust has a significant influence on customers intention to buy online [6], [7], [8]. However, customers face many uncertainties regarding e-commerce. Nemeth and Zsoter [9] define this uncertainty as inability of a customer to know the final outcome of the purchase. Rasty *et al.* [8] explains two variables regarding trust barriers (trust and distrust) where trust can be defined as shopper's willingness to buy online and distrust prevents shopper to make an online buying decision.

Horvath *et al.* [10] states that after many years since the introduction of e-commerce, consumers are unwilling to buy online due uncertainty. This uncertainty can be found in many factors and Horvath *et al.* [10] found statistically significant relation between perceived information asymmetry of the buyer, concerns about the seller's opportunism, and purchase intention.

The contribution of Soleimani [11] is in differentiating four types of trust regarding e-commerce environment. This considers: consumers trust in sellers, community trust, technology trust, and sellers trust in consumers. According to the same author consumers trust is when sellers behave in an acceptable way. Community trust refers to "trusting many trustees or trustors, especially those considered an unknown group of sellers or buyers" [11] where they have marketplace support. Technology trust refers to "online shopping, online store or platform, and social commerce websites as elements of technology trust" [10]. Further sellers' trust is "willingness of sellers to risk participating in a transaction, even when uncertainties occur" [11].

This study considers trust barriers as lack of trust perceived by the consumer to make an online buying decision and relates to consumers perception. Authors' focus on a several risks found in literature that contain financial risk, social risk, performance risk, privacy risk, quality risk, inadequate returning policy risk. The financial risk considers financial losses due to poor quality, poor guarantee, high shipping costs or high transaction costs when paying to e-shop [8]. Performance risk considers lack of products performance in order to satisfy customer needs [12].

Social risk considers judgement of a friends and acquaintances like not approving this type of online shopping [12]. Privacy risk includes loss of personal data in terms of credit card theft or other personal information's [12]. Quality risk considers inability to judge product/ service quality [13]. Inadequate returning policy risk refers to unclear info about returning policy [14].

Based on the analysis of literature we pose our first hypothesis H1: There is a relationship between the perception of trust barriers in online shopping and the intention to purchase products/services.

We also want to analyze whether woman rate their perception about trust barriers regarding online shopping higher than man, which represents our H2 hypothesis.

2.2. Online Purchase Intention and Third-Party Influence

Researching third-party influence on purchase intention, in our case the role of influencer type, has been stated in previous researches regarding influencer marketing [15].

For example, the study of Dwidienawati [16] confirmed that when influencer leaves a review on his social media platform this impacts positively followers purchase intention. Further, Schouten *et al.* [17] analyzed types of influencers and found that micro-influencers impact followers more than celebrity regarding purchase intention.

Most of previous researches deal with the influencer characteristics and how they influence consumers decision [15]. In this relation trust in influencer was found a significant factor of predicting customers purchase intention [18], [19].

Vrontis *et al.* [15] revealed that influencer credibility depends on "different products and different contexts" therefore influencer characteristics differ in terms of influencing customer purchase intention. For example, previous research found that clear communication regarding sponsorship status increases influencer credibility [20], [21]. Trivedi and Sama [3] found that there is a significant difference regarding influencer type and their characteristics confirming an expert influencer in consumer electronic products have greater influence then celebrity influencer.

Since great influence of third-party in an online context between sellers and buyers were found significant in previous studies [11], [22], [15], the authors analyze whether there is a difference among influencer type on trust barriers among respondents as a third-party person since they connect sellers and buyers through platforms and informing them about product/service characteristics.

Based on that relation and perceived third-party trust, customers create their opinions and make buying decisions. Therefore, we state our third hypothesis: H3: Micro influencers are a more credible source than celebrity regarding the inability to judge product/ service quality?

2.3. Impulsive Buying Behavior and Student's Behavior in S-Commerce

In today's world of s-commerce it seems that impulsive buying habits are rising, meaning people often buy something they did not plan to buy. Due to technology development there is a rise of easy-to-use applications that make online buying user-friendly, easy, and convenient. Due to this huge rise of applications and impulsive shopping, authors are interested in researching the trust barriers and social influence in the context of the online environment. As said by Trudel [23] "social influence is the change in a person's attitude or behavior resulting from the influence of others in a group". Influencer marketing has skyrocketed since the pandemic. Also, worries about security and privacy predict intention to buy online [24].

For example, students in Montenegro perceive buying online more convenient than in ordinary shops but find high risk so they buy inexpensive products [25]. Further, this study found that younger Millennial students buy more frequently than older Millennials. They are oriented toward buying cheap products, which can be characterized as a type of financial risk protection due to lack of trust in the online environment.

As students get younger, like the Z generation, known as the generation born with technology, also likes to buy online and those two generation cohorts spend frequently their money in the online environment [26].

Research data shows that 78% of students in the sample underwent impulsive buying due to the fact that they still cannot differentiate needs from desires. Further, their impulsive buying is driven by frequent use of social networks where influencers and vendors offer good promotions and offers [27].

Authors of this paper are dealing with the important role of trust barriers in the online environment regarding students' intention to buy online, which includes analyzing the difference of trust perception among male and female students. Research results presented here form a good basis for analyzing further factors that influence unplanned student behavior in s-commerce.

3. Methodology and Results

Based on the analyzed literature, a questionnaire was created online and sent to students of different divisions of University North in Croatia through a randomly selected sample that included finally 243 students. All questions were formulated with the use of a Likert scale from 1 (strongly disagree) to 5 (strongly agree). Respondents had to assess the extent to which they agree or disagree with the asked questions about trust barriers when shopping online. The questions consisted of the following six statements based on [8]: 1. Financial losses due to poor quality, poor guarantee, high shipping costs or high transaction costs when transferring money to vendor's account ("Financial Risk", representing variable TRUSTB1), 2. The inability of the product to provide customer satisfaction in terms of performance ("Performance Risk", representing variable TRUSTB2), 3. Being judged mistakenly by friends and acquaintances ("Social Risk", representing variable TRUSTB3), 4. Security or privacy loss due to disclosing personal information such as credit card details and addresses ("Privacy Risk", representing variable TRUSTB4), 5. Inability to judge product/service quality (representing variable TRUSTB5), 6. Difficulties in returning/exchanging goods and lack of sufficient information on return policy (representing variable TRUSTB6).

Purchase intention construct consisted of five questions which in detail can be found in the paper of Sesar *et al.* [20].

3.1. Sample Characteristics

Research sample has 61.5% of female respondents, and 38.5% of male respondents. Most respondents belong to the Z generation (73.6%), and 24.5% are Millennials. Boomers born between 1965 and 1980 represent only 1.9% of the sample. The most preferred social media network is Instagram, representing 52.2% of the sample, followed by Facebook with 24.5%, YouTube with 17%, and other social media networks (6.3%) like Tik Tok, Snapchat, Twitter, etc.

3.2. Testing Hypothesis

The research aims to test the following hypothesis: H1: There is a relationship between the perception of trust barriers in online shopping and the intention to purchase products/services. In order to test hypothesis H1, the following relationships were set: independent variable: Trust barriers in online shopping (TRUSTB1 to TRUSTB6) and dependent variable: Online purchase intention (PURCHIN).

In order to test this hypothesis, we used correlation analysis based on Pearson coefficient (ro).

As presented in Table 1 purchase intention and three variables of trust barriers have statistically significant positive relationship (TRUSTB1, r=0.149, p<0.05, TRUSTB2; r=0.175, p<0.01, TRUSTB3; r=0.185, p<0.01). Other trust barriers (TRUSTB4, TRUSTB5, TRUSTB6) and purchase intention do not have a statistically significant relation. Correlation coefficients PURCHINT and TRUSTB1

indicate small but positive relation (r=0.149), between purchase intention. Small but positive relation also refers to TRUSTB2(r=0.175) and TRUSTB3(r= 0.185) barriers. Perceived “financial risk” explains only 2.2% of the variance in respondents’ answers regarding intention to buy online. Further perceived “performance risk” explains only 3.06% of the variance regarding intention to buy online and 3.4% of the variance is explained by “social risk”.

Table 1. Correlations

		PURCHINT	TRUSTB1	TRUSTB2	TRUSTB3	TRUSTB4	TRUSTB5	TRUSTB6
PURCHINT	Pearson Correlation	1	,149*	,175**	,185**	,068	,126	,121
	Sig. (2-tailed)		,020	,006	,004	,293	,050	,060
	N	243	243	243	243	243	243	243
TRUSTB1	Pearson Correlation	,149*	1	,704**	,406**	,393**	,390**	,387**
	Sig. (2-tailed)	,020		,000	,000	,000	,000	,000
	N	243	243	243	243	243	243	243
TRUSTB2	Pearson Correlation	,175**	,704**	1	,431**	,436**	,455**	,391**
	Sig. (2-tailed)	,006	,000		,000	,000	,000	,000
	N	243	243	243	243	243	243	243
TRUSTB3	Pearson Correlation	,185**	,406**	,431**	1	,446**	,308**	,380**
	Sig. (2-tailed)	,004	,000	,000		,000	,000	,000
	N	243	243	243	243	243	243	243
TRUSTB4	Pearson Correlation	,068	,393**	,436**	,446**	1	,457**	,425**
	Sig. (2-tailed)	,293	,000	,000	,000		,000	,000
	N	243	243	243	243	243	243	243
TRUSTB5	Pearson Correlation	,126	,390**	,455**	,308**	,457**	1	,605**
	Sig. (2-tailed)	,050	,000	,000	,000	,000		,000
	N	243	243	243	243	243	243	243
TRUSTB6	Pearson Correlation	,121	,387**	,391**	,380**	,425**	,605**	1
	Sig. (2-tailed)	,060	,000	,000	,000	,000	,000	
	N	243	243	243	243	243	243	243

*. Correlation is significant at the 0.05 level (2-tailed)

** Correlation is significant at the 0.01 level (2-tailed)

Source: Authors work

Further, with the independent sample t test we analyzed the differences in the perception of trust barriers among gender (H2: Woman rate their

perception about trust barriers regarding online shopping higher than man?) (Table 2).

On average woman perceive greater financial risk when shopping online ($M = 2.94, SE = 0.10$) than man ($M = 2.53, SE = 0.12$). This difference was found to be significant $t(241) = 2.41, p < 0.05$.

Further, the difference was also significant regarding “performance risk” $t(241) = 3.01, p < 0.05$. In this case also woman ($M = 3.00, SE = 0.08$) perceive this risk higher than man ($M = 2.56, SE = 0.11$) while shopping online. The significant difference was found among respondents regarding “Privacy risk” $t(241) = 2.39, p < 0.05$.

This was also found higher for woman ($M = 2.84, SE = 0.107$) than man ($M = 2.44, SE = 0.12$).

The mean difference between male and female for variable TRUSTB1 ($MD = 0.40, 95\%, CI = 0.07$ to 0.73) was very small ($\eta^2 = 0.2$). For variable TRUSTB2 ($MD = 0.43, 95\%, CI = 0.144$ to 0.151) the mean difference was (was also small ($\eta^2 = 0.03$)). The mean difference between male and female for variable TRUSTB4 ($MD = 0.39, 95\%, CI = 0.071$ to 0.723) was very small ($\eta^2 = 0.0004$).

Table 2. The respondent’s perception of trust barriers when shopping online by gender

	GENDER	N	M	SD	t	df	p
TRUSTB1	Female	150	2,9400	1,28089	2.410	241	0.017
	Male	93	2,5376	1,23850			
TRUSTB2	Female	150	3,0067	1,09604	3.018	241	0.003
	Male	93	2,5699	1,09741			
TRUSTB3	Female	150	2,0533	1,21945	0.740	241	0.460
	Male	93	1,9355	1,18694			
TRUSTB4	Female	150	2,8400	1,31629	0.321	241	0.017
	Male	93	2,4409	1,16528			
TRUSTB5	Female	150	3,1933	1,10336	0.482	241	0.942
	Male	93	3,2043	1,17547			
TRUSTB6	Female	150	3,2400	1,29884	0.583	241	0.263
	Male	93	3,0430	1,38245			

Source: Authors work

To test the third hypothesis $H3$: Micro influencers are a more credible source than celebrity regarding the inability to judge product/ service quality?, independent sample t-test was performed (Table 3). The study found that respondents, on average perceive micro influencers ($M = 3.36, SD = 1.02$) as a more credible source than celebrity ($M = 2.99, SD =$

1.21) when they are unable to judge a product or service quality when shopping online. Also, this difference was found to be significant $t(241) = -2.604, p < 0.05$. The mean difference between micro and celebrity for variable TRUSTB5 ($MD = -0.37, 95\%, CI = -0.0658$ to -0.726) was very small ($\eta^2 = 0.02$).

Table 3. The respondent’s perception about trust barriers when shopping online by influencer type

	INFTYPE	N	M	SD	t	df	p
TRUSTB1	Celebrity	109	2.7431	1.29389	-0.471	241	0.638
	Micro-influencer	134	2.8209	1.26759			
TRUSTB2	Celebrity	109	2.7798	1.10015	-0.752	241	0.453
	Micro-influencer	134	2.8881	1.12831			
TRUSTB3	Celebrity	109	1.9083	1.19056	-1.166	241	0.245
	Micro-influencer	134	2.0896	1.21682			
TRUSTB4	Celebrity	109	2.5780	1.32143	-1.208	241	0.228
	Micro-influencer	134	2.7761	1.23021			
TRUSTB5	Celebrity	109	2.9908	1.21332	-2.604	241	0.010
	Micro-influencer	134	3.3657	1.02994			
TRUSTB6	Celebrity	109	3.0459	1.37022	-1.255	241	0.211
	Micro-influencer	134	3.2612	1.29736			

Source: Authors work

4. Discussion

After data analysis, the obtained results confirmed the set research hypotheses. The research showed that independent variable “trust barriers” has statistically significant impact on the dependent variable “purchase intention”. Results indicate that woman rate higher perceived financial risk, performance and social risk than man. This relation was found small but significant.

Also, study confirms that influencer type plays a statistically significant role in the perception of student’s inability to judge product/service quality in online environment. In our case, respondents trust more micro influencers than celebrity, regarding product or service quality when shopping online.

After analyzing the relation between trust barriers in online shopping and purchase intention we can highlight the obstacles of this research and make recommendations for further research. Given the purpose of the research, the observed constructs and its variables for further research should be expanded, since there are many variables addressing trust. The sample of the research included students from one Croatian university, therefore to draw up more general conclusion, in the future, research should be done on more representative sample. Besides examining a difference in trust perception among man and woman, we also analyzed the perspective of influencer type as a factor influencing consumer intention to buy.

5. Conclusion

This paper explains and deals with recognizing the importance of trust barriers in online shopping and the role of a third-party person, in this case influencers, and their significance which may serve as a good basis for planning company's marketing strategy since it puts in relation, trust in online purchase, influencer type, and gender perspective.

This research contributes to strengthening the awareness about trust barriers in online shopping and underlining gender difference and its effect on consumer purchase intention among students in the context of Croatian territory. As already said impulsive buying is rising among young generations and profit from s-business will continue to rise at a double-digit rate therefore addressing influencer marketing and trust barriers will continue to be an issue of a great importance for marketers and firm’s reputation who want to gain consumer trust and change their purchase behaviors into their favor. This paper promotes the role of a credible source in online environment which was found significant among students and can potentially increase their intention to buy if they trust the opinion of a source about the product or service quality.

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