Effect of Perceived Risk and Subjective Norms on Online Shopping Intention among Students in SEGi University: A Study Using SmartPLS-SEM Approach

Hua Xia¹²*, Yifan Chen²³, Xinxian Gao², Meiyu Ji¹, Wang Yi², Jiawen Yu⁴, Chuncha Chen¹

¹Wenshan University, Wenshan, 663000, China
²Graduate School of Business, Research and Innovation Management Centre (RIMC), Segi University, Petaling Jaya, 47810, Malaysia
³Pujiang Institute, Nanjing Tech University, Nanjing, 210000, China
⁴Faculty of Education, Language, Psychology and Music, Segi University, Petaling Jaya, 47810, Malaysia
*Corresponding author: sukd2101816@segi4u.my

Abstract: As an emerging form of consumption, online shopping has increasingly exerted more implications on the consumer market. This paper surveys a sample of SEGi university students, examining the implication of the Perceived Risk and Subjective Norms on the college students' for online purchases. The results of the questionnaire were empirically analyzed by SPSS and SmartPLS-SEM software. It shows that the factor of perceived risk do influence the online shopping intentions negatively among consumers. These are usually in the context of the features that the consumers may have in terms of payments and as well in regard to their security of privacy. it was concluded that the subjective norms do influence the consumers’ willingness to do their shopping online in a positive manner.

Keywords: Perceived Risk, Subjective Norms, Online Shopping Intention

1. Introduction

1.1 Background of the Study

The willingness to make a purchase is usually influenced and attributed to a series of factors and features. Among them being the convenience and the security of a customers. Hus, over time people have been making shopping and buying or intending to make purchases on the ground of influences of various factors. These have been on the vast of changes especially with the digital revolutions and the changes in time across the globe [1].

Additionally, the forms of making purchase and the shopping have changed and found to appear differently across the various age groups, gender among other characteristics in the population [2-3].

1.2 Problem Statement

The features and the factors of perceived risk and subjective norms are highly attributed to influence and cause an individual to either make the decision to purchase a product online or otherwise. As such, there exists the need for the evaluate of these factors and engage to investigate how far and by how much they influence online shopping intention among the young persons in the population.

1.3 Research Questions

The following are the developed research questions to guide the development of this research.

How does the factor of perceived risk influence online shopping intention?

How does subjective norms among the university students influence online shopping intention?
1.4 Significance and Importance of the Study

From the finding and the conclusion of this research, majorly on the subject of the developed research objectives and the research questions, the study will have an influential impact to a segment of the population. The fist and the critical significance of the study will be towards the online sellers. These merchants who sell their products and services online will have the understanding of the interests of their target consumers mainly being the young individuals and the population at the university [4-5]. Secondly, this research will be significant for these students. They will have an understanding of how features such as perceived risk on shopping online is likely to influence their purchase. Thus, the results, the findings and the drawn conclusions as well as recommendations for this study will be of great importance to a wide range of the population on a variety of issues [6].

1.5 Definition of Terms

The following terms were utilized in this research as thus defined below.

Perceived Risk – this is the uncertainty that any consumer has when they are buying items or products.

2. Literature Review

2.1 Introduction

This section aimed at making a representation of findings by other researchers in the context of the research objectives and aims. These were discussed in the view of what other scholars interested in the subject of the influences of the features of perceived risks and the subjective norms found towards the online shopping intention.

2.2 Consumers’ Online Shopping Intention

The online shopping intention is defined to being a reference of the likelihood of consumers in making their future shopping online. The phenomenon and these activities among the population have continually found to be varying in interest across the age groups, the ender and as well the education levels[7].

2.3 The Influence of Perceived Risks on Online Shopping Intention

The factor of perceived intention as earlier defined is attributed to being the levels of uncertainty that a consumer has whenever they are buying items.

A study conducted by [8] indicated in their findings that the consumers’ perceived risks have an influence on their intention to purchase online. The research highlighted five factors of the perceived risk which they attributed to yield negatively to the consumers’ intention to purchase online, only the facto of social risk was found to being insignificant. The main contributor towards the deterrent by consumers was the security risk[9].

2.4 The influence of Subjective Norms on Consumers’ Online Shopping Intention

The second factor which was evaluated in the context of consumers’ shopping intention was the subjective norms. These as earlier defined are the beliefs for which an important segment of people or persons approve and support a particular behavior. In the subject of online shopping, these do play an important role for consumers to make decision if indeed they will shop online or not [10].

According to the Ajzen & Driver, they defined subjective norms to being considered as the perceived pressure imposed by other people such as neighbors, friends, and peers who perform the behavior of interest and such action have either directly or indirectly influenced the behavior of an individual [11]. Khalil Md Nor & Michael Pearson Stated that friends, family members, and colleagues as subjective norms have the attribute of influencing positively on individuals to buy online. There have been existing proofs that subjective norms influence consumers to using ecommerce although with only a minor influence as compared to other factors that influence the online shopping intentions.
of consumers[12].

2.5 Hypotheses Development

The following research hypotheses were developed for the purpose of their evaluation in this study.

H1: The perceived risks influence the online shopping intention of consumers negatively.

H2: The subjective norms influence consumers’ online shopping intentions positively.

2.6 Chapter Summary

The chapter was extensive in the coverage of the research literature review. These were in the context of the previously conducted research studies within the aspects of the objectives formulated and the aims of the research.

3. Research Methodology

3.1 Introduction

The research methodology covered on the utilized techniques of research especially in the process of in the process interaction of the research participants with the researcher, to the design of a research instruments, gathering of data and its analysis.

3.2 Research Framework

The research framework is the clear illustration of the structure of the research plan and aims at help the research in the formulation of the proper and related research questions.

For this study, the research framework and the formulation of the research questions were outlined and highlighted in this chapter.

3.3 Research Design

The research design is usually the procedures and the techniques which are utilized by a researcher in the process of conducting a research for the purposes of collecting data, presentation of the same, and its interpretation towards the making of research conclusions and recommendations [13].

For this research, a descriptive research design was utilized in the gathering of data, its presentation, and interpretation. This design was found to be appropriate due to the fact of its allowing the researcher to gather numerical data, present the same in tabulations and interpretation the results in the context of the research objectives.

3.4 Population and Sampling

The population in a research is defined to being the entire collection of elements that are of interest in an investigation. The sample is defined to be the subset of the population. The sample selected bears the characteristics of the population and actually is the representation of the population in the findings and the study [14].

For this research, the study aimed at the population of the students at Segi University. Thus, a sample of the students was to be utilized in the same. The sample would be students of both genders and across all the age groups. The sample was obtained by the probabilistic methods of simple random sampling strategy.

3.5 Instrumentation

The research instruments are the tools that a researcher utilized for the purposes of engaging the respondents to obtain a response and further to gather data. The research instruments vary in the context of their type of research they intend to cover.

For this research, a questionnaire was utilized for the purpose of gathering data from the sample.
The questionnaire covered in the first section, the demographic profile of the respondents. The second section of the questionnaire focused on the coverage of the independent variable of perceived risks. Thirdly, the subjective norms were covered. Finally the Online Shopping intention was covered. For all these three variables, they were measured from the respondents using a series of statements on the 5-point Likert scale for the levels of agreement. This being: 1 = Strongly Disagree 2 = Disagree, 3 = Neither agree nor Disagree, 4 = Agree, 5 = Strongly Agree [15].

3.6 Data Analysis

For the purpose of evaluation of the research objectives, the research utilized the SPSS and SmartPLS software to conduct the analysis. These were covered by various techniques. Among the tests conducted were; the reliability tests, the bivariate analysis and linear regression.

4. Results

4.1 Introduction

These were conducted in the context of the research objectives and the set hypotheses. All the test were carried out at 0.05 level of significance by use of the SPSS and SmartPLS software.

4.2 Demographic Profile of Respondents

The following table 1 is the representation of the demographic profiles of the stud participants.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Categories</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>42</td>
<td>47.7</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>46</td>
<td>52.3</td>
</tr>
<tr>
<td>Age Groups</td>
<td>18-24 years</td>
<td>41</td>
<td>46.6</td>
</tr>
<tr>
<td></td>
<td>25-30 years</td>
<td>20</td>
<td>22.7</td>
</tr>
<tr>
<td></td>
<td>31-35 years</td>
<td>24</td>
<td>27.3</td>
</tr>
<tr>
<td></td>
<td>Above 35 years</td>
<td>3</td>
<td>3.4</td>
</tr>
</tbody>
</table>

The research study participants being 88 in number indicate that the majority being 52.3% (46) were female participants while in regard to their age groups; the majority being 46.6% (41) were aged between 18 to 24 years with only 3.4% (3) stating to be aged above 35 years.

4.3 Reliability test

The Table 2 represents the levels of reliability for the statements utilised in the measurement of each of the dependent and independent variables in the research.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cronbach’s Alpha</th>
<th>Number of statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived risk</td>
<td>0.950</td>
<td>10</td>
</tr>
<tr>
<td>Subjective Norms</td>
<td>0.963</td>
<td>8</td>
</tr>
<tr>
<td>Online Shopping Intention</td>
<td>0.961</td>
<td>7</td>
</tr>
</tbody>
</table>

The results of the reliability tests, as performed above, indicated that all these variables were reliably measured for utilization in this research. This was based on the values of Cronbach’s Alpha being above 0.6 for each variable.

4.4 Correlation

The tabulation for the correlation of the study variables was presented as Figure 1.
However, there exists a strong, negative correlation between the online shopping intention and the perceived risk; $r = -0.934$, $p = 0.000$.

The results as shown in Figure 2 indicated that there exist a strong positive correlation between the subjective norms and the online shopping intention; $r = 0.951$, $p = 0.00$.

4.5 Linear Regression

For the regression of the research, the Figure 3 were presented from the multiple linear regression conducted.

The results of the above model summary indicated that 92.1% variation in the online shopping intention is attributed to the factors of perceived risk and subjective norm as in this model; $R$ Square $= 0.921$. 
The coefficients of the regression further indicated that the factors of perceive risk, and subjective norm were both influential in the influence of the consumers’ online shopping intention. The results indicated that the influence of perceived risk ($\beta = -0.353, p = 0.000$), reduced the online purchase intention of these consumers while on the other hand, the subjective norms ($\beta = 0.621, p = 0.000$) increased one’s intention do shopping online.

4.6 Chapter Summary

The chapter was extensive in the coverage of the tests, the presentation of the data analysis and the tabulations for the findings from the results. The chapter therefore formed an important basis for the subsequent chapter towards drawing of research conclusions and recommendations.

5. Summary and Conclusion

5.1 Introduction

This chapter was utilized to make a summary of the research findings in the context and within the limits of the objectives for the research, the hypotheses and further the findings from the results.

5.2 Summary for the research

Similar to the findings of Arffin et. al. this study found that the perceived risks do influence the online shopping among consumers. The results and findings indicated that these respondents tend not to feel safe to make their payments through electronic systems. Additionally, the consumers were found to express feelings of trusting the security of online payment methods.

With the regard to the second investigative feature; this study’s findings were similar to those of Khali, and Michael, 2008 that indicated that the friends, family members, and colleagues are likely to influence one’s decision to make a purchase online. The research also found a similar phenomenon and indeed indicated that these subjective norms are significant towards an individual determining on if they will do online shopping.

5.3 Conclusions

From the drawn research findings, the summary of the same and the objectives of the research, several consumers were made for the research.

It was concluded that the factor of perceived risk do influence the online shopping intentions negatively among consumers. These are usually in the context of the features that the consumers may have in terms of payments and as well in regard to their security of privacy.

Secondly, it was concluded that the subjective norms do influence the consumers’ willingness to do their shopping online in a positive manner. The more the friends and the family members of an individual attribute to the goodness of the online shopping, the more the individual is likely to shop online.

Acknowledgement

This study was supported by Wenshan University 2021 undergraduate teaching quality and teaching reform project of the Research Group on Data Analysis (WYZL210110).

References


