



FACTORS INFLUENCING SELF-PROTECTION PRACTICES IN ONLINE SHOPPING AMONG STUDENTS OF HIGHER EDUCATION INSTITUTIONS IN MALAYSIA

By

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Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in Fulfilment of the Requirements for the Degree of Master Sciences

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Abstract of thesis presented to the Senate of Universiti Putra Malaysia in
fulfilment of the requirement for the degree of Master of Science

**FACTORS INFLUENCING SELF-PROTECTION PRACTICES IN ONLINE
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IN MALAYSIA**

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July 2022

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Technology has recently revolutionized consumer shopping experiences, and Malaysia's high internet penetration rate has sparked rapid growth in the local online shopping marketplace in recent years. The ease and simplicity of online shopping also creates a new area for consumer complaints and challenges in consumer protection issues. Limited research has been done on online shopping among young consumers, particularly college students, and from a literary perspective, there have been many studies on online shopping behaviour but very few in self-protection practices. Additionally, challenges in higher shopping online shopping have resulted in a newly emerging area for consumer issues to become more complicated in terms of their rights. As a result of this predicament, consumers become increasingly vulnerable to fraudulent and deceptive marketing in online transactions. This study aims to investigate the self-protection practices in online shopping among students of higher education institutions in Malaysia. Four factors explored were self-efficacy, media of consumer education, safety priority and subjective norm. The theory pertaining to this research is the Social Cognitive Theory. In this study, the quantitative method was employed and the data were collected through a self-administered questionnaire among 400 respondents who have shopped online. The respondents were selected using systematic random sampling. Descriptive analysis was performed to understand the characteristics of the respondents and variables of the determinants of self-protection practices. Outcomes such as frequency, percentage, mean, and standard deviation were applied to every variable using SPSS. The inferential analysis was performed by way of Pearson correlation and multiple linear regression. The outcome revealed that self-efficacy, media of consumer education, safety priority, and subjective norm have a positive and significant relationship with self-protection practices. The result from regression analysis indicated the regression model to be statistically significant due to the significance of F statistics generated ($F=78.280$; $P < 0.05$). Meanwhile, these four variables contributed 43.7 percent to the model. The

multiple linear regression analysis indicated safety priority as the most influential predictor. This study supports the importance of self-protection practices in online shopping among students of higher educational institutions. This study examines self-protection practices, which is a key component of the National Consumer Policy (NCP). In terms of policy implications, the findings suggests that the self-protection aspects in the NCP should also emphasize consumer rights and responsibilities in online purchase. The practical implications centre on the role of media of consumer education, specifically how social and electronic media can be utilized to disseminate consumer education on online shopping practices. Finally, from the methodological standpoint, the study contributes to the application of Social Cognitive Theory, which is rarely used in consumer self-protection practices studies



Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia
sebagai memenuhi keperluan untuk ijazah Master Sains

**FAKTOR-FAKTOR YANG MEMPENGARUHI AMALAN PERLINDUNGAN
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menunjukkan model regresi adalah signifikan secara statistik disebabkan oleh signifikan statistik F yang dijana ($F=78.280$: $P < 0.05$). Manakala, empat pembolehubah ini menyumbang 43.7 peratus kepada model tersebut. Analisis regresi linear berganda menunjukkan keutamaan keselamatan sebagai peramal yang paling berpengaruh. Kajian ini menyokong kepentingan amalan perlindungan diri dalam membeli-belah dalam talian dalam kalangan pelajar institusi pengajian tinggi. Kajian ini mengkaji amalan perlindungan diri, yang merupakan komponen utama Dasar Pengguna Negara (NCP). Dari segi implikasi dasar, penemuan mencadangkan bahawa aspek perlindungan diri dalam NCP juga harus menekankan hak dan tanggungjawab pengguna dalam pembelian dalam talian. Implikasi praktikal tertumpu kepada peranan media pendidikan pengguna, khususnya bagaimana media sosial dan elektronik boleh digunakan untuk menyebarkan pendidikan pengguna mengenai amalan membeli-belah dalam talian. Akhir sekali, dari sudut metodologi, kajian ini menyumbang kepada aplikasi Teori Kognitif Sosial, yang jarang digunakan dalam kajian amalan perlindungan diri pengguna.

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CHAPTER 1

INTRODUCTION

1.1 Background of the Study

There should be at least two subheadings to justify having subheadings.

Malaysia aims to promote a sustainable and dynamic economic growth by embracing the digital economy. The digital transformation is also part of industrial revolution 4.0 (IR 4.0), which is an evolution that uses technology, changes the way of life, opens up new opportunities in business and ways of innovating in the industry (Hofmann & Rusch, 2017). The IR 4.0 is an important aspect of building a new civilization in the country. It is also a benchmark for the country not to be left behind in technology (Yahya et al., 2020). Technology has revolutionized consumers' online purchase experience, and the high internet penetration rate in Malaysia has caused online purchase to grow rapidly in recent years. Nevertheless, online transactions are exposed to online cheating, security breaches, data leaks, cyber theft, and privacy (Chakraborty et al., 2016).

The e-commerce in Malaysia in 2017 showed positive progression with gross value added contributed 6.3% to gross domestic product (GDP) (Malaysian Communications and Multimedia Commission, 2018). Furthermore, in 2020, the growth rate increased to 32.7 percent, contributing RM896.4 billion in e-commerce revenue compared to 2019, and in the first quarter of 2021, revenue for e-commerce recorded RM254.6 billion, an increase of 30.0 percent revenue growth (Department of Statistics Malaysia, 2021). The significant contribution was made from the online shopping of goods with RM128,940,315 pending which forms 51% of total e-commerce spending (Moey & Kemp, 2019). Approximately, e-commerce consumers in 2018 were 16.6 million and from this 93.3% claimed to be online shoppers (MCMC, 2018). Malaysia rank number two after Singapore for the high number of e-consumers as compared to the other countries in the region (MCMC, 2018). Malaysia has excellent engagement in connecting to the digital world, especially in mobile platforms. In 2018, mobile broadband penetration per 100 citizens in Malaysia reached maximum percentage and users of the internet are 87.4% (MCMC, 2018).

Online shopping is an easy solution for busy life nowadays, instead of going to malls for shopping, consumers can purchase goods by using the internet. The advantages of online shopping are not getting stuck in the traffic jam, no hassle of searching for parking, and saving money for fuel and tolls (Akroush & Al-Debei, 2015). Other advantages such as convenience, add information, get better prices, send as gifts, availability of express shipping, various choices of products, compulsive shopping, and secure method of payment (Bansal, 2013; MCMC, 2018; Rahman et al., 2018). Online shopping also saves time and energy, twenty-four hours a day, seven days a week availability, avoiding crowd and overcome geographical limitations (Rahman et al., 2018).

Recently the world has been shocked by the discovery of a new contagious disease that has spread worldwide called Coronavirus (COVID-19). Many countries have been severely affected by COVID-19 and to prevent the spread of this disease, many countries including Malaysia have enforced a lockdown order. The Movement Control Order (MCO) was implemented under the Prevention and Control of Infectious Disease Act 1988 and the Police Act 1967. During the MCO, most of the daily activities were stalled when schools, higher education institutions, shops, offices, mosques and houses of worship were closed down. Only one family member can go out to buy groceries and need to minimize time out from home. The pandemic outbreak is a massive disruption in almost every aspect of life with most of the people need to stay and work from home, the Malaysians have been accustomed to spend more time online and show more interest to purchase online (Leong, 2020). Many Malaysians have therefore chosen to make online purchases in order to get their necessities.

According to OECD (2020), the COVID-19 crisis has proliferated worldwide, contributing to panic buying of hand sanitizers, disinfectants, facemasks, and toilet paper in some countries. As more consumers emphasise on hygiene, unethical business or online scams take advantage during this pandemic, making consumers more vulnerable to commercial exploitation and product quality (He & Harris, 2020). Price gouging is another issue as some businesses have sought to maximize profits from increased demand. Online services have soared and consumers move to the online channels as essential products become scarce. According to the website Vase.ai (2020) Malaysians currently focus on buying essentials items such as groceries (97%), personal hygiene items (91%), snacks (89%), household items (88%), and face masks, hand sanitizers, or disinfectants (86%).

According to Muller (2021), the findings revealed that females shopped more than males, and the reasons that motivated online shopping included being under quarantine and unable to leave the house, avoiding queuing in supermarkets or other stores in order to minimise involvement with the crowd, and practicing social distancing. According to the Department of Statistics Malaysia (2020), the sales value of wholesale and retail trade rebounded 26.3 percent to record RM17.6 billion in May 2020 as compared to the previous month. Food-related industries grew marginally, retail sales were expected to rise due to the expansion of e-commerce activities as consumers become more digitized and prefer convenient methods of purchasing and payment.

Regardless of the many advantages of online shopping for consumers, its disadvantages cannot be denied. The weaknesses included lack of negotiation, high delivery cost, fraudulent sites, spam and identity theft (Bansal, 2013). Huseynov and Yildirim (2016) found that consumers had difficulties to test and feel the item physically like the conventional way to judge the quality of the product. Security concerns, fraud, privacy on contact information and full hidden cost are further disadvantages listed by Rahman et al. (2018). The issues on product and product return policies such as refund money or defective product is also another concern in online shopping (Bansal, 2013; Huseynov & Yildirim,

2016; Rahman et al., 2018). According to the Organisation for Economic Co-operation and Development (OECD) (2018), the risk and challenges faced by online consumers were exposure to unfair business and advertising practices, complicated term and conditions of the contract, payment and transaction issues, data and privacy inadequately protected, selling unsafe product that had been banned or recalled from the market, also dispute resolution and redress taking a long time to be settled.

Online shopping is a fast-growing trend in the world due to advanced technology and widespread internet access. The youth has received the greatest exposure to technology as well as the internet, thus, online shopping has become their choice of this platform to shop (Johnson, 2015; Priyanka & Ramya, 2016). Technology advancement has been fuelled by the new generation who desire more options, value for money, and convenience (Ofori & Nimo, 2019; Sox et al., 2014). The findings were supported by the Malaysian Communications and Multimedia Commission (2018), whereby internet users were mainly composed of adults in their 20's (30%) and 30's (25.9%). The new generation, especially those in the higher education used technology in their daily activities (Ofori & Nimo, 2019). These students save time and energy while engaging in online shopping activities from the comfort of their own house or hostel (Deneen & Yu, 2018). Students prefer online shopping over conventional stores because the availability of numerous brands and types of items makes online shopping even more pleasant and practical, particularly for students who have limited time due to the workload of study and assignments (Kuswanto et. al., 2019).

The National Consumer Policy (NCP) or Dasar Pengguna Negara (DPN) was launched on 26 July 2002 to introduce self-protection in consumers, self-regulation in traders and manufacturers, to achieve adequate levels of consumer protection by providing a conducive environment to create a fair market and sustainable development in domestic and global economic growth (Ministry of Domestic Trade, Co-operatives and Consumerism, 2010). The 2010 review of the National Consumer Policy (NCP) aims to produce consumers who practice self-protection by being knowledgeable, well-informed, proactive and responsible (National Consumer Policy, 2010). Self-protection practices had been a highlight in the National Consumer Policy (NCP) that encourages consumers and sellers to know their rights and responsibilities to fulfil the vision of the Malaysia government (Dol, Bakar & Said, 2015). The eight consumer rights consist of the right to basic needs, the right to safety, the right to be informed, the right to choose, the right to be heard, the right to redress, the right to consumer education and the right to a healthy environment. Apart from these rights, there are many laws that protect consumers in their daily transactions. The Consumer Protection Act 1999, for example, protects consumers before, during and after the transaction with the traders (Norhafifah et al., 2018). However, the law remains unhelpful if consumers are not aware of their existence and not knowing their rights and responsibilities (Zumilah, 2002). Consumers not only have the right to be informed, but they also have the obligation to educate themselves in order to protect themselves from the products or services they purchase (Popescu, 2018). Therefore, consumers who

have good self-protection practices, they play a role and carry out their responsibilities without depending on law enforcement.

1.2 Problem Statement

Although online shopping brings many benefits, consumers are still exposed to the risks due to the nature of online shopping. Online business is a very important and complementary alternative to a traditional business where it does not require the cost of renting a place to start a business. (Coker et al., 2011; Celik, 2011). However, consumers who transact online are exposed to various risks. This is because they cannot see the transaction that takes place in real life but only through communication through an intermediary whether it is a smartphone, computer, or tablet. Although buying and selling online is easier and simpler, consumers will also be more easily deceived when their important information such as account numbers or credit cards is easily stolen and accessed by cybercriminals (Portal Polis Di Raja Malaysia, 2014).

Besides that, according to the Malaysian Communications and Multimedia Commission (2019), the total number of online purchase fraud cases recorded as of October 2018 was 2,813 cases involving a total loss of RM19, 562,025.09. According to KPDNHEP (2022), the online transaction statistics show the e-Tribunal system has received 5,300 cases of total filling, whereas January to July 2022 recorded the highest number of complaints of 24,018 in online transactions.

Nowadays information is loaded without boundaries and it makes the selection of information difficult. Students have to face challenges to learn and communicate in accordance with the global network (Amir et al., 2018). Consumers have changed their lifestyles, and the top three shopping websites visited by consumers were Shopee, Lazada, and Food Panda, where these websites sell general daily necessities, and the majority of Malaysian online shoppers are students aged 15 to 24 years old who are actively involved in online shopping (Isa et al., 2020). Because students rely on their parents for most of their pocket money, they will compare online prices, including transportation, before making a decision (Aragoncillo & Orus, 2018; Ofori & Nimo, 2019). There are countless studies on online shopping, however, the focus on higher education students is still less explored by researchers (Farah et al., 2018). Furthermore, although online shopping is convenient and less stressful, it is vulnerable to malicious cyberattacks from malware and other parties that jeopardize data safety, security, and integrity (Aseri, 2021).

This situation made consumers more vulnerable to fraudulent and misleading advertisements in an online transaction. Hence, the importance of practicing self-protection while doing online shopping is to overcome consumers' concerns as well as build up confidence in online shopping to solve any dispute regarding goods or services. In the same way, factors to consider for self-protection

practices in online shopping include self-efficacy, safety priorities, media of consumer education, and subjective norm.

There are a few research gaps that have motivated this study. Firstly, there are limited studies on online shopping among young consumers, especially among students of higher educational institutions where the population is homogeneous. The age group between 21 to 35 is the highest age group in making online transactions as compared to other groups (Krishnan et al., 2017). Secondly, the Social Cognitive Theory by Bandura (1986) explains that there is an interaction between individual factors, environment, and behaviour. Therefore, this theory needs to be explored further in order to better understand how self-efficacy, consumer education media, subjective norm, and safety preferences influence self-protection practices in online shopping. Moreover, while there have been many previous studies on online shopping behaviour, there is still lack of research on online shopping self-protection practices. As a result, this study will focus on self-protection practices in online shopping among higher education institution students. As a result, self-protection in online shopping is critical because students frequently shop online and are vulnerable to fraud. As a result, the purpose of this study is to reduce reliance on government agencies to solve online shopping problems and to promote self-protection practices in online shopping with minimal government supervision.

1.3 Research Questions

- 1) What are the patterns of online shopping among students of higher educational institutions in Malaysia?
- 2) What is the level of self-efficacy, media of consumer education, safety priority, subjective norm and self-protection practices among students of higher educational institutions in Malaysia?
- 3) What is the relationship between self-efficacy, media of consumer education, safety priority, subjective norm with self-protection practices?
- 4) What is the most influential factors in self-protection practices?

1.4 Research Objective

1.4.1 General Objective

The objective of the study is to determine the relationship between self-efficacy, media of consumer education, safety priority, subjective norm and self-protection practices among students of higher educational institutions in Malaysia. The study also seek to determine the most influential factor in self-protection practices.

1.4.2 Specific Objective

- 1) To identify the patterns of online shopping among students of higher educational institutions in Malaysia.
- 2) To determine the level of self-efficacy, safety priority, media of consumer education, subjective norm and self-protection practices among students of higher educational institutions in Malaysia.
- 3) To investigate the relationship between self-efficacy, safety priority, media of consumer education, and subjective norm with self-protection practices.
- 4) To examine the most influential factor in self-protection practices.

1.5 Hypothesis

H₀₁: There is no significant relationship between self-efficacy and self-protection practices.

H₀₂: There is no significant relationship between media of consumer education and self-protection practices.

H₀₃: There is no significant relationship between safety priority and self-protection practices.

H₀₄: There is no significant relationship between subjective norm and self-protection practices.

H₀₅: Self-efficacy, media of consumer education, safety priority and subjective norm do not significantly influence online consumer self-protection practices.

1.6 Definition of Key Terms

Self-Protection Practices

Conceptual: The manner by which a person defends himself, his property and well-being against any harm (Afida Mastura, Elistina & Syuhaily, 2014).

Operational: Self-protection practices in this study refer to the consumer conduct of purchase transaction, verification of business details, and consumer redress in online shopping. This is measured by 18 questions developed by the researcher through Focus Group Discussion (FGD). A high score indicates that the respondent has very good self-protection practices, and items are evaluated on a five-point Likert scale that ranges from never (1) to always (5).

Self-Efficacy

Conceptual: An individual's belief about their capabilities of performance that will affect their lives that included cognitive, motivational, affective and selection processes (Bandura, 1994).

Operational: In the context of this study, self-efficacy was measured using a four-point scale ranging from not at all true (1) to exactly true (4) by Schwarzer and Jerusalem (1995) whereby a high score indicating a respondent's ability to make wise decisions based on their actions and emotions when dealing with an issue during online shopping.

Media of Consumer Education

Conceptual: Medium of consumer education consist of printed media sources, reference groups, and electronic media (Benn, 2004).

Operational: In this study, media of consumer education refers to an effective channel with a high score that instructs or educates consumers on self-protection practices in online shopping by measuring using a four-point scale ranging from very ineffective (1) to very effective (4) from Simanjuntak et al (2013).

Safety Priority

Conceptual: Prioritizing safety involves the fact that people prioritize the safe option when they have the opportunity (Moen, 2007).

Operational: Safety priority is about choosing a safe option when respondents shop online and measuring seven items using a five-point scale ranging from strongly disagree (1) to strongly agree (5) by Moen (2007). A high score implies that a respondent gives a high priority on safety during online buying transactions.

Subjective Norm

Conceptual: Social pressure that will lead to performing or not to perform certain actions (Ajzen, 1991).

Operational: Five questions were adapted from Lee and Ngoc (2010) and were measured using a five-point scale ranging from strongly disagree (1) to strongly agree (5), with a high score indicating the high impact of social pressure and influence from important people in the respondent's life such as friends, family, or relatives to practice self-protection in online shopping.

1.7 Theoretical Framework (Social Cognitive Theory by Bandura, 1986)

A theory is intended to explain, predict, understand the phenomenon and expand existing knowledge (Kivunja, 2018). Correspondingly, the Social Cognitive Theory (Bandura, 1986) were used in this study to identify the factors that influence self-protection practices in Malaysia. The Social Cognitive Theory was developed from the Social Learning Theory by Albert Bandura and was expanded in 1986 since it provides a more extensive overview of human cognition in the context of social learning (Nabavi, 2012). Bandura's Social Cognitive Theory is a mechanism that provides consumers with effective consumer protection practices, based on three main factors namely personal, environmental, and behavioural factors (Bandura, 1986). This theory presents a framework for understanding, predicting, and influencing human behaviour by way of observing, modelling and imitating the behaviour of others (Green & Peil, 2009; Nabavi, 2012).

The main focus in the Social Cognitive Theory is the process of learning and interaction between various factors in it, also known as reciprocal interaction or triangular relationship between personal factors, environment and behaviour that influence each other bidirectionally as in Figure 2 (Bandura, 1986).

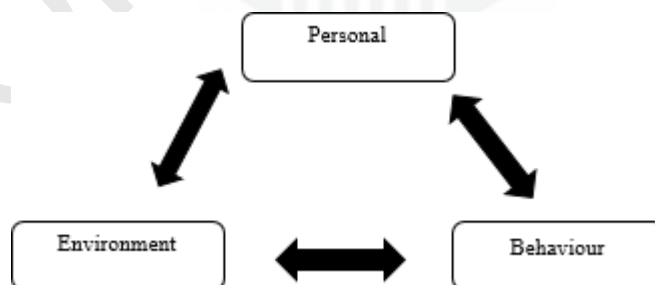


Figure 1: Social Cognitive Theory Reciprocal Model

The fundamental principle of SCT is reciprocal determinism, which implies a constant, complex interaction between the personal, environment, and behaviour as one of the variables may indicate dominance over others, and variations in one of it may lead to changes in others' behaviour (Ozmete & Hira, 2011; Yakut, 2019). Reciprocal in Social Cognitive Theory does not imply that various sources of influence are equal strength as some might be stronger than others and the reciprocal influences do not always occur at the same time (Bandura, 1986). The bidirectional impacts imply a cyclical influence among the three components or between any two of them (Stajkovic & Sergent, 2019).

The environment factor has a significant impact on consumer practices (Lim et al., 2019). According to Carillo (2010), environment factor may be divided by the social (family members, friends, and colleagues) and physical (size of room, availability of food) factors that will affect individual behaviour. Environment factors are related to social factors or readily impacted by surrounding in order to assimilate into the society and strongly linked to subjective norm within the community itself (Johnstone & Hooper, 2016; Phipps et al., 2013; Carillo, 2010; Glanz et al., 2002). That is, what people thinks, believes, and experience influences how they behave (Bandura, 1989). Apart from that, the environment factor has a significant impact on individual learning processes, as the previous studies have shown when tasks were challenging, individuals become more vulnerable (Lim et al., 2019; Lucas et al., 2006). Parents, peers, schools and instructors, and the mass media have been identified as social environment factors that have a significant impact on the formation of personal factor (Stapa et al., 2012).

On the other hand, personal factors include essential cognitive and affective human abilities such as self-efficacy, personal traits, desires, self-regulation, and reinforcement (Ozmete & Hira, 2011; Yakut, 2019). Personal factor to the consumers such as gain knowledge, self-interest, and willingness to take action for protection as a result of their own self-responsibility (Kumar & Ghodeswar, 2015). Therefore, it is possible to assume that whatever is present in a person's personality through social processes such as observing, imitating, and following other people's behaviours will affect their behaviour in the state of the self-protection practices (Jenkins et al., 2018).

While behaviour is being influenced by the environment and personal factors as in Social Cognitive Theory. When people create objectives, develop appropriate actions, and predict outcomes, they act on their beliefs, and this behaviour is dependent on self-awareness, self-reflection, and adaptive self-regulation (Stajkovic & Sergent, 2019). Environment factors as influenced by the environment and personal factors that explain the elements inside the individual will influence practices (Bandura, 1999). However, according to Social Cognitive Theory, individuals actively seek and evaluate information rather than just responding to environmental influences (Nevid, 2009). The self-protection practices enable being sensitive to the right of consumers by performing actions to make claims and remedies for each defective item or unsatisfied service (Wook et al., 2011).

Social Cognitive Theory (SCT) is a theory that derives from applied psychology as it has been widely accepted and empirically validated in various fields of research particularly on learning at different contexts (Boateng et al., 2016; Carillo, 2010; Ormrod, 2004), for example, in the social and health science (Posada et al., 2020). The research on formal education has been most frequently explored, yet researchers recently working in different subject areas have also used the SCT framework. SCT has generally been used in educational contexts using students as data subjects, as is the case with the majority of learning behavior research. (O'Brien et al., 2017). There are studies conducted in health education used SCT such as healthy lifestyles in general (Lyons et al., 2014) and also in medical conditions such as cancer (Krebs et al., 2017), diabetes (Rosal et al., 2014), and heart disease (Cook et al., 2015). Additionally, other discipline that used SCT are education (Burney, 2008; Gordon et al., 2015; Zhang et al., 2012), careers (Blanco, 2011; Zikic & Saks, 2009), information systems (Agarwal et al., 2013; Baker et al., 2014; Hoffman et al., 2015; Liang & Lu, 2013; Rana & Dwivedi, 2015; Yap & Gaur, 2016), media and communication studies (Bandura, 2009; LaRose & Eastin, 2004), consumerism (Broderick et al., 2011; Haron, 2008; Paim et al., 2017; Wang et al., 2011) and last but not least in organisational studies (Hwang et al., 2016; Gong et al., 2009; Wood & Bandura, 1989).

Several consumer studies have also adopted Social Cognitive Theory in explaining consumer behaviour, such as O'Brien et al. (2017), Paim et al. (2017), and Tajurahim et al (2020). Finally, this study focuses on several variables in personal factors, such as self- efficacy, safety priority; environment factors, such as media of consumer education, subjective norm; and behavioural factors (practices) is the end result to be achieved in this study that is to implement good self-protection practices when engaged with online shopping.

1.8 Conceptual Research Framework

Figure 1 shows the conceptual model of the study. The framework of this conceptual study refers to the Social Cognitive Theory by Bandura (1986) as the foundation of research on the concept of consumer self-protection practices in online shopping. There are four independent variables, namely self-efficacy, media of consumer education, safety priorities and subjective norm. The dependent variable is consumer self-protection practices in online shopping.

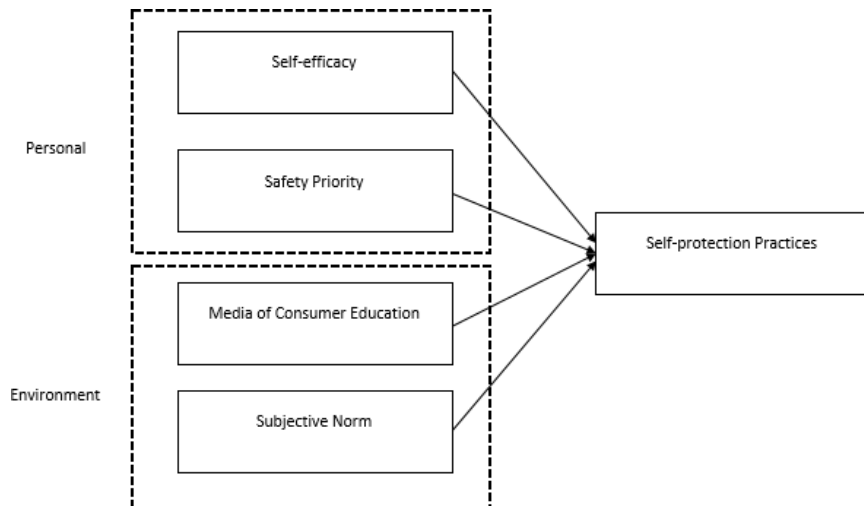


Figure 2: Conceptual Research Framework

1.9 Significance of Research

There are many benefits when consumers take steps to protect themselves in online shopping as it might help in reducing the number of consumer complaints. Consumers who can defend themselves will reduce the reliance on government agencies to solve problems. Consumers can protect themselves from being the victim of fraud with minimum supervision from the government.

The findings of this study are essential to the consumers, government agencies, non- governmental organisations (NGOs), traders and academics in areas related to consumer protection, especially consumer online transactions. The results of this study might help to improve and develop current policies, and guidelines as well as enhancing education awareness consumer protection. The consumer also can gain benefits via this research findings to improve self-protection practices. Moreover, from the consumers' point of view, consumers can enhance their well-being and protect themselves from being a victim of greedy sellers.

The results from this study will also benefit to the government agencies such as the Ministry of Domestic Trade and Consumer Affairs (KPDNHEP) by strengthening existing policies or improving laws to protect consumers, especially the National Consumer Policy and the Consumer Protection Act 1999. Furthermore, the Malaysian Communications and Multimedia Commission (MCMC) is able to provide consumer education through campaigns for consumers to protect themselves in online shopping and to reduce consumer complaints.

Other than that, non-governmental organisations (NGO) such as National Consumer Complaints Centre (NCCC), Consumer Association of Penang (CAP), Muslim Consumer Association of Malaysia (PPIM), and Malaysia Cyber Consumer Association can help to develop programs that provide knowledge and enhance consumer confidence to protect themselves when transacting in online shopping. This study also can give benefit to the consumers in Malaysia by helping them to know their rights in the market through NGOs in Malaysia.

Furthermore, from the online sellers' perspective, in-depth understanding of self-protection practices provides useful information and knowledge to better understand online consumer and develop an innovative marketing strategy as well as improve business competitiveness and profitability. Thus, consumers will enjoy when making online shopping and feel secure when engaging with the online transaction.

Additionally, in terms of the theoretical aspect, this research uses Social Cognitive Theory by Albert Bandura. The SCT is commonly being used in psychology, education and communication research. As a dependent variable, self-protection practices is rarely used for study related to online shopping, this framework can be a contribution to the body of knowledge because there is a lack of existing literature on this specific perspective.

1.10 Scope

The respondents of this study consist of 400 students in higher education institutions who are already engaged with online shopping. The students are from four different zones which are northern (Universiti Utara Malaysia, UNITAR International University), Southern (Universiti Tun Hussein Onn, Sunway Johor Bharu), Eastern Coast (Universiti Malaysia Kelantan, Kolej Kosmopoint) and Central (Universiti Putra Malaysia, Universiti Tenaga Nasional). The sample size of respondents was calculated in order to obtain a reliable and valid representative for this research. Consequently, a self-administered bilingual questionnaire was distributed to respondents. This study focused only on self-efficacy, media of consumer education, safety priority, subjective norm and self-protection practices using the Social Cognitive Theory framework. The primary purpose of this study is to identify factors that influence self-protection practices in online shopping. All first letters of principal words are capitalised and the subheading is left justified.

1.11 Organization of Thesis

This study consists of five chapters that describe each aspect of the study in detail. The first chapter explains the background of the study and the emergence of research issues that need to be studied in detail. The research questions and objectives are also specified in order to understand the direction of the study more clearly. The hypothesis of the study is to measure the relationship of the variables in Pearson and to determine the most influential factors in self-protection practices. Moreover, this chapter also describe the importance of research to government agencies, non-government organizations, consumers and traders. This chapter also describes the theory used in the study that is the Social Cognitive Theory by Bandura (1986). In addition, the scope and limitations of doing this study, as well as conceptual and operational definitions are also discussed.

The second chapter on the literature review describes the previous studies on the independent variables and self-protection practices so the differences, similarities or gap in this current study can be identified. third chapter discusses the methodology which includes the design, location, population, and sampling method used in this study. The development of study instruments and pre-test is also described. In addition, the validity and reliability of the instrument are also discussed. Furthermore, the data processing and analysis methods are also explained in detail.

The fourth chapter discusses the results of the study where they are presented systematically by answering the objectives of the study in the descriptive and inferential manner. The results of the study are analysed using Statistical Package for Social Sciences (SPSS) software. This chapter starts with the descriptive result of the respondent's demographic background, followed by further inferential analysis using Pearson correlation and multiple regression.

Chapter five summarizes this study in its entirety. The conclusions of this chapter are based on the results of the study and the objectives that were developed at the beginning of the study. Implications of the study were also stated to provide suggestions for improvement to all involved parties. Finally, further studies are proposed to provide continuity in the consumer research field by investigating the research aspects that were not covered in this study.

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