DRIVING FACTORS TOWARDS LIVE-STREAM SHOPPING LIFESTYLE IN MALAYSIA: AN UNDISCOVERED GOLD MINE?

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DECLARATION

We hereby declare that:

(1) This undergraduate FYP is the end result of our own work and that due acknowledgement has been given in the references to ALL sources of information be they printed, electronic, or personal.
(2) No portion of this FYP has been submitted in support of any application for any other degree or qualification of this or any other university, or other institutes of learning.
(3) Equal contribution has been made by each group member in completing the FYP.
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DEDICATION

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LIST OF ABBREVIATIONS

A	Attractiveness
ANOVA	Analysis of Variance
B2B	Business-to-business
B2C	Business-to-consumer
DOSM	Department of Statistics Malaysia
DV	Dependent Variable
E	Expertise
EG	Entertainment Gratification
eWOM	Electronic Word-of-Mouth
HG	Hedonic Gratification
IG	Informativeness Gratification
IV	Independent Variable
KL	Kuala Lumpur
MCMC	Malaysian Communications and Multimedia Commission
MLR	Multiple Linear Regression
NS	Not Supported
PB	Purchase Behavior
PBC	Perceived Behavioral Control
PI	Purchase Intention
S	Supported
SCM	Source Credibility Model
SCT	Source Credibility Theory
SG	Social Gratification
SLR	Simple Linear Regression
T	Trustworthiness
TAM	Technology Acceptance Model
TPB	Theory of Planned Behavior
TRA	Theory of Reasoned Action
UG	Utilitarian Gratification
UGT	Uses and Gratification Theory

US   United States

VIF   Variance Inflation Factor

PREFACE

This research methodology project is conducted to fulfill the requirement of Bachelor of Commerce (Hons) Accounting completion. This research project is furnished and accomplished based on other conducted researches which were quoted as references.

The title of this research project is "Driving Factors Towards Live-Stream Shopping lifestyle in Malaysia: An Undiscovered Gold Mine?". As the emergence of live-stream feature in the social media is believed to be beneficial to the e-commerce, thus we were driven to conduct this research in order to identify the motivation factors that influence the purchase intention of Malaysian online shoppers in live-stream shopping and whether their purchase intention will subsequently affect their purchase behavior. This is to provide the retailers a clearer understanding on what motivates the Malaysian shoppers to purchase in live-stream shopping. As the live-stream shopping is a relatively new phenomenon in Malaysia, therefore live-stream shopping in Malaysia would be an interesting topic for us to make an in-depth investigation.

ABSTRACT

Live-stream shopping is growing exponentially in Malaysia but limited research has been conducted to investigate the driving factors that lead consumers to shop via live-stream. Thus, this research is aimed to establish the factors that affect the purchase intention of Malaysia online shoppers on live-stream shopping to fill this research gap. Uses and Gratification Theory (UGT) (i.e. Entertainment Gratification and Informativeness Gratification) and Source Credibility Theory (SCT) (i.e. Attractiveness, Expertise, and Trustworthiness) are adopted to investigate the relationship with purchase intention, and Theory of Planned Behavior (TPB) is applied to study the relationship between purchase intention and purchase behavior in a live-stream context. The integration of these three theories would provide a more comprehensive result as compared to merely adopt only one theory. Also, this study would provide some understanding to retailers to understand what are the motivation factors that lead the consumer to complete checkout and thus retailers able to design own business strategy to complete a sale. The target respondents in this study are Malaysian internet users who had experienced watching live-stream video about a product or service in social media. Moreover, the self-administered questionnaire will be distributed in Kuala Lumpur, Selangor, Johor, and Perak and 252 sets of the self-administered questionnaires were collected. The data collected will be analyzed using Multiple Linear Regression Model and Simple Linear Regression Model. Besides, Reliability, Normality, Multicollinearity, and Linearity tests were conducted to provide empirical support for the items developed. This research could further enhance the validity of UGT, SCT, and TPB that might be outdated as time lapse. Besides, it could suggest a new business model to retailer particularly online retailers with small business size.

Keywords: Live-stream, shopping, online shopper, internet user, purchase intention, Uses and Gratification Theory (UGT), Source Credibility Theory (SCT), Theory of Planned Behavior (TPB).

CHAPTER 1: RESEARCH OVERVIEW

1.1 Research Background

The future of e-commerce has arrived when live-stream meets online shopping (Chen, Cenfetelli & Benbasat, 2017; Wongkitrungrueng & Assarut, 2018). Live-stream shopping is a new way of shopping through a mixed media which has social commerce attributes and unique media attributes (Cai, Wohn, Mittal & Sureshbabu, 2018) where real-time interaction is offered (as shown in Figure 1.1). Individuals who sell their products or services in real time videos are known as live-stream sellers (Todd & Melancon, 2018; Wongkitrungrueng & Assarut, 2018), including the social media influencers who are paid to promote merchants' products in live-stream (Cai et al., 2018).

Although the technology of live-stream has only been considered as completely up-to-date in 2017 (Wendt, 2017), the incorporation of shopping into live-stream is becoming popular and exponentially growing through the advent of Taobao Live, Facebook Live and YouTube Live (Lu, Xia, Heo & Wigdor, 2018). In fact, watching live-stream is now part of online shopping and is beyond just clicking on the shopping platform ("Live streaming shopping," 2018).

Malaysia is of no exception, the uptake of live-stream shopping has been increasing over the last two years. Data from the Malaysian Communications and Multimedia Commission (MCMC) in 2018 shows the percentage of online shopping in Malaysia increased from 48.8% in 2016 to 53.3% in 2018. Approximately 79% (25.08 million) of Malaysians are active Internet users and 62% of mobile users shop online via their devices (International Trade Administration, 2018).

In December 2018, Lazada Malaysia first introduced the live-stream feature in its mobile shopping app in conjunction with Lazada 12.12. Grand Year End Sale. Shopee and Lelong also adopted a similar approach where unique inventory offers being made available via Facebook Live ("Online store goes," 2018).

Figure 1.1: The Screenshot of a Facebook Live-Stream Show

Source: Developed for research.

Notes: 1–The number of online viewers, 2–Live-stream seller, 3–Message from online viewers, 4–Public scrolling text screen, 5–Comment box, 6–Reaction from online viewers.

1.2 Problem Statement

1.2.1 Research Problem

Live-stream has been utilized by live-stream sellers in marketing certain products. They will demonstrate the products and their features to the potential buyers in real-time (Steve, 2017). Hence, live-stream has become a strategic part of a modern business model for business-to-business (B2B) and business-to-consumer (B2C) business model (Dylan, 2016). By incorporating live-stream into an online business, it is likely to increase e-commerce value.

Although there are many mobile phone and Internet users in Malaysia, the revenue generated from B2C out of total e-commerce values is relatively low which only occupied 18.5% out of total RM 198.2 billion (Department of Statistics Malaysia [DOSM], 2018).

Live-stream has been used as an e-commerce tool in many countries, especially China, the United States (US) and Europe (Frank, 2018; Soo, 2018). However, the degree of acceptance towards live-stream shopping varies among countries. In China, shopping while interacting with sellers is common to consumers; while it is unusual to consumers in western countries (David, 2018). According to Cai et al. (2018), live-stream shopping is still a relatively new phenomenon. Therefore, this study attempts to investigate the factors that will trigger consumers' purchase intention (PI), which eventually leads to purchase behavior (PB) via live-stream in Malaysia since it appears as a groundbreaking marketing tool to merchants recently ("Live streaming shopping," 2018).

1.2.2 Review of Past Studies and Deficiency of Past Studies

In the past, many studies were conducted on online shopping by using different models such as the Theory of Planned Behavior (TPB) (Malik & Guptha, 2013); Technology Acceptance Model (TAM) (Hu et al., 2009; Sin, Nor & Al-Agaga, 2012); Hedonic Shopping Motivation and Utilitarian Shopping Motivation (Cardoso & Pinto, 2010; Parker & Wang, 2016). Though Uses and Gratification Theory (UGT) has been used by Lim and Ting (2012) in investigating online shopping intention in Malaysia context, limited constructs have been adopted in their study where other potential variables might have been ignored. Besides, the samples selected were from a single location that might not represent the whole of Malaysia online shoppers.

Source credibility theory (SCT) has been adopted in investigating the causal link between SCT constructs and PI (Malik & Qureshi, 2017). However, the study only carried in Klang area which the result might not be representative. Meanwhile, numerous past studies have been conducted on the impact of social media influencer in marketing (Glucksman, 2017; Lê & Hoàng, 2018) but there are very limited studies in the context of live-stream shopping.

In addition, finite studies were conducted on the live-stream shopping (Wongkitrungrueng & Assarut, 2018). To date, Cai et al. (2018) conducted research on live-stream shopping by using TAM, Hedonic and Utilitarian motivation theory. The sample was selected based on convenience sampling that would be biased and might not be representative. Moreover, Cai and Wohn (2019) have investigated the motivation to use live-stream commerce by using UGT approach. Yet, both studies' respondents are majority from the US (78.4%). Thus, the result might be different if similar research was conducted in Malaysia. In short, insufficient past literature on live-stream shopping demonstrated the need to conduct research on this area in order to provide useful insight in describing live-stream commerce in Malaysia extent.

1.3 Research Objectives and Questions

1.3.1 General Objective and Question

Table 1.1: General Research Objective and Question

General Research Objective	General Research Question
To determine the motivation factors that influence the purchase intention of Malaysian online shoppers in live-stream shopping and whether their purchase intention will subsequently affect their purchase behavior.	What are the motivation factors that influence the purchase intention of Malaysian online shoppers in live-stream shopping and whether their purchase intention will subsequently affect their purchase behavior?

Source: Developed for research.

1.3.2 Specific Objectives and Questions

Table 1.2: Specific Research Objectives and Questions

Specific Research Objectives	Specific Research Questions
To find out the relationship between gratification factors (i.e. entertainment and informativeness) and purchase intention of Malaysian online shoppers in live-stream shopping.	To find out the relationship between gratification factors (i.e. entertainment and informativeness) and purchase intention of Malaysian online shoppers in live-stream shopping.
What is the relationship between the gratification factors (i.e. entertainment and informativeness) and the purchase intention of Malaysian online shoppers in live-stream shopping?	What is the relationship between the gratification factors (i.e. entertainment and informativeness) and the purchase intention of Malaysian online shoppers in live-stream shopping?
To find out the relationship between source credibility factors (i.e. live-stream seller's attractiveness, expertise, and trustworthiness) and purchase intention of Malaysian online shoppers in live-stream shopping.	To find out the relationship between source credibility factors (i.e. live-stream seller's attractiveness, expertise, and trustworthiness) and purchase intention of Malaysian online shoppers in live-stream shopping.

Source: Developed for research.

1.4 Significance of the Study

1.4.1 Theoretical Contribution

This research could once again confirm the past researches might be outdated as time lapse. In this research, we are adopting UGT, SCT, and TPB to understand the relationships between these dimensions and live-stream shoppers' PI, which subsequently leads to PB. As one theory alone may tend to ignore other motivation factors which also possibly affect the PI, integration of theories can provide better insight into the effect of the motivation factors have on the PI. In addition, there are only limited researchers who studied on live-stream shopping to date especially in Malaysia, and this study purports to fill this research gap.

1.4.2 Practical/Managerial Contribution

In views of managerial contribution, this proposed study is beneficial to the retailers, especially online retailers with smaller business size, by proposing a new business model to them. This study helps them to understand the factors affecting the PI of online shoppers during live-stream shopping. With a better understanding of what motivates shoppers to buy the products via live-stream shopping, it can stimulate the revenue stream generated from B2C. This proposed study presents practical implications for the development of live-stream shopping in Malaysia and with anticipation to push the social commerce of Malaysia to greater heights.

1.5 Chapter Layout

The following chapter will discuss the theoretical perspectives which are UGT, SCT, and TPB and provide a comprehensive literature review on the proposed conceptual model. Chapter three will further deliberate the research methodology used.

CHAPTER 2: LITERATURE REVIEW

2.0 Introduction

The antecedents incorporated in our study that adopted from three different theories (UGT, SCT, and TPB) will be deliberated under this segment. Besides, the proposed theoretical framework and hypotheses will be established in this chapter.

2.1 Review of Literature

2.1.1 Uses and Gratification Theory (UGT)

UGT is the extension of Needs and Motivation Theory advocated by Abraham Maslow (West & Turner, 2004). Table 2.1 demonstrates the brief timeline of the development of UGT.

Table 2.1: Timeline of UGT

1940	+ Herta Herzog investigates motivations of radio soap opera fans to listen the shows (Powell, 2005).
	+ Only three gratifications explaining why people listened to soap operas (West & Turner, 2004).
	+ Scholars use UGT to examine the reasons that motivate individuals to use mass media daily (Macquail, 2010; Elliott & Rosenberg, 1987).
1959	+ This theory named by Elihu Katz (Powell, 2005).
1973	+ 35 needs that people seek from the mass media including television, newspapers, and radio have been categorized into five categories which are Cognitive Need, Affective Need, Personal Integrative Need, Social Integrative Need as well as Tension Release Needs (Katz, Haas & Gurevitch, 1973).
	+ UGT became popular to researchers (Powell, 2005).
2017	+ Developed into three major aspects which are hedonic gratification (HG), utilitarian gratification (UG) and social gratification (SG) justifying why people make a purchase decision (Huang, Bao & Li, 2017).

Source: Developed for research.

Figure 2.1: Three Aspects of UGT
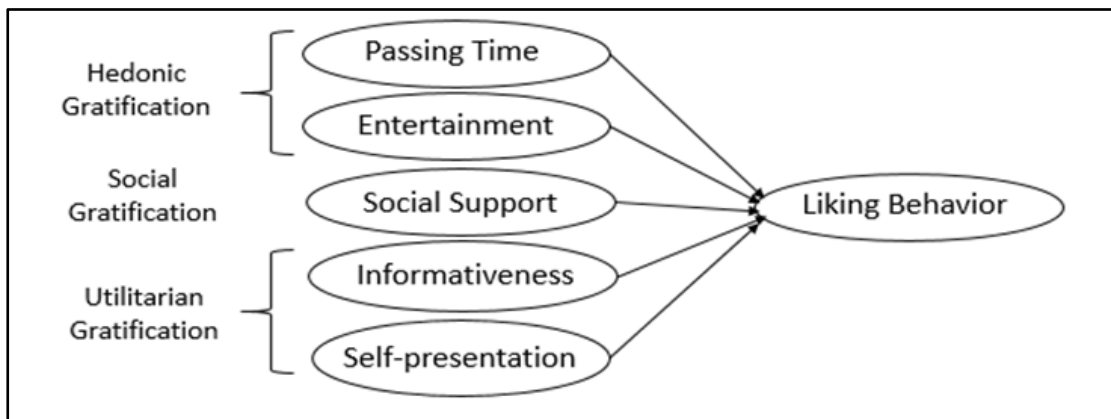
Source: Gan (2017).

Only HG and UG have been adopted in this study. Luo, Chea, and Chen (2011) revealed that these are the main factors affecting individuals in the adoption of information technology and act as the driver of purchase and consumption behavior (Holbrook & Hirschman, 1982; Adomaviciute, 2013).

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HG is dealing with sensory or emotional experiences of online shopping (Moon et al., 2017). It consists of two dimensions which are enjoyment and passing time (Gna, 2017). However, only entertainment gratification (EG) is incorporated in this research because it tends to exert the most influence on consumers' PI (Tan, Goh, Stany & Yeow 2017). According to Tam (2019), live-stream shopping integrated the concepts of e-commerce, social media, and entertainment that represented by the term "entertainmerce". It means shopping is entertainment which further supported the adoption of EG in this study.

UG is dealing with the utility intended to be obtained from a particular object (Moon et al., 2017). Informativeness gratification (IG) was adopted in the conceptual model. Literature proved that IG is positively affecting shoppers' PI (Prashar, Vijay & Parsad, 2017) and could be used to predict PI (Kim, Lee & Kim, 2004). As live-stream permits the sellers to provide an immediate response to the shoppers, it is needed to identify whether the timely information provided by live-stream seller is able to trigger shoppers' PI. Lastly, a recent study further supported that EG and IG significantly and positively affected consumers' online shopping intention (Zamzuri, Kassim, Shahrom, Humaidi & Zakaria, 2018).

To date, UGT is widely adopted by scholars in exploring factors that motivate individual on the adoption of an application as shown in Table 2.2.

Table 2.2: Literatures Adopted UGT

Authors and Year of Publication	Research Area
Panda and Pandey (2017)	College students' motivation to engage in binge-watching via Video streaming websites.
Florenthal (2015)	College students' motivation to use Linkedin.
Huang, Bao, and Li (2017)	Purchase intention in mobile social network games driven by factors proposed in UGT.
Ghazali, Mutum, and Woon (2018)	The motivation of continuance to play Pokemon Go.
Lin (2016)	Continuance intention in using mobile communication software.
Li, Guo, Bai, and Xu (2018)	The causal relationship between usage of microblogging and addiction tendency.
Ho and See-To (2018)	EG, IG and social gratification on the users' attitude toward tourist attraction fan page.
Ltifi (2018)	Mobile users' intention to use a smartphone for m-services.

Source: Developed for research.

2.1.2 Source Credibility Theory (SCT)

SCT was originated from Aristotle who stated that there are three attributes: ethos, logos, and pathos, which are important in enhancing the persuasiveness of messages (Umeogu, 2012). Hovland, Janis, and Kelly (as cited in Umeogu, 2012) mentioned that if the source appears to be credible, the information is more likely to be persuasive. Expertise and trustworthiness were concluded as the foundation of SCT. Later in 1990, attractiveness was incorporated into Ohanian's Source Credibility Model (SCM) as it is a crucial factor where the attractive communicators are more influential over the level of persuasion (Ohanian, 1990). Figure 2.2 shows the three dimensions of Ohanian's SCM and the respective traits.

Figure 2.2: Ohanian's SCT
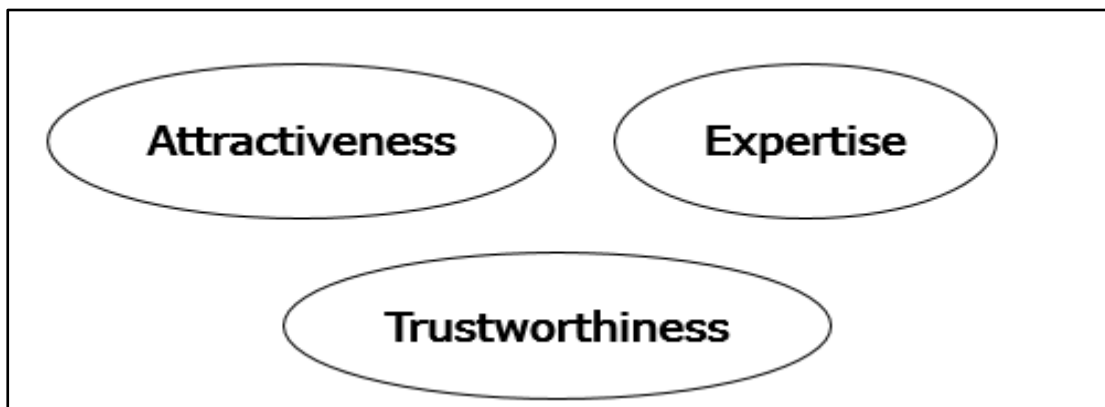
Source: Canning and West (2006).

SCT suggested that when the person perceives that the communicators are highly credible, he or she will have positive attitudes towards the message and vice versa (Zhang, Ritchie, Mair & Driml, 2018; Singh & Banerjee, 2018). Singh and Banerjee (2018) asserted that celebrity endorsement in advertising can motivate the consumers' PI as the celebrities are perceived to be credible and appreciated by the consumers.

Prior studies addressed that the communicators' expertise and trustworthiness will affect the message's persuasion. Expertise is the capability to provide correct and valid assertions whereas trustworthiness is the confidence of

the audience towards the assertions made. It is the communicators' honesty and integrity perceived by the audience (Wu, Noorian, Vassileva & Adaji, 2015; Zhang et al., 2018; Li & Yin, 2018). Besides, Morrow, McElroy, Stamper, and Wilson (1990) refer attractiveness to the desirable characteristics which include facial and body appearance, postures and others (as cited in Li & Yin, 2018). Communicators with attractive, funny, and expressive physical appearance are more influential over consumers' behavior (Singh & Banerjee, 2017). Thus, Ohanian's SCM is fully adopted in this study. Table 2.3 shows the past literature which adopted SCT.

Table 2.3: Literatures Adopted SCT

Author and Year of Publication	Research Area
Wang, Kao, and Ngamsiriudom (2017)	Effectiveness of celebrity endorsement in the airline sector.
Ayeh (2015)	Psychological factors affecting the user's online behavior in the vacation planning context.
Kang and Namkung (2018)	Customers' evaluation of online-to-offline commerce.
Hussain, Ahmed, Jafar, Rabnawaz, and Yang (2017)	Source credibility of electronic word of mouth among the food products consumers.

Source: Developed for research.

2.1.3 Theory of Planned Behavior (TPB)

TPB is employed as the theoretical foothold in this study. According to Ajzen (1991), TPB is an extended theory from the Theory of Reasoned Action (TRA) in 1980 by incorporating a new construct, perceived behavioral control (PBC). The main idea of TPB holds that; an occurrence of a particular behavior can be predicted, along with behavioral intention. The intention is determined by three independent predictors which are behavioral attitude; subjective norm; PBC (Azjen, 1991; Humaira & Hudrasyah, 2016). Overall, these three constructs affect an individual's intention which eventually influences the behavior (see Figure 2.3).

Figure 2.3: Azjen's TPB
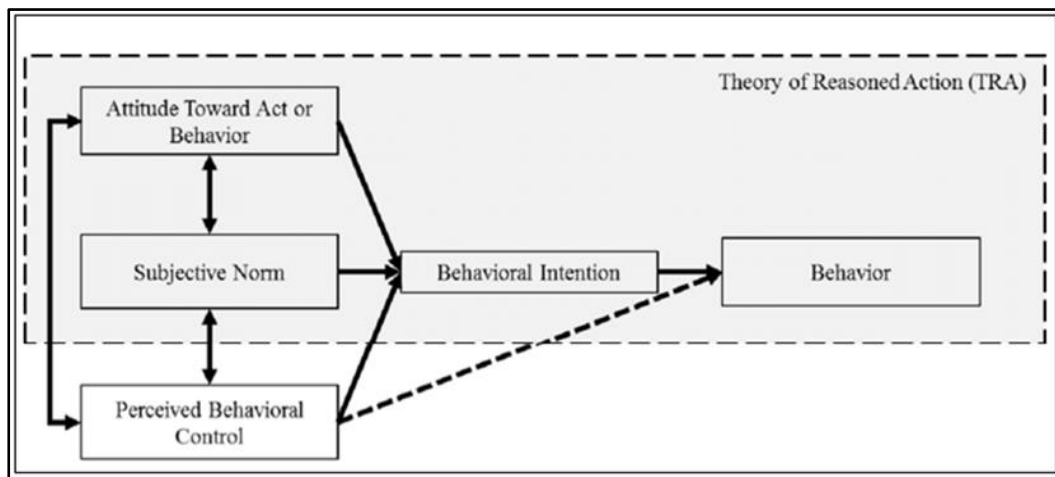
Source: Ajzen (1991).

Table 2.4: Literatures Adopted TPB

Author and Year of Publication	Research Area
Lee (2009)	People's behavioral intention to play online games.
Ketabi, Ranjbarian, and Ansari (2014)	To investigate factors that affect online purchase intention.
Thorhauge, Haustein, and Cherchi (2016)	Departure time choice is investigated from a microeconomic perspective as the main behavioral determinants.
Chu and Chen (2016)	Examine e-learning technology adoption by extending the theory of planned behavior with social identity and social bond.
Moon, Khalid, Awan, Attiq, Rasool and Kiran (2017)	Consumers' perceptions regarding attributes of online shopping websites that influence their cognitive and affective attitudes and also online purchase intentions.
Yang, Li, and Zhang (2018)	Chinese people's sustainable consumption behaviors for regular purchases during the Double-11 online shopping festival.

Source: Developed for research.

Ever since its emergence, this intention-based model has been extensively used in various industries as depicted in Table 2.4. Despite the usefulness of TPB, some researchers have criticized that the original model has poor predictive power due to the applicability and absent of domain-specific factors (Kaiser & Scheuthle, 2003; Donald, Cooper & Conchie, 2014). In fact, Ajzen (1991) has also suggested that TPB may include other components except for the three core components. Thus, an escalating number of scholars have made changes to the original theoretical model by adding new constructs (Chen & Tung, 2014; Shen, 2017; Tommasetti, Singer, Troisi & Maione, 2018).

To explain this notion further, TPB will be extended in this study by incorporating variables from UGT and SCT as determinants of PI (Al-Rafee & Cronan, 2006; Suki & Ramayah, 2010), which leads to PB (Ijaz & Rhee, 2018; Singh & Srivastava, 2018).

2.2 Review of Relevant Theoretical Models

2.2.1 Entertainment Gratification

Table 2.5: Definitions of EG

Definition of Entertainment Gratification	Sources
Entertainment refers to the degree which can be perceived as fun, enjoyable, and pleasurable.	♣ Moon and Kim (2001) ♣ Huang, Bao, and Li (2017)
EG is the state where consumers find an online shopping site is entertaining and fun.	♣ Zamzuri, Kassim, Shahrom, Humaidi, and Zakaria (2018) ♣ Lim (2015)
EG is the pleasure or enjoyment obtained from the interaction between viewers and streamers.	♣ Cai and Wohn (2019)

Source: Developed for research.

Table 2.5 shows the definitions of EG from different literature. EG could be referred to as perceived enjoyment (Harn, Tanakinjal, Jr & Rizal, 2014; Nysveen et al., 2005). Rationally, consumers feel satisfied when they feel pleasure and increase their willingness to acquire product or services via an internet platform (Ramayah & Ignatius, 2005). Numerous empirical researches portray the relationship between EG and PI can be found in Table 2.6. In terms of live-stream shopping, EG is related to fun and pleasure that could be obtained via the interaction with the live-stream seller. The more pleasure is expected to be obtained; the more likely consumers will have the PI via live-stream.

Table 2.6: Empirical Research That Established Relationship Between EG and PI

Author (s)	Research Purpose	Sampling Method	Target Respondent	Data Collection Method	Result (S/NS)*
Tan, Goh, Stany, and Yeow (2017)	To research on consumer purchase intention in social media websites	Quota sampling	Online consumers based on demographic variables	Online questionnaire	S
Harn, Tanakinjal, Jr, and Rizal (2014)	To develop a theoretical model that explains online group buying behaviour.	Convenience sampling	18 to 34 years old Malaysian	Online Questionnaire	S
Sabri (2019)	To identify the factors lead to luxury purchase behaviour via harnessing social media.	Purposive sampling	Consumer in Dubai Mall	Semi-structured interviews	S
Marimuthu and Ganapathi (2018)	To study factors lead to online purchase intention toward cars.	Convenience sampling	Consumers purchasing cars through online in Madurai district	Structured questionnaire	S
Zamzuri, Kassim, Shahrom, Humaidi, and Zakaria (2018)	To study EG, IG, web irritation and self-efficacy that trigger consumers' online purchase intention.	Purposive sampling	Young and frequent online shoppers	Survey	S
Aluri, Slevitch, and Larzelere (2016)	To study the gratification travelers seeking for when using embedded social media channels on hotel website.	Convenience sampling	Generation Y browsing a hotel website embedded with the social media channels	Online survey questionnaire	S

Source: Developed for research.
Note: * S= Supported; NS = Not supported

2.2.2 Informativeness Gratification

Table 2.7: Definitions of IG

Definition of Informativeness Gratification	Sources
Social media contents provide users helpful and resourceful information.	♣ Dolan, Conduit, Fahy, and Goodman (2015) ♣ Lim and Ting (2012) ♣ Zamzuri, Kassim, Shahrom, Humaidi, and Zakaria (2018)
Seeking accuracy, useful and timeliness information from websites.	♣ Lim and Ting (2012)
Provides useful and resourceful information.	♣ Lim and Ting (2012)

Source: Developed for research.

Table 2.7 shows the definitions of IG from different kinds of literature. In live-stream extent, IG is referring to online consumers' desire to obtain useful, timely and accurate information from live-stream seller which triggers their PI. If the live-stream seller is able to provide information regarding its products or trend that are accurate and complete in a timely manner, consumers are likely to make a purchase decision. Empirical studies supported the relationship between IG and PI as shown in Table 2.8. However, Aluri et al. (2016) research show that IG is not correlated to PI while other empirical studies show the opposite.

Table 2.8: Empirical Studies That Established Relationship between IG and PI

Author (s)	Research Purpose	Sampling Method	Target Respondent	Data Collection Method	Result (S/NS)*
Zamzuri, Kassim, Shahrom, Humaidi, and Zakaria (2018)	To study entertainment gratification, informativeness gratification, web irritation and self-efficacy that trigger consumers' online purchase intention.	Purposive	Young and frequent online shoppers	Survey	S
Harshini (2015)	To study on online ads characteristics and its influence over purchase intention.	Not stated	Not stated	Not stated	S
Chaturvedi, Gupta, and Hada (2016)	To study consumers' purchase behavior who purchase apparels via social media e-commerce system.	Not stated	Social media users in Rajasthan	Self-administered questionnaire	S
Samsudin and Ahmad (2014)	To study how working professionals perceive online shopping that subsequently form their online shopping intention.	Not stated	Academicians from Malaysia polytechnic colleges	Structured online-administered questionnaire	S
Aluri, Slevitch, and Larzelere (2016)	To study the effectiveness of hotel websites that are embedded with social media channels and its influence over traveler behavior.	Convenience sampling	Generation Y browsing a hotel website embedded with the social media channels	Online survey questionnaire	NS

Source: Developed for research.

Note: * S= Supported; NS = Not supported

2.2.3 Attractiveness

Table 2.9: Definitions of Attractiveness

Definition of Attractiveness	Sources
Fondness to the source which results from physical appearance in terms of facial and body appearance, dress code and posture.	↓ Li and Yin (2018)
Perception of others towards the seller and the social values which included the physical appearance, personality, or similarity.	↓ Chekima, Wafa, and Sulong (2018)

Source: Developed for research.

Table 2.9 shows the definitions of Attractiveness. According to Wang and Scheinbaum (2017), Attractiveness is mainly involving one's outward physical appearance. Change in the attitude of the consumers can be induced by a good-looking seller (Baniya, 2017). One's PI is most likely swayed by live-stream sellers' attractiveness (Sertoglu et al., 2014; Chekima et al., 2018). Consumers' acceptance of the information will increase if the information is deliberated by an attractive source (Wang & Scheinbaum, 2017; Todd & Melancon, 2018). In live-stream shopping context, if the information or the product is conveyed by the attractive live-stream sellers, consumers will have higher acceptance towards the information (Todd & Melancon, 2018), and thus enhancing the consumers' PI. Table 2.10 shows the past studies which examine the relationship between Attractiveness and PI.

Table 2.10: Empirical Studies That Established Relationship between Attractiveness and PI

Author (s）	Research Purpose	Sampling Method	Target Respondent	Data Collection Method	Result (S/NS)*
Sertoglu, Catli, and Korkmaz (2014)	Examining the effect of endorser credibility on the consumers' buying intentions: An empirical study in Turkey.	Not Stated	Young consumers	Questionnaire	S
Baniya (2017)	Components of celebrity endorsement affecting brand loyalty of Nepali customers.	Not Stated	Consumers residing in Kathmandu valley	Questionnaire	S
Samat, Ramlee, Bakar, Annual, and Rasid (2016)	Endorser credibility and its influence on the purchase intention of social networking sites (SNS) consumer: A mediating role of attitudes towards SNS advertising.	Judgmental sampling	Users of SNS	Questionnaire	S
Malik and Qureshi (2017)	The impact of celebrity endorsement on consumer buying behavior.	Non-probability sampling and Convenience sampling	Pakistan audience with educational background	Questionnaire	NS

Source: Developed for research.

Note: * S= Supported; NS = Not supported

2.2.4 Expertise

Table 2.11: Definitions of Expertise

Definition of Expertise	Sources
"Source of valid assertion"	🞣 Ayeh (2015, p.175)
To which extent of the understanding, skills, and knowledge that the endorser possessed.	🞣 Sertoglu, Catli, and Korkmaz (2014) 🞣 Malik and Qureshi (2017) 🞣 Wang and Scheinbaum (2017)
The capabilities of providing correct and valid information by an individual.	🞣 Ismagilova, Slade, Rana, and Dwivedi (2019)

Source: Developed for research.

Table 2.11 shows the definition of Expertise. The information conveyed by the live-stream seller who is expert tend to have more influence over the consumers' decision (Todd & Melancon, 2018). The live-stream seller who is an expert will be more persuasive and convincing (Wang & Scheinbaum, 2017) and eventually prompt consumer's PI (Malik & Qureshi, 2017; Chekima et al., 2018). In the context of live-stream, the level of expertise of the live-stream seller will directly affect the consumer's PI. A consumer would place more trust towards the expert live-stream seller who deemed has a high degree of intelligence (Khan, Rukhsar & Shaoaib, 2016). Table 2.12 shows the past studies which examine the relationship between Expertise and PI.

Table 2.12: Empirical Studies That Established Relationship between Expertise and PI

Author (s)	Research Purpose	Sampling Method	Target Respondent	Data Collection Method	Result (S/NS)*
Sertoglu, Catli, and Korkmaz (2014)	Examining the effect of endorser credibility on the consumers' buying intentions: An empirical study in Turkey.	Not Stated	Young consumers	Questionnaire	S
Shenje (2017)	Midas touch or time bomb? A look at the influence of celebrity endorsement on customer purchase intentions: The case study of fast foods outlet companies in Harare, Zimbabwe.	Not Stated	Customers in the main five fast foods outlets in Harare	Self-administered questionnaire	S
Samat, Ramlee, Bakar, Annual, and Rasid (2016)	Endorser credibility and its influence on the purchase intention of social networking sites consumer: A mediating role of attitudes towards SNS advertising.	Judgmental sampling	Users of SNS	Questionnaire	S
Baniya (2017)	Components of celebrity endorsement affecting brand loyalty of Nepali customers.	Not stated	Consumers residing in Kathmandu valley	Questionnaire	S
Filieri, McLeay, Tsui, and Lin (2018)	Consumer perception of information helpfulness and determinants of purchase intention in online consumer reviews of services.	Not Stated	Travelers that have experience in using online consumer reviews of services	Online questionnaire	S

Source: Developed for research.

Note: * S= Supported; NS = Not supported

2.2.5 Trustworthiness

Table 2.13: Definitions of Trustworthiness

Definition of Trustworthiness	Sources
Impartial, integrity and credibility of an endorser.	↓ Khan, Rukhsar, and Shoaib (2016) ↓ Rachbini (2018)
Traits of the dignity, believability, and honesty that one's owned and observed/believed by others.	↓ Wang and Scheinbaum (2017) ↓ Todd and Melancon (2018)

Source: Developed for research.

Table 2.13 explains the definitions of Trustworthiness. Trustworthiness refers to the degree of consumers' confidence placed in the information delivered by the live-stream seller and the level of acceptance of the consumers towards the information (Malik & Qureshi, 2017). Information conveyed by a trusted seller while promoting products via live-stream will be likely to be believed and accepted by the consumers (Todd & Melancon, 2018). Consumers will tend to be more self-assured towards the products by creating a higher level of trustworthiness and thus persuade the PI. Table 2.14 shows the past studies which examined the relationship between Trustworthiness and PI.

Table 2.14: Empirical Studies That Established Relationship between Trustworthiness and PI

Author (s)	Research Purpose	Sampling Method	Target Respondent	Data Collection Method	Result (S/NS)*
Sertoglu, Catli, and Korkmaz (2014)	Examining the effect of endorser credibility on the consumers' buying intentions: An empirical study in Turkey.	Not Stated	Young consumers	Questionnaire	S
Bashir, Mehboob, and Bhatti (2015)	Effects of online shopping trends on consumer-buying behavior: An empirical study of Pakistan.	Not Stated	University student	Self-developed and standardized questionnaire	S
Samat, Ramlee, Bakar, Annual, and Rasid (2016)	Endorser credibility and its influence on the purchase intention of social networking sites consumer: A mediating role of attitudes towards SNS advertising.	Judgmental sampling	Users of SNS	Questionnaire	S
Batbayar, Batsaikhan, Enebish, Munkhzaya, and Sodnompil (2018)	Influences of website quality on online purchase intention of air ticketing Service: In case of Mongolia.	Not stated	Not stated	Online questionnaire	S
Filieri, McLeay, Tsui, and Lin (2018)	Consumer perception of information helpfulness and determinants of purchase intention in online consumer reviews of services.	Not Stated	Travelers that have experience in using online consumer reviews of services	Online questionnaire	NS

Source: Developed for research.

Note: * S= Supported; NS = Not supported

2.2.6 Purchase Intention and Purchase Behavior

Table 2.15: Definitions of PI

Definition of Purchase Intention	Sources
Consumer's willingness to buy something.	♦ Li and Zhang (2002) ♦ Jiradilok, Malisuwan, Madan, and Sivaraks (2014) ♦ Tran (2018)
The intention of the consumer to make future online purchases.	♦ Cheng & Yee (2014)

Source: Developed for research.

Table 2.16: Definitions of PB

Definition of Purchase Behavior	Sources
Process of buying products or services.	♦ Li and Zhang (2002)
Consumer's action of placing an order and making payment for the goods and services to satisfy his will.	♦ Varma and Agarwal (2014) ♦ Jaiswal and Kant (2018)

Source: Developed for research.

Table 2.15 and 2.16 show the definition of PI and PB respectively. Azjen (1985) defined "intention" in terms of trying to perform a particular behavior instead of actual performance. And, the original TPB model indicates that it as the immediate antecedent to perform the behavior in question and acts as "an indication of how hard people are willing to try, of how much of an effort they are planning to exert, in order to perform the behavior" (Ajzen, 1991, p. 181). PI is most used to measure when trying to predict for PB (Ansary & Samir, 2013; Dachyar & Banjarnahor, 2017).

A favorable person's attitude towards online shopping will increase his or her intention to perform a favorable behavior in online shopping (Azjen 1991; Fishbein & Ajzen 1975). There is a higher possibility for consumers with PI to make actual buying (Brown, Pope & Voges, 2001; Tran, 2018). It is important to highlight that the PI does not equate to PB, the researcher will have a better contribution to retailers if PB is studied (Chiew, Ariff, Zakuan & Tajudin, 2014). Past research studies that established the relationship between PI and PB as shown in Table 2.17.

Table 2.17: Empirical Studies That Established Relationship between PI and PB

Author (s)	Research Purpose	Sampling Method	Target Respondents	Data Collection Method	Results (S/NS)*
Ijaz and Rhee (2018)	To examine factors that influence online shopping so that retailers could enhance their shopping processes and thus able to sustain their e-business development.	Convenient sampling	Actual and regular Korean online shoppers make the purchase more than twice per month for 6 months.	Online questionnaire	S
Lim, Osman, Salahuddin, Romle, and Abdullah (2016)	To determine the relationship between subjective norm, perceived usefulness and online shopping behavior while mediated by purchase intention.	Multi-stage, stratified and systematic sampling	University students aged between 18 and 34 who are currently pursuing their studies in University Malaysia Perlis.	Questionnaire	S
Singh and Srivastava (2019)	To investigate the mapping of product characteristics with individual channel capabilities and its effect on online consumer behaviour.	Convenience and snowball sampling	Active shoppers who made actual purchases in the past six months.	Self-administered questionnaire survey	S
Chiew, Ariff, Zakuan, and Tajudin (2014)	To examine how consumers' perception affect their behavior intention to purchase the organic food products.	Convenient Sampling	Respondents in the supermarkets in the district of Kluang and its surrounding areas.	Mall-intercept personal survey	S

Source: Developed for research.

Note: * S= Supported; NS = Not supported

2.3 Proposed Theoretical Framework

Figure 2.4 depicts the proposed research model of this study. Two constructs of UGT (EG and IG of Malaysian online shoppers) and three constructs of SCM (Attractiveness, Expertise, and Trustworthiness of the live-stream seller) are employed as the predictors for PI. Additionally, the relationship between PI and PB is examined in this research.

Figure 2.4: Proposed Research Model

Gratifications
Entertainment
Informativeness

Source Credibility
Attractiveness
Expertise
Trustworthiness

H1
H2
H3
H4
H5

Purchase Intention

H6

Purchase Behavior
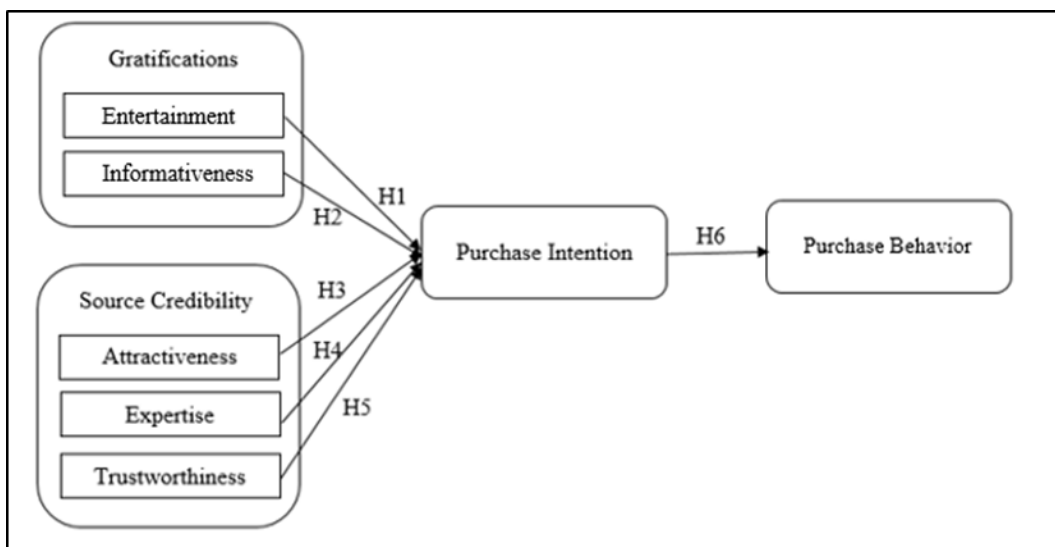
Source: Developed for research.

2.4 Hypotheses Development

According to the review of the literature, the following hypotheses are developed:

H1: EG has a positive relationship on the consumers' PI.

H2: IG has a positive relationship on the consumers' PI.

H3: Live-stream sellers' attractiveness has a positive relationship on the consumers' PI.

H4: Live-stream sellers' expertise has a positive relationship on the consumers' PI.

H5: Live-stream sellers' trustworthiness has a positive relationship on the consumers' PI.

H6: PI has a positive relationship on the consumers' PB.

CHAPTER 3: METHODOLOGY

3.1 Research Design

This study aimed to offer a comprehensive overview of the motivation factors that influence PB in the setting of live-stream shopping in Malaysia. Hence, Malaysia internet users who had experienced watching live-stream video of a product or service in social media are targeted.

This is a cross-sectional study where the data collection is conducted only once at a specified time with no follow up required which is more suitable due to time constraints (Mann, 2003). This methodology is generally quick, easy, and affordable to perform (Mann, 2003; Sedgwick, 2014). The cross-sectional survey is highly advocated by Mathers, Fox, and Hunn (2007) to describe an individual's behavior or attitudes.

A quantitative approach is adopted as it is suitable to be used especially when investigating respondents' opinion on behavioral components such as PI and PB (Amaratunga, Baldry, Sarshar & Newton, 2002). It is an approach in using numbers and figures to gather and analyze the empirical data (Bryman, 2012). One of the methods is conducting surveys through a questionnaire whereby the researchers able to elicit information by asking questions and obtaining answers (Amaratunga et al., 2002; Showkat & Parveen, 2017).

Self-administered questionnaire survey has been adopted to collect data in several states in Malaysia. Leeuw (2008) states that questionnaires should be completely self-explanatory to the participants without the direct involvement of interviews. This enables them more privacy and less intrusive, eventually increases the cooperation rate from respondents. Additionally, it is relatively simple, straightforward and less time-consuming (McClelland, 1994).

3.2 Population, Sample and Sampling Procedures

3.2.1 Target Population

Our target population is Malaysian internet users who have watched a live-stream about a product or service. One qualifier question has been set in the questionnaire which is "Have you ever watched a live-stream video content about a product or service?" to filter out non-target respondent (Cai et al., 2018). Targeting those respondents who have watched the live-stream video before would provide relevant experience-based information.

3.2.2 Sampling Surveys

Due to time and budget constraints, sample surveys are preferable. It could reduce cost and time as well as provide generalizable results (Cochran,1966; Parker & Gallivan, 2011). Since the complete list of internet users in Malaysia is not accessible, census surveys are impossible. Hence, non-probability sampling has been adopted in this research.

3.2.3 Sampling Technique

Quota and judgmental sampling have been adopted in selecting samples. Quota sampling is useful when probability samples are unobtainable. It can be carried out easier and quicker. Moreover, quota sampling ensures the representativeness of samples from each stratum within the population (Sharma, 2017). As live-stream shopping is still not widely adopted in Malaysia, a low response rate is foreseeable and it is recommended to apply quota sampling in this study (Yang & Banamah, 2014).

Quota sampling is used to divide the population according to states in Malaysia. Samples from several states in Malaysia are likely to enhance its representativeness. Judgmental sampling in this study is only focused on the respondents that have the experience as set out in the qualifying question.

In Malaysia, most of the internet users (53.6%) are aged between 20-34 years old followed by 35-49 years old (24.7%), below 20 years old (13%) (MCMC, 2017). The population will be divided based on geographical area. Internet user distribution based on the state of residence in Malaysia has been used as an indicator to determine the location to distribute the questionnaire. Selangor, Johor, Kuala Lumpur (KL), Sabah and Perak are the states with more internet users which represent 23.6%, 11.7%, 9.8% 7.6%, and 7.1% respectively (MCMC, 2017). In addition, according to Ishak and Bani (2017), KL, Johor, and Selangor are the most developed States in Malaysia. However, population density in Sabah is only 44 persons per kilometer which are far lower than the other four states above mentioned (DOSM, 2015). Due to time and budget constraints, Sabah is not cost effective to be selected as targeted strata. Therefore, Selangor, Johor, KL, and Perak are selected as targeted states. Targeted questionnaire to be collected from each state are shown in Table 3.1.

Table 3.1: Targeted Questionnaire to be collected from Each State

States	Number of Questionnaires
Selangor	$\frac{23.6\%}{52.2\%} \; x \; 250 = 113$
Johor	$\frac{11.7\%}{52.2\%} \; x \; 250 = 56$
Kuala Lumpur	$\frac{9.8\%}{52.2\%} \; x \; 250 = 47$
Perak	$\frac{7.1\%}{52.2\%} \; x \; 250 = 34$

Source: Developed for research.

The suggested sample size from past literature can be found in Table 3.2. To enhance the representativeness of this study, the sample size proposed is 250 respondents. It is greater than the majority of the suggested sample size under the literature and can yield reliable results which are representative of the whole population.

Table 3.2: Suggested Sample Size

Author & Year	Proposed Sample Size	Sample Size Projected for This Research
✚ Victor, Jose, Robert, and Fekete (2018)	At least 100 to conduct factor analysis.	100
✚ Kline (2011)	Sample size-to-parameter ratio to generate ideal sample size should be 20:1.	20 X 6 Independent Variables (IV) = 120
✚ Hair, Black, Babin, and Anderson (2014) ✚ Ibrahim, Suki, and Harun (2014)	Minimum sample size is 150 for seven or lesser construct which each construct has three items or more.	150
✚ Shafiee and Bazargan (2018) ✚ Roca, García, and Vega (2009)	Minimum sample size should be at the ratio of 10:1 to indicators of the scale for highest number of formative indicators.	10 X Questions in IV with most questions = 10 X 6 = 60
✚ Sekaran and Bougie (2016)	Sample size should within the range of 30-500.	30-500
✚ Tracie, Geoffrey, Stephen, and Hamid (2014)	10 times of variables in the study.	10 X 6 IV = 60
✚ Hinkin (1995)	Ideal sample size is 1:4 to 1:10 of item-to-response ratio.	[4 X 30]; [10 X 30] = 120 − 300

Source: Developed for research.

3.3 Data Collection Method

Data collection was carried out in the middle of May 2019 (13th May until 19th May) in KL, Selangor, Johor, and Perak through self-administered questionnaires.

Nevertheless, it is considered that the shopping malls in the above-mentioned states are the most relevant and suitable area to conduct the survey as the research is in respect of the shopping behavior of Malaysian shoppers. Shopping malls are the places where the researchers can reach active shoppers and possibly having a greater probability to approach qualified respondents (Lim & Ting, 2012).

3.4 Variables and Measurement

All antecedents are measured by using an interval scale because it is useful in performing an arithmetical operation (Sekaran, 2003). 31 items have been adopted and the Seven-point Likert scale is applied to evaluate the 7 constructs. Table 3.3 illustrates the details of the variables and measurements.

Table 3.3: Variables and Measurements

Variables	Definition	No. of items	Scale	Source
Entertainment Gratification	Pleasure and enjoyment obtained from interaction with live-stream sellers.	5	Seven-point Likert scale (1= strongly disagree and 7 = strongly agree)	Lim and Ting (2012)
Informativeness Gratification	Accurate, perceived timely as well as information that of consumers' interest provided by live-stream sellers.	5	Seven-point Likert scale (1= strongly disagree and 7 = strongly agree)	Lim and Ting (2012)
Attractiveness	Live-stream seller's outward physical appearance.	4	Seven-point Likert scale (1= not at all and 7 = very much)	Choi and Lee (2019)
Expertise	The level to which the live-stream sellers are familiar with the field and have precise knowledge.	5	Seven-point Likert scale (1= not at all and 7 = very much)	Choi and Lee (2019)
Trustworthiness	The extent to which the receiver perceived the source is honest or valid.	5	Seven-point Likert scale (1= not at all and 7 = very much)	Choi and Lee (2019)
Purchase Intention	Consumers' willingness to make purchases in the future.	4	Seven-point Likert scale (1= strongly disagree and 7 = strongly agree)	Peng, Zhang, Wang, and Liang (2019)
Purchase Behavior	Actual live-stream purchases that have been made by consumers.	2	Seven-point Likert scale (1= strongly disagree and 7 = strongly agree; 1=Never and 7= At every opportunity)	Chan (2001)
		1	Seven-point Likert scale (1= None and 7 = Very much money)	Chaudhary and Bisai (2018)

Source: Developed for research.

3.5 Data Analysis Technique

3.5.1 Descriptive Analysis

Frequency and percentage are presented by tables and pie chart in this section to analyze respondent characteristics (Saunders, Lewis & Thornhill, 2012; Washington, Karlaftis & Mannering, 2010).

In addition, central tendencies and dispersion of variables were used in this section. The average score of each variable has been measured by using mean while the gap between the mean and the finding is measured by the standard deviation (Saunders et al., 2012; Lodico, Spaulding, & Voegtle, 2010).

3.5.2 Scale Measurement

3.5.2.1 Reliability Test

Reliability test assesses the internal consistency between the items to ensure those factors are reliable. Cronbach's alpha has been used and it is considered to be acceptable if the value is greater than 0.7 (Hair et al., 2014).

3.5.2.2 Normality Test

Normality test is availed to assure data collected is normally distributed. Therefore, skewness and kurtosis test are needed to be conducted (Saunders et al., 2012). Kline (2011) asserted that the skewness value shall fall within ± 3 whereas the kurtosis value should not beyond ± 10.

3.5.3 Inferential Analysis

3.5.3.1 Pearson's Correlation Analysis

Pearson's correlation analysis has been conducted by the aim of assessing the linear correlation betwixt two numerical data variables (Saunders et al., 2012; Gogtay & Thatte, 2017) by referring to the Pearson Correlation Coefficient rule of thumb. The correlation among variables ("r") usually range from -1 to +1 as shown in Figure 3.1. According to Rosen (1999), multicollinearity problem occurs if "r" is greater than ±0.9 (as cited in El-Fallah & El-Sallam, 2011). This can be solved by combining or omitting highly correlated IV (Daoud, 2017).

Figure 3.1: Rule of Thumb for Interpreting the Size of a Correlation Coefficient
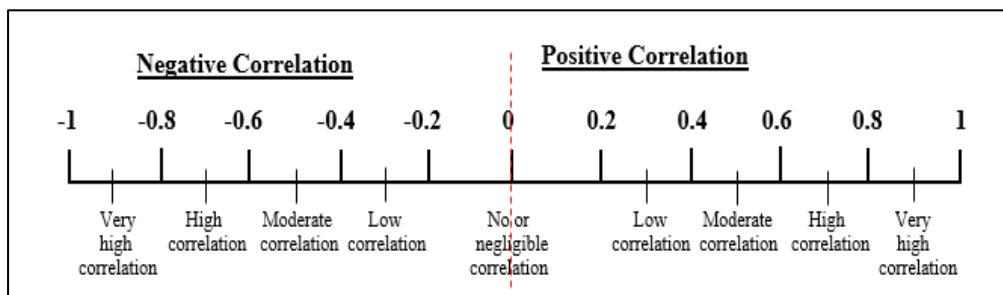
Source: Developed for research.

3.5.3.2 Regression Analysis

Regression analyses are conducted to study the relationship between uses and gratification motives and source credibility motives towards PI; PI towards PB. Regression analyses will be carried out only if certain conditions as presented in Table 3.4 had been attained.

Table 3.4: Pre-requirements for Regression Analyses

	Multiple Linear Regression (MLR)	Simple Linear Regression (SLR)
Purpose	To test the strength of a linear relationship between an independent variable and a dependent variable (DV) (Saunders, Lewis & Thornhill, 2012).	To test the strength of a linear relationship between a pair of variables (Saunders, Lewis & Thornhill, 2012).
Analyze	The relationship between uses and gratification motives (Entertainment Gratification; Informativeness Gratification) and source credibility motives (Attractiveness; Expertise; Trustworthiness) towards purchase intention.	The relationship between purchase intention and purchase behavior.

Assumptions	1. **Linearity**
	    − It assumes that the change in the dependent variable is similar to the change in the independent variable, and this can be examined through scatter plot as shown in Figure 3.2 (Saunders, Lewis & Thornhill, 2012; Osborne & Waters, 2002).
	    − The conditional mean of the errors is assumed to be zero for any given combination of values of the independent variables (Ernst & Albers, 2017).	

	2. **Normality** It assumes that error is normally distributed around zero for any combination of value on the variables (Ernst & Albers, 2017; Osborne & Waters, 2002).	

	3. **Homoscedasticity** It assumes that the variance of errors is the same across all levels of the independent variable and the errors are spread consistently between the variables, an example is shown in Figure 3.3 (Osborne & Waters, 2002; Saunders, Lewis & Thornhill, 2012).	
	4. **Independence** It assumes that the errors are independent with each other (Ernst & Albers, 2017).	
	5. **Multicollinearity** It assumes that the variables are not highly correlated with each other (Saunders, Lewis & Thornhill, 2012).	
Benchmark	P-value < 0.05 indicates that the variable is statistically significant (Hair, Celsi, Money, Samouel & Page, 2011; Osborne, 2017).	

Equation	The MLR equation was formed as follow: $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + e$ Where: Y=Purchase Intention X_1=Entertainment gratification X_2=Informativeness gratification X_3=Attractiveness X_4=Expertise X_5=Trustworthiness	The SLR equation was formed as follow: $Y = \beta_0 + \beta_1 X_1 + e$ Where: Y=Purchase Behavior X_1=Purchase Intention

Source: Developed for research.

Figure 3.2: Scatterplots Showing Linear and Curvilinear Relationships with Standardized Residuals
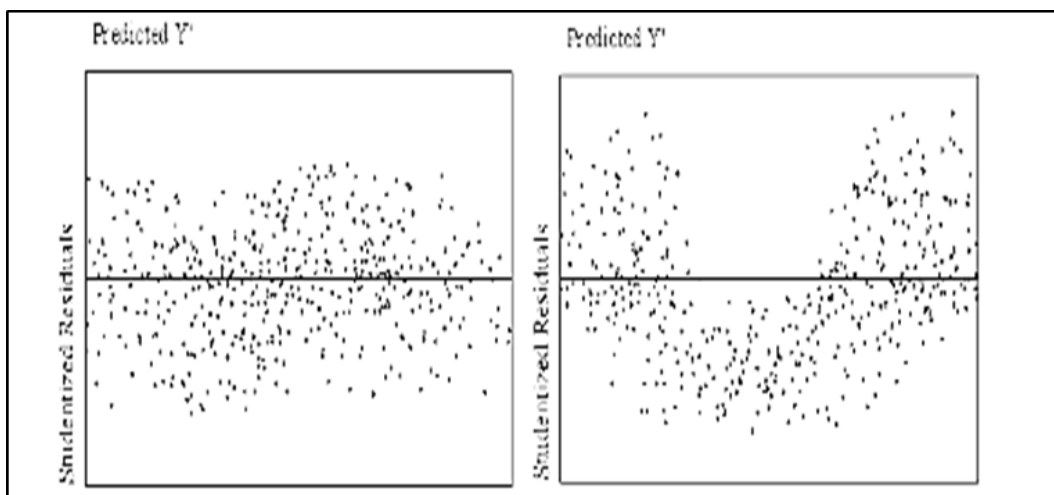
Source: Osborne and Waters (2002).

Figure 3.3: Examples of Homoscedasticity and Heteroscedasticity
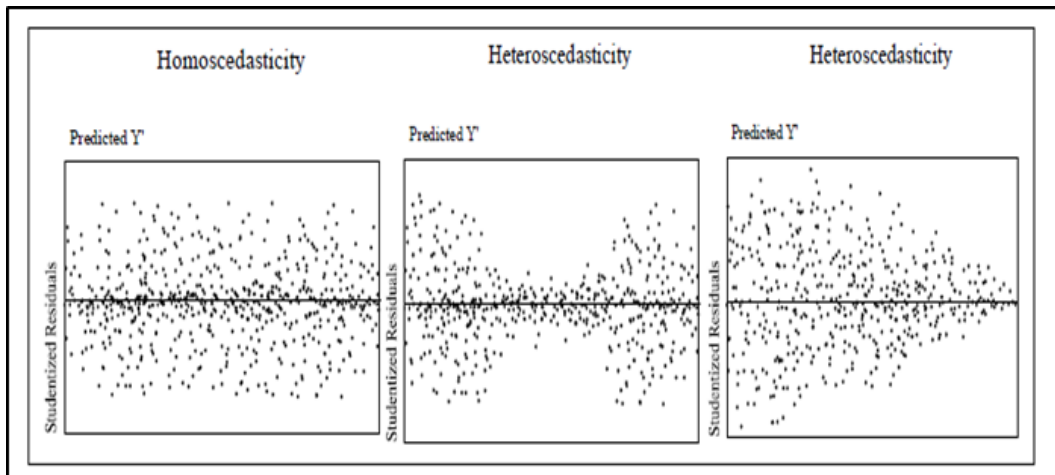
Source: Osborne and Waters (2002).

3.6 Pre-test

Drafted questionnaire was distributed to five academicians who have relevant knowledge in this study which is conformed to past literature by Beatty & Willis (2007).

CHAPTER 4: DATA ANALYSIS

4.1 Pilot Test Analysis

Reliability test and normality test are conducted after sample data collection. Bartlett (2013) suggested that the desired sample size for the pilot test is ranging from a number of 25 to 50 respondents. 50 sets of questionnaires were self-administered in Ipoh and Kampar because Perak is one of the sampling locations for this research. A total of 40 sets of the questionnaire are used for pilot testing.

4.1.1 Reliability Test

Table 4.1: Reliability Statistics of Pilot Test

Variables	Cronbach's Alpha	Number of Items
Entertainment Gratification	0.905	5
Informativeness Gratification	0.874	5
Attractiveness	0.846	4
Expertise	0.834	5
Trustworthiness	0.78	5
Purchase Intention	0.933	4
Purchase Behavior	0.926	3

Source: Developed for research.

Table 4.1 presents the reliability statistics of the pilot test. Cronbach's Alpha for Trustworthiness recorded the lowest which is 0.780 whereas PI has the highest value of 0.933. Since the Cronbach's Alpha for the variables lie between 0.780 to 0.933, they are above the threshold of 0.70 as recommended by Hair et al. (2014). Thus, the variables are considered to be reliable.

4.1.2 Normality Test

Table 4.2: Normality Test (Pilot Test)

	Variables	Skewness	Kurtosis
Entertainment Gratification (EG)	EG1	-0.774	-0.284
	EG2	-0.675	-0.261
	EG3	-0.057	-0.391
	EG4	-0.505	-0.387
	EG5	-0.229	-0.316
	Variables	**Skewness**	**Kurtosis**
Informativeness Gratification (IG)	IG1	-0.936	1.089
	IG2	-0.994	1.131
	IG3	-1.055	2.625
	IG4	-0.497	-0.435
	IG5	-0.928	0.681
	Variables	**Skewness**	**Kurtosis**
Attractiveness (A)	A1	-0.133	-0.875
	A2	-0.483	-0.492
	A3	-0.124	-0.290
	A4	0.136	0.441
	Variables	**Skewness**	**Kurtosis**
Expertise (E)	E1	-0.743	0.032
	E2	0.001	-0.747
	E3	-0.387	-0.640
	E4	0.080	-1.022
	E5	-0.795	0.320
	Variables	**Skewness**	**Kurtosis**
Trustworthiness (T)	T1	-0.290	-0.662
	T2	0.727	-0.361
	T3	0.162	0.650
	T4	-0.222	-0.598
	T5	-0.355	-0.284
	Variables	**Skewness**	**Kurtosis**
Purchas Intention (PI)	PI1	-0.613	-0.389
	PI2	-0.134	-0.270
	PI3	-0.076	-0.269
	PI4	-0.309	-0.382
	Variables	**Skewness**	**Kurtosis**
Purchase Behavior (PB)	PB1	0.436	-1.184
	PB2	0.897	0.060
	PB3	0.984	0.044

Source: Developed for research.

Table 4.2 shows the skewness and kurtosis statistics of the normality test for all the variables. The values of skewness range from -1.055 to 0.984 whereas the values of kurtosis range from -1.184 to 2.625. The data collected is normally distributed as the values are within an acceptable range of ± 3 for skewness test and ± 10 for kurtosis test (Kline, 2011).

4.2 Descriptive Analysis

300 sets of survey questionnaires have been administered to this study's target respondents, Malaysian internet users who have watched a live-stream about a product or service in Perak, KL, Selangor, and Johor. Out of the questionnaires were collected, only 252 sets were found to be complete.

4.2.1 Respondents Demographic Profile

The first segment of the survey questionnaire is regarding the demographic characteristics of the target respondents which consists of questions such as the respondents' experience in watching the live-stream, gender, age, academic qualification, occupation, monthly income level, and the mobile devices owned by the respondents.

4.2.1.1 Respondents' Experience in Watching Live-Stream

Table 4.3: Respondents' Experience in Watching Live-Stream

	Frequency	Percentage (%)
Yes	252	100.0
No	0	0.0
Total	252	100.0

Source: Developed for research.

Figure 4.1: Respondents' Experience in Watching Live-Stream
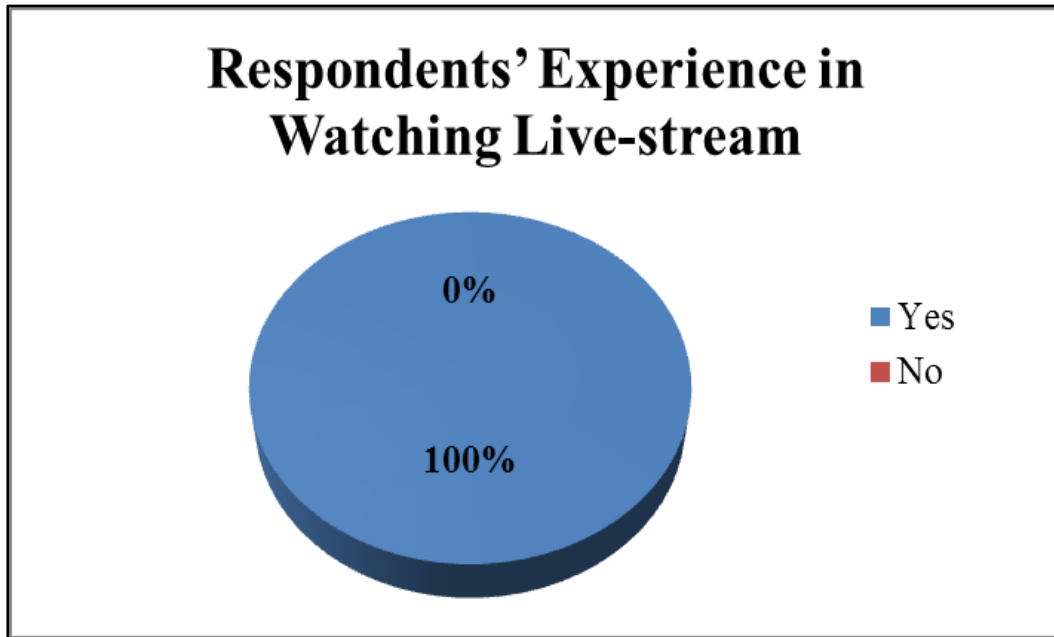
Source: Developed for research.

According to Table 4.3 and Figure 4.1, all 252 respondents (100%) had watched live-stream before.

4.2.1.2 Gender of Respondents

Table 4.4: Gender of Respondents

	Frequency	**Percentage (%)**
Male	116	46.0
Female	136	54.0
Total	252	100.0

Source: Developed for research.

Figure 4.2: Gender of Respondents
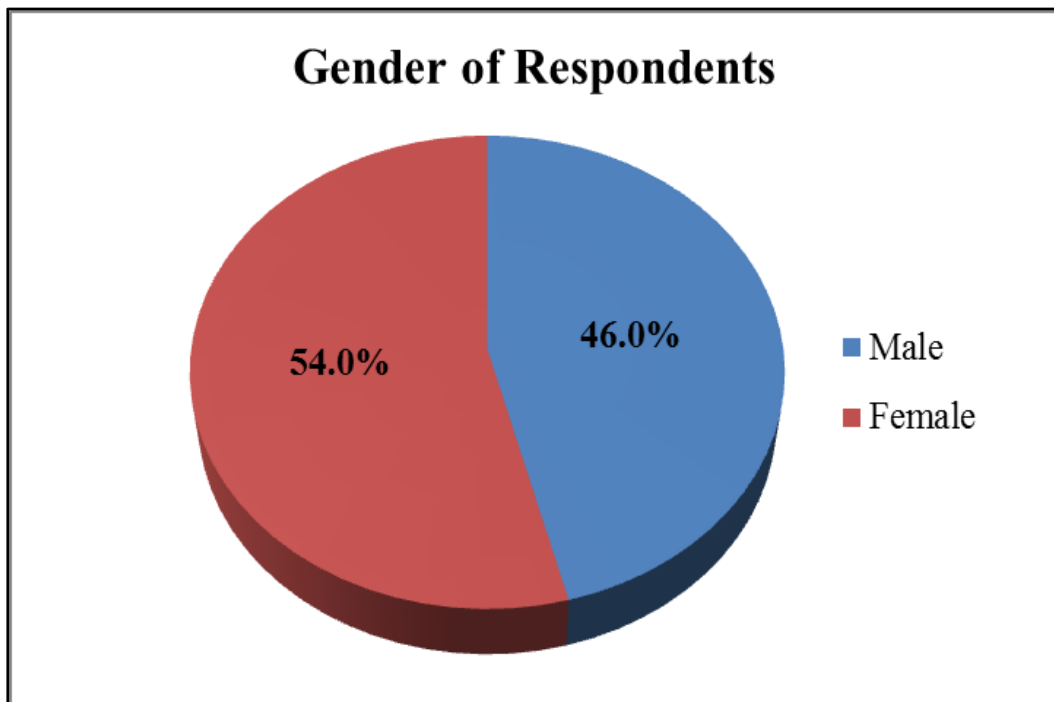
Source: Developed for research.

Table 4.4 and Figure 4.2 show the percentage distribution of respondents' gender. Obviously, a total of 116 (46.0%) male respondents and 136 (54.0%) female respondents who have participated in the survey questionnaire.

4.2.1.3 Age of Respondents

Table 4.5: Age of Respondents

	Frequency	**Percentage (%)**
20-25 years old	166	65.9
26-30 years old	39	15.5
31-35 years old	23	9.1
Above 36 years old	24	9.5
Total	252	100.0

Source: Developed for research.
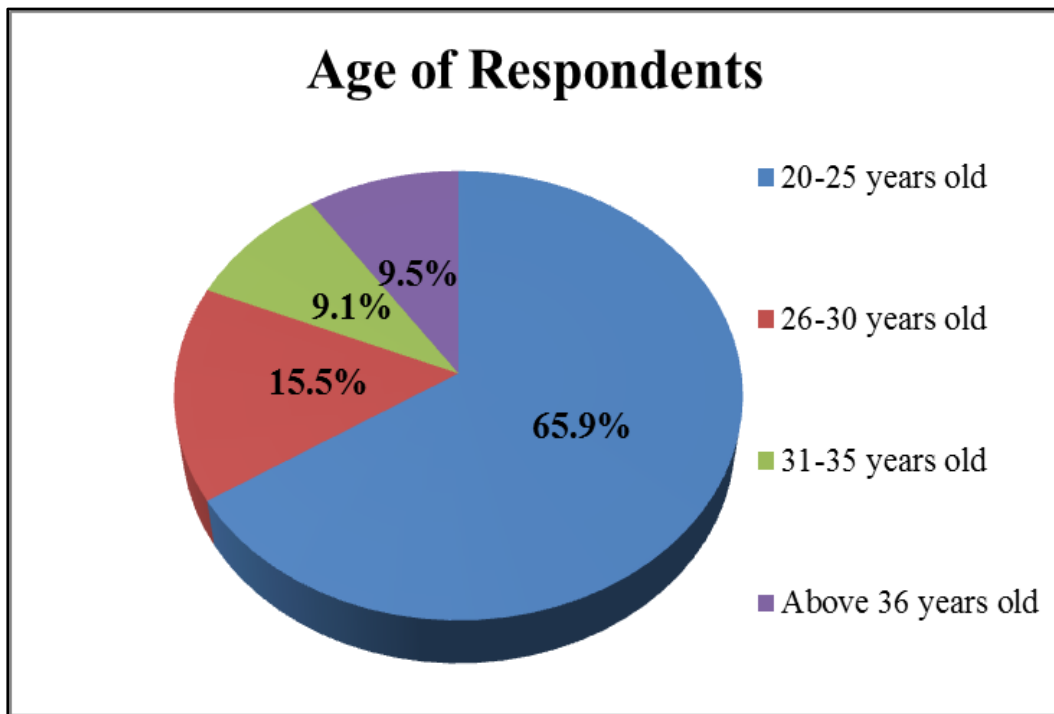
Source: Developed for research.

Table 4.5 and Figure 4.3 illustrate the frequency and percentage of the age groups of 252 respondents who have participated in the survey questionnaire. Based on the result, most of the respondents are from the age group of 20 to 25 years old, with 166 respondents (65.9%). Besides, there are 39 respondents (15.5%) and 23 respondents (9.1%) aged between 26 to 30 years old and 31 to 35 years old accordingly. Furthermore, a total of 24 respondents (9.5%) were fall into the age group of above 36 years old.

4.2.1.4 Academic Qualification of Respondents

Table 4.6: Academic Qualification of Respondents

	Frequency	Percentage (%)
Secondary School	54	21.4
Diploma/ Higher Diploma	51	20.2
Bachelor's Degree	138	54.8
Postgraduate Studies (Master and PhD)	7	2.8
Others	2	0.8
Total	252	100

Source: Developed for research.

Figure 4.4: Academic Qualification of Respondents
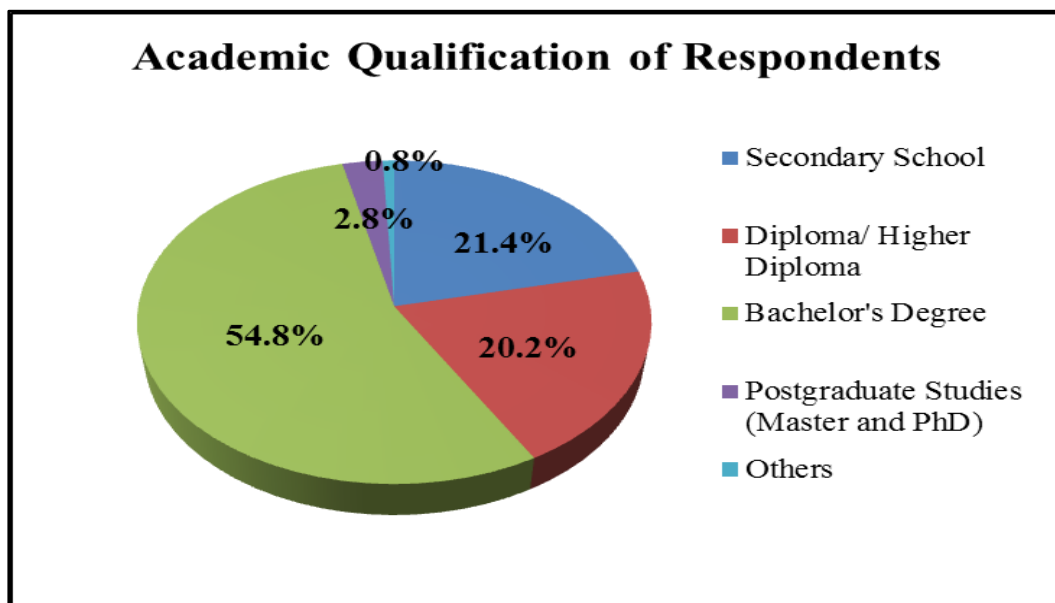
Source: Developed for research.

In accordance with Table 4.6 and Figure 4.4, the highest academic qualification possessed by 21.4% (54) of the respondents are secondary studies. Besides, 20.2% (51) of the respondents have pursued at least a diploma or higher diploma, while 54.8% (138) of the respondents have completed their bachelor's degree. Meanwhile, there are 2.8% of the respondents (7) are conferred a postgraduate degree.

4.2.1.5 Occupation of Respondents

Table 4.7: Occupation of Respondents

	Frequency	**Percentage (%)**
Self employed	44	17.5
Employed	98	38.9
Unemployed	16	6.3
Full time student	93	36.9
Retired	1	0.4
Total	252	100.0

Source: Developed for research.

Figure 4.5: Occupation of Respondents
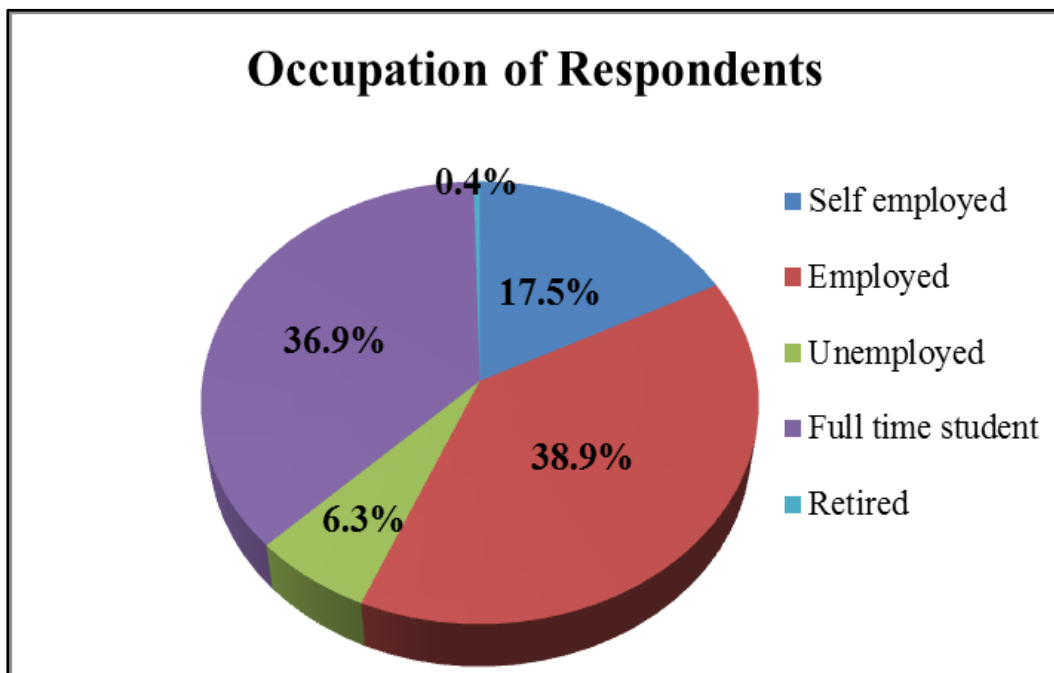
Source: Developed for research.

98 (38.9%) of the respondents are under employment, followed by 93 full time students (36.9%), 44 self-employed respondents (17.5%), 16 unemployed respondents (6.3%), and 1 retired respondent (0.4%) as depicted in Table 4.7 and Figure 4.5.

4.2.1.6 Monthly Income Level of Respondents

Table 4.8: Monthly Income Level of Respondents

	Frequency	**Percentage (%)**
Dependent (Zero Income)	97	38.5
RM 1,000 and below	21	8.3
RM 1,001- RM 3,000	52	20.6
RM 3,001- RM 5,000	49	19.4
Above RM 5,000	33	13.1
Total	252	100.0

Source: Developed for research.

Figure 4.6: Monthly Income Level of Respondents
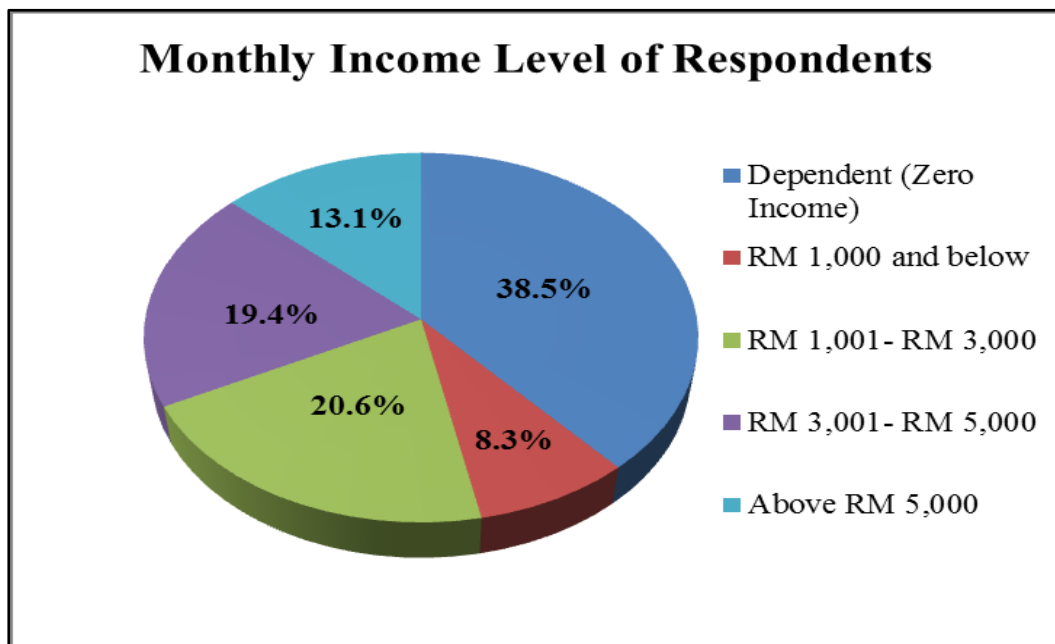
Source: Developed for research.

Table 4.8 and Figure 4.6 showed that among the 252 respondents, 97 respondents (38.5%) have zero income. Besides, 21 respondents (8.3%) earned RM1,000 and below every month. Respondents who fall under the income group of RM1,001 to RM3,000 and RM3,001 to RM5,000 consisted of 52 respondents (20.6%) and 49 respondents (19.4%). Meanwhile, 33 respondents (13.1%) have monthly income above RM5,000.

4.2.1.7 Mobile Devices Own by Respondents

Table 4.9: Mobile Devices Own by Respondents

	Frequency	Percentage (%)
Smartphone	243	53.9
Tablets	56	12.4
Laptop/Notebook	148	32.8
Personal Digital Assistant Device	4	0.9
Others	0	0.0
Total	451	100.0

Source: Developed for research.

Figure 4.7: Mobile Devices Own by Respondents
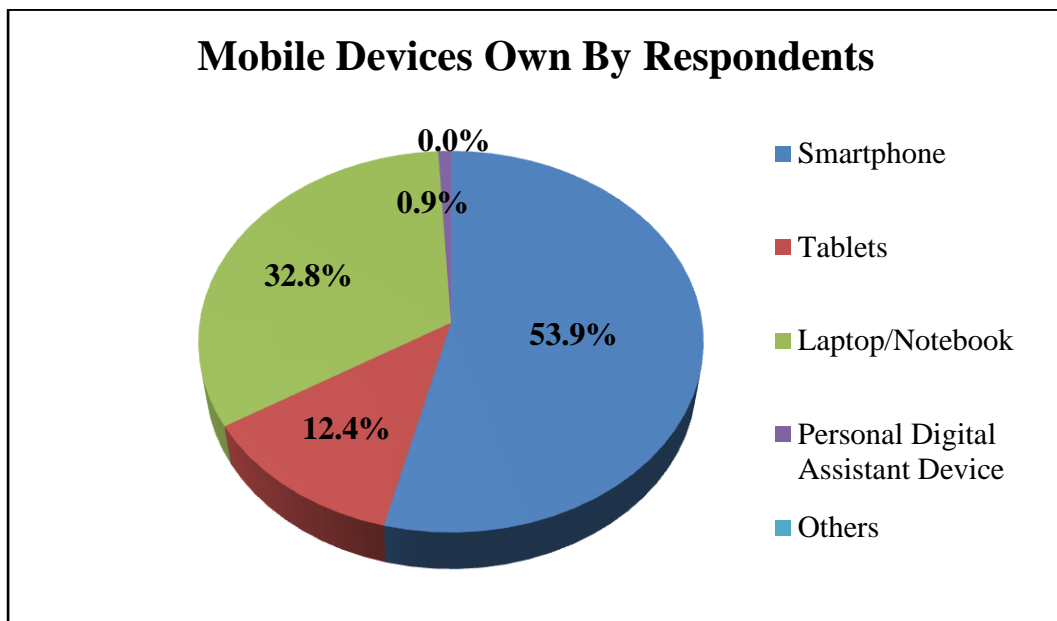
Source: Developed for research.

Table 4.9 and Figure 4.7 manifests the frequency and percentage of mobile devices owned by respondents. It shows that smartphone is the most own mobile device which comprises of 243 respondents (52.9%). Moreover, 56 respondents (12.4%) owned tablets and 148 respondents (32.8%) owned laptop or notebook. However, only 4 respondents (0.9%) have personal digital assistant device.

4.2.2 Central Tendencies of Construct Measurement

Table 4.10: Statistics of Constructs' Mean and Standard Deviation

Variable	Items	Mean	Standard Deviation
Entertainment Gratification	EG1	4.3254	1.4767
	EG2	4.3254	1.4356
	EG3	4.0238	1.5173
	EG4	4.1190	1.4204
	EG5	4.0714	1.4677
Informativeness Gratification	IG1	4.9603	1.3052
	IG2	4.9960	1.3375
	IG3	4.8810	1.2694
	IG4	4.8056	1.2710
	IG5	4.9087	1.1857
Attractiveness	A1	4.6667	1.3684
	A2	4.6389	1.3744
	A3	4.6548	1.3611
	A4	4.1944	1.6258
Expertise	E1	4.9841	1.4000
	E2	4.6667	1.3360
	E3	4.7103	1.3087
	E4	4.6667	1.2966
	E5	5.1468	1.2554
Trustworthiness	T1	4.4444	1.4089
	T2	4.2460	1.4431
	T3	4.3056	1.3352
	T4	4.5873	1.2386
	T5	4.6190	1.3441
Purchase Intention	PI1	4.0040	1.4490
	PI2	3.8373	1.5153
	PI3	3.7738	1.4395
	PI4	3.8214	1.4240
Purchase Behavior	PB1	3.1429	1.8563
	PB2	2.4722	1.4814
	PB3	2.4127	1.4242

Source: Developed for research.

Table 4.10 depicted the means and standard deviations for all 31 survey items from 7 variables. The mean of EG lies between 4.0238to 4.3254, IG lies between 4.8056 to 4.996, Attractiveness lies between 4.1944 to 4.6667, Expertise lies between 4.6667 to 5.1468, Trustworthiness lies between 4.2460 to 4.6190, PI lies between 3.7738 to 4.0040, and PB lies between 2.4127 to 3.1429. It shows that the majority of respondents answered 'neutral' or 'somewhat agree' for EG items and IG items. Besides, for the items of Attractiveness, Expertise, and Trustworthiness, most respondents answered 'neutral' or 'somewhat agree' except for E5 where majority respondents answered 'somewhat agree' or agree. Moreover, majority respondents answered 'somewhat disagree' or 'neutral' for PI items except for PI1 where majority respondents answered 'neutral' or 'somewhat agree'. For PB items, most respondents answered 'somewhat disagree' or 'neutral' for PB1, 'rarely' or 'occasionally for PB2 and 'quite less' or 'somewhat less' for PB3. Meanwhile, standard deviations of the 31 survey items are ranged between 1.18574 and 1.8563 which represented by IG5 and PB1.

4.3 Scale Measurement

4.3.1 Reliability Test

Table 4.11: Result of Reliability Test

Variables	No of items	Cronbach's Alpha
Entertainment Gratification	5	0.915
Informativeness Gratification	5	0.922
Attractiveness	4	0.853
Expertise	5	0.884
Trustworthiness	5	0.907
Purchase Intention	4	0.949
Purchase Behavior	3	0.890

Source: Developed for research.

Table 4.11 has summarized the Cronbach's Alpha value for all the variables. As shown above, Cronbach's Alpha values for all the variables ranged from 0.853 to 0.949. This has indicated that all the items in the variables are acceptable and reliable as all the values have exceeded 0.70 (Hair et al., 2014).

4.3.2 Normality Test

Table 4.12: Result of Normality Test

Variables	Items	Skewness	Kurtosis
Entertainment Gratification	EG1	-0.3800	-0.4030
	EG2	-0.3330	-0.3690
	EG3	-0.0470	-0.6030
	EG4	-0.0100	-0.5920
	EG5	-0.1630	-0.6740
Informativeness Gratification	IG1	-0.7710	0.5690
	IG2	-0.6170	0.0690
	IG3	-0.3990	0.0960
	IG4	-0.6040	0.2640
	IG5	-0.5590	0.2350
Attractiveness	A1	-0.3490	-0.2520
	A2	-0.3950	-0.3020
	A3	-0.3970	-0.1030
	A4	-0.1490	-0.5000
Expertise	E1	-0.7360	0.0900
	E2	-0.2200	-0.3930
	E3	-0.3860	-0.1040
	E4	-0.2660	-0.2000
	E5	-0.6090	0.2920
Trustworthiness	T1	-0.6090	0.0900
	T2	-0.0050	-0.2900
	T3	0.1140	-0.3970
	T4	-0.3410	-0.0400
	T5	-0.2610	-0.2390
Purchase Intention	PI1	-0.2050	-0.3580
	PI2	-0.2480	-0.7950
	PI3	-0.0340	-0.4000
	PI4	-0.0070	-0.4200
Purchase Behavior	PB1	0.3550	-1.0950
	PB2	0.7740	-0.3460
	PB3	0.6870	-0.6430

Source: Developed for research.

Table 4.12 has illustrated the result of normality test for each item in every variable. As a whole, skewness value and kurtosis value for all items were fall within ± 3 and ± 10 respectively (Kline, 2011). Thus, it can be concluded that the data collected is normally distributed (Saunders et al., 2012). PB2 has the greatest skewness value which is 0.7740 among all other items. In contrast, IG1 has the lowest score which is -0.7710. As for the kurtosis test, IG1 marks the highest which is 0.5690 while the PB1 scores only -1.0950, which is the lowest among others.

4.4 Inferential Analysis

4.4.1 Pearson's Correlation Analysis

Table 4.13: Multicollinearity Test

Variables	EG	IG	Attractiveness	Expertise	Trustworthiness
EG	1				
IG	0.476 Sig.<0.0001	1			
Attractiveness	0.367 Sig.<0.0001	0.378 Sig.<0.0001	1		
Expertise	0.228 Sig.<0.0001	0.592 Sig.<0.0001	0.441 Sig.<0.0001	1	
Trustworthiness	0.310 Sig.<0.0001	0.537 Sig.<0.0001	0.457 Sig.<0.0001	0.723 Sig.<0.0001	1

Source: Developed for research.

Table 4.13 shows the correlation coefficient values among the five IVs. Based on the results, the values are ranged from 0.228 to 0.723, in which the values are smaller than 0.90, there is no multicollinearity problem according to Rosen (1999) (as cited in El-Fallah & El-Sallam, 2011). The highest coefficient value is achieved at 0.723 between Expertise and Trustworthiness.

4.4.2 Multiple Linear Regression

Table 4.14: Model Summary

Model	R	R-Square	Adjusted R-Square	Standard Error of the Estimate
1	0.673	0.454	0.442	1. 0129

Source: Developed for research.

Table 4.15: Analysis of Variance (ANOVA)

Model		Sum of Squares	df	Mean Square	F	p-value
	Regression	209.480	5	41.896	40.835	0.000
1	Residual	252.394	246	1.026		
	Total	461.874	251			

Source: Developed for research.

Table 4.16: Multiple Linear Regression

Model		Unstandardized Coefficients		Standardized Coefficients	T	p-value	Collinearity Statistics		Hypotheses testing
		B	Std. Error	Beta			Tolerance	VIF	
	(Constant)	-.491	0.349		-1.407	0.161			
	EG	0.445	0.060	0.415	7.406	0.000	0.708	1.413	Supported
	IG	0.163	0.080	0.134	2.049	0.041	0.519	1.925	Supported
1	A	0.146	0.063	0.129	2.304	0.022	0.710	1.409	Supported
	E	-.001	0.093	0.000	-0.006	0.995	0.398	2.515	Not Supported
	T	0.232	0.084	0.198	2.776	0.006	0.436	2.291	Supported

Source: Developed for the research.

* DV = PI

* IV = EG, IG, A, E, T

Based on the result that illustrates in Table 4.14, R-square scores 0.454 means 45.4% of the changes of PI is accounted to EG, IG, A, E, T. Meanwhile, Table 4.15 presents the F-value for this study. In this study, F-value scored 40.835 while the p-value is below 0.05. It predicted that at rock-bottom, one IVs is related to the DV and makes this research become meaningful. Consequently, the research model is fit for this study.

As shown in Table 4.16, tolerance value for all IV range between 0.398 and 0.710 while the variance inflation factor (VIF) ranged within 1.409 to 2.515. As the tolerance level is more than 0.10 and VIF does not exceed 5, multicollinearity issue does not appear in this research (Daoud, 2017; Hair, Black, Babin, Anderson & Tatham, 2005; O'brien, 2007).

With reference to Table 4.16, four hypotheses which are H1 (EG), H2 (IG), H3 (A), and H5 (T) are supported as their p-value is below 0.05. Conversely, H4 (E) p-value exceeds the threshold of 0.05 and therefore not supported. In short, four IVs which are EG, IG, A, and T have a positive relationship to PI while E is not related to PI.

Moreover, the degree of influence for each IV over DV can be measured by parameter estimates (B) (Hair, Black, Babin, Anderson & Tatham, 2006). With regards to Table 4.16, EG has the most significant influence over PI followed by T, IG and A. Therefore, the regression equation below is formulated:

PI= -0.491+0.445 (EG) +0.163 (IG) +0.146 (A) -0.001 (E) +0.232 (T)

4.4.3 Simple Linear Regression

Table 4.17: Model Summary

Model	R	R-square	Adjusted R-square	Standard Error of the Estimate
1	0.646	0.417	0.415	1.1078

Source: Developed for the research.

Table 4.18: Analysis of Variance (ANOVA)

Model		Sum of Squares	df	Mean Square	F	p-value
1	Regression	219.511	1	219.511	178.870	0.000
	Residual	306.801	250	1.227		
	Total	526.312	251			

Source: Developed for the research.

Table 4.19: Single Linear Regression

Model		Unstandardized Coefficients		Standardized Coefficients	T	p-value	Collinearity Statistics		Hypotheses testing
		B	Std. Error	Beta			Tolerance	VIF	
1	(Constant)	0.015	0.211		0.073	0.942			
	PI	0.689	0.052	0.646	13.274	0.000	1.000	1.000	Supported

Source: Developed for the research.
*Dependent variable: Purchase Behavior
*Independent Variable: Purchase Intention

By referring to Table 4.17, R-square 0.417 means 41.7% of the variation of PB can be explained by PI. Meanwhile, according to Table 4.18, this PI is fit to modeling PB as F-value is large (178.870) and the p-value is below the suggested threshold of 0.05. Moreover, if the p-value of IV is less than 0.05, the connection between DV and IV will be significant (Hair, Babin, Money & Samouel, 2003). In the view of the p-value beneath the suggested threshold, H6 is supported.

The regression equation is formed as PB=0.015+0.689 (PI).

CHAPTER 5: DISCUSSION, CONCLUSION AND IMPLICATIONS

5.0 Introduction

Descriptive analysis, scale measurement as well as the inferential analysis will be summarized and discussed in Chapter 5. Moreover, an in-depth discussion on the major findings together with the managerial and theoretical implications will be demonstrated. Limitations of the studies will also be illustrated and recommendation for improvement will be suggested. Further, a brief summary is going to be drawn out in the last section.

5.1 Summary of Statistical Analysis

5.1.1 Summary of Descriptive Analysis

Table 5.1: Summarized Demographic Profile of Respondents

Category	Frequency	Percentage (%)
Yes	252	100
No	0	0
Gender		
Category	Frequency	Percentage (%)
Male	116	46
Female	136	54
Age		
Category	Frequency	Percentage (%)
20-25 years old	166	65.9
26-30 years old	39	15.5
31-35 years old	23	9.1
Above 36 years old	24	9.5

Academic Qualification		
Category	Frequency	Percentage (%)
Secondary School	54	21.4
Diploma/ Higher Diploma	51	20.2
Bachelor's Degree	138	54.8
Postgraduate Studies (Master and PhD)	7	2.8
Others	2	0.8
Occupation		
Category	Frequency	Percentage (%)
Self employed	44	17.5
Employed	98	38.9
Unemployed	16	6.3
Full time student	93	36.9
Retired	1	0.4
Monthly Income Level		
Category	Frequency	Percentage (%)
Dependent (Zero Income)	97	38.5
RM 1,000 and below	21	8.3
RM 1,001- RM 3,000	52	20.6
RM 3,001- RM 5,000	49	19.4
Above RM 5,000	33	13.1
Mobile Devices Owned		
Category	Frequency	Percentage (%)
Smartphone	243	53.9
Tablets	56	12.4
Laptop/Notebook	148	32.8
Personal Digital Assistant Device	4	0.9
Others	0	0

Source: Developed for the research

Among 300 sets of questionnaires that have been allocated, the total 252 sets of questionnaires are usable. Our response rate is 84% as per calculated. As stated in Table 5.1, all valid respondents (100.0%) had experience in watching live-stream.

Majority of the respondents are female respondents, which consists of 136 respondents (54%) while the remaining 116 respondents are male respondents (46.0%). As shown in the table above, the dominant age group that occupied by the respondents is 20 to 25 years, which have 166 respondents in total (65.9%).

This is subsequently proceeded by 26 to 30 years old (15.5%) and above 36 years old (9.5%). There are only 23 respondents (9.1%) aged 31 to 35 years old as compared to other age group.

Based on the result, 138 respondents (54.8%) had pursued their studies in the Bachelor's Degree. Apart from that, there are 54 (21.4%), 51 (20.2%), and 7 (2.8%) respondents had the qualification of Secondary School, Diploma/Higher Diploma, and Postgraduate Studies respectively.

Among all the valid respondents, 98 respondents (38.9%) are employed while 93 respondents (36.9%) are full time student. 44 respondents (17.5%) had clarified to be self-employed. Depart from that, there are 16 respondents (6.3%) are unemployed and the remaining 1 respondent (0.4%) answered to be in the retired status.

In addition, 97 respondents (38.5%) reacted to have zero income which had registered the highest among the five monthly income levels. However, only 21 respondents (8.3%) have a monthly income of RM1,000 and below. As for others monthly income level, 52 respondents (20.6%), 49 respondents (19.4%), and 33 (13.1%) respondents have the monthly income level of RM1,001 to RM3,000; RM3,001 to RM5,000; and above RM5,000 correspondingly.

Most of the respondents owned a smartphone as their mobile devices (53.9%) and this eventually followed by laptop/notebook (32.8%). The least respondents owned the personal digital assistant device as there are only 4 respondents (0.9%). As for the tablets, there are 56 respondents (12.4%) used it as mobile devices.

5.1.2 Summary of Scale Measurement

As has been noted in the Chapter 4, Cronbach's alpha for the constructs are greater than the recommended threshold of 0.70. Hence, this can be summarized that all the items in the variables are acceptable and reliable (Hair et al., 2014). Moreover, the skewness and kurtosis statistics are lied between the desired range of ± 3 and ± 10 correspondingly (Kline, 2011). Thus, all the data considered to be normally distributed (Saunders et al., 2012).

5.1.3 Summary of Inferential Analysis

5.1.3.1 Multicollinearity Problem

In accordance with the result from Pearson Correlation Test, all the correlation coefficient values among all the five IVs are less than 0.90. Henceforth, it can be concluded that multicollinearity problem is not appeared among the IVs (El-Fallah & El-Sallam, 2011). Additionally, the result of MLR shows that the tolerance value for all IVs are above the threshold of 0.10 while the VIF seems to be less than 5. Obviously, the multicollinearity problem seems to be an absence in the research (Daoud, 2017; Hair et al., 2005; O'brien, 2007).

5.1.3.2 Multiple Linear Regression

In summary, 45.4% of the variation of PI is accounted to EG, IG, A, E and T. Since the p-value for the H1 (EG), H2 (IG), H3 (A), and H5 (T) are below 0.05, thus it can be seen that a positive relationship exists between EG, IG, A, E, and T with the PI. In brief, H1, H2, H3, and H5 are supported. However, there is no positive relationship between E and PI as the p-value for H4 (E) is above 0.05, thus H4 is not supported.

5.1.3.3 Simple Linear Regression

R-square value in the SLR is 0.417. Thus, it can be indicated that 41.7% of the variation of PB is explainable by PI. Since the p-value is below 0.05, therefore a positive relationship exists between PI and PB, H6 is supported.

5.2 Discussions of Major Findings

5.2.1 Entertainment Gratification

Table 5.2: Entertainment Gratification

Hypotheses	Result
H_1: Entertainment Gratification has a positive relationship on the consumers' purchase intention.	Supported

Source: Developed for research.

As shown in Table 5.2, this study found that EG is positively related to consumer's PI. This finding is in correspondence with other past literature that consumers' intention to purchase depends on their perceived enjoyment (Tan et al., 2017; Lau, Lam & Cheung, 2016; Harshini, 2015; Pan, Wang, Chen & Qu, 2017; Adis et al., 2015; Harn at al., 2014; Sabri, 2019; Marimuthu & Ganapathi, 2018; Zamzuri et al., 2018; Aluri et al., 2016). It implied that consumers found it is entertaining for them to shop via live-stream. The instant two-way communication by placing reaction button, comment and reply between users and sellers does provide greater pleasure for the users and generate their intention to make purchases via live-stream. Thus, mobile users' perception of entertainment via live-stream would affect their PI.

5.2.2 Informativeness Gratification

Table 5.3: Informativeness Gratification

Hypotheses	Result
H_2: Informativeness Gratification has a positive relationship on the consumers' purchase intention.	Supported

Source: Developed for research.

As can be seen from the result of this study (as presented in Table 5.3), IG tends to have a positive impact on consumer's PI.

This outcome consistent with other past researches as carried out by Zamzuri et al. (2018), Chaturvedi et al. (2016), Samsudin and Ahmad (2014), and Harshini (2015). However, this result contradicts to what has been discussed in the study conducted by Aluri et al. (2016) which claims that IG does not directly and significantly influence consumer's PI. This may be due to the difference in the research contexts. Aluri et al. (2016) studied on social media such as website rather than live-stream. The real-time features of live-stream enable sellers to provide information more accurately and timely compared to the website. The website provides information in photos and descriptions, and consumers can only make inquiries through sending messages to the sellers. This is time-consuming than live-stream shopping which offers real-time communication between sellers and consumers. In a live-stream context, sellers will demonstrate and explain about their products while at the same time consumers able to ask questions and get an immediate response. Therefore, it can be concluded that the accuracy and timeliness of information would trigger a consumer's intention to make purchases via live-stream.

5.2.3 Attractiveness

Table 5.4: Attractiveness

Hypotheses	Result
H$_3$: Live-stream sellers' attractiveness has a positive relationship on the consumers' purchase intention.	Supported

Source: Developed for research.

This study found that live-stream sellers' attractiveness has a positive influence on consumer's PI as depicted in Table 5.4.

This finding is conformity with various past literature issued by Shenje (2017), Samat et al. (2016), Khan et al. (2016), and Sertoglu et al. (2014). Undeniably, sellers with physical attractiveness would bring more attention to internet users due to their likeability. As mentioned by Baniya (2017), Asian consumers will like to follow the fashion style and likeability appearance of the sellers. It is important for sellers to have an attractive physical appearance to enhance the effectiveness of a message which will influence their PI.

On the other hand, this finding does not align with the result found by Malik and Qureshi (2017). Their study's result shows that Attractiveness will increase consumer's PI but the relationship is weak in Pakistan. This inconsistency may be due to demographic differences. This can be supported by Hassan and Ahmed (as cited in Baniya, 2017) who found that physical Attractiveness is not a significant factor that affects Pakistan customers' PI. However, Malaysian consumers are different from Pakistan consumers as Malaysian consumers' intention to buy would be affected by the physical attractiveness of the sellers.

5.2.4 Expertise

Table 5.5: Expertise

Hypotheses	Result
H$_4$: Live-stream sellers' expertise has a positive relationship on the consumers' purchase intention.	Not supported

Source: Developed for research.

This study hypothesized that sellers' expertise is positively associated with the intention of purchase on live-stream shopping; however, this study does not support that proposition. This finding shows conflict with the finding of others researches carried out by Sertoglu et al. (2014), Samat et al. (2016), Baniya (2017), Shenje (2017), and Filieri et al. (2018), in which the consumers' intention to buy a product or service from live-stream is not stimulated by the sellers' expertise. The reason might be that the millennials, representing nearly all the respondents do not discern that being an expert seller translates into reliability (Abdurrahaman, Owusu, Soladoye & Kalimuthu, 2018). Hence, they do not seem to agree that the live-stream sellers to have product-expert knowledge and the information provided will have no crucial effect towards the formation of their PI.

5.2.5 Trustworthiness

Table 5.6: Trustworthiness

Hypotheses	Result
H$_5$: Live-stream sellers' trustworthiness has a positive relationship on the consumers' purchase intention.	Supported

Source: Developed for research.

In accordance with the result presented in Table 5.6, this study found a positive effect between the live-stream seller's trustworthiness and the consumers' PI.

This result is opposed to the earlier study of Fileieri et al. (2018) in assessing the quality and performance of the products and services through online consumer reviews. This was mainly due to the disparities in study contexts. Electronic word-of-mouth (eWOM) settings are different from the live-stream context. The latter permits consumer to have face-to-face and in-depth interactions with live-stream sellers enhance their perceived trustworthiness towards the sellers; hence the message will result as persuasive (Zhang, Qin, Wang & Luo, 2019).

Meanwhile, the result is in keeping with other researchers' study which the information conveyed from the live-stream seller is reliable and trustworthy, thus probably useful in buying-decision making (Sertoglu et al., 2014; Bashir et al., 2015; Samat et al., 2016; Batbayar et al., 2018). This signifies that one of the notable determinants of consumer's live-stream PI is the Trustworthiness towards the seller. Specifically, how well the Trustworthiness of a live-stream seller is judged could infer the interests behind a buyer's decision to buy a product or service. To ensure sustainable live-stream business, it is a must for live-stream sellers to have insights as to how trust is created and its impact on people's desire to live-stream purchase. In view of this, the proposed posit can indeed be concluded as supported.

5.2.6 Purchase Intention

Table 5.7: Purchase Intention

Hypotheses	Result
H_6: Purchase intention has a positive relationship on the consumers' purchase behavior.	Supported

Source: Developed for research.

PI has been elucidated that it will positively affect the consumers' PB in the live-stream context as depicted in Table 5.7.

In line with past researches on electronic commerce, PI has identified as the significant determinant of actual PB using TPB model as a foundation of predicting individual's willingness to make an online purchase (Ijaz & Rhee, 2018; Lim et al., 2016; Singh & Srivastava, 2019). Additionally, instruments used to capture PB on live-stream are the frequency and amount of purchase are congruent with Li, Kuo, and Rusell (2006) and Verhagen and van Dolen (2009) (as cited in Silva, Pinhp, Soares & SA, 2019). Chiew et al. (2014) also asserted that those customers who demonstrated the intention of buying will manifest higher spending and actual check-out rates compared to those have no intention. This study thus further affirms that the PI has a significant association with consumers' actual PB.

5.3 Implications of the Study

5.3.1 Managerial Implications

Motivation factors that influencing the PI and PB of buyers in live-stream shopping has been studied in this research by using an extended theoretical model which incorporated UGT, SCT, and TPB. The results show that Entertainment Gratification, Informativeness Gratification, Attractiveness, and Trustworthiness are positively related to the PI and PI also has a positive relationship with PB. The findings from this research have a few key implications for the live-stream sellers or any person or company who considers establishing their business in live-stream.

First of all, EG refers to the degree of pleasure and enjoyment the buyers obtain when they shop or interact with the sellers in live-stream shopping (Lim, 2015; Zamzuri et al., 2018; Cai & Wohn, 2019). The results show that buyers find it entertaining and enjoyable to have live-stream shopping as they can have two ways of interaction with the sellers. The live-stream sellers should take advantage of the features of live-stream which allows instant replies, comments, and reactions button to attract the consumers in live-stream shopping. Utilizing live-stream as a platform to promote the products is more cost-saving and can help to influence the level of consumers' perceived entertainment and subsequently trigger their PI. This study suggests that interaction between live-stream seller and potential buyers could trigger their PI which is likely to reflect on increased sales.

IG refers to the desire of the users to obtain accurate, useful, resourceful and timely information (Lim & Ting, 2012; Dolan et al., 2015; Zamzuri et al., 2018). As mentioned earlier, the advantage of using live-stream is that the users can interact with each other in almost real time. Timely and accurate information, reaction and feedback offered by the live-stream seller are favorable to the consumers. Live-stream sellers should be able to provide correct information and

react in a timely manner with respect to their products and services, in order for consumers to have the intention to make a purchase in live-stream shopping.

Attractiveness is one's perceived likeability or fondness towards the other person which results from the physical appearance, the way of dressing up or personality (Li & Yin, 2018; Chekima et al., 2018). It is suggested that the live-stream sellers should try to demonstrate good personality and good-looking physical appearance in order to increase the buyers' purchase intention. This may act as the additional bonus feature in the strategy of marketing the products or services in live-stream shopping. Merchants are advised to transfer the budget from employing celebrity to a social influencer with attractive physical appearance to promote its products. It is a more cost-effective way to improve the exposure and sales of a product.

Trustworthiness is referring to the traits of having integrity as well as being honest, credible, and believed by others (Khan et al., 2016; Rachbini, 2018; Todd & Melancon, 2018; Wang and Scheinbaum, 2018). Unlike the traditional shopping style, live-stream shopping is a platform where the buyers cannot see the products in real or touch the products. Therefore, the trustworthiness of the live-stream sellers becomes beyond important when it comes to live-stream shopping. The live-stream sellers should always promote and demonstrate the products in an honest manner. They should not lie or exaggerate about the usefulness and quality of the products. Creating trust between consumers and sellers can assist in persuading the consumers and subsequently increasing their PI.

To conclude, the live-stream sellers should make the best use of live-stream in their businesses as the real-time feature of the live-stream itself is very beneficial to the live-stream sellers in terms of providing timely information and enjoyment of interacting with the consumers. On top of that, the live-stream sellers should also display good personality and appearance and be credible in promoting their products or services in live-stream shopping, in order to have achieved greater success in their businesses.

5.3.2 Theoretical Implications

This research provides a more comprehensive understanding of the motivation factors affecting the PI and PB of the Malaysian shoppers in the live-stream context using an integration of UGT, SCT, and TPB in the research model. Theoretically, this research contributes by filling the research gap and addressing the deficiencies of past studies. In addition to UGT, the incorporation of SCT in the research model helps to examine the effect of the live-stream sellers' attribute on the shoppers' purchase intention and behavior in live-stream, in which the past studies did not address.

The proposed research model of this research targeted on and pays attention to the predominant factors that are perceived to be more relevant to the features of live-stream shopping where the irrelevant variables are not being investigated in this study. For example, UGT is adopted to address the real-time and entertaining features of live-stream, SCT is adopted to ascertain the relationship of the live-stream sellers' attribute and the buyers' purchase intention and TPB is used to examine the link between the buyers' purchase intention and behavior. Therefore, this research, as a relatively new research model, gives contributions to other academicians or researchers regarding the association between the motivation factors and PI, as well as the PB in live-stream shopping.

Furthermore, the results show an R-square value of 0.454 or 45.40% of the changes in PI is accountable by all the five IVs. Four out of the five IVs (EG, IG, Attractiveness, and Trustworthiness) are proven to have positive relationships with PI whereas Expertise is not related to PI. Moreover, the R-square value of 0.417 or 41.70% of the variation of PB can be explained by PI. PI is also evidenced to have a positive relationship with PB. As of today, there is very limited research in respect to live-stream shopping which is in the Malaysian shopper's context. The findings of this research have come up with the useful insights as to the motivation factors, EG, IG, Attractiveness, and Trustworthiness are identified and confirmed to have an influence on the PI of the buyers and subsequently affecting their PB in live-stream shopping.

In a nutshell, this study contributes as a source of reference to the academicians and future researcher in terms of an extended and improved model of a theoretical framework as well as in the understanding of the motivation factors affecting the buyers' purchase intention and behavior in live-stream shopping.

5.4 Limitations and Recommendations

This is a cross-sectional study whereby data of this research only collected once (Mann, 2003). Thus, the result analyzed based on the data collected might not apply in the future because it will become irrelevant and plausible as time elapsed. Future researchers are advised to conduct a longitudinal study in the relevant context to generate the result that applies to various point of time. This could investigate the online shoppers' attitude towards live-stream shopping concept which may differ in various point of time (Caruana, Roman, Hernández-Sánchez & Solli, 2015).

Besides, R-square of this study is only 0.454 and 0.417 respectively. It depicted that less than half of the variation of the DV is explainable by the IV in this study. Demographic factors such as income level, educational level, occupation, and gender have impacts on the PI. However, this research omitted its effect in moderating the IV toward the DV. In order to address this limitation, future researchers are suggested to incorporate more predictors such as income level, social influence, experiential, and functional in predicting the changes of online shopper PI (Mamat, Noor & Noor, 2016). Moreover, respondents' demographics should be developed as moderators that moderate the existing relationships.

Moreover, questionnaires were only distributed in the shopping mall in Peninsular Malaysia (Selangor, Johor, KL, and Perak). Ignorance of East Malaysia (Sabah & Sarawak) might limit the representativeness of the results in

this study and generalizability of this finding will be limited. There are differences between East Malaysia and Peninsular Malaysia such as cultural differences and economic gap (Geraldine, 2017; Chan, 2014). Thus, differences between East and West Malaysia will cause different perspective towards live-steam shopping in the eyes of respondents from a different region. Consequently, the result might not preferable and could not be generalized to represent the whole of Malaysia online shoppers. In order to overcome this constraint, future researchers are recommended to broaden the geographical area such as include East Malaysia when distributing the questionnaire. Researchers should also attempt to print and distribute questionnaires in various languages. For instances, Mandarin and Tamil.

The last limitation of this study is the adoption of a survey questionnaire. Questionnaires were physically distributed. One of the drawbacks of the survey questionnaire is the questionnaire items might not fit with respondents thought and perceptions which will reflect on a biased result. Moreover, respondents may feel being forced or irritated. Thus, data from these respondents might be inaccurate or inappropriate and diminish the reliability of the findings in this study (Akbayrak, 2000). The solution to resolve the above-mentioned issues is the adoption of the e-survey questionnaire. Several approaches such as web-based and email-based could be adopted in distributing the questionnaire. These approaches required less time to distribute and collect back the questionnaire, ease of reaching a substantial number of potential respondents as well as low cost (Jamsen & Corley, 2007; Zhang, Kuchinke, Woud, Velten & Margraf, 2017). Alternatively, a face-to-face interview should be adopted. The face-to-face interview could enable researchers to obtain better insights regarding live-stream shopping from respondents' feedback. Open-ended questions can be asked during the interview which provides an opportunity to respondents in providing a deeper understanding of how the IVs affect DV. Respondents can explain in details about their thoughts on how the IVs affecting DV.

5.5 Conclusion

This research helps us to have a clearer picture on the motivation factors that affect the Malaysian online shoppers' PI in live-stream shopping and whether their PI will affect their PB. The findings of this research confirm that all the IVs have positive relationships with the consumers' PI, except for Expertise. On top of that, according to this research, the PI of the consumers is also found to be positively affecting consumers' PB. There is a justification given to explain why the Expertise of the live-stream sellers does not significantly and positively influence the PI. In a nutshell, the research objective has been achieved by successfully determine the motivation factors that will bring an effect on PI and if the PI will affect the PB in a live-stream context.

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Appendix A: Summary of Past Empirical Studies

Table 2.6: Empirical research that established relationship between EG and PI

No.	Title of the Article	Name of Journal	Vol, No, Page	Author (s)	Country	Research Purpose	Sampling method	Methodology	Result (S/NS) *
1	Factors That Influence the Consumer Purchase Intention in Social Media Websites	International Journal of Supply Chain Management	$6(4)$, 208-214	Tan, Goh, Stany, and Yeow (2017)	Malaysia	Research on consumer purchase intention in social media websites	Quota	**Target respondent:** Social media shoppers **Data collection method:** Online questionnaire	S
2	Examining the Factors Influencing Purchase Intention of Smartphones in Hong Kong	Contemporary Management Research	$12(2)$, 213-214	Lau, Lam, and Cheung (2016)	Hong Kong	This empirical investigates the factors that affect the purchase intention of smartphones in Hong Kong,	Purposive	**Target respondent:** Secondary and undergraduate students in Hong Kong **Data**	S

								collection method: Structured questionnaire survey	
3	Influence Of Social Media Ads On Consumer's Purchase Intention	International Journal of Current Engineering and Scientific Research	2(10), 110-115	Harshini (2015)	India	Study on online ads characteristics and its influence over purchase intention	Not stated	**Target respondent:** consumers who have watched social media ads **Data collection method:** Not stated	S
4	Research on the Influence of Web Experience on Consumers' Purchasing Intention	Journal of Business Administration Research	6(2), 8-14	Pan, Wang, Chen and Qu, (2017)	China	This research study the theory of web experience, consumers' purchasing intention as well as other related theories	Not stated	**Target respondent:** Not stated **Data collection method:** Not stated	S

5	Purchase Behaviour in Advergame and the Effect of Brand Attitude as a Mediator	Asian Social Science	*11*(5), 249-257	Adis, Kim, Majid, Osman, Razli, and Ing (2015)	Malaysia	Examine the impact of entertainment factors and self-brand congruity in affecting brand attitude among gamers on advergame	Snowball	**Target respondent:** Malaysia video game/ mobile game/ SNS game's Gamers **Data collection method:** Structured online survey questionnaire	S
6	Determinants of Online Group Buying Behaviour: The Moderating Role of Informational Social Influence	Jurnal Pengurusan	*41, 133-143*	Harn, Tanakinjal, Jr, and Rizal (2014)	Malaysia	To develop a theoretical model that explain online group buying behaviour	Convenience	**Target respondent:** Malaysian aged between 18 to 34 years old **Data collection method:** Online Questionnaire	S

7	Consumer's Purchase Intention towards Luxury Retailer's Social Media Advertisements	Social Networking	8(01), 39-51	Sabri (2019)	United Kingdom	Identify the factors lead to luxury purchase behaviour via harnessing social media	Purposive	**Target respondent:** Consumers who walking in the mall **Data collection method:** Semi-structured interviews	S
8	A Study on Factors Affecting Purchase Intention towards Cars through Online Among Customers	Indian Journal Of Applied Research	8(10), 55-57	Marimuthu and Ganapathi (2018)	India	Study factors lead to online purchase intention toward cars	Convenience	**Target respondent:** Consumers who purchased car through online in Madurai **Data collection method:** Structured questionnaire	S

9	Entertainment Gratification, Informative Gratification, Web Irritation and Self-Efficacy as Motivational Factors to Online Shopping	Management & Accounting Review	*17*(3), 95-108	Zamzuri, Kassim, Shahrom, Humaidi, and Zakaria (2018)	Malaysia	Study of EG, IG, web irritation and self-efficacy that trigger consumers' online purchase intention	Purposive	**Target respondent:** Consumers who have online shopping knowledge and experience **Data collection method:** Survey (details of the survey is not available)	S
10	The influence of embedded social media channels on travelers' gratifications, satisfaction, and purchase intentions	Cornell Hospitality Quarterly	*57*(3), 250-267	Aluri, Slevitch and Larzelere (2016)	United States	Study the gratification travelers seeking for when using embedded social media channels on hotel websites	Convenience	**Target respondent:** Northeastern U.S. university's students **Data collection method:** Online survey questionnaire	S

Source: Developed for research

Table 2.8: Empirical studies that established relationship between IG and PI

No.	Title of the Article	Name of Journal	Vol, No, Page	Author (s)	Country	Research Purpose	Sampling method	Methodology	Result (S/NS) *
1	Entertainment Gratification, Informative Gratification, Web Irritation and Self-Efficacy as Motivational Factors to Online Shopping	Management & Accounting Review	_17_(3), 95-108	Zamzuri, Kassim, Shahrom, Humaidi, and Zakaria (2018)	Malaysia	Study of EG, IG, web irritation and self-efficacy that trigger consumers' online purchase intention	Purposive	**Target respondent:** Consumers who have online shopping knowledge and experience **Data collection method:** Survey (details of the survey is not available)	S
2	Influence Of Social Media Ads On Consumer's Purchase	International Journal of Current Engineering and	_2_(10), 110-115	Harshini (2015)	India	Study on online ads characteristics and its influence over	Not stated	**Target respondent:** Not stated **Data collection**	S

	Intention	Scientific Research				purchase intention		**method:** Not stated	
3	Perceived Risk, Trust and Information Seeking Behavior as Antecedents of Online Apparel Buying Behavior in India: An Exploratory Study in Context of Rajasthan	International Review of Management and Marketing	*6*(4), 935-943	Chaturvedi, Gupta and Hada (2016)	India	Study consumers' purchase behavior who purchase apparels via social media e-commerce system	Not stated	**Target respondent:** Social media users in Rajasthan **Data collection method:** Self-administered questionnaire	S
4	Online Shopping Perception among Malaysian Professionals	Journal of Technology Management and Business	*1*(2) 65-72	Samsudin and Ahmad (2014)	Malaysia	Study how working professionals perceive online shopping which subsequently form their online	Not stated	**Target respondent:** Academicians from Malaysia politechnic colleges **Data collection method:** Structured	S

						shopping intention		online-administered questionnaire	
5	The influence of embedded social media channels on travelers' gratifications, satisfaction, and purchase intentions	Cornell Hospitality Quarterly	*57(3),250-267*	Aluri, Slevitch, and Larzelere (2016)	United States	Study the effectiveness of hotel websites that are embedded with social media channels and its influence over traveler behavior	Aluri, et al. (2016)	**Target respondent:** Generation Y browsing a hotel website embedded with the social media channels **Data collection method:** Online survey questionnaire	NS

Source: Developed for research

Table 2.10 Empirical studies that established relationship between Attractiveness and PI

No.	Title of the Article	Name of Journal	Vol, No, Page	Author (s)	Country	Research Purpose	Sampling method	Methodology	Result (S/NS)*
1	Midas touch or time bomb? A look at the influence of celebrity endorsement on customer purchase intentions: The case study of fast foods outlet companies in Harare, Zimbabwe	African Journal of Business Management	*11*(15), 347-356	Shenje (2017)	Zimbabwe	Investigate the influence of celebrity endorsements on consumer purchase intentions for fast foods products and services in Harare.	Not stated	**Target respondent:** Customers in main five fast foods outlets in Harare **Data collection method:** Self-administered questionnaire	S
2	Endorser credibility and its influence on the Purchase intention of social networking sites	International Journal of Management and Applied Science	*2*(12), 50-56	Samat, Ramlee, Bakar, Annual and Rasid (2016)	Malaysia	Inspect current consumers of internet Shopping in Malaysia with the goal of exploring the Credibility of	Judgmental Sampling	**Target respondent:** Users of SNS **Data collection method:** Questionnaire	S

	Consumer: a mediating role of attitudes towards SNS Advertising					the endorsers that will affect the Intention to purchase			
3	The Impact of Celebrity Endorsement on Consumer Buying Behavior	Journal of Marketing and Consumer Research	4(3), 149-170	Malik and Qureshi (2017)	Pakistan	Explore the impact of celebrity endorsement on consumer's buying intentions.	Non-probability sampling and Convenience sampling	**Target respondent:** Pakistan audience with educational background **Data collection method:** Questionnaire	NS
4	Components of Celebrity Endorsement Affecting Brand Loyalty of Nepali Customers	Journal of Business and Management Research	2(1&2), 52-65	Baniya (2017)	Nepali	Investigate the direct effect of components of celebrity endorsement on brand loyalty	Not stated	**Target respondent:** Consumers residing in Kathmandu valley **Data collection method:**	S

								Questionnaire	
5	Influence of Celebrity Endorsement on Consumer Purchase Intention	Journal of Business and Management	*18*(1), 06-09	Khan, Rukhsar and Shaoaib (2016)	Pakistan	Identify the positive and negative impact of celebrity endorsement in advertisement on consumer's purchase intentions.	Not stated	**Target respondent:** Consumers based on different educational and occupational from different area **Data collection method:** Primary data - Questionnaire Secondary data- Different source of literature	S

| 6 | Examining the Effect of Endorser Credibility on the Consumers' Buying Intentions: An Empirical Study in Turkey | International Review of Management and Marketing | *4*(1), 66-77 | Sertoglu, Catli and Korkmaz (2014) | Turkey | Test whether the source credibility affects buying intention and measure the perceived credibility differences between created spokesperson and celebrity endorser. | Not stated | **Target respondent:** Young Consumers

Data collection method: Questionnaire | S |

Source: Developed for research

Table 2.12: Empirical studies that established relationship between Expertise and PI

No.	Title of the Article	Name of Journal	Vol, No, Page	Author (s)	Country	Research Purpose	Sampling method	Methodology	Result (S/NS) *
1	Midas touch or time bomb? A look at the influence of celebrity endorsement on customer purchase intentions: The case study of fast foods outlet companies in Harare, Zimbabwe	African Journal of Business Management	*11*(15), 347-356	Shenje (2017)	Zimbabwe	Investigate the influence of celebrity endorsements on consumer purchase intentions for fast foods products and services in Harare.	Not stated	**Target respondent:** Customers in main five fast foods outlets in Harare **Data collection method:** Self-administered questionnaire	S

2	Endorser credibility and its influence on the Purchase intention of social networking sites Consumer: a mediating role of attitudes towards SNS Advertising	International Journal of Management and Applied Science	*2*(12), 50-56	Samat, Ramlee, Bakar, Annual and Rasid (2016)	Malaysia	Inspect current consumers of internet Shopping in Malaysia with the goal of exploring the Credibility of the endorsers that will affect the Intention to purchase	Judgmental Sampling	**Target respondent:** Users of SNS **Data collection method:** Questionnaire	S
3	Influence of Celebrity Endorsement on Consumer Purchase Intention	Journal of Business and Management	*18*(1), 06-09	Khan, Rukhsar and Shaoaib (2016)	Pakistan	Identify the positive and negative impact of celebrity endorsement in advertisement on consumer's purchase intentions.	Not stated	**Target respondent:** Consumers based on different educational and occupational from different area **Data collection method:** Primary data - Questionnaire	S

								Secondary data- Different source of literature	
4	Components of Celebrity Endorsement Affecting Brand Loyalty of Nepali Customers	Journal of Business and Management Research	*2*(1&2), 52-65	Baniya (2017)	Nepali	Investigate the direct effect of components of celebrity endorsement on brand loyalty	Not stated	**Target respondent:** Consumers residing in Kathmandu valley **Data collection method:** Questionnaire	S
5	Examining the Effect of Endorser Credibility on the Consumers' Buying Intentions: An Empirical Study in Turkey	International Review of Management and Marketing	*4*(1), 66-77	Sertoglu, Catli and Korkmaz (2014)	Turkey	Test whether the source credibility affects buying intention and measure the perceived credibility differences between created spokesperson and celebrity	Not stated	**Target respondent:** Young Consumers **Data collection method:** Questionnaire	S

						endorser.			
6	Consumer perception of information helpfulness and determinants of purchase intention in online consumer reviews of services	Article in Information & Management	55(8), 956-970	Filieri, McLeay, Tsui and Lim (2018)	Hong Kong	Investigate consumer perceptions about information helpfulness (IH) in electronic word-of-mouth (e-WOM) contexts	Not stated	**Target respondent:** Travelers that have experience in using OCRs **Data collection method:** Online questionnaire	S

Source: Developed for research

Table 2.14: Empirical studies that established relationship between Trustworthiness and PI

No.	Title of the Article	Name of Journal	Vol, No, Page	Author (s)	Country	Research Purpose	Sampling method	Methodology	Result (S/NS) *
1	Endorser credibility and its influence on the Purchase intention of social networking sites Consumer: a mediating role of attitudes towards SNS Advertising	International Journal of Management and Applied Science	$2(12)$, 50-56	Samat, Ramlee, Bakar, Annual and Rasid (2016)	Malaysia	Inspect current consumers of internet Shopping in Malaysia with the goal of exploring the Credibility of the endorsers that will affect the Intention to purchase	Judgmental Sampling	**Target respondent:** Users of SNS **Data collection method:** Questionnaire	S
2	Midas touch or time bomb? A look at the influence of celebrity endorsement on customer purchase intentions: The case	African Journal of Business Management	$11(15)$, 347-356	Shenje, 2017	Zimbabwe	Investigate the influence of celebrity endorsements on consumer purchase intentions for fast foods products and services in	Not stated	**Target respondent:** Customers in main five fast foods outlets in Harare **Data collection method:**	S

	study of fast foods outlet companies in Harare, Zimbabwe					Harare.		Self-administered questionnaire	
3	Factors Affecting Online Purchase Intention: Effects of Technology and Social Commerce	International Business Research	*11*(10), 111-128	Athapaththu and Kulathunga (2018)	Sri Lanka	Identifying the factors affecting online purchase intention of customers from both the technological and social commerce perspective	Not stated	**Target respondent:** MBA students from two main universities and one prominent institute **Data collection method:** Online questionnaire	S

4	Examining the Effect of Endorser Credibility on the Consumers' Buying Intentions: An Empirical Study in Turkey	International Review of Management and Marketing	*4*(1), 66-77	Sertoglu, Catli and Korkmaz (2014)	Turkey	Test whether the source credibility affects buying intention and measure the perceived credibility differences between created spokesperson and celebrity endorser.	Not stated	**Target respondent:** Young Consumers **Data collection method:** Questionnaire	S
5	Consumer perception of information helpfulness and determinants of purchase intention in online consumer reviews of services	Article in Information & Management	*55*(8), 956-970	Filieri, McLeay, Tsui and Lim (2018)	Hong Kong	Investigate consumer perceptions about information helpfulness (IH) in electronic word-of-mouth (e-WOM) contexts	Not stated	**Target respondent:** Travelers that have experience in using OCRs **Data collection method:** Online questionnaire	NS

6	Effects of online shopping trends on consumer-buying Behavior: an empirical study of Pakistan	Journal of Management and Research	*2*(2)	Bashir, Mehboob and Bhatti (2015)	Pakistan	Examines the relationship between various factors that affect the consumer behavior towards online shopping	Not stated	**Target respondent:** University student **Data collection method:** Self-developed and standardized questionnaire	S
7	Influences of Website Quality on Online Purchase Intention of Air Ticketing Service: In case of Mongolia	Invention Journal of Research Technology in Engineering & Management (IJRTEM)	*2*(6), 13-18	Batbayar, Batsaikhan, Enebish, Munkhzaya and Sodnompil (2018)	Mongolia	Investigate the relationship of Website quality and online purchasing intention	Not stated	**Target respondent:** Not stated **Data collection method:** Online questionnaire	S

Source: Developed for research

Table 2.17: Empirical studies that established relationship between PI and PB

No.	Title of the Article	Name of Journal	Vol, No, Page	Author (s)	Country	Research Purpose	Sampling method	Methodology	Results (S/NS)*
1	Social interaction-based consumer decision-making model in social commerce: The role of word of mouth and observational learning	International Journal of Information Management 2017	*37*, 179-189	Wang and Yu (2015)	United States	To examine social interactions from World of mouth and observational learning perspectives on purchase intentions and actual purchase behaviors in a social commerce environment.	Snowball sampling	**Target respondents:** Participants from three undergraduate-level courses at a university in the southeastern United States **Data collection method:** Questionnaire	S

| 2 | Constituents and consequences of Online-Shopping in sustainable E-business: An experimental study of online-shopping malls | Sustainability 2018 | *10*, 2-24 | Ijaz and Rhee (2018) | Korea | To examine factors that influence online shopping so that retailers could enhance their shopping processes and thus able to sustain their e-business development. | Convenient sampling | **Target respondents:** Actual and regular Korean online shoppers that make purchase more than twice per month for 6 month.

Data collection method: Online questionnaire | S |

3	Moderating effect of product type on online shopping behaviour and purchase intention: An Indian perspective	Cogent Arts & Humanities	1-27	Singh and Srivastava (2018)	India	To investigate the factors that influence online shopping behavior with focus on continued usage of India online shoppers.	Purposive, convenient and snowball sampling	**Target respondents:** India Online shoppers with prior shopping experience. **Data collection method:** Questionnaire through email and social media.	S
4	Factors influencing online shopping behavior: The mediating role of purchase intention	Procedia Economics and Finance	401 – 410	Lim, Osman, Salahuddin, Romle and Abdullah (2016)	Malaysia	To determine the relationship between subjective norm, perceived usefulness and online shopping behavior while mediated by purchase intention.	Multi stage, stratified and systematic sampling	**Target respondents:** University students aged between 18 and 34 who are currently pursuing their studies in University Malaysia Perlis. **Data collection**	S

								method: Questionnaire	
5	Engaging consumers in multichannel online retail environment: A moderation study of platform type on interaction of e-commerce and m-commerce.	Journal of Modelling in Management	*14*(1), 49-76	Singh and Srivastava (2019)	India	To investigate the mapping of product characteristics with individual channel capabilities and its effect on online consumer behavior.	Convenient and snowball sampling	**Target respondents:** Active shoppers who made actual purchases in past six months. **Data collection method:** Self-administered questionnaire survey	S

| 6 | Consumers perception, purchase intention and actual purchase behavior of organic food products. | Review of Integrative Business & Economics Research | *3*(2), 378-397. | Chiew, Ariff, Zakuan, and Tajudin (2014). | Malaysia | To examine how consumers' perception affect their behavior intention to purchase the organic food products. | Convenient Sampling | **Target respondents:** Respondents in the supermarkets in the district of Kluang and its surrounding areas

Data collection method: Mall-intercept personal survey | S |

| 7 | The effect of motivation on purchasing intention of online games and virtual items provided by online game provider. | International Journal of Communication & Information Technology | *8*(1), 22-27. | Stefany (2014) | Indonesia | To investigate the motivation factors of online games player to purchase intention of online games virtual items. | Probability sampling (random sampling) | **Target respondents:** Online games users who are Jakarta and the age ranges between 15 to 24

Data collection method: Questionnaire | S |

Source: Developed for research.

Note: * S= Supported; NS = Not supported

Appendix B: Table of Variables and Measurements

Variable	Item	Description	Measurement	References
Entertainment Gratification	EG1	I find it entertaining to watch a live video content that sells/promotes product/service.	Seven-point Likert scale	Lim and Ting (2012)
	EG2	I find that a live video content that sells/promotes product/service is fun to watch.		
	EG3	I feel excited when I watch a live video content that sells/promotes product/service.		
	EG4	Watching a live video content that sells/promotes product/service provides me with lots of enjoyment		
	EG5	I have fun when interacting with live-stream seller.		
Informativeness Gratification	IG1	It is important that the live-stream seller is able to give me product/service information that is of interest to me.	Seven-point Likert scale	Lim and Ting (2012)
	IG2	Accurate product/service information from the live-stream seller improves my		

		shopping effectiveness.		
	IG3	Timely information of product/service from the live-stream seller improves my shopping performance.		
	IG4	Product/service information from the live-stream seller that is useful in aiding my shopping decisions is appreciated.		
	IG 5	Product/service information from the live-stream seller that makes it easier for me to compare product/service choices when shopping online is desirable.		
Attractiveness	A1	The live-stream seller is good looking (pretty/handsome).	Seven-point Likert scale	Choi and Lee (2019)
	A2	The live-stream seller has a stylish image.		
	A3	The live-stream seller is very attractive.		
	A4	Others will want to look like the live-stream seller.		
Expertise	E1	The live-stream seller knows about the product/service very well.	Seven-point Likert scale	Choi and Lee (2019)

	E2	It is an undeniable fact that the live-stream seller is an expert on the product/service.		
	E3	The live-stream seller has a lot of experience with the product/service.		
	E4	The live-stream seller is likely to see/read a lot of reference sources/materials related to the product/service.		
	E5	The live-stream seller gives viewers information about the product/service.		
Trustworthiness	T1	The live-stream seller will be sincere every time he/she promotes/sells the product/service.	Seven-point Likert scale	Choi and Lee (2019)
	T2	The live-stream seller will not either exaggerate or lie about the product/service.		
	T3	The live-stream seller will not pretend to know about what he/she does not know well about the product/service.		
	T4	The live-stream seller will talk validly and reasonably about the product/service.		

	T5	The live-stream seller will frankly present his/her position, thoughts and opinions about the product/service.		
Purchase Intention	PI1	The probability that I would consider buying the product/service from live-stream seller is high.	Seven-point Likert scale	Peng, Zhang, Wang, and Liang (2019)
	PI2	If I were to buy product/service, I would consider buying it from the live-stream seller.		
	PI3	The likelihood of my purchasing the product/service from the live-stream seller is high.		
	PI4	My willingness to buy the product/service from the live-stream seller is high.		
Purchase Behavior	PB1	I have been purchasing product/service from the live-stream seller within the previous month.	Seven-point Likert scale	Chaudhary and Bisai (2018)
	PB2	The frequency of purchasing product/service from live-stream seller within the previous month.		Chan (2001)
	PB3	The amount spent on live-stream shopping within the previous month.		

Appendix B- Operationalization of the model variables

Variable	Item	Description	Measurement	References
Entertainment Gratification	EG1	I find it entertaining to watch a live video content that sells/promotes product/service.	Seven-point Likert scale	Lim and Ting (2012)
	EG2	I find that a live video content that sells/promotes product/service is fun to watch.		
	EG3	I feel excited when I watch a live video content that sells/promotes product/service.		
	EG4	Watching a live video content that sells/promotes product/service provides me with lots of enjoyment		
	EG5	I have fun when interacting with live-stream seller.		
Informativeness Gratification	IG1	It is important that the live-stream seller is able to give me product/service information that is of interest to me.	Seven-point Likert scale	Lim and Ting (2012)
	IG2	Accurate product/service information from the live-stream seller improves my shopping effectiveness.		

	IG3	Timely information of product/service from the live-stream seller improves my shopping performance.		
	IG4	Product/service information from the live-stream seller that is useful in aiding my shopping decisions is appreciated.		
	IG 5	Product/service information from the live-stream seller that makes it easier for me to compare product/service choices when shopping online is desirable.		
Attractiveness	A1	The live-stream seller is good looking (pretty/handsome).	Seven-point Likert scale	Choi and Lee (2019)
	A2	The live-stream seller has a stylish image.		
	A3	The live-stream seller is very attractive.		
	A4	Others will want to look like the live-stream seller.		
Expertise	E1	The live-stream seller knows about the product/service very well.	Seven-point Likert scale	Choi and Lee (2019)
	E2	It is an undeniable fact that the live-stream seller is an expert on the product/service.		

	E3	The live-stream seller has a lot of experience with the product/service.		
	E4	The live-stream seller is likely to see/read a lot of reference sources/materials related to the product/service.		
	E5	The live-stream seller gives viewers information about the product/service.		
Trustworthiness	T1	The live-stream seller will be sincere every time he/she promotes/sells the product/service.	Seven-point Likert scale	Choi and Lee (2019)
	T2	The live-stream seller will not either exaggerate or lie about the product/service.		
	T3	The live-stream seller will not pretend to know about what he/she does not know well about the product/service.		
	T4	The live-stream seller will talk validly and reasonably about the product/service.		
	T5	The live-stream seller will frankly present his/her position, thoughts and opinions about the product/service.		

Purchase Intention	PI1	The probability that I would consider buying the product/service from live-stream seller is high.	Seven-point Likert scale	Peng, Zhang, Wang, and Liang (2019)
	PI2	If I were to buy product/service, I would consider buying it from the live-stream seller.		
	PI3	The likelihood of my purchasing the product/service from the live-stream seller is high.		
	PI4	My willingness to buy the product/service from the live-stream seller is high.		
Purchase Behavior	PB1	I have been purchasing product/service from the live-stream seller within the previous month.	Seven-point Likert scale	Chaudhary and Bisai (2018)
	PB2	The frequency of purchasing product/service from live-stream seller within the previous month.		Chan (2001)
	PB3	The amount spent on live-stream shopping within the previous month.		