ANTECEDENTS AND CONSEQUENCES OF BEAUTY AND COSMETIC PRODUCTS IMPULSE PURCHASE ON TIKTOK

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BY

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DECLARATION

I hereby declare that:

(1) This undergraduate FYP is the end result of my own work and that due acknowledgment 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) Sole contribution has been made by me in completing the FYP.

(4) The word count of this research report is 18536 words.

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DEDICATION

I would like to dedicate this research study to my beloved family members who have always supported me during the completion of this research project. Their continuous contributions, affection, and care are deeply appreciated.

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SOR	Stimuli Organism Response
IPB	Impulse Purchase Behavior
HB	Hedonic Browsing
UB	Utilitarian Browsing
SP	Sales Promotion
SE	Streamer Expertise
II	Interpersonal Influence
PLS-SEM	Partial Least Square Structural Equation Modelling
R^2	R-Square
β	Standardized Beta
VIF	Variance Inflation Factor
AVE	Average Variance Extracted

PREFACE

This research study is compulsory to be done by Bachelor of International Business (HONS) students in order to complete their degree study at University Tunku Abdul Rahman (UTAR). The title of this research is " Antecedents and Consequences of beauty and cosmetic products impulse purchases on TikTok".

The motivations behind conducting this study are because of the rapid advancement in technology and the tremendous growth of e-commerce. With technology continually evolving, many businesses have started to transform their traditional retail landscape to online platforms. Hence, this transformative trend has significantly impacted consumer behavior within the beauty and cosmetic industry.

Therefore, this study will look into this phenomenon by exploring how stimulus factors such as sales promotion, streamer expertise, and interpersonal influence affect both hedonic browsing and utilitarian browsing, ultimately leading the consumers to exhibit impulsive purchasing behavior, within the context of TikTok.

ABSTRACT

Recently, there has been a notable growth of e-commerce, social commerce, and live stream commerce within the industry, thus Malaysian consumers are increasingly searching for beauty and cosmetic products through their social media platforms. This phenomenon has made social media an important player in encouraging impulsive purchasing behavior. Therefore, this research aimed to identify the factors affecting Malaysian consumers ' impulse purchases during live-streaming shopping. With this aim, a sample of 385 Malaysian consumers who had previously experienced live-streaming shopping was collected via a self-created questionnaire using Google Forms. Proposed hypotheses and data analysis were tested using the SMART PLS 4.

Besides, the study utilized the Stimulus Organism Response as a theoretical model in this study to investigate how sales promotion, streamer expertise, and interpersonal influence impact consumers' hedonic and utilitarian browsing, leading them to make impulsive purchasing behavior.

The findings in this study revealed that there is a significant relationship between all stimulus factors (i.e. sales promotion, streamer expertise, and interpersonal influence) and organism factors (i.e. hedonic and utilitarian browsing), consequently leading to the response factor which is impulsive purchasing behavior. The findings provided valuable insights to assist marketers and practitioners in developing effective social media marketing strategies to encourage Malaysian consumers' impulsive purchasing behavior, thereby potentially enhancing the beauty and cosmetic businesses' profitability and sustainability.

CHAPTER 1: RESEARCH OVERVIEW

1.1 Research Background

In recent years, the development of the Internet network has expanded rapidly and indirectly shifted consumer behavior and lifestyles to people who are actively using Internet facilities that are easily accessed and used, including e-commerce platforms for online purchasing (Wiratama et al., 2021). This transformative trend is evident in Malaysia as well, where the e-commerce market has experienced substantial growth. Supporting this observation based on Figure 1.1, a survey conducted on the frequency of social commerce purchases during the last 12 months in 2023, revealed that there are 37% of the Malaysian respondents stated they frequently shop on social media, while only 15% of the respondents claimed that they never engage in shopping through social media platforms (Statista, 2023). Therefore, this showed that a significant 37% engagement of Malaysians in social media for shopping purposes and making purchases.

It is argued that the difference in consumer behavior and shopping patterns suggests a transition towards a digitalized shopping experience driven by social commerce. It also indicates a significant shift in how Malaysian consumers interact with businesses and make purchase decisions, emphasizing the significant role of social commerce in Malaysia's retail landscape. In turn, this was underlining the necessary for businesses and marketers to adapt and take advantage of this evolving trend.

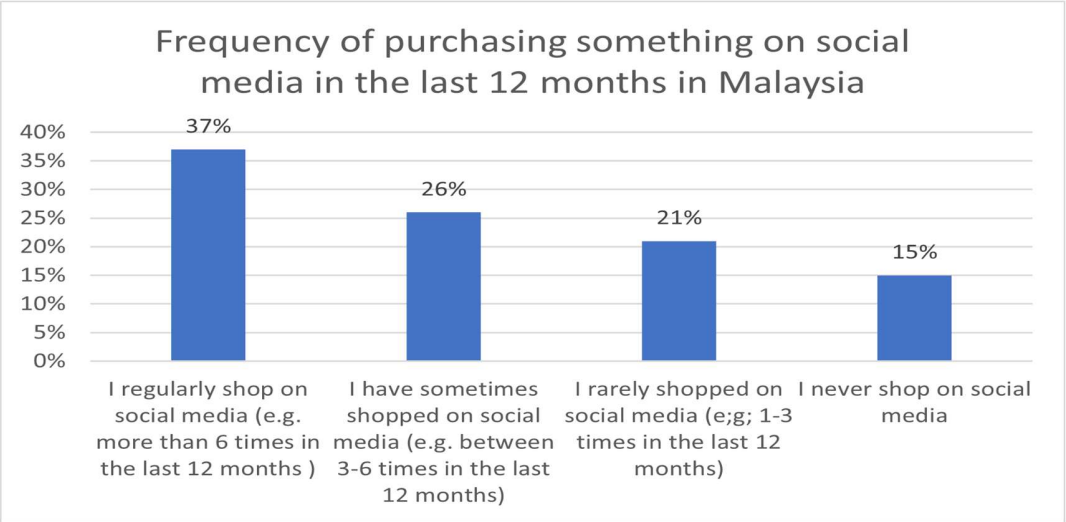


Figure 1. 1: Frequency of purchasing something on social media in the last 12 months in Malaysia as of February 2023 (Source: Statista, 2023)

In Malaysia, TikTok has emerged as one of the most popular social media platforms particularly among younger generations (Howe, 2023). Based on Figure 1.2, in 2023, the largest share of TikTok users falls in the age group of 19-25 years old, constituting approximately 35.61% of the total users. Then, the next significant segment is the age group of 26 to 32 years old, making up about 29.04% of the user base. After that, the age group beyond 32 years old gradually decreases. Hence, this implies that a large portion of TikTok's user base is from the younger generations, highlighting the app's attraction to and influence on today's youth. Additionally based on Figure 1.3, the total potential advertising reach on TikTok in Malaysia reached around 19.3 million users in 2023, a 32 percent growth over the previous year. This suggests the potential of TikTok to influence the shopping behavior of Malaysian consumers and warrants further investigation.

TikTok Shop, a live-streaming social commerce feature, allows users and creators to promote and sell products by making short-form videos and creative content to attract users to make purchases. Beyond mere entertainment, it has been used as an influential tool in sales and marketing, effectively increasing the number of online sales and

encouraging impulse purchasing (Rizqi et al., 2023). Notably, TikTok currently standout among social media platforms by utilizing its advanced computer algorithms and competent big data capabilities to revolutionize the online shopping experience through personalized recommendations, retargeted ads, and the substantial impact of user-generated content and social media influencers on transforming consumer behaviors (Chan & Asni, 2023). Therefore, it can be concluded that social media and digital transformation have changed consumer behaviors and shopping patterns, particularly for the younger generations.

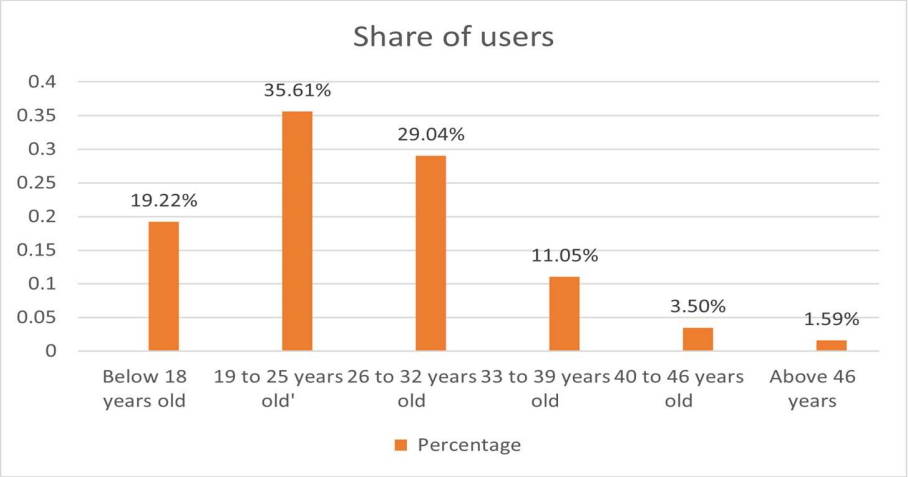


Figure 1. 2: Statistics of TikTok users in Malaysia of June 2023 (Source: Statista ,2023)

Figure 1. 3:Total potential reach of TikTok advertising in Malaysia from 2022 to 2023 (Source: Statista, 2023)

Moreover, with the rapid development of information technology and the tremendous growth of e-commerce, social commerce, and livestream commerce, online impulse purchasing is widespread, fostered by various factors within the context of e-commerce. According to the study by Ye and Ed (2021), approximately 40% of online consumer spending is due to impulsive purchases made online. Impulse purchases, as defined by Salsabila et al. (2023), are unreflective and sudden purchases made by consumers without consideration of the benefits or needs of the products being purchased. Furthermore, Salsabila et al. (2023) found that the emotional trigger that someone cannot control themselves to purchase something without evaluating any negative consequences is the stimulus of impulse purchase behavior. Moreover, Bashar et al.(2022) found that consumers are stimulated by factors such as wide product selection, advanced marketing strategies, easy access, and convenience to online shopping. However, some customers were demotivated to consider online shopping due to the delayed gratification and shipping and refund fees (Bashar et al., 2022). Thus, it has been argued that livestream commerce has given customers more opportunities to make impulsive purchases since it provides them more accessibility to a wider range of products and improves the convenience of carrying out transactions (Hu et al., 2019).

To support this, TikTok has a feature called ‘For You Page” which is also one of the factors that enables the users to be more attentive to calls-to-actions and brand messages from businesses of all kinds. Notably, studies have shown that there are 49% of TikTok users at least purchased a product after viewing at least once the TikTok, underscoring TikTok videos as a distinctive platform for promoting online shopping and encouraging impulse purchases (Barcelona et al., 2022).

Not only that, the COVID-19 pandemic outbreak at the end of December 2019, forced conventional industries like the cosmetic industry to shift traditional commerce towards online commerce and continues to grow due to the increasing trend that demonstrates public awareness of cosmetic products. Due to the large scale of social restrictions, the cosmetic industry experienced the need to update their marketing strategy by using the online system and developing into e-commerce (Mega et al., 2022). Thus, the cosmetic industry has transformed by integrating live streaming features in TikTok and Kuaishou which allows the users to share content, and improve the user interactivity and live demonstrations of cosmetic products (Guo & Sun, 2022). However, previous research has solely focused on studying the factors influencing purchasing behavior for such products and did not consider the possible differences between different types of live-streaming commerce platforms, overlooking the unique features associated with each social media platform (Mega et al., 2022). Thus, it can be shown that the previous research has been less studied on impulse purchases in the beauty and cosmetic industry, especially in the TikTok context.

Lastly, over the years, there are numerous researchers have extensively studied various factors and contexts that influence impulse purchase behaviors in certain industries. These studies could provide invaluable insights for businesses, improving their understanding of the factors that cause consumers to purchase impulsively. However, impulse purchasing behavior in the context of TikTok, especially regarding the beauty and cosmetic industry, remains an underexplored area in Malaysia. Therefore, in order to fill the research and literature gap, this research aims to explore the antecedents and

consequences of beauty and cosmetic products impulse purchases on TikTok, highlighting the fundamental causes of impulse purchasing behaviors and their consequences. It is hoped that this study will be useful for the beauty and cosmetic business and marketers in Malaysia in making their business decisions and determining marketing strategies.

1.2 Problem Statement

The widespread use of social media has led to a rise in impulse purchasing behavior, which is defined as sudden and unplanned purchases (Singh et al., 2023). This phenomenon has particularly significant implications in the beauty and cosmetic industry in Malaysia, particularly in the context of TikTok. Notably, the prior study on impulse purchases in the TikTok live-streaming environment encountered limited geographical coverage, for example, Akram et al. (2023) in China, Ghea et al.(2023), and Mamuaya and Pandowo (2018) in Indonesia. Furthermore, a thorough review of related literature has shown that very little research has been done concerning impulse purchases in the beauty and cosmetic industry, for instance, Akram et al.(2023) suggested the need for future research to explore the factors that motivate the consumers to use mobile commerce platforms to purchase cosmetics. Moreover, the findings regarding the factors such as sales promotion, streamer expertise, and interpersonal influence impact on hedonic and utilitarian browsing are inconclusive, for example, Ghea et al.(2023) and Huang and Suo (2021) did not investigate the effect on hedonic and utilitarian browsing. Therefore, this study intends to identify the critical factors that influence Malaysian consumers to engage in hedonic and utilitarian browsing on TikTok, ultimately leading to impulse purchases within the context of the beauty and cosmetic industry.

Previous studies found hedonic browsing has a favorable impact on influencing impulsive purchasing behavior (Akram et al., 2023.; Nugraha et al., 2023). It is suggested that hedonic web browsing positively influences consumers' cosmetic m-commerce purchase intention, as Chinese consumers find mobile shopping for a cosmetic product by hedonic browsing entertaining and enjoyable (Akram et al., 2023). Moreover, consistent findings indicate that hedonic browsing has a positive and significant effect on reminiscence purchase intention and designed impulsive purchase intention (Nugraha et al., 2023). Nevertheless, a dissenting view was presented by Rani et al. (2023), claiming that hedonic value has no significant effect on impulse purchases. Thus, in order to make validation on that hedonic browsing can affect impulse purchasing behavior, this research will focus on validating the influence of hedonic browsing on impulse purchasing behavior in the Malaysian context.

Utilitarian browsing is also considered a factor that influences impulse purchasing behavior. According to prior research, it verified that utilitarian browsing positively affects consumers' cosmetic m-commerce purchase intention (Akram et al., 2023). It is observed that the consumers who browse with utilitarian motivations tend to make rational decisions based on purely economic criteria, instead of purchasing with hedonic motives (Akram et al., 2023). However, previous studies have suggested that future researchers should make further exploration to understand the factors that encourage consumers to use m-commerce platforms to buy cosmetics. Nevertheless, another research claimed that utilitarian consumers who are prioritizing meeting specific consumption that aligns with their expectations have no direct inclination toward impulsive purchasing behavior (Zheng et al., 2019). Nonetheless, the earlier study solely gathered data on Taobao during the Singles Day Shopping Festival, thus Zheng et al. (2019) were unable to make comparisons between the data collected during the shopping festival and data from outside of the festival period. Thus, in response to the suggestion by Akram et al.(2023) and Zheng et al. (2019), this study validates the effect of utilitarian browsing on consumer impulsive behavior on TikTok in the Malaysian consumer context.

Furthermore, the sales promotion is a potential stimulus that may cause hedonic and utilitarian browsing. According to the study of Ghea et al.(2023), sales promotion has a positive effect on emotions in the form of positive emotions among consumers. When there are offered attractive sales promotions for consumers, this will raise the interest of the consumers to try the product and services. However, previous research in the beauty and cosmetic industry remains limited, and the findings regarding the impact of sales promotion on hedonic and utilitarian viewing are inconclusive. Referring to the study from Mamuaya and Pandowo （n.d), the authors claimed that the more attractive sales promotions, the greater the emergence of hedonic shopping motivation. Both studies were conducted in Indonesia, thus giving potential variations in browsing behavior between Indonesian and Malaysian consumers. Besides, the authors, Montaner and Pina (2008) claimed that discounts in promotions can deliver utilitarian value while gift promotions can provide hedonic value based on consumer perspectives. However, this study has fewer studies investigating the effect of sales promotion on hedonic and utilitarian browsing. In response to these limitations, it is necessary to validate the impact of sales promotion on hedonic and utilitarian browsing in Malaysian beauty and cosmetic products on TikTok.

Other than that, streamer expertise is another crucial factor influencing hedonic and utilitarian browsing. A study conducted by Chen （2022), revealed expertise of streamers plays an important role in shaping consumers' perceptions of both hedonic and utilitarian value. Nevertheless, it is noteworthy that previous research focuses on limited sample sizes, predominantly women and university students. Further, several similar studies have been conducted to investigate the impact of the streamer's expertise on hedonic and utilitarian value, consistently yielding the same outcome such as Guo et al. (n.d.) claimed that expertise appears to be the most crucial factor that could strongly influence both hedonic and utilitarian value. However, the previous study shares a common limitation with Chen （2022), as they only focus on Chinese

consumers which may restrict the findings' generalizability. Therefore, this study attempts to close the literature gaps and examines the impact of streamer expertise on hedonic and utilitarian browsing, from the Malaysian context on TikTok.

Lastly, interpersonal influence is a notable factor affecting consumers to make hedonic browsing and utilitarian browsing. This is due to the reasons that the interaction between consumers and streamers heightens the consumers' excitement, thereby amplifying purchasing behavior (Huang & Suo, 2021). However, prior research has largely focused on consumers of Taobao live streaming which lacks a broader exploration of other online live streaming platforms. Additionally, according to Akram et al.(2023), the authors emphasized that consumers tend to communicate with their friends, and families about the shopping deals such as Black Friday, which can lead to hedonic browsing, while this study also claimed that interpersonal influence has a positive effect on utilitarian web browsing as the China consumers actively seek out the information such as consumer reviews, comments, and suggestions before purchasing cosmetics. Nevertheless, the influence of interpersonal influence in this context was not fully understood in the Malaysian consumer context. Furthermore, according to Zheng et al. (2019), the study concluded that interpersonal influence in mobile commerce had an insignificant effect on consumers' utilitarian browsing. Therefore, it is necessary to fill the research gap by investigating the impact of interpersonal influence on hedonic and utilitarian browsing among Malaysians in the beauty and cosmetic industry, within the context of TikTok.

1.3 Research Questions

TikTok has become one of the distinctive platforms for promoting online shopping and encouraging impulse purchases as the analysis showed that there are 49% of TikTok users at least purchased a product after viewing it at least once the TikTok (Barcelona

et al., 2022). Thus, this study attempts to investigate the factors and consequences of beauty and cosmetic product impulse purchases on Tiktok. Therefore, the following are the main research questions to be addressed in the present study:

- What influence do hedonic browsing and utilitarian browsing have on the impulse purchase of beauty and cosmetics products on TikTok?
- Do sales promotion, streamer expertise, and interpersonal influence influence the hedonic browsing of beauty and cosmetic products on TikTok?
- Do sales promotion, streamer expertise, and interpersonal influence influence the utilitarian browsing of beauty and cosmetic products on TikTok?

Specifically, the following are the research questions:

- Is there a significant relationship between hedonic browsing and impulse purchasing behavior?
- Is there a significant relationship between utilitarian browsing and impulse purchasing behavior?
- Is there a significant relationship between sales promotion and hedonic browsing?
- Is there a significant relationship between sales promotion and utilitarian browsing?
- Is there a significant relationship between streamer expertise and hedonic browsing?
- Is there a significant relationship between streamer expertise and utilitarian browsing?
- Is there a significant relationship between interpersonal influence and hedonic browsing?
- Is there a significant relationship between interpersonal influence and utilitarian browsing?

1.4 Research Objectives

This study attempts to use the SOR model to answer the above research questions. First, it attempts to investigate the impact of hedonic and utilitarian browsing on impulse purchases of beauty and cosmetic products on TikTok. Secondly, it examines the influence of sales promotion, streamer expertise, and interpersonal influence on the hedonic browsing of beauty and cosmetic products. Finally, this study will look into the impact of sales promotion, streamer expertise, and interpersonal influence, influence the utilitarian browsing of beauty and cosmetic products on TikTok. Therefore, the following are the specified objectives of the study:

- To determine the relationship between hedonic browsing and impulse purchasing behavior.
- To determine the relationship between utilitarian browsing and impulse purchasing behavior.
- To investigate the relationship between sales promotion and hedonic browsing.
- To investigate the relationship between sales promotion and utilitarian browsing.
- To examine the relationship between streamer expertise and hedonic browsing.
- To examine the relationship between streamer expertise and utilitarian browsing.
- To investigate the relationship between interpersonal influence and hedonic browsing.
- To examine the relationship between interpersonal influence and utilitarian browsing.

1.5 Scope of Study

The objective of this study is to investigate the influence of stimulus factors (sales promotions, streamer expertise, interpersonal influence) on emotions (hedonic and utilitarian browsing), which lead to impulse purchase behavior for beauty and cosmetic

products among Malaysian consumers on TikTok. Hence, the study's scope is confined to Malaysian consumers aged 18 to 42, who reside in Klang Valley. Besides that, the study explicitly targets individuals who own a smartphone or tablet and a TikTok account. Specifically, the targeted respondents are individual TikTok subscribers, thus the unit of analysis is individual TikTok consumers.

1.6 Significance of Study

Various studies have investigated impulse purchasing behavior in other countries such as Indonesia (Rizqi Febriandika et al., 2023) and China (Wang et al., 2022). Similar studies, particularly the impulse purchase behavior of the beauty and cosmetic products on TikTok within the Malaysian context were found limited. Owing to this, this study aims to fill the research gap by investigating the factors that cause impulse purchasing behavior of Malaysian consumers within the beauty and cosmetic industry on TikTok. The findings of this study significantly contribute to the body of knowledge by providing a better understanding of Malaysian consumer impulse purchases of beauty and cosmetic products on TikTok. Furthermore, the present study also contributes to the model expansion and validation of the existing SOR model in studying consumer behavior on TikTok. In addition, TikTok live-streaming shopping has currently become a phenomenon, this is due to the widespread usage of this platform in performing online sales transactions (Chan & Asni, 2023). Thus, understanding how sales promotion, streamer's expertise, and interpersonal influence affect hedonic and utilitarian browsing, eventually causing impulse purchasing behavior can close the literature gaps, particularly in Malaysian.

In a highly competitive industry, beauty and cosmetic businesses are constantly exploring new marketing strategies to engage and attract consumers. For example, the authors, Darmatama and Erdiansyah (2021) revealed that the percentage of female

Indonesian respondents showed that they are most interested in viewing beauty products based on the statistical data. This phenomenon, supported by statistical data, highlights an ongoing shift in consumer behaviors within the industry. The findings of this study can provide valuable information and practical insights to businesses, practitioners, and marketers in Malaysia's beauty and cosmetic industries in understanding the factors that affect the consumer preferences for hedonic and utilitarian browsing on TikTok which in turn lead to impulse purchase.

CHAPTER 2: LITERATURE REVIEW

2.0 Introduction

This chapter commences with the analysis of social media impulse purchases in the beauty and cosmetic industry relevant to this research. It is followed by a review of the dependent variable, which is impulse purchasing, as well as an investigation of the independent variables, which are sales promotion, streamer expertise, and interpersonal influence, hedonic browsing and utilitarian browsing. The relationship between these variables is explained based on the evidence from the literature review. Furthermore, the theoretical frameworks from previous research will be discussed accordingly. Lastly, the conceptual framework from this research has been developed and subsequently formulated hypothesis development.

2.1 Impact of Social Media Impulse Purchase in the Beauty and Cosmetic Industry

According to Statista (2023), substantial growth has been observed in the beauty and personal care market, especially within the cosmetic segments in Malaysia from 2018 to 2027. Recent industry developments have witnessed a growing fusion of e-commerce, social commerce, and live-stream commerce. Malaysian consumers nowadays frequently discover beauty and cosmetic products through their social media platforms or online shopping apps.

Due to the advancement in mobile technology and internet development, it tremendously changes the human lifestyle. People are increasingly browsing or

exploring information about products through search engines and social networking sites. Singh et al. (2023) have suggested that social media has been an important player in encouraging impulsive purchasing behavior. Refer to Figure 2.1, in 2022, TikTok was the leading social media platform for online beauty product purchases in the United States, with a share of 89 percent of product purchases. Instagram ranked second, with a percentage of 66. It is important to acknowledge the changes in consumer shopping behavior, particularly impulse purchases for beauty and cosmetics products on social media platforms. This is because e-commerce and social commerce make transactions more convenient, and provide consumers with better access to a wider selection of products, thus it has increased the potential of making impulse purchasing (Xi et al. 2016).

The influence of social media platforms and factors driving impulse buying of beauty and cosmetics are challenges for the industry in terms of competitive advantage and sustainability. Understanding the factors and consequences that lead to TikTok impulse buying behavior in the context of Malaysia's beauty and cosmetic industry can provide valuable insights for businesses to build more impact-driven social media business strategies in a highly competitive market.

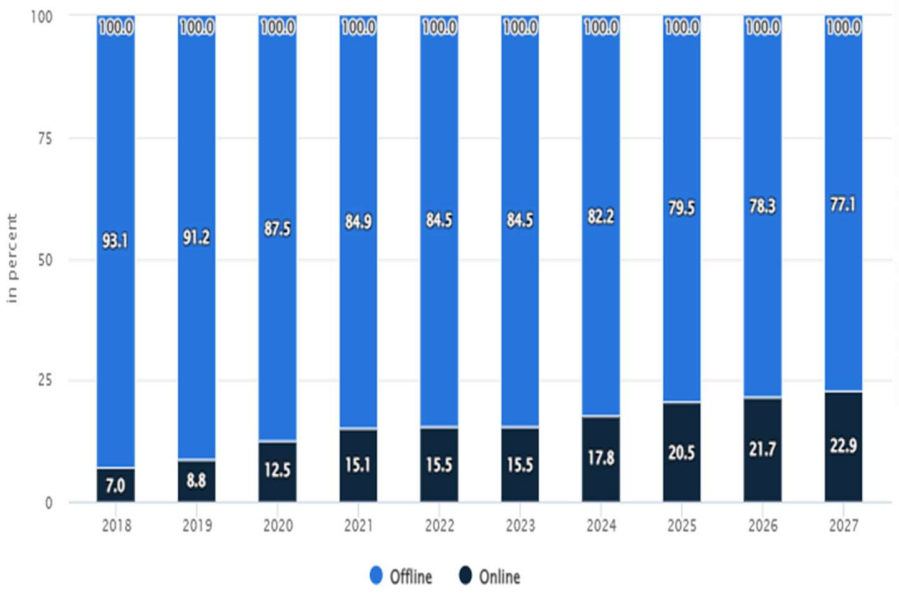


Figure 2. 1: Revenue share in beauty and personal care in Malaysia from 2018 to 2027 (Source: Statista, 2023)

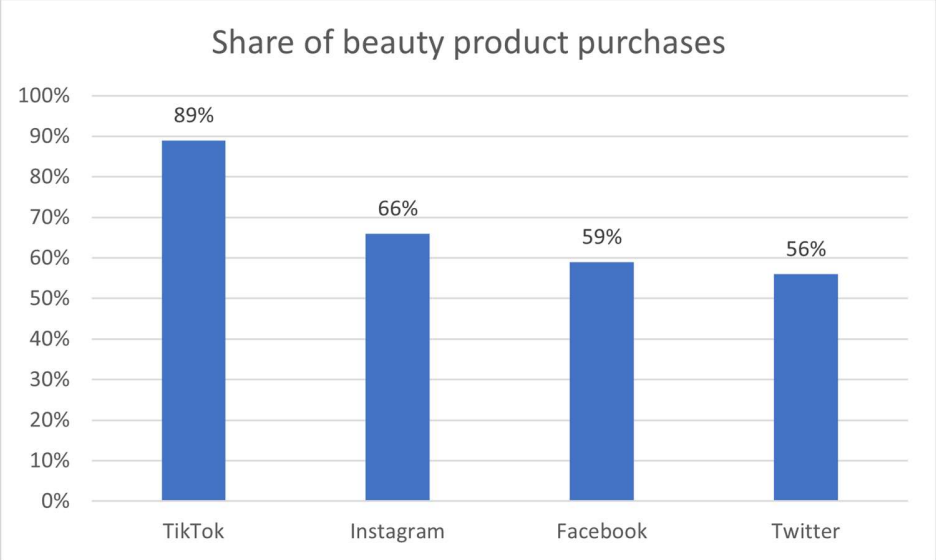


Figure 2. 2 : Leading social media platforms for online beauty purchases in the United States in 2022. (Source: Statista, 2023)

2.2 Variable Conceptualisation

2.2.1 Impulse Purchasing Behavior

According to Widagdo and Roz (2021), impulse purchasing refers to unplanned and unexpected procurement of products and services triggered by a sudden desire or whim. When a consumer feels an unanticipated, powerful, and persistent desire to make a sudden purchase, this is referred to as impulse purchasing (Singh et al., 2023). Likewise, both Ming et al. (2021) and Furnham et al. (2022) characterized impulse purchasing as the act of making spontaneous, unreflective, and immediate purchases.

From a consumer psychology standpoint, impulsive purchasing involves purchasing something immediately when experiencing a strong impulse(Gao et al., 2022). Additionally, Ahmad Moon et al. (2017) stated that impulsive buying is an unplanned behavior characterized by quick decision-making and an instant desire to purchase an item.

In the realm of online shopping, online impulse purchasing is when an unplanned purchase is made impulsively in direct response to a stimulus (Li et al., 2022). Additionally, Cavazos-Arroyo and Máynez-Guaderrama (2022) similarly define it as unexpected and unplanned purchases. Xi et al. (2016) suggested that e-commerce's convenience and broader product accessibility have amplified the potential for impulse purchasing. Chen et al. (2021) further explained that impulsive purchasing behavior is a sudden and overwhelming desire to buy something that surpasses one's ability to exercise self-control. They also highlight that individual-level factors, such as finances, availability of time, and self-discipline can influence impulsive purchases (Chen et al., 2021). Whereas, external factors such as discounts, peer pressure, store layout, and customer behavior can trigger impulsive purchasing behavior (City, 2021). Nonetheless, there are differences in making impulsive purchases in online and offline stores, noting customers exhibit greater levels of impulsive purchasing behavior in physical stores due to their immediate possession or consumption (Pallikkara et al. 2021).

In this study, impulse purchasing behavior is defined as a person acquiring a product or service immediately when experiencing a strong impulse.

2.2.2 Hedonic Browsing

Hedonic browsing is described as emphasizing the fun and entertaining aspects of shopping, even without making a purchase (Barry et al., 1994; Park et al., 2012). It aims to provide a delightful experience, where the consumers explore various items purely for enjoyment (Akram et al., 2023).

The hedonic browsing experience involves finding joy and enjoyment while exploring a website (Chen et al., 2020). For example, diverse category-level website pages enable online consumers to engage in hedonic browsing seeking diversion, pleasure, and enjoyment (Karim et al., 2021). Therefore, this form of online shopping provides hedonic value by providing enjoyment, excitement, and a sensation of escape because the consumers feel it gives them a break from their daily routines (Guo et al., 2022). On the other hand, hedonic browsing behavior can be raised by price (Yi & Jai, 2020). This is because consumers enjoy seeking bargains or fair deals, reflecting the hedonic aspect of their economic perceptions (Park et al., 2012). Therefore, hedonic browsing on social media websites could be linked to hedonic shopping value.

In mobile commerce, hedonic browsing refers to the consumers prioritizing the enjoyable, entertaining, and delightful aspects of shopping behavior through browsing the website (Zheng et al., 2019). Hedonic shopping value is intrinsically more emotional and individualized, arising more from the enjoyment and entertainment aspects of an experience than from a task's completion (Barry et al., 1994).

However, customers often stick to their favorite stores to make their browsing more manageable when it comes to hedonic browsing (Melewar, 2015).

Conversely, Moe and Fader (2001) stated that hedonic browsing visit involves consumers enjoying the process without necessarily seeking anything specific. In this study, hedonic browsing is defined as enjoyment, excitement, and escapism through browsing on TikTok.

2.2.3 Utilitarian Browsing

Utilitarian browsing refers to rational, efficient, and intentional web exploration in online shopping (Chen et al., 2020). According to Park et al. (2012), utilitarian browsing is defined as the process of getting products through the use of heuristics, a goal-oriented process aimed at reducing risks and achieving information search objectives when obtaining products. In terms of online fashion apparel shopping, utilitarian browsing refers to purposeful shopping. It involves using shortcuts to minimize risks by actively seeking relevant information. (Wadera & Sharma, 2018).

Likewise, Zheng et al. (2019) have mentioned that utilitarian browsing is distinguished by its emphasis on attaining specific goals, with customers actively applying risk-aversion strategies and seeking purchase-related information. This customer behavior aligns with the characterization of utilitarian consumers as rational problem-solvers, prioritizing value and emphasizing savings and convenience in their purchasing decisions (Parsad et al., 2021; Barry et al. 1994).

Notably, utilitarian browsing extends beyond traditional online shopping and encompasses social media platforms. On social media, customers engage in utilitarian browsing by actively seeking desired information (Kimiagari &

Asadi Malafe, 2021). For example, consumers can easily make comparisons on the price of a variety of suppliers, which can lead to utilitarian browsing for purchases (Park et al., 2012). Additionally, Lavuri (2023) suggests that the utilitarian components, such as ease of use play a pivotal role in facilitating comparisons of products or prices in online shopping. Therefore, utilitarian value is the evaluation of functional benefits and tradeoffs, and it is important for task-specific online shopping, such as product feature consideration and pricing evaluation before making a purchase (Rani et al., 2023).

Meanwhile, Hsu and Lin (2016) refer to utilitarian value as the degree to which an individual believes that utilizing an app increases their capacity to do activities, while Guo et al.(2022) regard it serves as the core framework for investigating the multidimensional feature of consumer-perceived value. In this study, utilitarian browsing is defined as the method of acquiring products by employing goal-driven strategies that minimize risks and achieve information search objectives.

2.2.4 Sales Promotion

Sales promotion is defined as the products offered with special incentives and discounts, making shopping at supermarkets economically beneficial for customers (Karim et al., 2021). These sales promotions greatly influence consumers' purchasing behaviors by incorporating promotional activities such as price packs, contests, bonus packs, loyalty programs, discounts, free products, coupons, and promotional signs (Karim et al., 2021; Zeng, 2011). Likewise, Zheng et al. (2023) defined sales promotion as flash sales, discounts, coupon usage, prize draws, or any special offers.

Zeng (2011) emphasizes the short-term impact of sales promotion and its crucial role in consumer purchasing decisions. Notably, sales promotion has evolved into a powerful online marketing tool, effectively disseminating product information, and contributing to product promotion and broader strategic marketing goals. This evolution aligns with the perspectives of Prasasti Sekar Asrinta (2018) and Reddy and Basha (2018) who underscore that sales promotion serves as a short-term incentive designed to boost the sales of products and services.

Furthermore, sales promotion can be known as incentives used to encourage products and service purchases, and it usually forms a part of the company's marketing and communication plan (Ahmad Musadik & Abdul Ghani Azmi, 2020). However, Purnamasari and Murwatiningsih (2015) emphasize that sales promotion serves not just as a means of communication, but as the potential to influence their purchasing decisions. Consumers exhibit immediate interest in products or services when attractive sales promotions are available (Ghea Septia Atika Refasa et al., 2023; Andani & Wahyono, 2018). Moreover, sales promotion is a form of direct persuasion by using diverse incentives to prompt immediate or bulk purchases. (Tjiptono , 2016). Hence, sales promotion is a short-term incentive program designed to encourage expedited purchases by both retailers and customers (Gardi & Darmawan,2022).

In this study, sales promotion is defined as short-term marketing initiatives that offer discounts or deals to customers in order to encourage immediate purchase, aiming to change consumer behavior.

2.2.5 Streamer Expertise

Expertise can be referred to as a considerable level of ability and knowledge that can attract and engage customers (Lee & Chen, 2021). Mayer et al.(1995) characterize expertise as a combination of knowledge, skills, and competencies that empower an individual's influence within a specialized field. Erdoğan (1999) emphasizes that expertise is the perceived reliability in the context of information sources. Furthermore, expertise involves being skilled, experienced, reliable, and qualified in promoting a brand or product (Chiu & Ho, 2023). The expertise of a communicator can be reflected through knowledge and professional experiences (Jaitly & Gautam, 2021).

In live streaming commerce, a deeper assortment of streamers contributes a sense of expertise among customers seeking products (Yang et al., 2023). Streamer's product-related expertise effectively satisfies the customers' needs by fostering their cognitive involvement in perceiving the product's usefulness (Chen & Liao, 2022). Hence, expertise is esteemed for its ability to streamline and present product information in a useful, reliable, and accurate manner, because it reduces the viewer's efforts to digest product information (Guo & Sun, 2022). Additionally, these expertise signals significantly boost the promotion of search items (Yang et al., 2023).

Consumers perceive the expertise of live streamers based on their knowledge, experience, and achievements in live streaming or sales of related products (Guo et al., 2022). Thus, Li & Peng (2021) claimed that streamer expertise is also known as 'authoritativeness' as it involves knowledge, experience, and capabilities. Meanwhile, Liao et al. (2023) claimed streamer expertise as the skill, knowledge, or ability of the live streamer. In short, expertise in live

commerce indicates possessing the necessary skills, experience, or knowledge required for effective product promotion (Lin & Nuangjamnong, 2022).

In this study, expertise is defined as the streamer's experience, knowledge, and ability to interact with the customers and provide accurate and reliable product information that affects consumer behavior in the context of live streaming commerce.

2.2.6 Interpersonal Influence

Interpersonal influence is a fundamental aspect of interpersonal communication, involving information exchange in personal interactions between mutually acquainted individuals (Alfisyahr & Devita, 2019). Akram et al. (2023) describe interpersonal influence as the impact of another person's influence on shaping an individual's attitudes, beliefs, or actions. Putra et al. (2020) further emphasize that interpersonal influence encourages consumers to seek acceptance and cohesion within their social circles, often leading to sudden impulsive purchases.

Bekoglu et al. (2016) emphasize interpersonal influence's critical role in consumer behavior, driving new product acceptance and innovation dissemination. Sharma and Klein (2020) categorize interpersonal influence into two categories which are normative influence, and informational influence. Normative influence indirectly shapes attitudes, behaviors, and purchasing choices to align with the group norms, while informational influence indirectly impacts people's understanding and assessment of products and services (Sharma & Klein, 2020). Additionally, Ahmad Moon et al. (2017) describe

informational influence as the tendency to believe that information received from other individuals accurately represents reality. Further, Huang et al. (2017) elucidated that informational influence can manifest in two ways such as either by asking knowledgeable people for information or by observing how others behave to conclude purchasing decisions.

The offering of rewards and coupons in online shopping encourages customers to share their shopping experiences with friends and family, amplifying interpersonal influence (Yang et al., 2021). Furthermore, engaging in online communities and social networks facilitates a seamless exchange of brand experiences and discussion (Bekoglu et al., 2016). Therefore, leveraging incentives and active engagement in online communities amplifies interpersonal influence in online shopping. Thus, both online and offline interpersonal influence plays a significant role during the information-seeking phase of the consumer purchasing decision process (Scaraboto et al., 2012; Bekoglu et al., 2016).

In this study, interpersonal influence is defined as a multifaceted process shaped by external factors such as opinions, behaviors, and expectations, molding an individual's attitudes, beliefs, and purchasing decisions. It encompasses normative influences, which strive for consistency and value expression, alongside informational influences, relying on the perceived reliability of external information sources.

2.3 Hypotheses Development

2.3.1 The Relationship between Hedonic Browsing and Impulse Purchasing Behavior

Zheng et al. (2019) have confirmed that there is a significant relationship between hedonic browsing and the urge to buy impulsively in m-commerce during the Singles Day shopping festival. Their study emphasized that hedonic browsing revolves around experiencing entertainment and excitement through browsing the website. This emphasis on enjoyable, fun, and delightful aspects of purchasing behavior significantly impacts consumers' impulse purchasing tendencies. Zheng et al. (2019) asserted that hedonic motivation plays a crucial role in shaping an individual's behavior intention, particularly among experiential buyers who are more likely to engage in an activity or embrace a technology when they have experienced immediate pleasure or satisfaction from it. Thus, Zheng et al. (2019) have asserted the relevance of hedonic motivation in understanding consumer behavior, especially within the context of mobile commerce.

Furthermore, Mamuaya and Pandowo (2018) confirmed that hedonic shopping motivation has a significant effect on impulsive purchasing. They observed that hedonistic consumers are less constrained by financial and time considerations, leading to a natural inclination towards impulsivity. This inclination can be caused by the hedonistic individuals' tendency to actively seek out new experiences, variety, and excitement. Consequently, Mamuaya and Pandowo (2018) concluded that consumers who prioritize hedonic value tend to find it easier to make purchases compared to those who prioritize utilitarian value.

In the context of e-commerce in China, it has been proven that there is a significant relationship between hedonic browsing and cosmetic m-commerce

purchase intention (Akram et al., 2023). The prior study has shown that Chinese consumers exhibit greater involvement in online cosmetic purchases through mobile platforms, primarily motivated by the entertainment and experiential aspects of hedonic browsing. However, Rani et al. (2023) found that hedonic value has no significant effect on impulse purchasing. They argued that married women often take on the role of household financial managers, thus they need to balance multiple considerations when making purchases, which extend beyond mere entertainment and exploration. Their research also highlighted that considerations such as the delayed gratification of product reception, the inability to engage all senses, and the expenses associated with shipping or return costs play a critical role in their decision-making process.

In conclusion, previous studies have had inconclusive results. Therefore, it is necessary to re-validate this relationship and propose that hedonic browsing significantly affects impulse buying behavior.

Hypothesis 1: There is a significant relationship between hedonic browsing and impulsive purchasing behavior.

2.3.2 The Relationship between Utilitarian Browsing and Impulse Purchasing Behavior

Utilitarian browsing is defined as the process of acquiring a product by employing heuristics, goal-oriented actions, and risk mitigation strategies while fulfilling information search objectives (Park et al. 2012). Akram et al. (2023) have argued that utilitarian browsing has a significant effect on

influencing cosmetic m-commerce purchase intention. This outcome can be related to the consumers with utilitarian goals typically seeking rational, economic, or functional benefits and they have specific purchasing goals.

Likewise, in the context of live-streaming commerce in China, it has been proven that consumers' perceived utilitarian value has a positive relationship with impulse purchasing behavior (Chen, 2022). Chen (2022) justified that during the live streaming session, the streamer introduces and demonstrates products, particularly in the case of technology products, allowing the consumers to experience products firsthand and potentially leading to impulse purchases driven by the streamer's recommendation.

However, Zheng et al. (2019) argued that utilitarian consumers driven by utilitarian motives, prioritizing the meeting of their consumption expectations were less inclined towards impulse purchasing. They concluded that there is an insignificant relationship between utilitarian browsing and impulse purchasing behavior. Furthermore, Rani et al. (2023) also claimed that they no significant relationship between utilitarian value and impulse purchasing on TikTok. This is because Rani et al. (2023) justified that TikTok predominantly serves as an entertainment medium rather than focusing on convenience and savings in shopping, prompting users to switch from one video to another. In addition, they also highlighted that users show a preference for video offering information, news, or entertainment over live streaming that primarily involves product marketing.

As discussed above, there is no conclusive finding for this relationship. Therefore, in the context of this study, there is an urgent need to verify the significant impact of utilitarian browsing on impulse purchasing behavior.

Hypothesis 2: There is a significant relationship between utilitarian browsing and impulsive purchasing behavior.

2.3.3 The Relationship between Sales Promotion and Hedonic Browsing

Sales promotion is defined as the short-term utilization of incentives or promotional tactics to prompt customer purchases (Reddy & Basha, 2018). Furthermore, Tjiptono (2016) characterizes sales promotion as direct persuasion through various incentives designed to instantly boost product sales. Notably, the various promotions such as price discounts, rebates, coupons, and loyalty rewards, have a stronger positive effect on hedonic purchases (Kivetz & Zheng, 2017). Kivetz and Zheng (2017) also justified that discount promotions without the need for additional product purchases can effectively stimulate hedonic purchases. Therefore, they confirmed that promotions exert a more significant positive impact on the purchase of hedonic.

Mamuaya and Pandowo (2018) confirmed that there is a significant relationship between sales promotion and hedonic shopping motivation as they highlighted that the more attractive sales promotion, the higher the hedonic shopping motivation. They also argued that consumers perceived hedonic value as a motivating factor that encourages them to make purchases to fulfill their emotional satisfaction. In addition, Parsad et al. (2021) claimed that promotion-focused consumers demonstrate a stronger inclination to alleviate their negative moods, while this mood repair significantly influences the perceived value of hedonic shopping experiences.

Meanwhile, Montaner and Pina (2008) argued sales promotions can raise hedonic advantages by providing amusement and boosting self-esteem. Similarly, Jee (2021) also highlighted that consumers can get a feeling of excitement generated by a price promotion. Therefore, their studies confirmed that sales promotion impacts consumer purchase decisions through hedonic benefit perceptions which can be driven by the typical experiences that are associated with the satisfaction of obtaining a favorable deal. Additionally, Park et al. (2012) highlighted that consumers driven by hedonic motives are more price-sensitive, indicating the importance of pricing in motivating hedonic web browsing. Their study confirmed that sales promotion could significantly affect hedonic browsing. Furthermore, Nugraha et al. (2023) argued that incentives such as promotions such as price discounts, and shipping rebates will stimulate the consumers to make hedonic browsing. Nugraha et al. (2023) claimed that in-store promotions have a significant impact on hedonic browsing.

In light of these perspectives, this study proposes that sales promotion has a significant effect on hedonic browsing.

Hypothesis 3: Sales promotion has a significant relationship with hedonic browsing.

2.3.4 The Relationship between Sales Promotion and Utilitarian Browsing

Montaner and Pina (2008) argued that discounts offered through sales promotion can provide utilitarian benefits to consumers by maximizing

utilitarian value, such as usefulness, efficiency, and cost-effectiveness of their purchases. Their study has proven that sales promotion can provide utilitarian value to consumers.

Furthermore, Magdy Elgayed and Taher Attia (2023) also asserted that sales promotion has a significant effect on utilitarian browsing. They highlight that encountering limited yet compelling sales promotions while the consumers were browsing social media. These promotions, such as " Buy one get one on selected items" or "Don't miss this offer," enticed utilitarian browsers to explore and compare the offerings of the online platforms, which led them to click through to respective websites. Hence, their findings confirmed that there is a significant relationship between sales promotion and utilitarian browsing.

Likewise, Park et al. (2012) asserted that the facilitation of utilitarian browsing through sales promotions enables consumers to easily compare prices among various sellers. Furthermore, they also argue that consumers prioritizing price sensitivity tend to exhibit rational and logical shopping behavior and place greater emphasis on utilitarian shopping benefits. In the same vein, Jee (2021) claimed that sales promotion impacts the consumer purchase decision through utilitarian benefit perceptions as they argue that when price promotions are integrated into purchase decisions, the desire for utilitarian perceived goods increases.

As discussed above, sales promotion is posited to have a significant impact on utilitarian browsing on TikTok. Thus, this study proposes:

Hypothesis 4: Sales promotion has a significant relationship with utilitarian browsing.

2.3.5 The Relationship between Streamer Expertise and Hedonic Browsing

Expertise is defined as a significant degree of skill or knowledge that has the potential that stimulate consumers (Lee & Chen,2021). Chen (2022) has confirmed that expertise has a significant effect on consumers' perceived hedonic value. In the context of live streaming in China, expertise refers to extensive knowledge and skills displayed by streamers, which enables the viewers to visually assess the product's features (Chen,2022). For instance, through fashion walks or engaging presentations, streamers involve viewers in an enjoyable and entertaining experience. Therefore, Chen (2022) argued that expertise is the most important factor as it has a significant impact on perceived hedonic value.

Likewise, Guo et al. (2022) also argued that expertise emerges as the most important factor that has a significant impact on hedonic value. Streamer's skills and knowledge contribute to an engaging product introduction, exemplified through various interactive methods like trying on products or presenting them in captivating ways, such as cat-walk style presentations. These engaging experiences, crafted through expertise able to provide consumers with an enjoyable and engaging experience. However, Li & Peng (2021) have different points of views and claimed that expertise does not influence emotional attachment. In other words, hedonic value might not be directly correlated with expertise. This is because the users prioritize the entertaining aspect of live streaming rather than the streamer's expertise, which implies a potential disconnect between expertise and the emotional connection viewers

establish. Thus, Li & Peng (2021) argued that streamer expertise has an insignificant relationship with hedonic value.

In summary, the results of previous studies are inconclusive. Therefore, it is necessary to re-validate this relationship. This study proposes that a streamer's expertise can significantly influence hedonic browsing, particularly within the context of TikTok.

Hypothesis 5: Streamer expertise has a significant relationship with hedonic browsing.

2.3.6 The Relationship between Streamer Expertise and Utilitarian Browsing

Expertise is argued to be a crucial factor significantly impacting consumers' perceived utilitarian value (Chen, 2022). Within live streaming contexts, Chen (2022) proved that the expertise of the streamer has a significant effect on utilitarian value. They justified that a streamer's knowledge and product details during broadcasts, and expertise become a key attribute that influences consumer attitudes and behaviors.

Meanwhile, Guo et al. (2022) also highlighted that customers evaluate a streamer's skill level based on various attributes, including knowledge, experience, and achievements in live streaming sessions. The streamers' extensive product expertise enables them to suggest products that align with customer needs. In addition, they also highlighted that the streamer with high

expertise can significantly minimize the consumers' efforts in product searching, evaluating, and making decisions. Thus, this study has confirmed that streamer expertise has significantly affected the utilitarian value perceived by consumers.

In addition, Hu et al. (2016) argued that expertise represents the logical and rational facet of reliability, enhancing an individual's utilitarian value as expertise plays a crucial role as an individual's quality directly affects their usefulness to others. Likewise, the consumers would regard the relationships and interactions on the website as beneficial due to the potential for receiving useful information when the consumers believe that other participants are on social shopping websites. Therefore, this study proposes that a streamer's expertise can significantly influence utilitarian browsing within the context of TikTok.

Hypothesis 6: Streamer expertise has a significant relationship with utilitarian browsing.

2.3.7 The Relationship between Interpersonal Influence and Hedonic Browsing

Interpersonal influence is described as an individual being influenced by another person in terms of attitudes, beliefs, or behaviors (Akram et al., 2023). Akram et al. (2023) confirmed that interpersonal influence can significantly affect hedonic browsing. They justified that consumers who are inclined to seek recommendations and advice from other people are aligned with hedonic shopping values, actively engaging in hedonic browsing. For example, the

consumers will often engage in discussion about the shopping offers with their friends, and families, leading to the stimulation of hedonic browsing.

Likewise, Zheng et al. (2019) concluded that consumers' direct interactions with store staff can positively affect the hedonic perception of consumers and confirmed that interpersonal influence has a significant effect on hedonic browsing. Furthermore, Jasman et al. (2023) argued that consumers, especially teenagers tend to engage in discussions with friends about preferred products and discounts, which lead to hedonic value before events such as the 'China Single Day Shopping Festival" take place. Thus, both studies have confirmed that a higher interpersonal influence enhances hedonic browsing. Meanwhile, Nazirah et al. (2022) also claimed that high interpersonal influence will enhance someone's hedonic browsing motivation as an individual's shopping attitude can be shaped by the viewpoints of those they trust. Thus, they concluded that interpersonal influence has a significant effect on hedonic browsing. In the context of Taobao, it has been proven that interpersonal influence has a significant impact on hedonic browsing (Nazirah et al., 2022). Therefore, this study proposes that interpersonal influence can significantly impact hedonic browsing.

Hypothesis 7: Interpersonal influence has a significant relationship with hedonic browsing.

2.3.8 The Relationship between Interpersonal Influence and Utilitarian Browsing

Akram et al. (2023) and Mufadhzil and Alversia (2021) confirmed that interpersonal influence has a significant effect on utilitarian browsing. They argued that consumers focused on achieving shopping objectives and seeking information to pursue the utilitarian shopping value. Akram et al. (2023) note that Chinese consumers refrain from purchasing cosmetics without reviewing customer feedback, comments, or recommendations, as it is impossible to determine a product's efficacy without prior use.

However, Zheng et al. (2019) study found that there is an insignificant relationship between interpersonal influence and utilitarian browsing. This is because consumers with utilitarian motives typically have a specific shopping objective and are not easily influenced by others. In addition, they found that the interpersonal influence of m-commerce on the Single Days shopping festival has a negative effect on utilitarian browsing. The finding indicates that the direct interaction with the store employees had a negative effect on their utilitarian perception. In addition, Zheng et al. (2019) asserted that consumers gain a sense of enjoyment when they engage in discussions about their purchase intentions with others instead of gaining utilitarian value.

As discussed above, there is no conclusive finding for this relationship. Therefore, in the context of this study, there is an urgent need to verify the significant impact of interpersonal influence on utilitarian browsing.

Hypothesis 8: Interpersonal influence has a significant relationship with utilitarian browsing.

2.4 Underpinning Theory: Stimuli Organism Response Model (SOR)

The S-O-R framework is the most often used theoretical underpinning in research on impulsive online purchases (Rani et al., 2023). In addition, Lee and Chen (2021) stated that the S-O-R model represents an environmental stimulus that influences an individual's cognitive and affective response, and it is used to investigate customers' behavior in response to various retail stimuli that are mediated by an organism, also known as emotional reactions.

The S-O-R framework consists of three components such as stimulus, organism, and response. Stimulus is defined as a component that can influence a consumer's cognitive and affective or emotional processes (Akram et al., 2023). According to Rani et al. (2023), stimulus acts as a catalyst, arousing customer interest or response, and it has two forms of stimuli which are internal and external. External stimuli can be marketing or situational, while internal stimuli are customer traits. Furthermore, Lee & Chen (2021) have highlighted that stimulus refers to the cues that elicit people's perceptions, and subsequently shape their reactions, and it is defined as time and place-specific elements that do not follow from knowledge of personal stimulus features, which have a clear and systematic effect on current behavior.

Organism is a person's inner condition that is accelerated by affective and cognitive drives (Akram et al., 2023). It also serves as a motivator between the stimulus and the response. According to Zheng et al. (2019), the cognitive state involves engaging with existing information through a process, whereas emotional states include people's experiences or emotions, such as joy and happiness. Therefore, 'organism' refers to a consumer's emotional state, overall perception, physiological responses, and thinking processes (Nugraha et al., 2023).

Response refers to the result of customers' reactions to impulse buying stimuli as well as their internal appraisals (Lee & Chen, 2021). Akram et al. (2023) asserted that response represents an individual's perceived reaction influenced by situational elements, in which mediating regulating factors translate environmental stimuli into behavioral responses, which are then exhibited in consumer behavior connected to technology adoption or rejection. Thus, 'response' is described as the final judgments and acts that result from affective and cognitive states, and it encompasses three forms of consumer behaviors in e-commerce such as purchase intention, unplanned purchase intention, and intention to return (Ming et al., 2021). Zheng et al. (2019) added consumer response can be categorized into two stages in the impulse purchasing process which are the urge to buy impulsively, and the actual impulse purchase. However, prior researchers are reluctant to use actual behaviors as their response in the study due to the behavioral intentions are the substitution of actual behaviors in marketing research, and it has been a challenge to observe the actual behaviors in a controlled environment, as stated by Zheng et al. (2019).

Yang et al.(2021) highlighted the S-O-R framework provides a structured way to explore how various environmental stimuli in m-commerce influence customer perceptions, both cognitively and emotionally, resulting in affecting impulsive purchasing behavior. Zheng et al. (2019) explained that a stimulus will trigger an individual's perceptions, which will then influence their response, leading to either an approach or avoidance behavior. Furthermore, based on the study from Huo et al. (2023), the S-O-R model was adopted to examine the influencing mechanism of live-streaming impulse purchasing behavior.

2.5 Proposed Conceptual Framework

This study adopted the S-O-R model to better explain the reasons for consumers' impulse purchase behavior through TikTok. According to Wiratama et al. (2021), SOR plays a significant role in impulse purchasing behavior, since purchasing is easily influenced by stimuli and encouragement from a person. Hence, the S-O-R model was applied to analyze the stimuli influencing consumer behavior concerning social commerce, e-commerce, and live-streaming commerce.

Figure 2.3 shows the conceptual framework developed for this study. The stimulus in this study includes sales promotion, streamer expertise, and interpersonal influence. Hedonic browsing and utilitarian browsing are defined as the organism factors, while impulse purchasing behavior represent the response. It is positing that, sales promotion, streamer expertise, and interpersonal influence are the stimuli that affect hedonic browsing and utilitarian browsing and then they shape the impulse purchasing behavior.

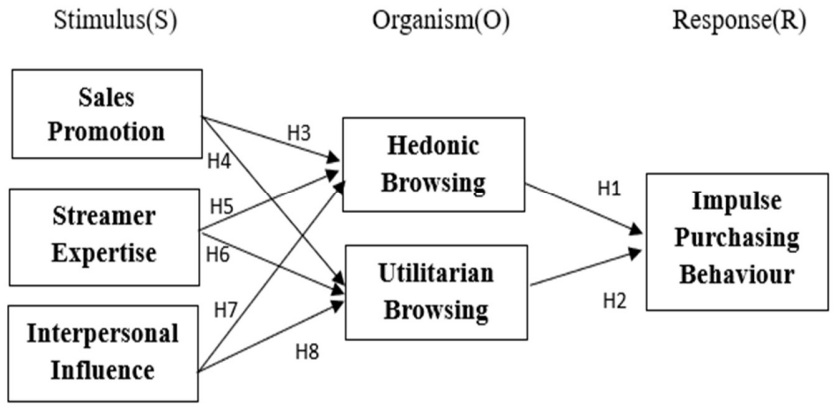


Figure 2. 3: Proposed Research Framework

CHAPTER 3: RESEARCH METHODOLOGY

3.0 Introduction

Chapter Three concentrates on the formalized process of conducting research, which underpins the study. To begin, the research design, data collection method, and sampling design will be addressed. Following that, the research instrument and construct measurement applied in the questionnaire will be explored. The final section will discuss the data processing and analysis methods implemented in this study sequentially.

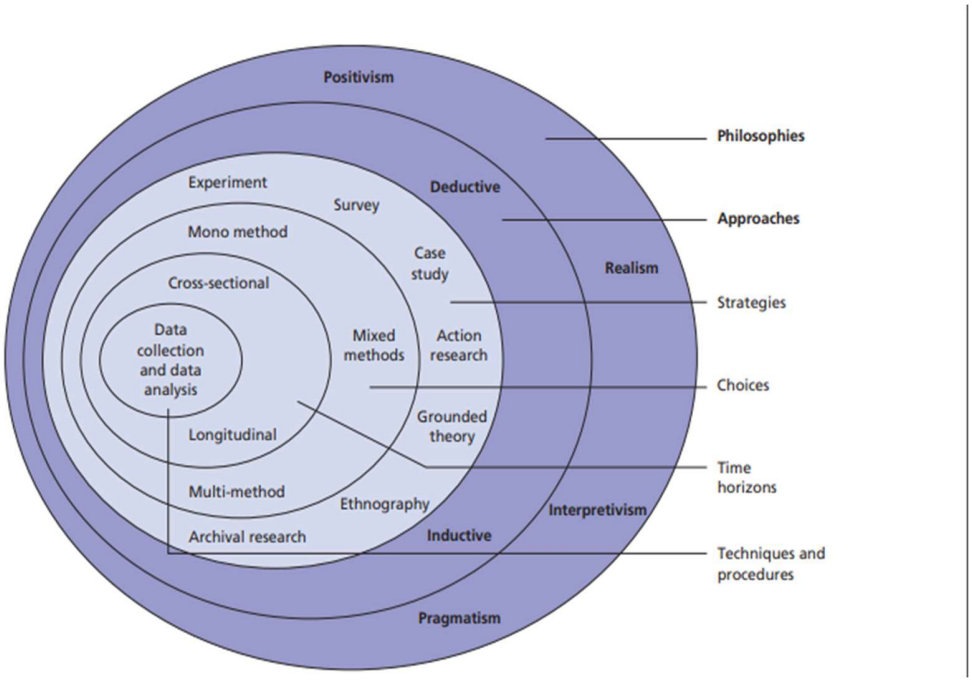
3.1 Research Philosophy

Based on Figure 3.1, research philosophy is the foundational layer of the research onion. It serves as an overarching term that pertains to the development of knowledge and its nature. The chosen research philosophy involves critical assumptions about our worldview, serving as the foundational basis for the research strategy and methodology. While the research philosophy adopted will be influenced by the practical considerations. However, the primary influence is typically our view of the relationship between knowledge and the process through which it evolves.

Positivism is a research philosophy that aligns with natural science which involves the analysis of observable features of social reality to produce generalizations with traits akin to scientific laws (Saunders et al., 2019). Positivism theory asserts that positive

knowledge arises from the examination of natural phenomena and their interrelationships. Thus, this knowledge is derived from sensory experiences through reason and logic (Binu Joseph, 2012). The research philosophy for this study is aligns with positivism.

FIgure 3. 1: Research Onion



Source: Saunders, M., Lewis, P., & Thornhill, A. (2019). Research Methods for Business Students, Fithh Edition, Prentice Hall. In *Research Methods for Business Students* (Issue January).

3.2 Research Design

According to Helen (2015), a research design serves as a structured framework or blueprint specifically devised to answer the research questions and to manage the variability. It typically falls into one of four categories based on the purpose of the research such as descriptive, correlational, quasi experimental, or experimental. This research incorporates data collection, measurement, and analysis, which will be carried out in the later subsection to validate the research question. Furthermore, research design is described as encompassing the approach used to conduct research, including participant recruitment and assignment, implementation of experimental methods, and the processes of data collection, analysis, and interpretation. In addition, research designs can be categorized into experimental and non-experimental (Rosenstein, n.d.).

According to Goldberg (2016), quantitative research is defined as a spectrum of methods focused on systematically studying social issues using statistical or numerical data and it aims to analyze data for trends, and correlations and to verify the measurements. Bhandari (2023) defined quantitative research as the process of collecting and assessing numerical data that can be used to identify patterns, make predictions, examine cause-and-effect connections, and extrapolate findings to a broader population. There are few quantitative research methods such as experiments, surveys, and secondary research. Therefore, quantitative research is conducted in this study by collecting data through distributing questionnaires. The reason is that the current analysis includes the numerical calculation where figures are used to summarize the results by sending the questionnaire through online self-reported Google form to our respondents.

In addition, cross-sectional research has been conducted in this study. A cross-sectional study is an observational research, where both the exposure and the outcome are assessed simultaneously for each participant. These studies are comprised the simple individual-level observational and are often more cost-effective and easy to conduct (Pandis, 2014). Besides that, by identifying the associations between various exposures

and outcomes, researchers can formulate hypotheses about potential causal relationships. A significant reason for utilizing cross-sectional studies is the absence of loss to follow-up. Since the data is gathered from participants at a single time point, therefore there is no need to track the individuals over the period and remain as the representative of the target population (Levin, 2006).

3.3 Sampling Design

Sampling design refers to a mathematical process that determines the probability of choosing any given sample from a larger population. It involves not only understanding how to construct probability formulas that describe a given sampling method but also how to design the most suitable sampling approach for an actual situation (Tim, 2023).

3.3.1 Target Population

The target population refers to the group of people from the intervention that intends to conduct research and derive conclusions (Barnsbee et al., 2018). The target population of this research is those Malaysian consumers aged 18 to 42, who reside in Klang Valley. This age range was selected is due to individuals within this demographic are most likely to own a smartphone and actively engage with social media platforms. Specifically, the study targets individuals who own a smartphone or tablet and a TikTok account. Moreover, the targeted respondents are individual TikTok subscribers, making them the primary unit of analysis.

3.3.2 Sampling Frame and Sampling Location

A sampling frame refers to the collection of source material from which the sample was selected (Turner, 2008). In this research, the application of the sampling frame is insignificant due to there is lack of a complete and accessible list of Malaysian live-streaming users. On the other hand, the sampling location is the location where the sample was collected. The sample was collected in this research through the distribution of Google Forms. Thus, the respondents aged 18 to 42 years old are the target samples who live in Klang Valley in Selangor, Malaysia. The selection of the Klang Valley as the sampling location is motivated by its status as the largest city in Selangor, and this state has the largest population staying with the largest economy in terms of gross domestic product based on the statistics result in Figure 3.2. This strategic choice of sample location can ensure that this study includes a varied and economically significant group of target respondents, which makes these findings more valuable and relevance.

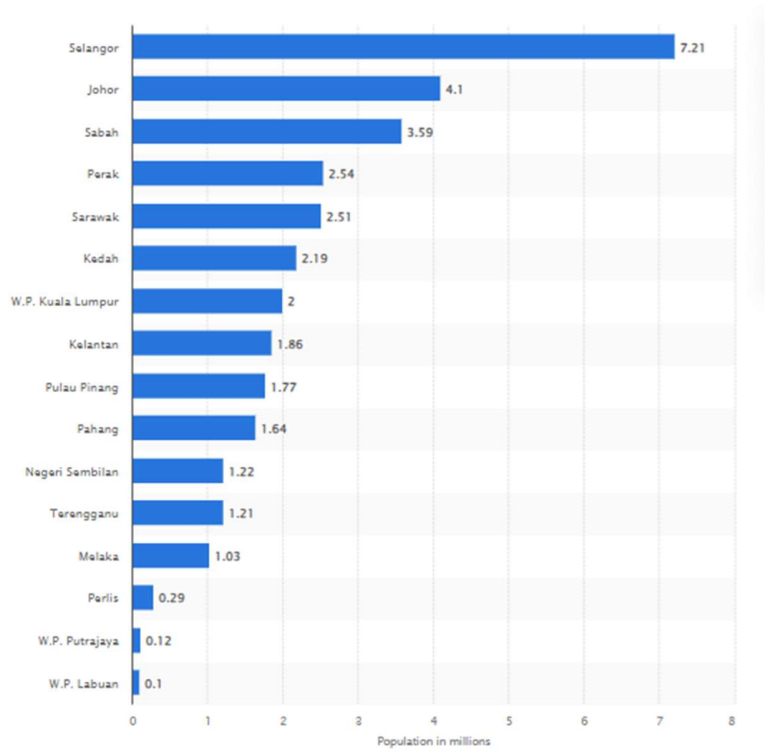


Figure 3. 2: Number of population in Malaysia as of July 2023, by state (Source: Statista, 2023)

3.3.3 Sampling Elements

In this research, the sampling element refers to the respondents aged 18 to 42 years old who live in Klang Valley in Selangor, Malaysia only are chosen to fill in the questionnaire. This is to make sure that they are applicable to be studied as the objective of this research is to understand the factors that affect the consumers from generation Y and Z on making impulse purchases of beauty products on TikTok. Hence, the respondents must fulfill these requirements: (1) Own a TikTok account, (2) Who have ever made a purchase through TikTok live stream commerce, were selected at random in this research.

3.3.4 Sampling Technique

Since there is no listing of the target population, a convenience sampling technique is being used for data collection for this research. Convenience sampling techniques refer to the non-probability sampling method where units are chosen to be part of the sample because of ease of access (Nikolopoulou, 2023). Nonetheless, the respondents must fulfill the criteria such as owning a TikTok account and having experience in purchasing products or services from TikTok live stream commerce. According to Acharya et al. (2013), the advantages of convenience sampling techniques are its widespread usage, less expensive, and there is no need for a population list. Besides that, the researchers who use convenience sampling techniques can just choose the individuals of the study population based on proximity, without examining whether they can represent the whole population (Isaac, 2023).

3.3.5 Sample Size

Sample size is defined as the estimation of number of individuals required to meet the goals of the study (Rodríguez del Águila & González-Ramírez, 2014). This study followed the table provided by Krejcie et al. (1996) based on Figure 3.3 which the minimum sample size in this study is 384. This is due to the reason that the number of TikTok users in Malaysia is reaching around 17 millions in 2023 (Statista, 2023) . Therefore, there will be 385 respondents were selected to ensure the reliability and accuracy of this study.

Figure 3. 3: Table for Determining Sample Size from a Given Population

TABLE 1

Table for Determining Sample Size from a Given Population

N	*S*	*N*	*S*	*N*	*S*
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	1000000	384

Note.—*N* is population size.
S is sample size.

Source: Krejcie, R., V.Morgan, & W., D. (1996). (1970) “Determining sample Size for Research Activities”, Educational and Psychological Measurement. *International Journal of Employment Studies*, *18*(1), 89–123.

3.4 Data Collection Methods

In this section, the primary data collection method is being used to collect information. Primary data is considered as the real-time data collected for addressing the current problem by utilizing sources including surveys, observations, experiments, questionnaires, and personal interviews (Ajayi, 2017). In this study, primary data is collected by distributing questionnaires to the target sample in order to gather the relevant information. This collection method can ensure that the data collected are accurate and up-to-date due to it is designed to solve the problem at hand.

3.5 Research Instrument

3.5.1 Questionnaire Design

In this study, the questionnaire has three sections which are sections A, B, and C.

In section A, screening questions will be asked to ensure that the respondents fulfill the requirements to be the target sample. Respondents are required to answer whether they have a TikTok account and ever made a purchase through TikTok live stream commerce. Thus, the respondents who answered ‘ Yes’ will only continue to complete the following section.

In section B, demographic profile questions will be asked through close-ended questions. Respondents are required to tick in the blanks with the best alternative in the boxes given. This section contains 14 questions including age, gender, ethnicity, education level, employment status, social media platforms that are used regularly, time spent on social media, purposes for using social

media, how often use TikTok, frequency of using TikTok live stream commerce, features of TikTok that they think are most appealing, how often they make purchases through TikTok live stream commerce, types of beauty and cosmetic products purchased through TikTok live stream commerce, and factors that influence their decision to make a purchase on TikTok live stream commerce.

In section C, variables will be asked through close-ended questions. There are a total of 27 questions with six variables including impulse purchasing behavior, hedonic browsing, utilitarian browsing, sales promotion, streamer expertise, and interpersonal influence. All questions are asked on an interval scale with five values: strongly disagree, disagree, neutral, agree, and strongly agree.

3.5.2 Pretest and Pilot Test

Pretesting has been defined as an important phase during questionnaire development aimed at examining the questionnaire's potential effectiveness. Besides that, it can help to refine the survey questions and determine any errors that may lead to unreliable results (Reynolds et al., 1993). Before distributing the questionnaires, the survey questions were reviewed by a lecturer specializing in consumer behavior and the adjustment were made based on their feedback. During this pre-testing, there are 5 questionnaires distributed to 5 students studying consumer behavior from Brickfield Asia College, University of Nottingham Malaysia, and University Malay were asked to participate in the pre-test.

A pilot test is defined as a pre-test version of a research tool used before the real study is carried out. The objective of the pilot test to be conducted in the

research is to ensure the attainment of validity (Gani et al., 2020). According to Sekaran and Bougie (2017), a pilot test involving 30 participants is sufficient to examine the reliability and validity of the questionnaire. Therefore, 30 sets of questionnaires have been used in this study to be tested in the pilot study. According to Cronbach's Alpha rule of thumb, when the variable is greater than 0.7, this means that it is reliable. All the variables conducted in the pilot test are greater than 0.7; thus, all the reliable.

Table 3.1: Result of Reliability Test (Cronbach's Alpha)

Variables	Cronbach's Alpha	Number of items
Independent Variables:		
Sales promotion	0.763	5
Streamer expertise	0.842	5
Interpersonal influence	0.850	4
Hedonic Browsing	0.886	4
Utilitarian Browsing	0.893	5
Dependent Variable:		
Impulse purchasing behavior	0.877	4

3.5.3 Origin of Constructs

All questions are adopted and adapted from past research studies.

Table 3. 2: Survey Instrument

NO	Variables	Original questions	Questions	Sources
1	Sales promotion	• I will buy agricultural products because the anchor runs a special flash sale during the live streaming • I will continue to watch live streaming and buy agricultural products because the anchors issue livestreaming-exclusive coupons • I will buy agricultural products because, when I place an order to buy agricultural products during the live streaming, I will receive a gift • I will buy agricultural products	• The TikToker runs special flash sales during the live streaming. • The TikToker give live-streaming exclusive coupons. • The TikToker gives gift. • The TikToker occasional give draw during the live streaming. • The TikToker give limited sales promotion in the live streaming.	(Zheng et al., 2023)

		because there are occasional draws during the live streaming • I was attracted to buy agricultural products by the 'limited time, limited purchase and limited sales' promotion in the live streaming		
2	Streamer expertise	• I feel that the live streamer is expert. • I feel that the live streamer has experience in live streaming. • I feel that the live streamer is knowledgeable in the field of live streaming. • I feel that the live streamer is qualified to broadcast live-streams. • I feel that the live streamer has the skills to	• I feel that the TikToker is an expert. • I feel that the TikToker has experience in live streaming • I feel that the TikToker knows a lot about the product they talk. • I feel that the TikToker is really good at promoting the product during live stream. • I feel that the TikToker possesses extensive knowledge	(Li & Peng, 2021)

		broadcast live-streams.	about the product featured in the live-streams.	
3	Interpersonal influence	• Almost all of my friends use mobile commerce services. • Almost all of my colleagues think using mobile commerce services is a good idea. • My friends or colleagues think that we should all use mobile commerce services. • Some of my friends or colleagues recommended I should try out mobile commerce services.	• My family and friends use live stream shopping platforms a lot like Facebook live, Instagram live, Shopee Live, TikTok Live. • My family and friends believe that using live stream shopping platforms , such as Facebook live, Instagram live, Shopee Live, TikTok Live is a good idea. • My family and friends think we should all try using live stream shopping platforms such as Facebook live, Instagram live, Shopee Live, TikTok Live. • My family and friends suggested I try out live stream shopping platforms ,such as Facebook	(Akram et al., 2023)

			live, Instagram live, Shopee Live, TikTok Live.	
4	Utilitarian browsing	• I browse to buy better items in price or quality. • I browse shopping websites to gather information about products. • I look around shopping websites to comparison shop. • I browse shopping websites to get additional value as much as possible. • I browse for efficient online shopping.	• I engage with live-stream commerce platforms to buy better items in price or quality. • I engage with live-stream commerce platforms to gather information about products. • I watch live stream commerce platforms to look around and comparison products. • I watch live stream commerce platforms to get additional value as much as possible. • I watch live stream commerce platforms for efficient online shopping.	(Park et al., 2012)
5	Hedonic browsing	• This streamer's live stream is entertaining. • This streamer's live stream gives	• The TikToker conducted the live stream is entertaining and engaging. • The TikToker's	(Guo et al., 2022)

		me sense of enjoyment, not just because I am able to purchase the products I want. • Watching this streamer's live stream is a pleasant way to use my leisure time. • Watching this streamer's live stream gets me excited.	live stream gives me a sense of enjoyment. • Watching the TikToker's live stream is a pleasant and delightful experience. • I feel very excited when watching the TikToker's live stream.	
6	Impulse purchasing behavior	• I buy things recommended by the anchor without careful consideration. • I often have a sudden and strong desire to buy in the livestreaming. • I will be unsatisfied if I do not buy something I like in the e-commerce livestreaming. • I buy things that I have not intended to purchase in the e-commerce livestreaming.	• I often buy things recommended by the Tiktokers without thinking much. • I often have a strong desire to buy things when I watch livestreams. • I feel unhappy if I do not buy something I like during the livestreaming. • I end up buying things during livestreams even if I did not plan to.	(Gao et al., 2022)

3.5.4 Scale of Measurement

The scale of measurement refers to the type of data being collected, analyzed, and presented plays a vital role in the whole process of dealing with data. There are various types of scale measurements such as nominal scale, ordinal scale, interval scale, and ratio scale. The scale measurements used in this study are nominal and ordinal scales.

3.5.4.1 Nominal scale

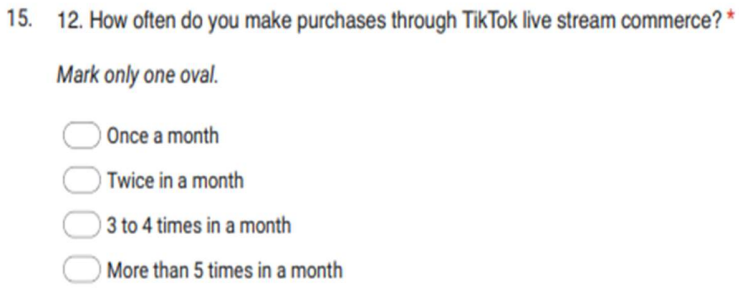
A nominal scale is referred to as a measuring scale and is made up of names or characteristics that are categorized into two or more groups without an intrinsic ordering to the categories, which means the nominal data does not have a natural ranking or ordering (Mishra et al., 2018). In the questionnaire designed to develop this research, a nominal scale has been used to develop questions in sections A and B. The questions in section A are the screening questions including owning a TikTok account and ever making a purchase through TikTok live stream commerce. In section B are the demographic profile questions which include age, gender, ethnicity, education level, employment status, social media platforms that are used regularly, time spent on social media, purposes for using social media, how often use TikTok, frequency of using TikTok Live Stream commerce, features of TikTok that they think are most appealing, how often they make purchases through TikTok live stream commerce, types of beauty and cosmetic products purchased through TikTok live stream commerce, and factors that influence their decision to make a purchase on TikTok live stream commerce.

Figure 3. 4: Image of Nominal Scale Questions in this Research

3.5.4.2 Ordinal Scale

Ordinal scale refers to the scale measurement that is different from nominal scale which has a clear ordering in the data (Mishra et al., 2018). The ordinal scale was used in sections B and C of the questionnaire in this study. The below figure shows an example of a question using an ordinal scale:

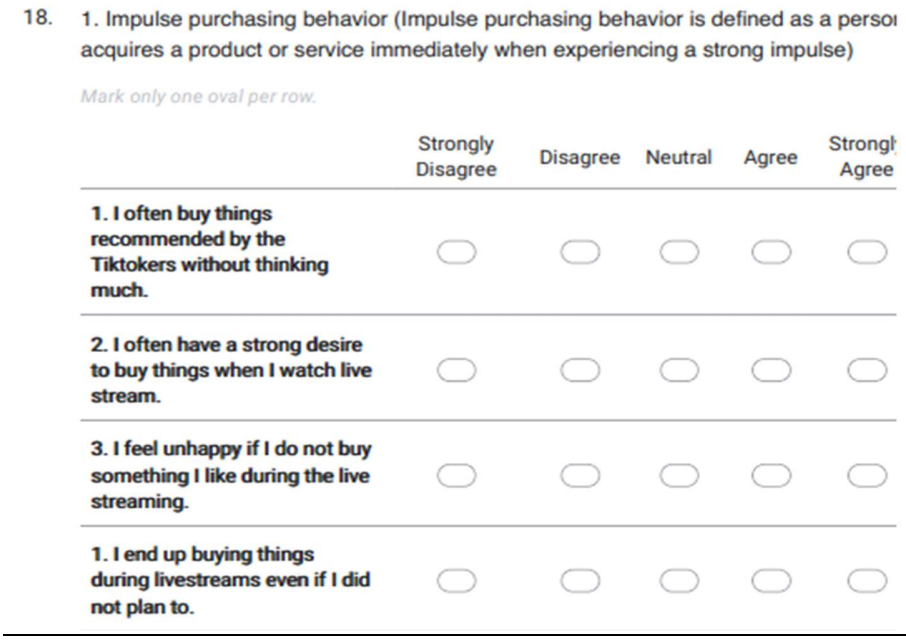
Figure 3. 5: Image of Ordinal Scale question in this research



3.5.4.3 Likert Scale

Likert scale is a psychometric measure where the respondents can select various categories to express their views, attitudes, or feelings about a particular issue (Beglar & Nemoto, 2014). There are a few advantages of using the Likert scale for the questionnaires such as large numbers of respondents can be surveyed relatively quickly to gather data, they can offer highly reliable person ability estimates, and they can establish interpretation validity through various methods. Lastly, the data provided by those respondents can facilitate comparisons, contrasts, and integration with qualitative data-gathering techniques such as open-ended questions, participant observation, and interviews (Beglar & Nemoto, 2014). Therefore, the Likert scale is adopted in Section C of the questionnaire to analyze the variables such as impulse purchasing behavior, hedonic browsing, utilitarian browsing, sales promotion, streamer expertise, and interpersonal influence.

Figure 3. 6: Example of Likert Scale in Questionnaire



18. 1. Impulse purchasing behavior (Impulse purchasing behavior is defined as a perso acquires a product or service immediately when experiencing a strong impulse)

Mark only one oval per row.

	Strongly Disagree	Disagree	Neutral	Agree	Strongl Agree
1. I often buy things recommended by the Tiktokers without thinking much.					
2. I often have a strong desire to buy things when I watch live stream.					
3. I feel unhappy if I do not buy something I like during the live streaming.					
1. I end up buying things during livestreams even if I did not plan to.					

3.6 Data Processing

3.6.1 Questionnaire Checking

In this step, this study will go through all the questionnaires to confirm that all data collected from the respondents are fully filled out.

3.6.2 Avoid Missing Value

As the last step, this study adopted Google Forms to avoid missing values from the data. The reason why use Google Form is due to its functionality, which mandates respondents to provide answers to all questions, otherwise, it will restrict the respondents from proceeding to the next section or eventually submitting.

3.6.3 Data Editing

In this step, the researcher will remove all the data collected from the respondents that exhibit outlier or no differentiation.

3.6.4 Data Coding

In terms of data coding, the present study will assign numerical values to each question to ensure ease of interpretation.

Table 3.3: Data coding for question in Section A

Question No.	Coding
Section A	
1) Do you have a TikTok account?	1=Yes
2) Have you ever made a purchase through TikTok live-stream commerce?	2=No

Table 3.4: Data Coding for question in Section B

Question No.	Coding
Section B	
1) Age	1= 18-26
	2=27-35
	3=36-42
2) Gender	1= Male
	2=Female
3) Ethnicity	1= Malay
	2=Chinese
	3=Indian
	4=Others
4) Education level	1=High school
	2=High school graduate or equivalent
	3= College
	4= Bachelor's degree
	5=Postgraduate degree
5) Employment status	1=Employed
	2=Self-employed
	3= Unemployed
	4=Student
	5= Housewife

6) Which social media platforms do you use regularly?	1=Facebook 2=Instagram 3= Twitter 4=TikTok 5= Xiao Hong Shu
7) How may hours per day do you spend on social media?	1= below 1 hour 2= 1-2 hours 3= 3-4 hours 4= more than 5 hours
8) What do you primarily use social media for?	1= Connecting with friends or family members 2=News 3=Entertainment 4=Shopping in live stream session 5=Promotion and marketing
9) How often do you use TikTok?	1= Daily 2= Weekly 3= Rarely
10) Frequency of using TikTok Live Stream Commerce	1= Daily 2= Weekly 3= Monthly 4= Less than once a month
11) What features of TikTok do you find most appealing?	1= Short video format 2= Variety of content 3= User interaction 4= Live streaming 5= Privacy and safety features

12) How often do you make purchases through TikTok live stream commerce?	1= Once a month 2= Twice in a month 3= 3 to 4 times in a month 4= More than 5 times in a month
13) What types of beauty and cosmetic products do you typically purchase in TikTok live stream commerce?	1= Skincare (Serums, sunscreens, facemasks, etc.) 2= Make up (Concealer, eyeshadow, lipsticks, etc.) 3= Hair care (Shampoo, conditioner, hair oils, etc) 4= Body care (Body lotions, hand creams, body scrubs, etc.) 5= Fragrances (eg: Perfumes, body mist, etc.)
14. What factors influence your decision to make a purchase on TikTok's live stream commerce?	1= Discounts or promotions offered by TikToker 2= Interpersonal influence of TikToker, family members, friends 3= Expertise of the TikToker 4= TikTok's product reviews 5= Quality of products 6= Limited availability of sales promotion 7= Convenience and seamless purchase process

Table 3. 5 : Data coding for question in Section C

Question No	Label	Coding
Section C		
IPB (Question 1-Question 4)	Impulse Purchasing Behaviour	1=Strongly Disagree
HB (Question 1-Question 4)	Hedonic Browsing	2= Disagree
UB (Question 1-Question 5)	Utilitarian Browsing	3= Neutral
SP (Question 1-Question 5)	Sales Promotion	4=Agree
SE (Question 1-Question 5)	Streamer Expertise	5= Strongly Agree
IF (Question 1-Question 4)	Interpersonal Influence	

3.6.5 Data Transcribing

Data collected from Google Forms were transformed accordingly based on the data coding as outlined in the previous section.

3.6.6 Data Cleaning

Data cleaning involves the correction or removal of inaccurate, duplicate, improperly formatted, or incomplete data present in a dataset (*Guide to Data Cleaning: Definition, Benefits, Components, and How to Clean Your Data*, n.d.). This step is important to ensure that the dataset is accurate, reliable, and prepared for analysis.

3.7 Data Analysis

3.7.1 Scale Measurement

3.7.1.1 Reliability Test

Reliability serves as an indicator of a measure's internal consistency which is the key to understanding reliability (Bilgin, 2019). A measurement is considered reliable when various attempts to measure a particular attribute gain the consistent and same result (Bilgin, 2019). Coefficient alpha is the most commonly used in estimating a multiple item's scale's reliability. Although coefficient alpha does not assess validity, many researchers still use it as the sole indicator of a scale's quality (Bilgin, 2019). The coefficient alpha ranges in value from 0 means no consistency, while 1 means complete consistency. Based on Table 3.1 Rules of Thumb for Cronbach's Alpha Coefficient Value, the scale with coefficients between 0.80 and 0.95 is considered to have excellent reliability, while coefficients between 0.70 and 0.80 are considered to have good reliability, 0.60 and 0.70 considered moderate reliability. More, a coefficient below 0.6 is considered the scale has poor reliability (Bilgin, 2019).

Table 3. 6: Rules of Thumb for Cronbach's Alpha Coefficient Value

Alpha Coefficient Range	Strength of Association
Less than 0.6	Poor
0.6 to < 0.70	Moderate
0.7 to < 0.80	Good
0.8 to < 0.90	Very Good
0.90 and above	Excellent

Adopted from: Zikmund, Babin, Carr, & Griffin, (2010)

3.7.2 Multivariate Assumption Test

3.7.2.1 Normality Test

Normality tests examine whether a set of data is distributed in a way that is consistent with a normal distribution (Statistics.com: Data Science, Analytics & Statistics Courses, 2013). In this study, a normality test is carried out by using Jamovi to evaluate whether a dataset follows a normal distribution, assisting in determining if parametric statistical techniques are suitable.

3.7.2.2 Pearson Correlation Analysis

Pearson correlation coefficient known as the product-moment correlation coefficient is denoted as 'r' in a sample and as 'p' in the population from which the sample is derived. This coefficient is measured with no units and ranges from -1 to +1. A positive sign of the correlation coefficient indicates a positive correlation would have existed, which suggests that an increase in one variable corresponds to an increase in another variable. In contrast, if the sign of the correlation coefficient was negative, then a negative correlation would have existed (Sedgwick, 2012).

Table 3. 7: Rule of Thumb for Correlation Coefficient

Coefficient Range	Strength of Association
± 0.91 to ± 1.00	Very high correlation
± 0.70 to ± 0.89	High correlation
± 0.50 to ± 0.69	Moderate correlation
± 0.30 to ± 0.49	Low correlation
± 0.00 to ± 0.29	Little if any correlation

Adopted from: Asuero, Sayago, & González (2006)

3.7.2.3 Multicollinearity Test

Multicollinearity refers to a statistical situation in which two or more predictor variables within a multiple regression model are highly correlated (Daoud, 2018). There are two types of multicollinearity such as data-based multicollinearity and structural multicollinearity. Data-based multicollinearity arises due to the researcher, for example, a poorly designed experiment or primarily focus on observational data collection, while structural multicollinearity occurs when the researcher creates new independent variables from one or more existing variables (Daoud, 2018). Besides, the highly correlated situation may lead to the standard error of predictor coefficients increasing. However, the Variance Inflation Factor (VIF) can be used as a tool for quantifying how much the variance is inflated and determining how much larger the standard error (Daoud, 2018). This study followed the rule of thumb for VIF to measure how much the variance is inflated. According to Table 3.6, a variation inflation factor value of 1 and below is considered as no collinearity issue. Besides, when the VIF is between 3.3 and 5.0, this condition is determined as likelihood collinearity. Probable collinearity occurs when the VIF value is between 5.0 and 10. Lastly, the collinearity issue occurs when the VIF value is more than 10.

Table 3. 8: Rule of thumb for VIF

Variation Inflation Factor Value (VIF)	Multicollinearity Problem
1 and below	No collinearity issue
>3.3	Likelihood collinearity
>5.0	Probable collinearity
>10	Collinearity issue

3.7.3 Descriptive Analysis

Descriptive analysis is a technique used to impartially describe the qualities and nature of sensory attributes. It could provide the sensory evaluation with a scientific foundation by enabling the generation of objective, statistically reliable, and statistically analyzable data (Kemp et al., 2017). Furthermore, descriptive statistics could serve the purpose of arranging and summarizing the data, whether derived from investigations into whole populations or samples (Holcomb, 2016). Besides, it is able to help in getting a quick overview of the set of data by providing concise observations and summaries involving the quantitative data and visuals such as graphs and charts to show patterns in the information (Conner & Johnson, 2017). The most common descriptive statistics are the measure of central tendency including mean, median, and mode, while the least common types of descriptive statistics are the measure of variability or dispersion (Conner & Johnson, 2017).

In this study, descriptive analysis is applied to evaluate the data collected from sections A and B.

3.7.4 Inferential Analysis

Inferential statistics is defined as utilizing descriptive statistics from a sample to make conclusions or estimations about the population (Jargowsky & Yang, 2004). The hypothesis will be tested by using inferential analysis through Partial Least Square Structural Equation Modelling, measurement model assessment, and structural model assessment.

3.7.4.1 Partial Least Square Structural Equation Modelling (PLS-SEM)

Partial Least Square Structural Equation Modelling (PLS-SEM) is designed as the alternative to Covariance-based SEM, and it is a prediction-oriented approach to SEM that aims to ease the demands on data and the specification of relationships (Sarstedt et al., 2014). Thus, PLS-SEM offers many advantages to researchers employing structural equation models and it requires more discussion to explain the rationale behind the decision (Hair et al., 2014). The primary reasons for utilizing PLS-SEM include dealing with nonnormal data, adapting to limited sample sizes, and formative measured constructs (Hair et al., 2014). Thus, SMART PLS is used for inferential data analysis.

3.7.4.2 Measurement Model Assessment

Measurement model assessment is an evaluative process used to ensure the quality criteria before proceeding to the structural model assessment (Ahmed, 2017). According to Hair et al. (2014), when assessing the measurement model assessment, the researchers should verify both the reliability and validity. Thus, the outer loading will be examined, and there is no issue when the factor loadings > 0.708

After that, the researchers need to evaluate the internal consistency reliability by using composite reliability (CR). Furthermore, by assessing using Cronbach Alpha, the composite reliability provides a more suitable measure of internal consistency reliability. According to Hair et al. (2018), authors have suggested that the Cronbach Alpha must above 0.70 while above 0.60 is acceptable in exploratory research. Besides, they also suggested that the maximum value of Cronbach Alpha is 0.95 in order to prevent redundancy among indicators, upholding reliability and content validity. Thus, the most recommended Cronbach Alpha's value is within the range of 0.80 to 0.90 (Hair et al., 2018).

On the other hand, construct validity needs to be examined under PLS-SEM which consists of convergent validity and discriminant validity. Firstly, convergent validity needs to be assessed through AVE, and each construct's average variance extracted (AVE) is equal to or higher than 0.50 (Hair et al., 2018). Besides, the discriminant validity, it need to be examined by using heterotrait-monotrait ratio (HTMT). The discriminant validity issues will exist when the HTMT is high. According to Hair et al. (2018), it is suggested that an HTMT value above 0.90 will cause the discriminant validity not to occur. However, for constructs that are conceptually more separate, a lower threshold such as 0.85 is suggested for a more conservative assessment (Hair et al., 2018). Therefore, the discriminant validity will be present when the HTMT value is below 0.90 or 0.85.

3.7.4.3 Structural Model Assessment

Structural model assessment is used to describe the relationship between the latent variables within the PLS-SEM path model (Ahmed, 2017). In this study,

path coefficients have been used to represent the direction of the relationships between latent constructs.

3.8 Chapter Summary

Chapter Three discussed the overall steps to conduct this study. This study adopted research onion by Saunders et al. (2019). Both quantitative and cross-sectional research have been proposed for use in this research. Besides that, a convenience sampling technique is suggested to collect the primary data source in investigating internal reliability and testing the relationship of the hypothesis. In the last part, descriptive analysis and inferential analysis were also presented.

CHAPTER 4: DATA ANALYSIS

4.0 Introduction

In this chapter, the findings of statistical analysis were presented after the data was collected from the respondents. A total of 408 responses were collected from 15 January 2024 to 28 January 2023. All the data collected by distributing Google Forms to different social media platforms such as Instagram are analyzed by various data analysis methods.

4.1 Data Screening and Data cleaning

This study conducted data screening. In this process, 19 respondents answered no to the screening questions being removed. Thus, there are 389 responses remained after data screening. In conjunction with that, before data analysis, this study conducted data cleaning. In the data cleaning process, there are 4 no differentiation responses that have been deleted from the data. In short, there are 385 responses will be used in this study.

4.2 Common Method Bias

4.2.1 Full Collinearity Test

This study conducted a full collinearity test and Harman single factor test to detect common method bias issues as mentioned in chapter 3. The results are presented in Table 4.1. Based on the full collinearity test result, the Variance Inflation Factor (VIF) of all variables 3.3, suggests that there are no common method issues.

.Table 4.1: Full Collinearity Test

Constructs	Full Collinearity VIF
Impulse purchase behavior	1.201
Hedonic browsing	1.116
Utilitarian browsing	1.215
Sales promotion	1.186
Streamer expertise	1.344
Interpersonal Influence	1.347

4.2.2 Harman Single Factor Test

Meanwhile, this study also conducted the Harman Single Factor Test to detect common method bias. The result in illustrated in table 4.2. In terms of Harman Single Factor Test, the percentage of the variance was below 50%, indicating that there is no common method bias issue. Thus, in this study, it is concluded that there is no common method bias.

Table 4. 2: Harman Single Factor Test

Component	**SS Loadings**	**Percentage of Variance**	**Cumulative Percentage**
1	6.448	23.883	23.883

4.3 Descriptive Data Analysis

There are 385 respondents' demographic profile data and general information has been collected through Section B of the questionnaire. The data result will be presented in the descriptive analysis section. Besides, the variance, standard deviation, median, mean and mode are shown as a result of demographic data collection.

4.3.1 Respondent Profile

Table 4.1 presents the demographic profile and social media behavior of the 385 respondents. The result is illustrated in table 4.3.

Table 4. 3: Respondent Profile

Respondents' Demographic Information		Frequency	Percentage
Age	18-26	293	76.10%
	27-35	71	18.44%
	36-42	21	5.45%
Gender	Male	196	50.91%
	Female	189	49.09%
Ethnicity	Malay	20	5.19%
	Chinese	356	92.47%
	Indian	8	2.08%

	Others	1	0.26%
Education level	High School	6	1.56%
	High School graduate or equivalent	40	10.39%
	College	119	30.91%
	Bachelor's degree	219	56.88%
	Postgraduate degree	1	0.26%
Employment status	Employed	79	20.52%
	Self-employed	30	7.79%
	Unemployed	1	0.26%
	Student	270	70.13%
	Retired	0	0.00%
	Housewife	5	1.30%
How many hours per day do you spend on social media?	Below 1 hour	3	1%
	1-2 hours	24	6.23%
	3-4 hours	256	67.27%
	More than 5 hours	99	26%
How often do you use TikTok?	Daily	68	17.66%
	Weekly	205	53.25%
	Rarely	112	29.09%
Frequency of using TikTok Live Stream Commerce	Daily	22	5.71%
	Weekly	79	20.52%

	Monthly	216	56.10%
	Less than once a month	68	17.66%
How often do you make purchases through TikTok live-stream commerce?	Once a month	71	18.44%
	Twice in a month	106	27.53%
	3 to 4 times in a month	196	50.91%
	More than 5 times in a month	12	3.12%

The result indicated that in terms of age, the analysis showed that the majority of respondents fell within the 18-26 age range (76.10%). Another significant group consisted of 27-35 years old (18.44%). Lastly, there are 5.45% of respondents between 36-42 years old.

Next, in terms of gender distribution, there are 196 respondents are male individuals (50.19%), while 189 respondents are female individuals (49.09%).

Then, for the ethnicity distribution, Chinese individuals formed the majority of the respondents at 92.47%. Malay and Indian individuals accounted for 5.19% and 2.08% respectively. There was also a respondent who identified with another ethnicity.

Moreover, for the education level. There are 1.56% of respondents at the high school level, while 10.39% of respondents are high school graduates or

equivalent. Most of the respondents were college-educated or higher, with 30.91% of respondents being college students, 56.88% of respondents holding a bachelor's degree, while there is only a respondent holding a postgraduate degree.

Next, in terms of employment status, there are 79 respondents are employed status (20.52%), 30 respondents are self-employed (7.79%), 1 respondent is unemployed (1), and a large amount of 270 respondents are students (70.13%). However, there are no retired persons and only 5 respondents are housewives (1.30%).

Then, the majority of respondents with 67.27% showed spending 3-4 hours on social media platforms. In addition, there are 26% of respondents spending more than 5 hours per day. on social media platforms. Lastly, there are 6.23% and 1% of respondents spending 1 to 2 hours per day and below 1 hour per day respectively.

After then, there are 68 respondents used TikTok daily (17.66%), 205 respondents used TikTok weekly (53.25%), while there are 112 respondents used TikTok rarely(29.09%).

Next, it is very critical to know the frequency of consumers used TikTok live stream commerce. Hence, according to Table 4.3, there are 216 respondents (56.10%) used TikTok Live stream commerce monthly, while 79 respondents (20.52%) indicated a weekly frequency. Next, there are 68 respondents (17.66%) used TikTok live stream commerce less than once a month, and 22 respondents (5.71%) used it daily.

Furthermore, a significant number of respondents made purchases through TikTok live stream commerce, with 50.91% of respondents making three to four purchases per month. Followed by 27.53% of respondents who made purchases twice a month, while 18.44% of respondents made one purchase per month. Only 3.12% made more than five purchases per month.

4.3.2 Multiple Response Analysis

This study also conducted multiple responses analysis to analyze the checkbox questions. The result is presented in table 4.4,4.5, 4.6, 4.7, 4.8.

Table 4.4: Multiple Response Analysis

Which platforms do you use regularly? (multiple response)			
Constructs	**Frequency**	**% of responses**	**% of cases**
Facebook	231	17.07	60.00
Instagram	356	26.31	92.47
Twitter	174	12.86	45.20
TikTok	353	26.09	91.69
Xiaohongshu	239	17.66	62.08
Total	1353	100.00	351.44

Note: These responses were provided by 385 cases.

According to table 4.4, when it comes to entertainment, online shopping, and educational purposes, the data highly suggests that Instagram and TikTok are the most frequently used social media. Instagram is the most widely used, with 26.31% of responses and 92.47% of cases. TikTok closely follows, with 26.09% of responses and engaging 91.69% of cases. In contrast, Xiaohongshu, Facebook, and Twitter exhibit lower usage percentages. Specifically,

Xiaohongshu, Facebook, and Twitter record 17.66%, 17.07%, and 12.86% of response rates respectively, while 62.08%, 60.00%, and 45.20% of cases respectively, indicating a lower level of user involvement.

Table 4. 5: Multiple Response Analysis

What do you primarily use social media for? (multiple response)			
Constructs	**Frequency**	**% of responses**	**% of cases**
Connecting with friends or family members	214	20.54	55.58
News	92	8.83	23.90
Entertainment	364	34.93	45.20
Shopping in live stream session	304	29.17	94.55
Promotion and marketing	68	6.53	17.66
Total	1042	100.00	236.89

Note: These responses were provided by 385 cases.

According to Table 4.5, the purpose of using social media consists of a diverse range. Firstly, entertainment is the most prominent motive, with 34.93% of respondents (45.20 % of cases). Followed by connecting with friends and family, there are 20.54% of responses (55.58% of cases) which indicates the social interaction in online platforms. Notably, the engagement in live stream shopping increased by 29.17% of the respondents (94.55% of cases). News consumption and promotional purposes are less prevalent, with 8.83% and 6.53% of respondents (23.90% and 17.66% of cases) respectively.

Table 4. 6: Multiple Response Analysis

What features of TikTok do you find most appealing? (multiple response)			
Constructs	**Frequency**	**% of responses**	**% of cases**
Short video format	232	23.39	60.26
Variety of content	220	22.18	57.14
User interaction	252	25.40	65.46
Live streaming	242	24.40	62.86
Privacy and safety features	46	4.64	11.95
Total	992	100.00	257.67

Note: These responses were provided by 385 cases.

Based on Table 4.6, the TikTok feature that respondents found most appealing is user interaction, with 25.40% of respondents (65.46 of cases) highlighting TikTok's unique interactive features. Besides, live streaming is followed closely where there are 24.40% of respondents (62.86% of cases) think that the live streaming session in TikTok is interesting and attractive to use. Short video format and variety of content are also significant selections that the respondents found most appealing, with 23.39% and 22.18% of respondents (60.26% and 57.14% of cases) respectively. However, the features of privacy and safety in TikTok received relatively less attention, involving 4.64% of respondents (11.95% of cases), which highlights the need for TikTok to improve the privacy and safety features.

Table 4. 7: Multiple Response Analysis

What types of beauty and cosmetic products do you typically purchase through TikTok live stream commerce? (multiple response)			
Constructs	**Frequency**	**% of responses**	**% of cases**
Skincare	267	27.41	69.35
Makeup	122	12.53	31.69
Haircare	285	29.26	74.03
Body care	230	23.61	59.74
Fragrances	70	7.19	18.18
Total	974	100	252.99

Note: These responses were provided by 385 cases.

According to Table 4.7, the beauty and cosmetic product preferences that respondents purchase through TikTok live stream commerce have a strong inclination towards skincare and haircare products, with 27.41% (69.35% of cases) and 29.26% of respondents (74.03% of cases) respectively. Followed closely by body care, with 23.61% of respondents (59.74% of cases). Lastly, makeup and fragrance products involve relatively less attention, with 12.53% (31.69% of cases) and 7.19% of respondents (18.18% of cases), which highlights the related industry or sellers' need to pay more attention to promoting products such as cosmetics and fragrances on TikTok live stream commerce.

Table 4. 8: Multiple Response Analysis

What factors influence your decision to make a purchase on TikTok's live stream commerce? (multiple response)			
Constructs	**Frequency**	**% of responses**	**% of cases**

Discounts or promotions	294	20.04	76.36
Interpersonal influence of TikTok	196	13.36	50.91
Expertise of the TikToker	237	16.16	61.56
TikTok's product reviews	260	17.72	67.53
Quality of products	255	17.38	66.23
Limited availability of sales promotion	130	8.86	33.77
Convenience and seamless purchase process	95	6.48	24.68
Total	1467	100	381.04

Note: These responses were provided by 385 cases.

According to Table 4.8, discounts or promotions emerge as the most influential factor, which there are 20.04% of respondents (76.36% of cases) are willing to make purchases in TikTok live stream commerce due to the given discounts and promotions. This result highlights that the incentives offered are important in driving sales. Followed closely by product review and quality of TikTok, which involving 17.72% (67.53% of cases) and 17.38% of responses (66.23% of cases) seem to these two factors as the crucial determinants to make purchases on TikTok's live stream commerce. The expertise of the streamers also is a significant factor, represented by 16.16 % of respondents (61.56% of cases), indicating the impact of streamer endorsement and suggestion in shaping

consumer behavior. Lastly, limited availability of sales promotion and convenience and seamless purchase process are the least influential factors, represented by 8.86% (33.77% of cases) and 6.48% (24.68% of cases) of respondents.

4.4 Partial Least Square Structural Equation Modelling

This research utilized Partial Least Squares Structural Equation Modeling (PLS-SEM) for the analytical interpretation of data. This approach consisted of two main steps: initially, an evaluation of the measurement model was conducted, followed by an assessment of the structural model.

4.5 Measurement Model Assessment

4.5.1 Convergent Validity

Convergent and discriminant validity was examined by the measurement model. The result of the measurement model assessment is presented in Table 4.9.

Table 4. 9: Measurement Model Assessment

Constructs	Factor Loading	Alpha	rhoA	rhoC	AVE

Impulse purchasing behaviour	0.887 0.900 0.893 0.756	0.882	0.888	0.919	0.741
Hedonic Browsing	0.933 0.922 0.925 0.854	0.930	0.930	0.950	0.827
Utilitarian Browsing	0.858 0.914 0.915 0.821 0.844	0.920	0.920	0.940	0.759
Sales Promotion	0.920 0.923 0.890 0.842 0.781	0.921	0.925	0.941	0.762
Streamer expertise	0.776 0.872 0.921 0.822 0.824	0.898	0.901	0.925	0.713
Interpersonal Influence	0.885 0.895 0.846 0.802	0.880	0.888	0.918	0.736

The result indicated that the majority of the indicators are >0.7, showing that all the factor loading has robust validity concerning their corresponding constructs. Furthermore, Table 4.9 indicates that Cronbach's Alpha and

Composite Reliability, including rhoA and rhoC, have met the required threshold values. In addition, all variables have an Average Variance Extracted(AVE) above 0.5, thus the study has successfully established convergent validity.

4.5.2 Discriminant Validity

After evaluating the convergent validity, this study conducted a test using the Heterotrait-Monotrait Ratio of Correlations (HTMT) to assess the discriminant validity of the study.

Table 4. 10: HTMT Criterion

Construct	1	2	3	4	5	6
HB						
II	0.191					
IPB	0.255	0.342				
SE	0.198	0.506	0.368			
SP	0.197	0.101	0.058	0.072		
UB	0.054	0.257	0.142	0.212	0.374	

Note: HTMT<0.85

Refers to table 4.10, which shows that all variables had met the threshold value (i.e., HTMT<0.85). Thus, it is concluded that discriminant validity has been successfully established.

4.6 Structural Model Assessment

Following the evaluation of the measurement model, the next step involves examining the structural model. Prior to the assessment of the structural model, the Varian Inflation Factor (VIF) needs to be examined to assess the multicollinearity issue of the variables. The outcomes are presented in table 4.11, which showed that all the variables had met the criterion of 3.3, thus it can suggest that there are no multicollinearity issues. After then, the assessment of the structural model can be continued.

Table 4. 11: Collinearity Statistics

Constructs	VIF
HB > IPB	1.001
UB >IPB	1.001
SE >HB	1.238
SE >UB	1.238
SP>HB	1.010
SP >UB	1.010
II > HB	1.248
II >UB	1.248

4.6.1 PLS Estimation

This study conducted 5,000 bootstrap samples with a two-tailed setting. The result is illustrated in table 4.12.

Table 4. 12: Path coefficient and Hypotheses Testing

Hypotheses	β	T value	P value	Confidence Interval bias corrected	Decision
H1: HB > IPB	0.241	4.886	0.000	(0.143,0.339)	Supported

H2: UB > IPB	0.140	2.841	0.005	(0.044,0.235)	Supported
H3: SP > HB	-0.196	3.812	0.000	(-0.300,-0.098)	Supported
H4: SP > UB	0.332	7.623	0.000	(0.249,0.420)	Supported
H5: SE:> HB	0.123	2.097	0.036	(0.003,0.239)	Supported
H6: SE > UB	0.128	1.985	0.047	(0.003,0.258)	Supported
H7: II > HB	0.137	2.252	0.024	(0.020,0.259)	Supported
H8: II > UB	0.150	2.495	0.013	(0.029,0.271)	Supported

According to the result presented in table 4.12, all hypotheses are supported, indicating significant relationships between the variables under investigation.

Firstly, H1 investigated the relationship between hedonic browsing and impulse purchasing behavior, showing a substantial standardized beta (β) of 0.241, a high t-value of 4.886 among all hypotheses, and a p-value of 0.000, indicating strong statistical significance as well. The 95% confidence interval for the coefficient falls between 0.143 and 0.339. Thus, H1 was supported, suggesting there is a significant relationship between hedonic browsing and impulse purchasing behavior.

Moving on to H2, it examined the relationship between utilitarian browsing and impulse purchasing behavior. The result showed a β of 0.140, a t-value of 2.841, and a p-value of 0.005, indicating strong statistical significance. The 95% confidence level interval for the coefficient falls between 0.044 and 0.235. Thus,

H2 was supported and concluded that utilitarian browsing has a significant relationship with impulse purchasing behavior.

Thirdly, H3 investigated the relationship between sales promotion and hedonic browsing. The result yields a β of -0.196, a t-value of 3.812, and a p-value of 0.000, confirming statistical significance. The 95% confidence level interval for the coefficient falls between -0.300 and -0.098. Therefore, H3 was supported, suggesting there is a significant relationship between sales promotion and hedonic browsing.

Next, H4 examined the relationship between sales promotion and utilitarian browsing. The result revealed a β of 0.332, the highest t-value of 7.623, and a p-value of 0.000, showing statistical significance. The 95% confidence level interval for the coefficient falls between 0.249 and 0.420. As a result, H4 was supported, indicating there is a significant relationship between sales promotion and utilitarian browsing.

After that, H5 explored the relationship between streamer expertise and hedonic browsing. The result revealed a β of 0.123, a higher t-value of 2.097, and a p-value of 0.036, indicating statistical significance. The 95% confidence level interval for the coefficient falls between 0.003 and 0.239. In short, H5 was supported, suggesting that there is a significant relationship between streamer expertise and hedonic browsing.

Furthermore, H6 examined the relationship between streamer expertise and utilitarian browsing. The result yields a β of 0.128, a t-value of 1.985, and a p-value of 0.047, indicating statistical significance. The 95% confidence level interval for the coefficient falls between 0.003 and 0.258. Thus, H6 was

supported and it was concluded that there is a significant relationship between streamer expertise and utilitarian browsing.

Next, H7 examined the relationship between interpersonal influence and hedonic browsing. The result revealed a β of 0.137, a high t-value of 2.252, and a p-value of 0.024, showing statistical significance. The 95% confidence level interval for the coefficient falls between 0.020 and 0.259. As a result, H7 was supported, indicating there is a significant relationship between interpersonal influence and hedonic browsing.

Lastly, H8 investigated the relationship between interpersonal influence and utilitarian browsing. The result revealed a β of 0.150, a high t-value of 2.495, and a p-value of 0.013, indicating strong statistical significance. The 95% confidence level interval for the coefficient falls between 0.029 and 0.271. As a result, H8 was supported and it is concluded that there is a significant relationship between interpersonal influence and utilitarian browsing.

4.7 Coefficient of Determination (R^2)

Furthermore, the explanatory power of a linear regression equation can be determined by the coefficient of determination, R^2. Besides that, R^2 can be used to measure the proportion of variation in the dependent variable that can be attributed to the independent variable (Pakay, 2023). More, R^2 ranges from 0 to 1, and higher values signify increased explanatory power, while general guidelines suggest that R^2 values of 0.75, 0.50, and 0.25 can be categorized as substantial, moderate, and weak, respectively (Edeh et al., 2023).

Table 4. 13: Coefficient of Determination

Constructs	R^2	Explanatory Power
Hedonic Browsing	0.075	Weak
Impulse Purchasing Behavior	0.071	Weak
Utilitarian Browsing	0.169	Weak

Refers to the Table 4.13 Coefficient of Determination, it shows that Utilitarian Browsing has R^2 values of 0.169, meaning that the stimulus variables (i.e., sales promotion, streamer expertise, interpersonal influence) had explained 16.9% of the variance of utilitarian browsing, indicating weak explanatory power. Furthermore, hedonic browsing had a R^2 values of 0.075, meaning that the stimulus variables (i.e., sales promotion, streamer expertise, interpersonal influence) had explained 7.5% of the variance of hedonic browsing, indicating weak explanatory power as well. Lastly, impulse purchasing behavior has a R^2 values of 0.071, meaning that it is explained by 7.1% through hedonic browsing and utilitarian browsing, indicating weak explanatory power.

4.8 Chapter Summary

This chapter delved into an analysis of the data collected, which included a descriptive analysis of respondent profiles and multiple response analysis. Furthermore, inferential analysis through Partial Least Squares Structural Equation Modelling (PLS-SEM) using SMART-PLS 4.0 was conducted, and the result showed that all the hypotheses were supported. The findings highlight the substantial influence of hedonic browsing and utilitarian browsing, subsequently affecting the impulse purchasing behavior of the consumers.

CHAPTER 5: DISCUSSION, CONCLUSION AND IMPLICATIONS

5.0 Introduction

In this study, there will be a summarization of the entire research study including the statistical analysis and interpretation of the major findings. Additionally, this chapter also highlighted the limitations within the research, and recommendations for future research are given.

5.1 Discussion of Major Finding

This study was carried out to examine the relationship between stimulus variables (i.e., sales promotion, streamer expertise, and interpersonal influence) and organism variables (i.e., hedonic browsing and utilitarian browsing), leading to response variables (i.e., impulse purchasing behavior) in TikTok. A major portion of the respondents were female consisting of 189 respondents with 49.09%, while 196 respondents with 50.91%. The summary of the result is presented in Table 5.1.

Table 5. 1: Summary of Hypotheses Testing

Hypotheses	Decision
H1: Hedonic Browsing > Impulse Purchasing Behavior	Supported

H2: Utilitarian Browsing > Impulse Purchasing Behavior	Supported
H3: Sales Promotion > Hedonic Browsing	Supported
H4: Sales Promotion > Utilitarian Browsing	Supported
H5: Streamer Expertise > Hedonic Browsing	Supported
H6: Streamer Expertise > Utilitarian Browsing	Supported
H7: Interpersonal Influence > Hedonic Browsing	Supported
H8: Interpersonal Influence > Utilitarian Browsing	Supported

5.1.1 Hedonic Browsing and Impulse purchasing behavior

Based on Table 5.1, Hypothesis 1 (H1) was supported which is aligned with prior studies such as Zheng et al. (2019) and Akram et al. (2023). Zheng et al. (2019) indicate that hedonic browsing revolves around the enjoyable, entertaining, and amusing aspects of shopping behavior, which can significantly affect the consumers' impulse purchasing behavior. Besides, Akram et al. (2023) indicate that hedonic browsing plays a critical role in leading impulse purchasing behavior, particularly in the beauty and cosmetic sector Akram et al. (2023). It also highlighted that Chinese consumers demonstrate greater engagement in purchasing cosmetics online through mobile platforms, primarily caused by the entertainment and experiential aspects of hedonic browsing. Thus, their findings could also be applied in this study.

Another possible factor is that hedonic shopping motivation significantly influences impulsive purchasing, as hedonistic consumers are less restricted by financial and time constraints, leading to a greater tendency towards impulsivity (Mamuaya & Pandowo, 2018). In addition, this is due to the reasons that hedonistic consumers prioritize pursuing the enjoyment and pleasure derived from online shopping rather than practical considerations, leading them to make immediate purchases without considering any consequences.

5.1.2 Utilitarian Browsing and Impulse purchasing behaviour

Based on table 5.1, Hypothesis 2 (H2) was supported which is aligned with previous studies such as Akram et al. (2023) and Chen (2022). Akram et al. (2023) indicate that utilitarian browsing has a significant impact on leading cosmetic mobile commerce purchase intention as the consumer with utilitarian objectives, who typically seek to pursue rational, economic, or functional benefits. Furthermore, Chen (2022) indicates that the streamers showcase and demonstrate various products during the live streaming session, particularly in the case of technology products, which provides the consumers with firsthand experience and product knowledge, stimulating them to make impulse purchases.

Another possible explanation for these findings may be attributed to the consumer behaviors influenced by technological advancement and the changing market dynamics. Firstly, the convenience and time-saving attributes of mobile commerce nowadays may contribute to an increase in impulsive purchases

among utilitarian consumers. Secondly, the promotional offers and limited vouchers, particularly during the live-streaming sessions could attract utilitarian consumers, leading them to make impulse purchases through the allure of discounted prices.

5.1.3 Sales Promotion and Hedonic Browsing

Based on the result presented in table 5.1, hypothesis 3 (H3) was supported which is aligned with the previous study by Park et al. (2012) and Kivetz & Zheng (2017). Park et al. (2012) indicated that price attributes such as discounted prices enhance the enjoyment of web browsing for consumers, thus inducing the hedonic value associated with economic price as perceived by consumers. Furthermore, Kivetz & Zheng (2017) indicated that various promotional tactics, including price discounts, rebates, coupons, and loyalty rewards were identified as having a positive impact on hedonic purchases. Thus, their outcomes have proven that sales promotion has a significant relationship with hedonic browsing.

The reason is that sales promotions can raise the consumers' hedonic advantages by entertainment and boosting self-esteem (Montaner & Pina, 2008). Likewise, sales promotions influence consumers' purchase decisions by shaping perceptions of hedonic benefits (Jee, 2021). Furthermore, another possible reason may be due to the urgency situation for consumers through offering time-limited promotions or exclusive discounts (Li et al., 2023). This is due to the reason that the perceived time constraints and competitive pressure will enhance the consumers' arousal, and limit the distribution of attention, thereby driving impulse purchasing behavior among the consumers (Li et al., 2023).

5.1.4 Sales Promotion and Utilitarian Browsing

Refers to the results presented in table 5.1, it is evident that Hypothesis 4 (H4) was supported, aligning with the results presented in Magdy Elgayed and Taher Attia (2023). This substantiates that utilitarian browsers may be influenced by the limited promotions offered such as " Buy one get one on selected items" as they actively compare offerings both within and across online platforms.

Likewise, sales promotions lead the utilitarian browsing as they can easily compare prices among different sellers (Park et al., 2012). Additionally, it also explained that businesses can appeal to online bargain hunters by displaying visible selections, special promotions, and discounts, eventually causing utilitarian browsing among consumers (Park et al., 2012). Another possible explanation is that sales promotion can provide utilitarian benefits to consumers by maximizing utilitarian value through critical aspects such as the usefulness, efficiency, and cost-effectiveness of their purchases (Montaner & Pina, 2008).

5.1.5 Streamer Expertise and Hedonic Browsing

The results in Table 5.1 showed that Hypothesis 5 (H5) was supported and indicated there is a significant relationship between streamer expertise and hedonic browsing. These findings align with the research by Chen (2022), which emphasizes that expertise is the most critical factor that has a significant effect on perceived hedonic value. For example, the proficiency and knowledge displayed by streamers during product introductions such as catwalk-style presentations, offer consumers enjoyable experiences.

Nonetheless, the results obtained in this research highlight that streamer expertise can affect consumers to make hedonic browsing. The reasons could be attributed to the different preferences and expectations of the consumers. Some consumers may develop a sense of enjoyment in streamers who professionally and interestingly present products, meeting their desire for enjoyable browsing experiences (Lee & Chen, 2021).

However, it is surprising that the results in this study contrast the view of Li and Peng (2021), as it asserted that hedonic value might not be directly connected with the streamer's expertise, rather than the entertaining aspect of live streaming. One possible justification is that the expertise of the streamer is not the most important aspect of live streamers due to the nature of live streaming being simply entertaining and the attractiveness of social media. Thus, the users follow a live streamer to develop a relationship with the streamer rather than acquiring skills from the streamer. Consequently, the main draw of live streaming is the entertaining experience the streamer offers, which potentially overrides the importance of expertise in enhancing hedonic value for viewers.

5.1.6 Streamer Expertise and Utilitarian Browsing

Based on Table 5.1, Hypothesis 6 (H6) was supported, indicating that streamer expertise has a significant effect on utilitarian browsing. This finding is consistent with a previous study by Chen (2022), Guo et al. (2022) and Hu et al. (2016). Chen (2022) and Guo et al. (2022) have explained that streamer's expertise in terms of product knowledge enables them to recommend products that align with customers' needs and desires, leading them to potentially

streamline the consumers' efforts on product searching, evaluating, and deciding on a product. This underscores the importance of streamer's expertise in inducing the utilitarian browsing motivation of the consumers.

Another plausible reason is due to the real-time engagement and product presentation during the live stream sessions can result in the establishment of trust. Additionally, streamers with high expertise act as credible sources of product information, and could represent the rational aspect of trustworthiness particularly for utilitarian consumers (Hu et al., 2016). The establishment of trust in streamers leads consumers to engage in utilitarian browsing.

5.1.7 Interpersonal Influence and Hedonic Browsing

Based on the result presented in Table 5.1, Hypothesis 7 (H7) was supported, affirming that interpersonal influence has a significant effect on hedonic browsing. The result is aligned with the previous studies by Akram et al. (2023) and Zheng et al. (2019). The reason why interpersonal influence has a significant effect on hedonic browsing is that consumers frequently discuss shopping offers with their friends and family, leading to hedonic browsing. Akram et al. (2023) and Zheng et al. (2019) asserted that consumers tend to communicate with friends and family members about the promotion offered or their favorite products which can induce hedonic browsing. Additionally, Akram et al. (2023) and Zheng et al. (2019) also mentioned that consumers will gain a sense of pleasure when interacting with store employees or discussing with others about their purchase plans.

As emphasized by Jasman et al. (2023), it argued that teenagers typically participate in discussions with their friends regarding preferred products and discounts, fostering hedonic value before events like the ‘ China Single Day Shopping Festival’ take place. Thus, the shared excitement among friends could arise from their hedonic browsing experiences. Furthermore, another significant reason is the shared shopping experiences within social circles, where the collective emotional and excitement among friends and family during online shopping contribute to the augmentation of hedonic browsing through interpersonal influence (Nazirah et al., 2022). Furthermore, Nazirah et al. (2022) also mentioned that the high interpersonal influence will increase an individual’s hedonic browsing motivation when shopping where the shopping attitude may be affected by the suggestions or opinions of the people they trust.

5.1.8 Interpersonal Influence and Utilitarian Browsing

Based on the results presented in Table 5.1, the hypothesis 8 (H8) was supported. This result indicates that there is a significant relationship between interpersonal influence and utilitarian browsing, which is consistent with the result of Akram et al. (2023). Akram et al. (2023) mentioned that some consumers refrain from making purchases without reviewing customer feedback, comments, or recommendations from friends or family members due to the challenges of assessing a product’s efficacy in an online shopping platform without prior use. Therefore, Akram et al. (2023) asserted that interpersonal influence has a significant impact on consumer utilitarian browsing motivations.

However, there is a different view from Zheng et al. (2019), which claimed that there is an insignificant relationship between interpersonal influence and utilitarian browsing. This is due to the reason that utilitarian consumers are not easily affected by others, given their specific purchasing objectives. For example, direct interactions with store employees negatively affect the consumes' utilitarian perceptions.

5.2 Implication of The Study

This research aims to explore the potential factors that can lead consumers to make impulsive purchases on one of the most favorable social media platforms currently in Malaysia, TikTok. The findings of this research substantially enhance both theoretical comprehension and practical implications within the existing literature.

5.2.1 Theoretical Implication

In this modern era, with an increasing number of businesses offering live-streaming commerce, the condition of impulse purchasing becomes more critical for the success of transactions. This study contributes to the existing knowledge base, offering valuable insights for a better understanding of how the stimulus variables (i.e. sales promotion, streamer expertise, and interpersonal influence) could contribute to the organism variables (i.e. hedonic browsing and utilitarian browsing), leading to the response variable (i.e. impulse purchasing behavior) by using the S-O-R model.

Thus, the second theoretical implication and contribution will be the SOR model. This research makes a contribution to the development of theoretical models by examining the influence of hedonic browsing and utilitarian browsing on impulse purchasing behavior through factors such as sales promotion, streamer expertise, and interpersonal influence. Therefore, this study has broadened the research scope of SOR model and contributes to the literature on consumers' impulsive purchasing behavior during live streaming in the Malaysia context, particularly in the beauty and cosmetic industry, thereby providing more valuable information and insights for future research on explaining impulsive purchasing behavior.

5.2.2 Practical Implication

These findings showed that factors such as sales promotion, streamer expertise, and interpersonal influence that influence the consumers to engage in hedonic browsing and utilitarian browsing, leading to impulse purchasing behavior on beauty and cosmetic products, in the context of TikTok. Therefore, this suggests that the shoppers who are selling beauty and cosmetic brands in TikTok should allocate resources, time, and efforts to social media marketing strategies based on the findings in this study related to the factors that may influence the consumers on making hedonic browsing and utilitarian browsing, leading them to make impulse purchasing behavior. When the sellers can effectively and strategically manage their social media platforms such as TikTok, the brand equity and awareness may enhanced by creating a positive brand image and reaching more audiences.

Firstly, recognizing the relationship between hedonic browsing and impulse purchasing behavior can bring marketers and practitioners in the beauty and cosmetic industry with important practical implications. Therefore, marketers or sellers in the relevant industry are encouraged to tailor their online platforms and events effectively in order to satisfy the desires and needs of customers by understanding that customers frequently seek enjoyable and pleasurable shopping experiences. For example, marketers can create visually appealing and immersive shopping environments during live streaming sessions in TikTok by utilizing strategic approaches such as influencer endorsement and limited-time promotion in order to enhance hedonic browsing motivation, leading them to engage in impulsive purchase behavior.

Furthermore, the finding of this research also showed that utilitarian browsing drives impulse purchases among consumers during TikTok live streaming. This finding has provided significant implications for both businesses and marketers. For instance, businesses and marketers can strategically add utilitarian features such as reviews, comparisons, and product demonstrations into their content during the TikTok live streaming. Therefore, by providing valuable information and addressing consumers' immediate needs and problems, marketers can effectively stimulate consumers to make impulse purchases. Apart from that, marketers can also enhance the visibility and accessibility of purchasing options within the TikTok platform in order to streamline the buying process of consumers. Overall, by leveraging the effect of utilitarian browsing, businesses and marketers can create a better and more immersive shopping experience, eventually leading to impulse purchase behavior.

After that, this study highlights the significant influence of sales promotion on stimulating hedonic browsing among consumers. Therefore, the beauty and cosmetic industry can pay attention to these findings to adjust their marketing strategies on TikTok, especially using the dynamic features of TikTok's live

streaming capabilities to offer promotion can be highly effective. This is because the promotion offered during the live-streaming session may arise their feeling of excitement and emotional satisfaction, which may lead them to immediately purchase a product. Therefore, businesses or marketers in the beauty and cosmetic industry should capitalize on these opportunities to foster a deeper interaction with their products. This strategic adjustment is able to enhance the brand awareness and profit gained in the competitive beauty and cosmetic industry.

After that, this study also showed that sales promotion is a crucial factor in leading utilitarian browsing. This is because promotional offers such as discounted prices, vouchers, and bonus packs may provide utilitarian value for the consumers, influencing them to engage in utilitarian browsing and compare the prices of the products among many brands. Therefore, these findings may provide some valuable findings to the sellers on making social media marketing successful. For example, marketers can manage their social media platforms such as TikTok by highlighting the unique features and value prepositions of their products as well as their competitive advantage through posting some interactive content.

In addition, the expertise of streamers also plays a significant role in driving consumers to conduct hedonic browsing. This is due to the reason viewers are typically attracted by streamers who provide entertaining and engaging content that can enhance their overall hedonic browsing experience. Therefore, businesses and marketers should pay more attention to their streamer expertise by partnering with knowledgeable or professional influencers who can effectively showcase the experiential and sensory aspects of their products. In this way, businesses can foster stronger connections with their target audiences, ultimately driving increased consumer engagement and sales. Besides, businesses can also provide training and support to their streamer to improve

their product knowledge and presentation skills thereby enhancing their ability to drive hedonic browsing and impulse purchases among their consumers. In short, improving the expertise of streamers is very important as it is one of the factors that can drive hedonic browsing among consumers.

Apart from that, the expertise of streamers is also a factor for utilitarian browsing among consumers during TikTok live streaming in the beauty and cosmetic product industry. Thus, understanding the influential role of streamer expertise allows businesses and marketers to collaborate with streamers and influencers who can effectively showcase the product's features, benefits, and functions. This is because partnering with such knowledgeable streamers and influencers can easily convince and persuade their target consumers that the product can effectively solve their problems. At the same time, marketers can also provide their expertise to deliver valuable insights and recommendations to consumers, thereby facilitating utilitarian browsing. Moreover, marketers can also develop interactive features within TikTok live streaming by incorporating elements such as live product demonstrations, and Q&A sessions in order to create an opportunity for their consumers to seek out specific information or guidance related to beauty and cosmetic products. In short, marketers can effectively harness the influence of streamer expertise to drive utilitarian browsing behaviors and ultimately stimulate impulse purchases of beauty and cosmetic products on TikTok live streaming.

Furthermore, this study has proved that interpersonal influence is also one of the key antecedents that may influence consumers to engage in hedonic browsing. Therefore, beauty brands should hire influencers with high popularity and credibility to be the streamers of product introduction. Thus, the consumer will build a sense of trust and enjoyment in the product recommended when interacting with the streamer in the live streaming session. Besides that, many

consumers purchase a product based on the suggestions and comments from their friends, or family members, so the brands could organize a social media campaign that aimed to widen their audience that requires the users to share this live streaming session with their friends in order to get discount vouchers. This strategic approach not only can enhance brand awareness but also enhance hedonic browsing behaviors in this competitive beauty and cosmetic market.

Lastly, this study also discovered that interpersonal influence can lead consumers to make utilitarian browsing. Therefore, the marketers in beauty and cosmetic industry can invite influencers with high credibility levels to introduce their products that prioritize focusing on providing trustworthy and informative suggestions to the customers during TikTok's live streaming session. Moreover, marketers can create interactive videos on TikTok to highlight their products' unique functionality. This strategic method not only improves the credibility level of a brand but also builds confidence among consumers, which could lead them to involved in utilitarian browsing to learn more about their products.

5.3 Limitations of The Study

5.3.1 Low R-squared values

According to the results from Table 4.13 Coefficient of Determination, this study also found that a weak relation of R^2 value in the regression model. The possible reason is that other vital factors are not accounted for in the model. The findings of this study found that the explanatory power of hedonic browsing, utilitarian browsing, and impulse purchasing behavior accounted for 7.5%, 7.1%, and 16.69% respectively. Thus, based on the guidelines from Edeh et al.

(2023), the R^2 values of 0.75, 0.50, and 0.25 can be categorized as substantial, moderate, and weak, respectively. In short, there are other factors that can affect the hedonic browsing, utilitarian browsing, and impulse purchasing behavior of Malaysian consumers in the TikTok live stream shopping context.

5.3.2 Limited Language Used in the Questionnaire

The questionnaire in this study is primarily created in English and presented through a Google form. Consequently, during the data collection process, some respondents may face challenges in fully understanding the questions. Thus, a considerable amount of time is spent on explaining and clarifying the questionnaire queries for the respondents. In addition, the lack of understanding of the questions due to limited languages may potentially lead to inaccurate and unreliable results for the study.

5.3.3 Limited diversity within the sample

The last limitation of this study is the overrepresentation of Chinese respondents, which may present bias in capturing the diverse consumer preferences from other ethnic backgrounds. Based on the analysis from Table 4.3, showed that there are 92.47% of the respondents are identified as Chinese, comprising 356 respondents out of the total 385 respondents. In contrast, ethnicities such as Malay, Indian, or others only involve 29 respondents that participate in this questionnaire. Hence, this has proven that lack of diversification in the sample might influence the accuracy level of the study's findings in reflecting the broader Malaysian population. Furthermore, the

unsuitable representation may cause biased results due to the lack of perspectives from another ethnic group instead of Chinese. In short, this study may not comprehensively show consumer behavior within the Malaysian context.

5.4 Recommendation for the future research

5.4.1 Implement Qualitative Research

The qualitative research approach comprises generating detailed descriptions of participants' feelings, opinions, and experiences, and interpreting the meaning underlying their actions (Rahman, 2016). Therefore, future researchers are encouraged to employ various qualitative research techniques such as participant observation, informal interviews, observational studies, and description records. Therefore, the researcher can engage directly with the participants during interview-based data collection, which could enhance the accuracy and explanatory power of research findings (Rahman, 2016).

5.4.2 Developing Multilingual Questionnaires

Firstly, it is recommended to construct the questionnaire in different languages such as Malay, Mandarin, and English, and distribute it based on the language preferences of the respondents. Another recommendation will be incorporating

all multiple languages into a single Google Form. This approach can enhance the convenience of distributing the questionnaire while saving time at the same time. Consequently, all respondents can better understand the questionnaire, leading to more accurate and reliable results in the future study.

5.4.3 Make appropriate distribution of the questionnaire

To address the issue of limited diversity within the sample, it is recommended that future studies are encouraged to distribute the questionnaire appropriately to ensure respondents from various ethnic backgrounds in Malaysia. Following the guidelines from the rule of thumb by Sekaran and Bougie (2017), a minimum sample size of 30 for each category when dealing with multiple subsamples. Thus, the researchers aim for a balanced distribution of questionnaires to each ethnic group such as Malay, Indian, Chinese, and other ethics by employing the targeted sampling techniques. In addition, future researchers are also encouraged to utilize various social media platforms to reach a wider range of participants especially those from underrepresented ethnicities. By doing this, future studies can reduce bias and improve the generalizability of the findings which can provide a more comprehensive understanding of Malaysian consumer behavior within the TikTok context.

5.5 Chapter Summary

In conclusion, by applying the S-O-R model, this study examined the antecedents influencing impulse purchase of beauty and cosmetic products on TikTok, by investigating factors such as sales promotion, streamer expertise,

and interpersonal influence. The organism variables tested included hedonic browsing and utilitarian browsing, while the response variables focused on impulse purchasing behavior. All hypotheses were supported and discovered that streamer expertise had the least significant impact on utilitarian browsing (P value = 0.047). However, the hypothesis of the relationship between sales promotion and hedonic browsing might need to be revalidated in future studies as it results in a negative beta value (β= -0.196). Furthermore, the researchers need to avoid the limitations identified in this study in future research and utilize the provided recommendations

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APPENDICES

Appendix A: Ethical Clearance and Online Survey Questionnaire

UNIVERSITI TUNKU ABDUL RAHMAN DU012(A)
Wholly owned by UTAR Education Foundation Co. No. 578227-M

Re: U/SERC/78-212/2024

13 January 2024

Dr Fitriya Binti Abdul Rahim
Head, Department of International Business
Faculty of Accountancy and Management
Universiti Tunku Abdul Rahman
Jalan Sungai Long Bandar
Sungai Long 43000 Kajang,
Selangor

Dear Dr Fitriya,

Ethical Approval For Research Project/Protocol

We refer to your application for ethical approval for your students' research project from Bachelor of International Business (Honours) programme enrolled in course UKMZ3016. We are pleased to informyou that the application has been approved under Expedited Review.

The details of the research projects are as follows:

No.	Research Title	Student's Name	Supervisor's Name	Approval Validity
1.	The Motivation for Purchasing Souvenirs Among the Domestic Tourists	Wan Shiuan Ling	Ms Annie Yong Ing Ing	13 January 2024 – 12 January 2025
2.	Factor Affecting Healthy Food Purchase Behaviours of Generation Z	Pe Kai Wen		
3.	Factors Affecting Customer Satisfaction Among Online Shoppers	Dion Teh Jee Wei		
4.	The Factors Influences on Customer Satisfaction and Loyalty in Business Performance	Tang Wei Ping		
5.	The Impact of Social Media Influencer on Youth Online Buying Behaviour in Klang Valley	Goh Pieh Ling	Ms Chin Wai Yin	
6.	A Study on E-commerce Factors that Influence Post-purchase Behaviour of Young Adults in Malaysia	Chan Chiew Kong	Dr Corrinne Lee Mei Jyin	
7.	Factors and Barriers to Attaining Mental Health Services	Chan Pei Xin		
8.	Factors Influencing the Customer Intention in Adopting Autonomous Vehicles (AVs)	Chye Chi Ern		

9.	Applying the Fraud Triangle Theory to Examine Fraudulent Cases from the Perspective of Working Adults	Alex Lau Chin Yeh	Dr Eaw Hooi Cheng	
10.	Examining the Influential Factors of Financial Fraud on Social Media from the Perspective of University Students	Bryan Wee Xin Jie		
11.	Factors Affecting Financial Fraud Awareness Among University Students	Liew Yoon Ler		
12.	The Impact of ChatGPT on E-commerce: The Case of Platform-based Business	Lee Siu Ying	Pn Ezatul Emilia Binti Muhammad Arif	

No.	Research Title	Student's Name	Supervisor's Name	Approval Validity
13.	Adoption Rate of Digital Channel among MSMEs Entrepreneurs. (A Comparison Between Social Commerce and E-Commerce Platforms)	Law Yung Khan	Pn Ezatul Emilia Binti Muhammad Arif	13 January 2024 – 12 January 2025
14.	Factor Affecting Consumers Behavioral Intention to Share Digital Footprints on Social Media	Jenny Leong Siew Yee	Pn Farida Bhanu Binti Mohamed Yousoof	
15.	Factors Affecting the Unemployment Crisis Among Fresh Graduate in Malaysia	Lim Say Siang		
16.	The Buying Behaviour on Green Products - From A Consumer Perspective	Lim Xiao Xuan	Dr Foo Meow Yee	
17.	Factor Affecting Consumer Brand Loyalty on Personal Care Product	Ooi Xin Yi		
18.	Drivers of Employee Retention: A Case Study in Health and Beauty Industry	Tan Chi Ying		
19.	Factors of Remote Work Influencing Remote Work Productivity of Employees in Malaysia	Lee YanZheng	Ms Hooi Pik Hua @ Rae Hooi	
20.	Exploring University Students' Readiness for the Industrial Revolution 4.0: A Conceptualised Framework	Poh Joe Yee	Dr Jayamalathi a/p Jayabalan	
21.	The Role of Artificial Intelligence on the Overall Success of SMEs in the E-Commerce Sector	Low Wai Ying	Ms K Shamini a/p T Kandasamy	
22.	Understanding the Impact of Short Video Advertising on Youth Consumer Behavior	Celine Tia Hui Lin	En Khairul Anuar Bin Rusli	
23.	Influence of Corporate Social Responsibility (CSR) on Consumer Purchase Intention	Yeo Ai Ping		
24.	The Impact of Green Marketing of Food and Beverages on Consumers' Purchase Intention	Yong Xin En		
25.	Factors that Influence the Acceptance of QR Payment Among Customers in Malaysia	Lee Hai Wen	Dr Komathi a/p Munusamy	
26.	To Study the Influences of Compensation, Work Environment, Motivation on Employee Satisfaction Among Industrial Trainees	Sam Li Ixing		
27.	The Influence of Celebrity Endorsements on Consumers' Purchase Intention Toward Sports Equipment	Chong Wei Ni		
28.	Investigating the factors of online payment technology in influencing consumer purchase behavior	Chua Jun Quan		
29.	The Impact of Utilizing ChatGPT in Higher Education	Lee Zi Wei	Dr Law Kian Aun	
30.	The Effectiveness of Duolingo's AI-Powered Language Learning Platform in Improving Second Language Acquisition Among Malaysia's Tertiary Students	Oh Fang Yan		
31.	The Effects of AI Tools on Undergraduates' Academic Writing Proficiency	Ng Shi Zhe		
32.	Consumer's Coping Strategies Toward Packaging Waste in Food Delivery Service	Tan Shin Rhu	Mr Lee Yoon Heng	
33.	Securing User Trust: A Study on Social Media Privacy, Information Protection, User Education, and Platform Reliability	Lim Jing	Ms Logeswary a/p Maheswaran	

34.	User Acceptance of Neobanks in Malaysia	Tang Sze Jun	Ms Loh Yin Xia	
35.	The Interplay of Digital Financial Literacy, Capability, Autonomy in the Financial Decision-making in Today's Digital Age	Wong Zheng Wah	Dr Low Mei Peng	
36.	Effects of In-store Factors Influencing Consumer Impulse Buying Behavior in Shopping Mall	Soh Xin Jie	Dr Malathi Nair a/p G Narayana Nair	
37.	Examining the Impact of Generation Z's Attitude Towards Counterfeit Footwear in Malaysia	Lim Su Kim		
38.	Young Adults' Intention to Use Mobile Payment in Malaysia	Alvin Chow Mun Sing		
39.	Consumer Motivation to Repurchase Organic Personal Care Products	Crystal Chow Weng Yann		

No.	Research Title	Student's Name	Supervisor's Name	Approval Validity
40.	The Impact of Worklife Balance on Employee Performance in Private Universities in Malaysia	Yeo Jing Wen	Dr Omar Hamdan Mohammad Alkharabsheh	13 January 2024 – 12 January 2025
41.	Determinants of Student's Satisfaction on AI Usage in Education	Chang Charng Jie	Ms Puvaneswari a/p Veloo	
42.	How Artificial Intelligence (AI) is Transforming Tourism Industry	Boon Yi Jean	Pn Raja Nurul Aini Binti Raja Aziz	
43.	Factors Affecting the Consumption Pattern of Fast Fashion Products Among Generation Z	Evelyn Chow Sum Yee	Dr Sia Bee Chuan	
44.	Antecedents and Consequences of Beauty and Cosmetic Products Impulse Purchase on TikTok	Kong Chi Kei	Dr Tang Kin Leong	
45.	Examining the Antecedents of Perceived Enjoyment and Flow Experience in Impulsive Buying Behaviour: A Study from the Perspective of TikTok User	Tan Hong Qing		
46.	Understanding the Determinants of Online Hotel Booking Intentions	Sharon Lian Sin Yee	Dr Tiong Kui Ming	
47.	A Study of Eco-Conscious Consumer Behavior on Green Products	Tan Sze Ting		
48.	Brand Loyalty Among Generation Z Towards Samsung Products in Malaysia	Chey Xin Hui	Dr Yeong Wai Mun	
49.	Factors Influencing the Adoption of Touch 'n Go eWallet Among Consumers in Malaysia	Lim Si Ting		

The conduct of this research is subject to the following:

(1) The participants' informed consent be obtained prior to the commencement of the research;

(2) Confidentiality of participants' personal data must be maintained; and

(3) Compliance with procedures set out in related policies of UTAR such as the UTAR Research Ethicsand Code of Conduct, Code of Practice for Research Involving Humans and other related policies/guidelines.

(4) Written consent be obtained from the institution(s)/company(ies) in which the physical or/and online survey will be carried out, prior to the commencement of the research.

Should the students collect personal data of participants in their studies, please have the participants signthe attached Personal Data Protection Statement for records.

Thank you. Yours

sincerely,

Professor Ts Dr Faidz bin Abd Rahman
Chairman
UTAR Scientific and Ethical Review Committee

c.c Dean, Faculty of Accountancy and Management Director,
Institute of Postgraduate Studies and Research

Online Survey Questionnaire

Dear respondents,

I am an undergraduate student from Universiti Tunku Abdul Rahman (UTAR), currently pursuing degree in Bachelor of Internationl Business(HONS) under Faculty of Accountancy and Management (FAM). I am conducting a questionnaire to research about ' **Antecedents & Consequences of Beauty & Cosmetic Products Impulse Purchase on TikTok**'.

This questionnaire consists of THREE sections. Please answer ALL questions in ALL sections. It will take approximately 10-15 minutes to complete this questionnaire. All answers will be kept strictly PRIVATE and CONFIDENTIAL, and used exclusively for academic research purpose. If you have any doubts regarding this survey, please drop me an email at **Kongchikei@1utar.my**.

Thank you and appreciate your contribution.

Sincerely,

Kong Chi Kei

Undergraduate Student

Faculty of Accountancy and Management (FAM)

Universiti Tunku Abdul Rahman (UTAR)

PERSONAL DATA PROTECTION NOTICE

Please be informed that in accordance with Personal Data Protection Act 2010 ("PDPA") which came into force on 15 November 2013, Universiti Tunku Abdul Rahman ("UTAR")is hereby bound to make notice and require consent in relation to collection, recording, storage, usage and retention of personal information.

1. Personal data refers to any information which may directly or indirectly identify a person which could include sensitive personal data and expression of opinion. Among others it includes:

   a) Name
   b) Identity card
   c) Place of Birth
   d) Address
   e) Education History
   f) Employment History
   g) Medical History
   h) Blood type
   i) Race
   j) Religion
   k) Photo
   l) Personal Information and Associated Research Data

2. The purposes for which your personal data may be used are inclusive but not limited to:

   a) For assessment of any application to UTAR
   b) For processing any benefits and services
   c) For communication purposes
   d) For advertorial and news
   e) For general administration and record purposes
   f) For enhancing the value of education
   g) For educational and related purposes consequential to UTAR
   h) For replying any responds to complaints and enquiries
   i) For the purpose of our corporate governance
   j) For the purposes of conducting research/ collaboration

3. Your personal data may be transferred and/or disclosed to third party and/or UTAR collaborative partners including but not limited to the respective and appointedoutsourcing agents for purpose of fulfilling our obligations to you in respect of the purposes and all such other purposes that are related to the purposes and also in providing integrated services, maintaining and storing records. Your data may be shared when required by laws and when disclosure is necessary to comply with applicable laws.

4. Any personal information retained by UTAR shall be destroyed and/or deleted in accordance with our retention policy applicable for us in the event such informationis no longer required.
5. UTAR is committed in ensuring the confidentiality, protection, security and accuracy of your personal information made available to us and it has been our ongoing strict policy to ensure that your personal information is accurate, complete, not misleading and updated. UTAR would also ensure that your personal data shall not be used for political and commercial purposes.

Consent:

6. By submitting or providing your personal data to UTAR, you had consented and agreed for your personal data to be used in accordance to the terms and conditionsin the Notice and our relevant policy.

7. If you do not consent or subsequently withdraw your consent to the processing and disclosure of your personal data, UTAR will not be able to fulfill our obligations or to contact you or to assist you in respect of the purposes and/or for any other purposes related to the purpose.

8. You may access and update your personal data by writing to us at
.

Acknowledgment of Notice

[ ] I have been notified and that I hereby understood, consented and agreed perUTAR above notice.

[ ] I disagree, my personal data will not be processed.

……
Name:
Date:

Section A: Screening questions

1. Do you have a TikTok account?

-Yes

-No

2. Have you ever made a purchase through TikTok live stream commerce?

-Yes (Please proceed to Section B)

-No (Thank you for your participation)

Section B: Demographic

1. Age

-18-26

-27-35

-36-42

2. Gender

-Male

-Female

3. Ethnicity

- Malay

- Chinese

- Indian

- Others

4. Education Level:

- High school

- High school graduate or equivalent

- Some college

- Bachelor's degree

- Postgraduate degree

5. Employment Status:

- Employed

- Self employed

- Unemployed

- Student

- Retired

- Housewife

6. Which social media platforms do you use regularly? (multiple choice)

- Facebook

- Instagram

- Twitter

- TikTok

- Xiao Hong SHu

7. How many hours per day do you spend on social media (Facebook, Instagram, TikTok, Xiao Hong Shu, etc.)?

- Below 1 hour

-1 to 2 hours

- 3 to 4 hours

- more than 5 hours

8. What do you primarily use social media for? (multiple choice)

- Connecting with friends/family

- News

- Entertainment

- Shopping (Livestream commerce)

-Promotion and marketing

9. How often do you use TikTok?

- Daily

- Weekly

- Rarely

10. Frequency of Using TikTok Live Stream Commerce:

- Daily

- Weekly

- Monthly

- Less than once a month

11. What features of TikTok do you find most appealing? (multiple choice)

- Short video format

- Variety of content

- User interaction

- Live streaming

-Privacy and safety features

12. How often do you make purchases through TikTok live stream commerce?

- once in a month

- Twice in a month

- 3 to 4 times in a month

- More than 5 times in a month

12. What types of beauty and cosmetic products do you typically purchase through TikTok live stream commerce?

-Skincare (Serums, sunscreens, facemasks, etc.)

-Make up (Concealer, eyeshadow, lipsticks, etc.)

- Haircare (Shampoo, conditioner, hair oils, etc)

-Body Care (Body lotions, hand creams, body scrubs, etc.)

-Fragrances (eg: Perfumes, body mist, etc.)

13. What factors influence your decision to make a purchase on TikTok's live stream commerce? (multiple choice)

- Discounts or promotions offered by TikToker

-Interpersonal ineuence of TikToker, family members, friends

- Expertise of TikToker

- TikToker's Product reviews

- Quality of products

- Limited availability of sales promotion

-Convenience and seamless purchase process

Section C: Factors

NO	Variable	Operational definition	Questions	Source
1.	Sales promotion	With the rapid popularization of e-commerce live streaming of agricultural products, to prompt users to place orders as soon as possible, the anchor encourages users to join flash sales, draw lotteries, use coupons, and otherwise take	• The TikToker runs special flash sales during the live streaming. • The TikToker give live-streaming exclusive coupons. • The TikToker gives gift.	(S. Zheng et al., 2023)

		advantage of special offers.	• The TikToker occasional give draw during the live streaming. • The TikToker give limited sales promotion in the live streaming.	
2.	Streamer expertise	Expertise is referred to as "authoritativeness"; it involves the knowledge, experience, and capabilities of a live streamer	• I feel that the TikToker is an expert. • I feel that the TikToker has experience in live streaming. • I feel that the TikToker knows a lot about the product they talk. • I feel that the TikToker is really good at promoting the product during live stream. • I feel that the TikToker possesses extensive knowledge about the product featured in the live-streams.	(Y. Li & Peng, 2021)
3	Interpersonal influence	Interpersonal influence is the process by which one person's attitudes, beliefs, or behaviors are affected by another person.	• My family and friends use/buy live stream shopping platforms a lot like Facebook live, Instagram live, Shopee	(Akram et al., 2023)

			Live, TikTok Live. • My family and friends believe that using live stream shopping platforms , such as Facebook live, Instagram live, Shopee Live, TikTok Live is a good idea. • My family and friends think we should all try using live stream shopping platforms such as Facebook live, Instagram live, Shopee Live, TikTok Live. • My family and friends suggested me try out live stream shopping platforms ,such as Facebook live, Instagram live, Shopee Live, TikTok Live.	
4	Utilitarian browsing	Utilitarian browsing is defined as "acquisition of products through the use of heuristics, goal-oriented behaviors, risk reduction strategies, and achievement of information search goals.	• I engage with live stream commerce platforms to buy better items in price or quality. • I engage with live stream commerce platforms to gather	(Park et al., 2012)

			information about products. • I watch live stream commerce platforms to look around and comparison products. • I watch live stream commerce platforms to get additional value as much as possible. • I watch live stream commerce platforms for efficient online shopping.	
5	Hedonic browsing	Hedonic value also includes features such as pleasure, arousal, and escapism	• The TikToker conducted the live stream is entertaining and engaging. • The TikToker's live stream gives me a sense of enjoyment. • Watching the TikToker's live stream is a pleasant and delightful experience. • I feel very excited when watching the TikToker's live stream.	(Y. Guo et al., 2022)
6	Impulse purchasing behavior	Rook (1987) defined impulsive buying as "buying something immediately when	• I often buy things recommended by the Tiktokers	(Gao et al., 2022)

		experiencing a strong impulse," from the perspective of consumer psychology and behavior.	without thinking much. • I often have a strong desire to buy things when I watch livestreams. • I feel unhappy if I do not buy something I like during the livestreaming. • I end up buying things during livestreams even if I did not plan to.	

APPENDIX B: RESULTS GENERATED FROM SMART PLS AND JAMOVI

Outer loadings – Matrix

	HB	II	IP	SE	SP	UB
HB1	0.933					
HB2	0.922					
HB3	0.925					
HB4	0.854					
II1		0.885				
II2		0.895				
II3		0.846				
II4		0.802				
IP1			0.887			
IP2			0.900			
IP3			0.893			
IP4			0.756			
SE1				0.776		
SE2				0.872		
SE3				0.921		
SE4				0.822		
SE5				0.824		
SP1					0.920	
SP2					0.923	
SP3					0.890	
SP4					0.842	
SP5					0.781	
UB1						0.858
UB2						0.914
UB3						0.915
UB4						0.821
UB5						0.844

Construct reliability and validity - Overview

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
HB	0.930	0.930	0.950	0.827
II	0.880	0.888	0.918	0.736
IP	0.882	0.888	0.919	0.741
SE	0.898	0.901	0.925	0.713
SP	0.921	0.925	0.941	0.762
UB	0.920	0.920	0.940	0.759

Discriminant validity - Heterotrait-monotrait ratio (HTMT) - Matrix

	HB	II	IP	SE	SP	UB	
HB							
II	0.191						
IP	0.255	0.342					
SE	0.198	0.506	0.368				
SP	0.197	0.101	0.058	0.072			
UB	0.054	0.257	0.142	0.212	0.374		

Path coefficients - Mean, STDEV, T values, p values

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
HB -> IP	0.241	0.243	0.049	4.886	0.000
II -> HB	0.137	0.139	0.061	2.252	0.024
II -> UB	0.150	0.152	0.060	2.495	0.013
SE -> HB	0.123	0.126	0.059	2.097	0.036
SE -> UB	0.128	0.130	0.064	1.985	0.047
SP -> HB	-0.196	-0.201	0.051	3.812	0.000
SP -> UB	0.332	0.334	0.044	7.623	0.000
UB -> IP	0.140	0.143	0.049	2.841	0.005

Path coefficients - Confidence intervals

	Original sample (O)	Sample mean (M)	2.5%	97.5%
HB -> IP	0.241	0.243	0.143	0.339
II -> HB	0.137	0.139	0.021	0.258
II -> UB	0.150	0.152	0.030	0.269
SE -> HB	0.123	0.126	0.005	0.239
SE -> UB	0.128	0.130	0.006	0.258
SP -> HB	-0.196	-0.201	-0.299	-0.098
SP -> UB	0.332	0.334	0.249	0.419
UB -> IP	0.140	0.143	0.044	0.235

Multi Response

Multi Response

Option	Frequency	Percentage of responses	Percentage of cases
SM_Facebook	231	17.073	60.000
SM_Instagram	356	26.312	92.468
SM_X	174	12.860	45.195
SM_TikTok	353	26.090	91.688
SM_XHS	239	17.664	62.078
Total:	1353	100.000	351.429

Note. These responses were provided by 385 cases.

Assumption Checks

Collinearity Statistics

	VIF	Tolerance
IP	1.201	0.832
HB	1.116	0.896
UB	1.215	0.823
SP	1.186	0.843
SE	1.344	0.744
II	1.347	0.742

Component Statistics

Summary

Component	SS Loadings	% of Variance	Cumulative %
1	6.448	23.883	23.883