香港教育大學
The Education University
of Hong Kong

A project entitled

To explore how social media boost the online consumption of The Education

University of Hong Kong students.

Submitted by

Chow Chung Ki

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Declaration

I, *Chow Chung Ki* declare that this research report represents my own work under the supervision of Assistant Professor, Dr. CHENG Wai Lun, Eddie, and that it has not been submitted previously for examination to any tertiary institution.

Chow Chung Ki

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Abstract

Introduction
Social networking sites are well-known in reaching information, and even certify users to create online business pages to promote products with social media modes. Social media is influential to consumers' online consumption behaviors and can boost their online transactions in general. While little is known regarding whether young consumers, particularly university students, tend to change their online shopping behaviors and make consumption due to the advertising content or promotion means.

Purpose
This study contributes to bringing practical values to university students, businesses, and the government, by (1) enabling students to understand and review their online consumption patterns, (2) urging businesses to understand students' perceptions on social media promotion in order to offer their products from an ethical perspective and fulfill their corporate social responsibility, and (3) providing recommendations for the government to develop more appropriate consumer protection laws and regulations.

Methodology
A convenience sampling method was used to select EdUHK students to be the target sample of the research. A mixed-method approach was adopted to collect the primary data from questionnaires and interviews. Two hundred EdUHK full-time undergraduates in all study years were invited to fill in the questionnaires through online survey. Respondents were asked to indicate their choice in response to statement with a 7-point Likert rating scale. IBM SPSS Statistics 26 was used to analyze the descriptive statistics in frequencies and to compare the means with gender effect by an independent-sample t test. Four interviewees were selected through phone contact to conduct zoom interviews for cross-checking purposes, and the concept of redundancy was applied to filter the optimal number of interviewees for this study.

Results
The results of the study and analysis on students' online consumption behavior empirically justified the positive relationship between social media promotion and the online consumption of EdUHK students. The study also identified the reasons and how the promotions on social media advertising effectively affected the consumption patterns of EdUHK students. Significant gender repercussions have been discovered in the e-shopper decision-making process.

Discussion and conclusion
The study underlines the advantages of using social media as a promotional approach for university students. Viable solutions are recommended to university students to avoid online-purchasing in an irrational or emotive way. Recommendations are also given to local government and businesses to generate returns ethically and social responsibly. Moreover, forthcoming studies can broaden the sample size for obtaining more representative results. Future research should also investigate the relationship between online personalization and consumption behaviors, as well as exploring how a close family-child relationship would affect students' consumption behaviors. This would allow for more understanding of the effectiveness of online consumption content to consumers.

Keywords
social media, online consumption, university students

<u>Introduction</u>

In the technology-driven generation, social media have accumulated rapidly in popularity, profoundly altering individuals' means to deliver messages and information through communication, collaboration, and consumption (Aral, Dellarocas, & Godes, 2013). Social media, functioning as Twitter, Google, Facebook, Instagram, YouTube, Pinterest, etc., are regarded as tools for social networking, social sharing and knowledge, picture sharing, etc., and are well-known in conveying diverse information to users (Tsimonis & Dimitriadis, 2014). Social networking sites are well-known in reaching information, and even certify users to create online business pages to promote products with social media modes. In recent decades, research papers have linked up business operations with social media, proposing that with advanced technological development, more people nowadays like to use social media to conduct information search regarding goods and services, leading prompt establishment of social media for business promotion (Campbell, Pitt, Parent, & Berthon, 2011; Aral et al., 2013; Bakeman & Hanson, 2012).

It is undoubted that university students, as part of the population, are having online business transactions with no boundaries (Bakeman & Hanson, 2012). Despite the fact that numerous empirical reports revealed that social media have changed consumer online shopping behaviors by boosting the online transactions of consumers, previous research are targeted on consumers at all ages, focusing on how social media influence the consumption factors or buying behaviors of consumers in general (Ojala, 2012; Hagel & Armstrong, 1997). Thus, little is known regarding whether young consumers, particularly university students, tend to change their online shopping behaviors and make consumption because of the advertising content or promotion means. Moreover, which social media types and modes can stimulate them to purchase online is also unidentified.

The study would focus the research target on university students, instead of other types of consumers. The present study emphasizes the effectiveness of social media in influencing the online consumption behavior of university students, by identifying the social media modes and the advertising channels that affect their purchase decision-making processes. This study contributes to bringing practical values to university students, businesses, and the government, (1) enabling students to understand and review their online consumption patterns, (2) urging businesses to understand students' perceptions on social media promotion in order to offer their products from an ethical perspective and fulfill their corporate social responsibility, and (3) providing recommendations for the government to develop more appropriate consumer protection laws and regulations.

Literature Review

In this section, existing literature connected with social media promotion, social media modes and its effectiveness to online consumers will be discussed and the significance of the current research will be also be highlighted.

1. *Relationship between social media promotion and online consumption*

Some preceding studies have indicated that there is a change from a conventional user-oriented social media content to a speedier one in terms of both user-generated content and brand-related sources (Forbes, 2013). Compared with traditional marketing, the monetary fences to social media marketing are less cost-consuming for delivering product messages to consumers; more importantly, social media allow users to create personal and online business pages as sharing and exchanging resources purposes, as well as adding multimedia to promote commodities (Eldon, 2008; Duffett, 2017). Thus, it has become a new platform to facilitate marketing connections between consumers and business corporations.

Khan and Iftikhar (2017) found that respondents preferred digital shopping to shopping physically. By assessing several types of marketing channels, digital marketing was highly known, and Internet shopping was preferred by young consumers, whereas the cost-efficient online information obtained from social media influenced consumer purchase behavior, and posed a positive impact on consumer buying intention (Nizar & Janathanan, 2018; Dayal, 2016; Ghai & Rahman, 2018).

2. *Social media modes triggering the desire of general public to make online consumption*

With the constant commercial engagement in social media, consumers are perceived as the prominent target in advertising contact. In order to popularize the business brand and continuously stay connected with online shoppers, social media promotion, acting as an operational business strategy, contributes to enrich consumers' awareness and recognition towards a brand and its relevant products (Zarrella, 2010). Based on the previous studies, social media advertising, key opinion leader (KOL) promotion and online shops' promotion of products are the three major social media modes used to stimulate consumers' buying intent (Ramesh & Vidhya, 2019; Ulfa & Astuti, 2019; Chivandi, Samuel, & Muchie, 2019; Frick, Matthies, Thogersen, & Santarius, 2020). These modes are elaborated more below.

2.1 Social media advertising

Different social media platforms are considered as new business connection tools to facilitate communications with and provision of information to Internet users (Chivandi et al, 2019). Some surveys proposed that social media advertising can act as a proactive marketing strategy to foster online consumption (Gossen, Ziesemer, & Schrader, 2019; Dinner, Heerde Van, & Neslin, 2014). With the projection of features, benefits, and the functions of the commodities in the online advertisement, the commercial operation can get value-added effects (Macdonald & Sharp, 2000; Zolkepli & Kamarulzaman, 2015). Earlier studies have concluded that the widespread use of social

media advertising is deliberated as a supplementary benefit to shoppers and merchants, in achieving their needs and desires, conveying a direct impact on the online transactions, and buying behavior (Khan & Iftikhar, 2017).

2.2 Key Opinion Leader (KOL) promotion of products

The purchasing decisions of consumers are typically affected by those they surrounded, rather than the product features mentioned by the companies (Hunt, 2009). According to Perdue (2010), commodities promotion by KOLs, in either post-uploading or video-making type, consumers tend to trust more in product sharing after used comparing with the direct product advertising. As KOLs' promotion enable consumers to understand their actual needs of the product, and to get familiar with the product features and functions, it is effective to see that social media ascended the consumers' devotion with business brand, especially teenagers who are desire to connect with people, and tend to circulate and recommend the information received from social media to their friends more often (Yaakop & Hemsley-Brown, 2013).

2.3 Online shops' promotion of products

The establishment of online shops allow consumers to have a flash look on the products through digital devices at anytime and anywhere, offering a convenience to motivate consumers to look for the latest launching products and consider making purchases online (Yaakop & Hemsley-Brown, 2013). Although there has been enormous intent on social media influence found in the previous studies, yet it is also critical to explore how social media promotion adds values to product recognition and elicit the desire and need of young consumers gradually.

3. How social media modes drive people to consume online

The marketing approaches adopted throughout different social media pose a positive stimulus to spread the product information in real time and generate primes with selling purposes. As a result,

social media spread a constructive effect that is beneficial to consumers who can make immediate online transaction experience, as well as companies to promote their brands and generate sales around the clock (Adamopoulos & Todri, 2014).

According to Chivandi, Samuel, and Muchie (2009) indicated that online environmental factors, such as online purchasing experience, transaction satisfactions, and social interactions, would affect consumers' decision-making processes and significantly influences buyers' final consumption decision. Generally, online promotion does not only accelerate the consumer decision-making process that triggers with a higher need recognition, more social interactions with friends and family, less time-consuming on individual information search or alternatives evaluation, speedier consumption decision, and purchase along with post-purchase evaluation, but also affects individuals' buying behavior in online consumption (Duffett, 2017). In most cases, teenagers are indulged in an indulgent or frivolous manner when they consume online.

4. *Significance of the study*

Referring to the reviews stated above, majorities of the studies focused on the effectiveness of social media promotion and how it helps to increase the operation of online businesses. Still, an in-depth survey of what kinds and modes of social media are mostly raising young consumers to make online shopping is undeveloped. It is certain that university students are enjoying the benefits in social media platform, having online business transactions internationally with no boundaries (Bakeman & Hanson, 2012). Even though many preceding studies have revealed that online shoppers are easily fallen into hasty shopping trap, but the sampling size was associated with all consumers. Also, relatively less studies have mentioned the factors affecting young consumers to make online purchase after noticing the social media promotion (Ojala, 2012; Hagel & Armstrong, 1997). Therefore, it is important to discover whether college students are inclined to different online shopping habits due to promotion content or advertising methods.

To investigate the impact of social media promotion more specifically, university students were set as the sample in the main study. Various social media promotion modes were compared to discover how social media promotion have made a difference to students studying in Hong Kong universities. According to Ramesh and Vidhya (2019), social media play an indispensable role to stimulate consumer purchase intention and online shopping behavior. Data regarded the effect of promoting products in social media on students' purchase decision and consumption patterns in this study, might be useful for students and marketers as review, as well as contributing to future research related to cyber consumption content.

Objectives of research

In order to examine the relationship between social media promotion and online consumption of university students, and to identify the social media business tools, specifically the social media modes and advertising means, that affect students' buying behaviors and make online consumption, this research primarily focuses on three objectives:

1. To investigate the relationship between social media promotion and online consumption of university students.

Description: To find out whether there is a direct relationship between social media promotion and online consumption of university students, either positively, negatively or no relationship, where social media promotion can affect students' intention and their online consumption behavior.

2. To identify the social media mode that most triggers the desire of university students to make online consumption.

Description: To determine which social media modes (i.e., social media advertising, key opinion leader (KOL) promotion of products, online shops' promotion of products) triggers the online consumption desire of university students the most.

3.   To explore in what ways the most effective social media mode drives university students to consume online.

Description: To find out the impact of social media promotion on students' online consumption by determining the buying decision process that university students go through after recognizing the products from the well-received social media, and how the online consumption patterns of university students are affected (e.g., triggered and motivated by the social media advertising content, indulge in indulgent or frivolous shopping, etc.).

Research questions

1.   What is the relationship between social media promotion and online consumption of university students?

2.   Which social media mode can best trigger university students' desire to purchase products?

3.   How does the best triggered social media mode drive university students to consume online?

Methodology

Research Method

As mentioned above, only a few previous relevant studies have narrowed the research sample as university students to reveal whether universities students' consumption preferences and purchase decisions are motivated by social media promotions. The original intention of the present study that sets university students in Hong Kong as the target population is to fill the gap of the existing literature, emphasizing the attractiveness of social media modes and to deepen the effectiveness of social media promotion relevance to factors of purchase, consideration before consumption, etc. To

generate a more responsible study result, the study also explore whether there is a variation in gender accordingly.

However, due to COVID-19, the difficulty in doing the research has been heightened, especially the increased resources limitations and the more difficulty in recruiting students from local universities to attend the interviews. Therefore, a convenience sampling method was used to select EdUHK students to be the target sample of the research. Whilst the previous research was neither done to explore how social media boost the online consumption of EdUHK students nor having results that were applicable to this study, a mixed-method approach was adopted to collect the primary data in order to improve the quality and the accountability of the findings (Grafton, Lillis, Malina, Norreklit, & Selto, 2011; Abro, Khurshid, & Aamir, 2015). This study consisted of both questionnaires and interviews, employing both quantitative and qualitative approaches.

Questionnaires

According to the figure indicated on the EdUHK webpage, the student enrolment of full-time undergraduate programmes as at 30 September 2019 was 4810 (EdUHK, 2019). In order to analyze the data effectively within a limited timeframe, a sample size of 200 was feasible. Semi-structured questionnaire with both close-ended and open-ended questions, consisting of ratio scales, were formulated to collect quantitative data from 200 EdUHK full-time undergraduates in all study-year, which distributed to male and female students with similar quantity. Thus, 200 respondents were invited to fill in the questionnaires through online survey. With the limitation of time to collect and process the questionnaires and the need for dealing with the current COVID-19 pandemic, online survey and email access for follow-up issues were used to replace the face-to-face distribution of questionnaires and interviews.

For the design of the questionnaire, questions were set according to the research questions (see Figure 1), and respondents were asked to indicate their choice in response to statements concerning their perceptions on different social media modes and their online consumption behavior. Likert type scales are a popular rating-scale approach used to measure an item with points (Pearse, 2011). As attached in Appendix, a 7-point Likert rating scale has been applied, and students were asked to give scores on the 1-7 scale with the corresponding questions. As stated by Dawes (2008) and Foody (1994), the seven-point scale specifies the options as 7 = Very Strongly Agree, 6 = Strongly Agree, 5 = Agree, 4 = Neutral, 3 = Disagree, 2 = Strongly Disagree, and 1 = Very Strongly Disagree, which is the most prevalent format used to endorse the reliability and validity of the research. Although there were some arguments suggesting that the mid-point provision would be considered as 'no idea', the accuracy of data would not be affected due to the two extreme scale options. The overall opinion would be duly distributed; and hence, the scale survey is reliable to reflect the attitudes and perceptions of the respondents in this study (Dillman et al., 2009).

RQ1: What is the relationship between social media promotion and online consumption of EdUHK students?

1. Do you use the social media networking site(s) below: (can choose more than one option)
2. How often do you access to the social media networking site(s) selected above?
3. Have you ever noticed the following social media modes in your social media networking site(s) selected above? (can choose more than one option)
4. I notice the social media mode(s) selected above quite often.
5. I enjoy watching the promotion on social media.
6. The social media promotion triggers me to look for more details of the promoted items.
7. I take action to access the social media networking sites of the promoted items I saw on social media.
8. I take action to buy the promoted items I saw on social media.
9. The social media promotion triggers me to have online consumption behavior.
10. The social media promotion communicates well with consumers.
11. The social media promotion attracts my attention.
12. I do research to look for more details after watching the social media promotion.
13. Social media promotion triggers my online-buying motivation.
14. Social media promotion prompts my desire to own the promoted item.

RQ2: Which social media mode can best trigger the students' desire to purchase products?

15. Which of the following social media promotion modes can best trigger your desire to purchase products online?
16. Referring to the question above, how does it affect you?

RQ3: How does the best triggered social media mode drive students to consume online?

17. I pay attention to the social media mode that best triggers me to make purchase online.
18. My selected social media mode is the biggest factor triggers me to consume online.

19. My selected social media mode affects my consumption behavior.
20. My selected social media mode boosts my online consumption.
21. I ask my friends' opinions before I make online consumption.
22. I ask my family members' opinion before I make online consumption.
23. I have made a thoughtful consideration before making online purchase.
24. I thought of my needs and desires on the products before making online purchase.
25. I am rational in making online purchase.
26. I am indulged in indulgent or frivolous shopping.

Figure 1. Questionnaire questions responding to the research questions of this study

After the collection of data, IBM SPSS Statistics 26 was used to analyze the descriptive statistics in frequencies and mode (see in Appendix F and G) of all research questions.

Interviews

For the second part of the research, the qualitative approach has been conducted. To get the consent from respondents to attend the interview, phone numbers obtained in the questionnaires were used as an invitation platform. Respondents were selected according to the findings between main study and previous studies for cross-checking purposes, and the concept of redundancy was applied to filter the optimal number of interviewees for this study. Due to the COVID-19 pandemic, four respondents (two males and two females) were invited through phone contact to be interviewed through Zoom with both main and follow-up questions. To get additional understanding on how EdUHK students are influenced by social media promotion, interviewees were questioned to answer the open-ended questions designed in advance (refer to Figure 2). They were also asked to give personal opinions on questions, such as the frequency of ordering commodities and their consumption patterns after reviewing different social media advertising modes, so as to reveal their online shopping activities.

RQ2: Which social media mode can best trigger the students' desire to purchase products?

1. Have you noticed the personalized advertisements in your social media? How do you think on those personalized advertisement? Do you think those advertisements can effectively trigger your desire to purchase?

RQ3: How does the best triggered social media mode drive students to consume online?

2. When considering others' opinions before online consumption, who, family members or friends, would you rather ask?
3. Hence, why do you have such consideration?
4. Do you think you are indulged in indulgent or frivolous shopping in making purchase online?
5. Why you are impulse in making purchase?
6. Do you think you are emotional in online shopping?
7. From the previous research, it mentioned that males are less influenced by emotion, do you think so?
8. What content attached on the social media advertisement can attract you the most? Do you think social media advertising regarding sales or discount can attract you to make online consumption?
9. What is/are the most important criterion(s) for you to buy a product?

Figure 2. Interview questions responding to research question 2 and 3

Schedule of research

The design of the questionnaires was drafted in December and a consultation was conducted with my supervisor in January. The final version of a structured questionnaire was formulated in mid-January and the online survey was conducted for approximately three weeks.

After the collection of completed questionnaires, data analysis was undertaken. By reviewing and comparing the current results with the existing research findings, interview questions were then outlined. Zoom interviews were conducted to invite four respondents as interviewees in mid-March. Interview results were analyzed with the previous findings to get a whole picture of this study.

2 Nov 2020
Submission of Honours Project Proposal and Ethical Review Application

Mid-Jan 2021
Zoom meeting with Supervisor regarding the design and setting of questionnaires

Jan-Feb 2021
Distribution and collection of questionnaires

Feb 2021
Zoom meeting with Supervisor regarding data analysis and design of interview questions

Feb-Mar 2o21
Analysis of the collected data and findings

Mid-Mar 2021
Zoom Interview with four respondents and analysis of the findings

30 Mar 2021
Project Presentation

22 Apr 2021
Submission of the final report

Figure 3. Schedule of the study

Descriptive and Inferential Statistics

For questionnaires, under the current COVID-19 pandemic, online survey was formulated and collected from 200 EdUHK full-time undergraduates in all study-year, with no issue of missing data. Respondents are mainly female and are studying in year 3 (Table 1).

Table 1. Demographic Information of the respondents

			Frequency	Percent	Valid Percent	Cumulative Percent
Gender	Valid	Male	85	42.5	42.5	42.5
		Female	115	57.5	57.5	100.0
		Total	200	100	100	
Year of Study	Valid	Year 1	0	0.0	0.0	0.0
		Year 2	11	5.5	5.5	0.0
		Year 3	71	35.5	35.5	41.0
		Year 4	52	26.0	26.0	67.0
		Year 5	66	33.0	33.0	100.0
		Total	200	100	100	

1. RQ1: What is the relationship between social media promotion and online consumption of EdUHK students?

The results from the questionnaire indicate that, social media promotion and online consumption of EdUHK students are positively related.

In Table 2, almost all of the respondents accessed to the social media networking site daily with the following preferences, mainly use Instagram, followed by Facebook and YouTube, and they noticed the social media modes quite often.

Table 2. Descriptive Statistics of the respondents on social media networking sites and modes (n=200)

Description	Option	Frequency	Percent	
Usage of social media networking site(s)			36.0	
	Twitter	72		
(can select more than one)	Google	173	87.0	
	LinkedIn	38	19.0	
	Facebook	193	97.0	2nd
	Instagram	198	99.0	1st
	YouTube	190	95.0	3rd
	MeWe	7	4.0	
Frequency to access social media networking site(s)	Once a week	0	0	
	2 to 3 times a week	0	0	
	More than 3 times a week	0	0	
	More than or equal to 5 times a week	2	1	
	Daily	198	99	
Notice of the social media modes	Social media advertising	191	95.5	
(can select more than one)	Key Opinion Leader (KOL) promotion of products	177	88.5	
	Online shops' promotion of products	170	85.0	

As shown in Table 3, nearly all of the respondents agreed that the social media promotion attracted their attention and prompted their desire to own the promoted items, showing that social

media promotion ease their affirmative attitudes and enhance their awareness and desire to own the products.

Table 3. Influences of social media promotion on respondents' attitudes (n=200)

Influences on attitude	Scale	Frequency	Percent
Social media promotion attract my attention	Disagree	3	1.5
	Neutral	2	1.0
	Agree	46	23.0
	Strongly Agree	110	55.0
	Very Strongly Agree	39	19.5
Social media promotion prompt my desire to own the promoted item	Strongly Disagree	2	1.0
	Disagree	10	5.0
	Neutral	5	2.5
	Agree	54	27.0
	Strongly Agree	100	50.0
	Very Strongly Agree	29	14.5

Referring to Table 4, it revealed that most respondents were strongly agreed that they had a positive reaction on online promotion, which motivated them to do research and accessed the social media networking sites to look for more product details, as well as making online payment after watching the social media promotion.

Table 4. Influences of social media promotion on respondents' online consumption behavior (n=200)

Influences on online consumption behavior	Scale	Frequency	Percent
Do research of the promoted items watched on social media promotion	Very Strongly Disagree	1	0.5
	Strongly Disagree	1	0.5
	Disagree	6	3.0
	Neutral	7	3.5
	Agree	32	16.0
	Strongly Agree	133	66.5
	Very Strongly Agree	20	10.0
Triggered to look for more details of the promoted Items	Strongly Disagree	2	1.0
	Disagree	2	1.0
	Neutral	5	2.5

	Agree	36	18.0
	Strongly Agree	125	62.5
	Very Strongly Agree	30	15.0
Take action to access the social media on networking sites of the promoted items saw on social media	Disagree	7	3.5
	Neutral	8	4.0
	Agree	39	19.5
	Strongly Agree	122	61.0
	Very Strongly Agree	24	12.0
Take action to buy the promoted items saw on social media	Strongly Disagree	4	2.0
	Disagree	8	4.0
	Neutral	7	3.5
	Agree	94	47.0
	Strongly Agree	79	39.5
	Very Strongly Agree	8	4.0

2. RQ2: Which social media mode can best trigger the students' desire to purchase products?

The results in Table 5 indicated that more than 70% of the respondents chose social media advertising as the best mode for their online consumption, and the remaining 30% chose Key Opinion Leader (KOL) and online shops' promotion of products. Thus, social media advertising is expected to be the most effective mode to trigger EdUHK students' desire to purchase products. It is because social media advertising (1) enhanced their awareness and drew their attention to the details of the promoted items, and (2) stimulated their shopping desire by knowing the latest product launch and the discount offered, as well as (3) better understood the merit and functions of product.

Table 5. Social media mode that best triggers students' desire to make online purchases

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Social media advertising (e.g. pop-up, flash and video ads)	149	73.5	73.5	73.5
	Key Opinion Leader (KOL) promotion of products	37	18.5	18.5	92.0
	Online shops' promotion of products	14	7.0	7.0	100.0
	Total	200	100.0	100.0	

3. RQ3: How does the best triggered social media mode drive students to consume online?

Social media advertising was found to be the most effective social media mode that triggered EdUHK students to consume online. The results in Table 6 indicated that more than half respondents paid attention to the promotion of social media advertising. More importantly, as shown in Figure 4, most of the respondents strongly agreed that social media advertising was the biggest factor triggering them to engage in digital shopping, which affected their buying behavior and boosted them to consume online. These findings shown that social media advertising directly affected students' online consumption behaviors, and there was a favorable influence of social media advertising on EdUHK students.

Table 6. Influences of social media advertising on respondents' attitudes and perceptions (n=149)

Statements	Scale	Frequency	Percent
I pay attention to social media advertising to make purchase online.	Agree	19	12.8
	Strongly Agree	76	51
	Very Strongly Agree	54	36.2
Social media advertising is the biggest factor triggers me to consume online.	Strongly Disagree	1	0.7
	Disagree	12	8.1
	Neutral	3	2
	Agree	43	28.9
	Strongly Agree	82	55
	Very Strongly Agree	8	5.4
Social media advertising affects my consumption behavior.	Very Strongly Disagree	3	2
	Disagree	14	9.4
	Neutral	3	2
	Agree	39	26.2
	Strongly Agree	79	53
	Very Strongly Agree	11	7.4
Social media advertising boosts my online consumption.	Neutral	2	1.3
	Agree	39	26.2
	Strongly Agree	82	55
	Very Strongly Agree	26	17.4

		4. My selected social media mode is the biggest factor triggers me to consume online.	5. My selected social media mode affects my consumption behavior.	6. My selected social media mode boosts my online consumption.	7. I ask my friends' opinions before I make online consumption.	8. I ask my family members' opinion before I make online consumption.	9. I have made a thoughtful consideration before making online purchase.	10. I thought of my needs and desires on the products before making online purchase.	11. I am rational in making online purchase.	12. I am indulged in indulgent or frivolous shopping.
N	Valid	149	149	149	149	149	149	149	149	149
	Missing	0	0	0	0	0	0	0	0	0
Mode		Strongly Agree	Strongly Agree	Strongly Agree	Agree	Strongly Disagree	Disagree	Agree	Strongly Disagree	Agree

Figure 4. Descriptive Statistics (Mode) of questionnaire questions on RQ3

In addition, most of the respondents agreed that they would ask their friends' opinions, while only less than 30% of respondents asked their family members' opinions before making their online consumption (see in Table 7). However, as presented in Table 8, more than half of the respondents disagreed that they made a thoughtful consideration before online consumption. It is interesting to see that over 70% of respondents thought of their needs and desires on the products before product acquisition, but at the same time, most of them thought that they were irrational in consumption. In fact, more than 70% of respondents thought that they were indulged in indulgent or frivolous shopping.

Table 7. Ask and consider others' opinions before making online consumption

Types of opinions			Frequency	Percent	Valid Percent	Cumulative Percent
Friends'	Valid	Disagree	11	7.4	7.4	7.4
		Neutral	5	3.4	3.4	10.7
		Agree	104	69.8	69.8	80.5
		Strongly Agree	27	18.1	18.1	98.7
		Very Strongly Agree	2	1.3	1.3	100
		Total	149	100	100	
Family members'	Valid	Very Strongly Disagree	43	28.9	28.9	28.9
		Strongly Disagree	45	30.2	30.2	59.1
		Disagree	23	15.4	15.4	74.5
		Neutral	8	5.4	5.4	79.9
		Agree	20	13.4	13.4	93.3
		Strongly Agree	4	2.7	2.7	96

Very Strongly Agree	6	4	4	100
Total	149	100	100	

Table 8. Influences of social media advertising on respondents' online consumption behavior (n=149)

Statements	Scale	Frequency	Percent
I have made a thoughtful consideration before making online purchase.	Very Strongly Disagree	2	1.3
	Strongly Disagree	3	2
	Disagree	76	51
	Neutral	13	8.7
	Agree	42	28.2
	Strongly Agree	12	8.1
	Very Strongly Agree	1	0.7
I thought of my needs and desires on the products before making online purchase.	Disagree	12	8.1
	Neutral	22	14.8
	Agree	96	64.4
	Strongly Agree	18	12.1
	Very Strongly Agree	1	0.7
I am rational in making online purchase.	Strongly Disagree	51	34.2
	Disagree	34	22.8
	Neutral	9	6
	Agree	44	29.5
	Strongly Agree	11	7.4
I am indulged in indulgent or frivolous shopping.	Strongly Disagree	18	12.1
	Disagree	23	15.4
	Agree	63	42.3
	Strongly Agree	42	28.2
	Very Strongly Agree	3	2

An independent sample T-test was conducted to examine whether gender had a significant effect on responses. As shown in figure 5 and 6, gender was a significant factor in certain aspects. First, although both males and females would ask their friends' opinions before making online consumption, females (M=5.18, SD=0.78) were more likely to ask their friends' opinions before they made online consumption [t(147)=-2.865, p=0.005] than males (M=4.83, SD=0.67). Second, females

(M=3.22, SD=1.74) were more likely to ask for advice from family members [t(147)=-4.599, p<0.001] than males (M=2.02, SD=1.36). Third, while both males and females agreed that social media advertising affected their online behaviors, females (M=5.60, SD=0.85) were more likely to be affected by social media advertising mode [t(147)=-2.407, p=0.017] than males (M=5.17, SD=1.34). Fourth, it was momentous on decision-making process, t(147)=3.736, p=0 where females (M=3.57, SD=1.06) had a less thoughtful consideration before making online purchases [t(147)=3.736, p<0.001] than males (M=4.26, SD=1.20). Fifth, females (M=4.61, SD=0.82) were less likely to think of their needs and desires on the products before making online purchases [t(147)=3.938, p<0.001] than males (M=5.09, SD=0.60). Sixth, females (M=3.18, SD=1.22) were less rational in making online purchases [t(147)=3.528, p<0.001] than males (M=3.97, SD= 1.51). Seventh, females (M=5.14, SD=1.13) thought they were more indulged in indulgent or frivolous shopping [t(147)=-5.242, p<0.001] than males (M=4.03, SD=1.47).

Group Statistics					
	Gender	N	Mean	Std. Deviation	Std. Error Mean
3. I pay attention to the social media mode that best triggers me to make purchase online.	1.00	66	6.1970	.70645	.08696
	2.00	83	6.2651	.62634	.06875
4. My selected social media mode is the biggest factor triggers me to consume online.	1.00	66	5.3333	1.14130	.14048
	2.00	83	5.5542	.83012	.09112
5. My selected social media mode affects my consumption behavior.	1.00	66	5.1667	1.34260	.16526
	2.00	83	5.6024	.85454	.09380
6. My selected social media mode boosts my online consumption.	1.00	66	5.8030	.76901	.09466
	2.00	83	5.9518	.62281	.06836
7. I ask my friends' opinions before I make online consumption.	1.00	66	4.8333	.66986	.08245
	2.00	83	5.1807	.78312	.08596
8. I ask my family members' opinion before I make online consumption.	1.00	66	2.0152	1.36430	.16793
	2.00	83	3.2169	1.73942	.19093
9. I have made a thoughtful consideration before making online purchase.	1.00	66	4.2576	1.19371	.14694
	2.00	83	3.5663	1.06144	.11651
10. I thought of my needs and desires on the products before making online purchase.	1.00	66	5.0909	.60070	.07394
	2.00	83	4.6145	.82390	.09043
11. I am rational in making online purchase.	1.00	66	3.9697	1.50864	.18570
	2.00	83	3.1807	1.22120	.13404
12. I am indulged in indulgent or frivolous shopping.	1.00	66	4.0303	1.46728	.18061
	2.00	83	5.1446	1.12762	.12377

Figure 5. Means, standard deviations and standard error mean of questionnaire questions responding to RQ3

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2–tailed)	Mean Difference	Std. Error Difference	Lower	Upper
3. I pay attention to the social media mode that best triggers me to make purchase online.	Equal variances assumed	.805	.371	–.623	147	.534	–.06809	.10934	–.28417	.14798
	Equal variances not assumed			–.614	131.063	.540	–.06809	.11085	–.28738	.15120
4. My selected social media mode is the biggest factor triggers me to consume online.	Equal variances assumed	5.536	.020	–1.367	147	.174	–.22088	.16162	–.54029	.09852
	Equal variances not assumed			–1.319	115.051	.190	–.22088	.16745	–.55256	.11079
5. My selected social media mode affects my consumption behavior.	Equal variances assumed	12.423	<.001	–2.407	147	.017	–.43574	.18100	–.79343	–.07805
	Equal variances not assumed			–2.293	104.987	.024	–.43574	.19003	–.81253	–.05896
6. My selected social media mode boosts my online consumption.	Equal variances assumed	10.816	.001	–1.305	147	.194	–.14878	.11401	–.37408	.07653
	Equal variances not assumed			–1.274	123.792	.205	–.14878	.11676	–.37989	.08233
7. I ask my friends' opinions before I make online consumption.	Equal variances assumed	2.158	.144	–2.865	147	.005	–.34739	.12125	–.58701	–.10777
	Equal variances not assumed			–2.916	146.188	.004	–.34739	.11911	–.58279	–.11199
8. I ask my family members' opinion before I make online consumption.	Equal variances assumed	9.589	.002	–4.599	147	<.001	–1.20172	.26133	–1.71816	–.68527
	Equal variances not assumed			–4.726	146.979	<.001	–1.20172	.25427	–1.70422	–.69921
9. I have made a thoughtful consideration before making online purchase.	Equal variances assumed	8.347	.004	3.736	147	<.001	.69131	.18502	.32567	1.05695
	Equal variances not assumed			3.687	131.289	<.001	.69131	.18752	.32036	1.06226
10. I thought of my needs and desires on the products before making online purchase.	Equal variances assumed	10.303	.002	3.938	147	<.001	.47645	.12099	.23734	.71556
	Equal variances not assumed			4.079	145.980	<.001	.47645	.11681	.24558	.70732
11. I am rational in making online purchase.	Equal variances assumed	10.836	.001	3.528	147	<.001	.78897	.22361	.34707	1.23088
	Equal variances not assumed			3.445	123.750	<.001	.78897	.22903	.33566	1.24229
12. I am indulged in indulgent or frivolous shopping.	Equal variances assumed	23.171	<.001	–5.242	147	<.001	–1.11428	.21257	–1.53436	–.69419
	Equal variances not assumed			–5.089	119.497	<.001	–1.11428	.21895	–1.54780	–.68075

Figure 6. Results for the independent sample t-test

Discussion

A positive connection between social media promotion and online consumption was revealed as the main finding of the present study. This finding suggests that social media promotion stimulates EdUHK students to be aware of and purchase online the promoted items.

In the existing literature, promotion on social media was argued to be the most operative and reachable electronic resources for purchase awareness and intentions (Duffett, 2017; Kim & Ko, 2010). A research pertaining to the discovery of the correlation between age and attitude on online promotion done by Cox (2010), has suggested that social networking users aged between 18 and 28 had strong positive attitudes towards videos, pop up, brands and related online advertisements. Those studies' findings are consistent with those of this study, implying that social media promotions are important in transferring informative product details that would motivate consumers to look, search

and buy the target products (Kotler & Armstrong, 2014; Schivinski & Dabrowski, 2015).

Several studies have found that the purchasing pattern of the younger generation may be varied by the social media effect (Chivandi et al., 2019; Gossen et al., 2019; Dinner et al., 2014). For example, a study, primarily focused on university students, has showed that the university students tend to be attracted by the discount offered in the social media advertisements (Sahin, Gulmez, & Ersoy, 2019). Another study found that online advertisements should possess positive attributes, such as informative product details and eye-catching layout of promotion (Cox, 2010). Hence, social media advertising is influential in creating positive attitudes and consumption behaviors. In summary social media advertising acts as an effective channel for the social media users to recognize the up-to-date merchandises in the market and stimulate their purchase desire subsequently.

Surprisingly, in addition to the above reasons why social media advertising modes are attractive to students, a study found that online advertising can draw university students to the product, as this mode offers a simpler product selection process for buyers (Sahin et al., 2019). Prior literature (Boerman, Kruikemeier, and Zuiderveen Borgesius, 2017; Lee, Cheng, and Shih, 2017) pointed out that businesses make their products more easily accessible by social media users through adopting personalized advertising practices or Online Behavioral Advertising (OBA). These advertisements collect data, such as the websites, videos and articles that users have visited or looked for from a search engine. According to Yang (2020), the better the highly personalized advertisements, the more will be the click-through intentions of the promoted products. In order to know more about the effect on consumption behavior, interviews were conducted, and the results revealed that the advertisements in social media advertising are in proportion to buyers' preferences. This kind of advertising quickly transmits the message so as to seize customers' consumption preferences and product recommendations. In other words, smart technological advancement can effectively capture users' personal preferences from analyzing the big data. This is an additional reason why social

media advertising is preferred by university students who enjoy efficient browsing and purchasing functions.

Now, I turn to discuss how gender in the factors affecting their buying decisions. This research has found that both males and females considered the opinions from friends, but they would also be inclined to ask those friends and family members who had a high education level and a close relationship with them. Moreover, the interview results also shows that both male and female informants would rather ask for the opinions from friends or experts than their family members because they thought that their friends should know more about the products than their family members. However, the study done by Togari, Sato, and Yamazaki (2012) found the importance of coherence in family relationship in decision-making. The present study has also found that university students would preferably ask for consumption opinions from family members if they have a close relationship.

Social media advertising has been found to be important in promoting the value of goods to social network users, especially women. This finding is consistent with Ghous, Shabir, and Hussain (2020), who found that women are fully exaggerated by the content of online advertisements and ultimately tend to buy products displayed in promotions (Ghous et al., 2020). Inevitably, consumers will experience product promotion and complete the buying process in a short time span, which usually lasts one day or up to three days (Forebes, 2013). According to a previous study (Schumann et al., 2014), products advertised on social media have increased consumer demands, especially female consumers who tend to become addicted to such advertising. As the interviewees in the Zoom interview said, if they browse on such social media sites and want to consume the product, they would quickly pay online. This may be explainable by the concept of instant shopping, which is a mentality combined with social media sites and online purchases (Forebes, 2013).

Current research shows that university students tend to make excessive online purchases, and female students are different from male students in their reasons for making buying decisions. Previous studies have mentioned that impulsive buyers undergo unexpected or sudden purchases when there are discounts or promotions listed on advertising content (Ozen & Engizek, 2014). This is consistent with Ghous et al. (2020), who found that the public is severely affected by advertisements for various products broadcasting on electronic media. Many women also believe that the social media campaign causes them to purchase unnecessary products, which indicates that businesses enjoy women's emotional online purchases. According to the theory of emotional intelligence (EI), emotions would affect an individual's self-regulation and domination of instantaneous aspirations and awareness of the emotions of others (Mayer, Salovey, & Caruso, 2004). Lin and Chuang (2005) also suggested the negative relationship between EI and impulsive buying tendency, whereas shoppers aged 18 to 39 are more susceptible to impulsive buying and adolescents with higher EI are less likely to be involved in emotional or impulsive shopping behavior. Previous studies (Karimpour, Sayad, Taheri, and Sheibani, 2019; Lin and Chuang, 2005; Waghmare, 2015) have suggested that men possess higher emotional intelligence compared to women, indicating that men seem to have greater rational control over spending than women. Summarizing the findings so far, it is found that women have lower EI than men, so they are more susceptible to emotions as well as illogical and unconscious purchasing. On the other hand, compared with women, men's emotional drive is smaller and their consumption experience is more reasonable. The results from both quantitative and qualitative studies are consistent.

Practical implications

By composing the reasons, factors and impact of social media promotion to EdUHK students' online purchasing practices, recommendations are given to college students, businesses and the

government, including discussion on social responsibility and ethical issues that companies should pay attention to.

Recommendations for university students

Aside from gaining insights into the merits of social media advertising, the present study offers practical values to students. The study suggests a prominent finding that university students tend to be spoiled in having online transactions, whereas gender points to an extraordinary effect on rationality and indulgences in the decision-making process. Therefore, the study is evocative in bringing values to university students about their belief in social media promotion and online consumption pattern, to review their buying activities by digital channels. According to Forebes (2013), consumers usually make online purchases with an unthoughtful consumption plan. Since female students readily become addicted to the products through online advertising means, therefore, to prevent permissive spending, it is suggested that the occurrence of emotional shopping would be obviously lower when buyers can differentiate the distinctions between intentional purchase and impulse purchase clearly (Hoyer, MacInnis, & Pieters, 2001; Youn & Faber, 2000). Yielding a weighing scale on consumers' wants and prerequisites of the products is also essential for raising the time perspective in product identification and consumption process, so as to reduce impulsive purchases in long-term (Forebes, 2013).

Recommendations for companies associated with social responsibility and ethical issues

In a company perspective, the study results help companies understand students' perceptions on social media promotion, as well as to review the social media mode they have used, thus, to refine online promotion strategies accordingly. The research has provided insights for prospective business companies, aiming to appeal university students' purchasing motivations and online consumption tendency in the future. Ozen and Engizek (2014) revealed that if there is a sales promotion and discount in social media campaign, consumers are easily persuaded to make an online order. Previous studies have then addressed suggestions for companies to optimize their earnings by

personalized marketing means, competitive messages formed to consumers in all phases of buying process, and appealing marketing mix tools (e.g., discount or sales promotion online), so as to motivate the acquisition desire of university students.

Most of the preceding studies or literatures revealed similar results as this main study and pervious findings stated above, implying that it is critical for marketing firms to tailor make enticing product strategies in promotion, attract males and females by inviting experts related to the products to boost the expert effect for promotion and by spending more efforts on product packaging and means of promoting products functions respectively to increase the offers (Poyry, et al., 2017; Sahin, et al., 2019; Yang, 2020). It is indubitable that the new formulated selling point of the online promoted products may be useful to supplement the product values to consumers and thereby, motivate them to have more online purchases. However, these business promotions mainly emphasize on the economic benefits, advocating for online consumption, or more seriously, encouraging university students to over-consume the marketed items on social media promotion subsequently. As. an operating firm, apart from generating favorable economic returns through social media promotion, it is also vital to business firms to intensify its consciousness of promoting their offerings in an ethical perspective, and firmly adopt more on social responsibility management.

To fulfill the corporate social responsibility in an ethical manner, firms should recognize how their business decisions and actions would affect its stakeholders and determine whether their behaviors are within the expectation by society or are accepted by moral (Whetten, Rands & Godfrey, 2002). Preceding findings mentioned that customer reactions are directly linked up with company's corporate social responsibility and ethical performance, while consumers holding a positive attitude on that may lead to a higher chance to build up customer loyalty in e-commerce businesses (Carroll & Shabana, 2010; Kurucz, Colbert, & Wheeler, 2008; Wei Zhao, 2018). It is reflected from the findings that the formation of customer devotion is a key to achieving business

success (Ferrell, Harrison, Ferrell, & Hair, 2019; Galdeano, Ahmed, Fati, Rehan, & Ahmed, 2019; Nwachukwu, Vitell, Gilbert, & Barnes, 1997).

According to the main study result, it indicates that males are generally more rational in making consumption than females, which is consistent with the previous findings that gender had a major impact in making online purchasing decisions. Moreover, males are more concerned with the product values and tend to trust the professional ideas from experts than their family members, while females emphasized on the packaging and the usefulness of the product itself. As a proactive social enterprise, marketers should draw a clear distinction between advertising and sensationalism, preventing excessive advocating on consumers to make online procurements and fall into emotional purchase (Lee & Shin, 2015). To encourage customers to buy online, it is acceptable to not only boost its sales with the exact product attributes or attractive promotion mix tools, but also prevent unethical advertising and promotion and project the accurate product messages to consumers. In order to guarantee the genuine transaction experiences and high quality of its offerings through social media promotion, it is of foremost importance to e-business firms not to make false statements on the advertising goods. Besides, getting the insights from the current interview, the firms can make beneficial use of expert effect by inviting real experts who have conducted relevant research formerly, or have expertise in the relevant field for testing or providing professional advice on those certain products. The true experience of experts can provide valuable suggestions on the worthiness to consume the promoted products and help the company to make further adjustments on the product quality (Spoljar et al., 2020). This ethical promotion behavior can obviously contribute to customer confidence and loyalty of the firm (Ferrell et al., 2019; Sharma & Lijuan, 2014).

From the marketing perspective, the accuracy of promoting social media advertising products to the most fascinated potential customers can enrich the value of its offerings (Ducoffe, 1995). According to the study, the high-tech progression succeeding consumers' personal preference from

the big data, which delivers suitable and relevant customized advertisements accordingly. The technique is now taking a key role to enticing consumers in looking, searching and purchasing the promoted items online. In simple words, targeted advertising practices could be used to make the items readily available to all social media users. Businesses could then maximize its greatest power to project the advantageous product image to those users to generate more sales. Since personalized advertising would concentrate on projecting similar items to social media users, it is important to business firms to ensure its authenticity of the product description and information presented on social media promotion to avoid product distortion (Carroll & Shabana, 2010). The honesty on dealings products can add value and integrity to the brand image in customers' eyes and establish a positive corporate business image to the public.

Recommendation for the government

According to LegCo (2021), there are only two generic consumer protection laws, which are Trade Descriptions Ordinance (Cap. 362) and Sale of Goods Ordinance (Cap. 26), being used to protect the unfair trade practices on general consumers, while neither precise legislation is regulated on online marketing business in Hong Kong nor standardized goods refund or return policies are launched for online shopping. Comparing to the situation in Hong Kong, the e-consumer protection in the UK is more stringent and e-businesses are required to provide sufficient transaction information, such as the price, product information and details on the social media promotion in order to follow government compliance. Similar to the UK, the local government in South Korea has also enacted the e-consumer protection that requires businesses to list out the essential information on the product description.

To protect the consumer from online shopping, as well as restricting the businesses to fulfill their social responsibilities to provide products' details and post-purchase guarantee to consumers. It is recommended that the Hong Kong government can imitate the relevant policies of e-commerce

promotion like that of the foreign countries. The implementation of legal provisions and government requirements can drive businesses to the formation of responsible plans, ensuring the accuracy of products offered on social media promotion.

To a great extent, this study bridges the knowledge gap by highlighting gender transformations in the online purchase context and delivering more visions to online advertising to buyers, sellers and government.

Limitations and future research directions

In spite of the results of this study enabling an understanding of how social media boost the online consumption of university students, there are still certain limitations and needs for additional research.

One possible concern of the study is the sampling size collected and analyzed from questionnaires and interviews. The original intention of study set the target population as university students in Hong Kong, which should involve a much larger sampling size for data analysis. According to Morgan (1970), approximately 355 respondents are needed for a population of 4,500 to 5,000. Moreover, a sample size of 200 to 500 is required for meaningful analyses with inferential statistics (Israel, 1992; Ibrahimov, Aleksic & Dukic, 2019). A minimum sample size of 257 is suggested, with 5% common actable marginal error, 90% confidence level and 50% response distribution (Moore & Kirkland, 2007; Rah, Alnaser, & Abd Ghani, 2019; Raosoft, 2004). However, due to the current COVID-19 pandemic, a convenience sample was used. Therefore, the effect size and statistical power might lower than expected, which may not fully represent the target population

of EdUHK (Moore & Kirkland, 2007; Rah, Alnaser, & Abd Ghani, 2019; Raosoft, 2004). Thus, in the future, if possible, a random sampling method should be conducted to obtain a more representable sample for data analysis. Despite this drawback, insights of this study are still useful. Statistical methods chosen are still appropriate for this research.

Another concern is the reliability of the self-report data (Hudson, 2016). As this study uses the data collected from questionnaires and interviews for examining, while personal judgements and subjective opinions were involved. The respondents and interviewees might express their thoughts by a self-report approach, in a dishonesty manner. This may give rise to misinterpretation or misunderstanding, though, in behavioral science projects, self-reporting is a mutual practice adopted (Kraut et al., 2004). However, according to Moore and Kirkland (2007), the individual scales combined, and the errors incurred in the study have been considered as acceptable (Faber & O'Guinn, 1992; Rosen et al., 2013; Young, 1998).

The present study suggested that university students are strongly influenced by social media advertising modes; more importantly, they are triggered by online advertising with the benefit of possessing a naiver selection procedure before online purchases (Boerman et al., 2017; Lee et al., 2017). Hence, more research can be conducted to study the relationship between online personalization and buying comportments.

The study has found that there is an influence of family relationship with children on decision-making. Nevertheless, a close relationship between parents and children was not found to be a predictor of children's consumption behavior despite a proliferation of research on the family role in children's social behavior (Epp & Price, 2008; Togari et al., 2021). Thus, more future investigations should be designed to improve the understanding in this research area.

As the social media development and the social media advertising play as key attributes in influencing university students' consumption patterns, it is also momentous to explore the effect of social media consumers' experiences and perspectives (Yang, 2020). Thus, future research should investigate the trend of social media modes and consumer behavior in online purchases. Such investigations can help to develop effective e-commerce business strategies on customer relationship management and promotion mix tools adopted by the advertising companies.

As mentioned before, companies should not only tailor its goods with its own interests or for profit maximization, but more importantly, should consider presenting their products on social media in an ethical and social responsible manner. It is reflected from the findings that the buildup of customer loyalty in online businesses is important in achieving corporate victory ((Ferrell et al., 2019; Galdeano et al., 2019; Nwachukwu et al., 1997). Therefore, it is suggested that more future research should be conducted to analyze the concern of moral views, as well as to examine the relationship between customers' expectations of business ethics and corporate social responsibility that leads to brand attitude. The future research directions would probably bring insights on how businesses build up a sense of trust and loyalty and consolidate customer relationship management through social media promotions.

Conclusion

The results of the study and analysis on students' online consumption behavior empirically justified the positive relationship between social media promotion and the online consumption of EdUHK students. The study also identified the reasons and how the promotions on social media advertising effectively affected the consumption patterns of EdUHK students specifically. Additionally, significant gender repercussions have been discovered in e-shopper decision-making

process. Viable solutions are recommended to university students to avoid online-purchasing in an irrational or emotive way. Concrete values are also advocated to government and businesses.

It is hoped that this study adds a positive knowledge to the research on social media promotion and consumers' online purchasing pattern, as well as providing a solid foundation for a novel direction in business ethics and corporate social responsibility research. Forthcoming searches can broaden the sample size into a greater one for obtaining a more accurate and effective study result. Future research investigating on the correlation of online personalization and buying patterns, as well as testing how a close family-child relationship would affect students' consumption behaviors, would allow for a more wide-ranging structure to comprehend the effectiveness of online transaction substance to university students.

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Appendices

Appendix A: Table for Determining Sample Size for a Finite 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 & Morgan, 1970

Appendix B: Formula and figure showing the criterions in finding the minimum respondents of the survey:

$$x = Z(^c/_{100})^2 r(100-r)$$

$$n = \frac{Nx}{((N-1)E^2 + x)}$$

$$E = \text{Sqrt}[\frac{(N-n)x}{n(N-1)}]$$

(Where N is the population size, r is the fraction of responses and $Z(^c/_{100})$ is the critical value for the confidence level c.)

What margin of error can you accept? 5% is a common choice	5 %	The margin of error is the amount of error that you can tolerate. If 90% of respondents answer *yes*, while 10% answer *no*, you may be able to tolerate a larger amount of error than if the respondents are split 50-50 or 45-55. Lower margin of error requires a larger sample size.
What confidence level do you need? Typical choices are 90%, 95%, or 99%	90 %	The confidence level is the amount of uncertainty you can tolerate. Suppose that you have 20 yes-no questions in your survey. With a confidence level of 95%, you would expect that for one of the questions (1 in 20), the percentage of people who answer *yes* would be more than the margin of error away from the true answer. The true answer is the percentage you would get if you exhaustively interviewed everyone. Higher confidence level requires a larger sample size.
What is the population size? If you don't know, use 20000	4810	How many people are there to choose your random sample from? The sample size doesn't change much for populations larger than 20,000.
What is the response distribution? Leave this as 50%	50 %	For each question, what do you expect the results will be? If the sample is skewed highly one way or the other, the population probably is, too. If you don't know, use 50%, which gives the largest sample size. See below under **More information** if this is confusing.
Your recommended sample size is	257	This is the minimum recommended size of your survey. If you create a sample of this many people and get responses from everyone, you're more likely to get a correct answer than you would from a large sample where only a small percentage of the sample responds to your survey.

Appendix C: Information Sheet

<div align="center">

INFORMATION SHEET

To explore how social media boost the online consumption of EdUHK students

</div>

Invitation

You are invited to participate in a project supervised by Dr. Cheng Wai Lun, Eddie and conducted by Chow Chung Ki, who are staff / student of The Department of Social Sciences in The Education University of Hong Kong.

Purpose of the Research

This study dedicates to explore how social media boost the online consumption of EdUHK students in relation to social media promotion, social media modes and online consumption patterns. The research objectives are to investigate the relationship between social media promotion and online consumption of EdUHK students, the social media mode that most triggers the desire of EdUHK students to make online consumption as well as the ways that the most effective social media mode drives students to consume online.

Why have you been chosen?

The study highlights the effectiveness of social media in influencing the online consumption behavior of EdUHK students and is expected to bring values to university students to understand more regarding their perception on social media promotion and online consumption pattern, so as to review the buying behaviors through the digital channels. On the other hand, the research results would provide practical values to the businesses to understand students' perceptions on social media promotion, as well as to review the social media modes that have used, to fine-tune the online-promotion strategies accordingly.

Methodology of the Research

    I.   Research Method

A mix-method approach would be adopted to collect the primary data. This study is regarded as a small-scale mixed research, consisting of questionnaires collection and interviews. For questionnaires, under the current COVID-19 pandemic, online surveys will be formulated to collect quantitative data from around 200 EdUHK full-time undergraduates in all study-year, with similar number of questionnaires distributed to male and female respectively. For interview, students' phone number provided in the questionnaires will be treated as their consent to attend the interview. Five to ten of the respondents, according to the actual situation, would be invited to participate in the interview through telephone chat or Zoom meeting with both main and follow-up questions.

II.   Procedure of the Research

In order to have sufficient time to analyze how social media influences the online consumption behavior of EdUHK students, questionnaires will be collected between late January and early February. Interviews will then take place for the collection of individual opinions related to preceding online consumption experience. Invitation of interview will be sent through email or phone message in mid-February and interviews are expected to be conducted between mid-February and late February.

III.   Potential Benefits for participation

There are no reimbursements or other incentives offered to research participants.

Methods for Ensuring Confidentiality of Research Data

The study is an undergraduate (UG) student research project, involving indirect human participants by distributing online questionnaires to full-time EdUHK undergraduates studying in all-year. The questions asked in the interview are straightforward, related to preceding online consumption experience, with neither personally identifiable information nor intervention involved.

Your participation in the project is voluntary. You have every right to withdraw from the study at any time without adverse concerns. All information related to you will remain confidential, and will be identifiable by codes known only to the researcher.

The collected data will be stored in the data file, which will only be kept by the researcher to avoid leaking information. After the project has been assessed by the supervisor, all relevant data will be safely deleted.

If you would like to obtain more information regarding the research study, please contact Chow Chung Ki or the supervisor Dr. Cheng Wai Lun, Eddie. If you have any concerns about the study, please do not hesitate to contact the Human Research Ethics Committee via email at hrec@eduhk.hk or by mail to the Research and Development Office, The Education University of Hong Kong.

When you complete the questionnaire and/or attend the interview, you consent to allow us to use your data for research analysis. Thank you for participating in this research study.

Chow Chung Ki

Principal Investigator

Appendix D: Consent Form

THE EDUCATION UNIVERSITY OF HONG KONG
The Department of Social Sciences

CONSENT TO PARTICIPATE IN RESEARCH
To explore how social media boost the online consumption of EdUHK students

I _____ hereby consent to participate in the captioned research supervised by Dr. Cheng Wai Lun, Eddie and conducted by Chow Chung Ki, who are staff / students of Department of Social Sciences in The Education University of Hong Kong.

I understand that information obtained from this research may be used in future research and may be published. However, my right to privacy will be retained, i.e., my personal details will not be revealed without permission.

The procedure as set out in the **information sheet** has been fully explained. I understand the benefits and risks involved. My participation in the project is voluntary. I acknowledge that I have the right to question any part of the procedure and can withdraw at any time without negative consequences.

Name of participant	_____
Signature of participant	_____
Date	_____

Appendix E: Online survey — Questionnaire questions

Personal Information
Please indicate your personal information below. All of your information typed below will remain confidential and will be used by the researcher for contact purpose only. Your personal information will be deleted after the study.

1. Gender:
    ☐   Male
    ☐   Female

2. Programme title:
    _____

3. Year of studies:
    ☐   Year 1
    ☐   Year 2
    ☐   Year 3
    ☐   Year 4
    ☐   Year 5

4. Student email address:
    _____

Session 2 — Social Media Promotion and Online Consumption

1. Do you use the social media networking site(s) below: (can choose more than one option)
    ☐   Twitter
    ☐   Google
    ☐   LinkedIn
    ☐   Facebook
    ☐   Instagram
    ☐   YouTube
    ☐   Others: _____

2. How often do you access to the social media networking site(s) selected above?
    ☐   Once a week
    ☐   2 to 3 times a week
    ☐   More than 3 times a week
    ☐   More than or equal to 5 times a week
    ☐   Daily

3. Have you ever noticed the following social media modes in your social media networking site(s) selected above? (can choose more than one option)
    ☐   Social media advertising (e.g. pop-up, flash and video advertisements)
    ☐   Key Opinion Leader (KOL) promotion of products
    ☐   Online shops' promotion of products
    ☐   Others:_____

Please read the statement below and indicate your choice which best describes you in 1-7 point scale. (7 = Very Strongly Agree, 6 = Strongly Agree, 5 = Agree, 4 = Neutral, 3 = Disagree, 2 = Strongly Disagree, and 1 = Very Strongly Disagree)

4.   I notice the social media mode(s) selected above quite often.

Very Strongly Disagree	1 O	2 O	3 O	4 O	5 O	6 O	7 O	Very Strongly Agree

5.   I enjoy watching the promotion on social media.

Very Strongly Disagree	1 O	2 O	3 O	4 O	5 O	6 O	7 O	Very Strongly Agree

6.   The social media promotion triggers me to look for more details of the promoted items.

Very Strongly Disagree	1 O	2 O	3 O	4 O	5 O	6 O	7 O	Very Strongly Agree

7.   I take action to access the social media networking sites of the promoted items I saw on social media.

Very Strongly Disagree	1 O	2 O	3 O	4 O	5 O	6 O	7 O	Very Strongly Agree

8.   I take action to buy the promoted items I saw on social media.

Very Strongly Disagree	1 O	2 O	3 O	4 O	5 O	6 O	7 O	Very Strongly Agree

9.   The social media promotion triggers me to have online consumption behavior.

Very Strongly Disagree	1 O	2 O	3 O	4 O	5 O	6 O	7 O	Very Strongly Agree

10.   The social media promotion communicates well with consumers.

Very Strongly Disagree	1 O	2 O	3 O	4 O	5 O	6 O	7 O	Very Strongly Agree

11.   The social media promotion attracts my attention.

1	2	3	4	5	6	7

Very Strongly Disagree	O	O	O	O	O	O	O	Very Strongly Agree

12. I do research to look for more details after watching the social media promotion.

Very Strongly Disagree	1 O	2 O	3 O	4 O	5 O	6 O	7 O	Very Strongly Agree

13. Social media promotion triggers my online-buying motivation.

Very Strongly Disagree	1 O	2 O	3 O	4 O	5 O	6 O	7 O	Very Strongly Agree

14. Social media promotion prompts my desire to own the promoted item.

Very Strongly Disagree	1 O	2 O	3 O	4 O	5 O	6 O	7 O	Very Strongly Agree

Session 3 — The Most Effective Social Media Mode Drives Consumption
1. Which of the following social media promotion modes can best trigger your desire to purchase products online?
   ☐ Social media advertising (e.g. pop-up, flash and video ads)
   ☐ Key Opinion Leader (KOL) promotion of products
   ☐ Online shops' promotion of products
   ☐ Others:_____

2. Referring to the question above, how does it affect you?
   _____

Please read the statement below and indicate your choice which best describes you in 1-7 point scale. (7 = Very Strongly Agree, 6 = Strongly Agree, 5 = Agree, 4 = Neutral, 3 = Disagree, 2 = Strongly Disagree, and 1 = Very Strongly Disagree)

3. I pay attention to the social media mode that best triggers me to make purchase online.

Very Strongly Disagree	1 O	2 O	3 O	4 O	5 O	6 O	7 O	Very Strongly Agree

4. My selected social media mode is the biggest factor triggers me to consume online.

Very Strongly Disagree	1	2	3	4	5	6	7	Very Strongly Agree

5. My selected social media mode affects my consumption behavior.

	Very Strongly Disagree	1	2	3	4	5	6	7	Very Strongly Agree

6. My selected social media mode boosts my online consumption.

	Very Strongly Disagree	1	2	3	4	5	6	7	Very Strongly Agree

7. I ask my friends' opinions before I make online consumption.

	Very Strongly Disagree	1	2	3	4	5	6	7	Very Strongly Agree

8. I ask my family members' opinion before I make online consumption.

	Very Strongly Disagree	1	2	3	4	5	6	7	Very Strongly Agree

9. I have made a thoughtful consideration before making online purchase.

	Very Strongly Disagree	1	2	3	4	5	6	7	Very Strongly Agree

10. I thought of my needs and desires on the products before making online purchase.

	Very Strongly Disagree	1	2	3	4	5	6	7	Very Strongly Agree

11. I am rational in making online purchase.

	Very Strongly Disagree	1	2	3	4	5	6	7	Very Strongly Agree

12. I am indulged in indulgent or frivolous shopping.

	Very Strongly Disagree	1	2	3	4	5	6	7	Very Strongly Agree

There will be a follow up interview session. If you are interested in joining the session, please leave your telephone number below:

Phone number:

_____

Appendix F: Questionnaire data — Descriptive Statistics (Frequencies)

Session 1 — Personal Information

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	85	42.5	42.5	42.5
	Female	115	57.5	57.5	100.0
	Total	200	100.0	100.0	

Year of Study

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Year 1	0	0.0	0.0	0.0
	Year 2	11	5.5	5.5	0.0
	Year 3	71	35.5	35.5	41.0
	Year 4	52	26.0	26.0	67.0
	Year 5	66	33.0	33.0	100.0
	Total	200	100.0	100.0	

Session 1 — Social Media Promotion and Online Consumption
RQ1: What is the relationship between social media promotion and online consumption of EdUHK students?

1. Do you use the social media networking site(s) below: (can choose more than one option)

		Frequency	Percent	Valid Percent	
Valid	Twitter	72	36.0	36.0	
	Google	173	87.0	87.0	
	LinkedIn	38	19.0	19.0	
	Facebook	193	97.0	97.0	2nd
	Instagram	198	99.0	99.0	1st
	YouTube	190	95.0	95.0	3rd
	MeWe	7	4.0	4.0	
	Total	943	100	100.0	

2. How often do you access to the social media networking site(s) selected above?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Once a week	0	0.0	0.0	0.0
	2 to 3 times a week	0	0.0	0.0	0.0
	More than 3 times a week	0	0.0	0.0	0.0
	More than or equal to 5 times a week	2	1.0	1.0	1.0
	Daily	198	99.0	99.0	100.0
	Total	200	100.0	100.0	

3. Have you ever noticed the following social media modes in your social media networking site(s) selected above? (can choose more than one option)

		Frequency	Percent	Valid Percent
Valid	Social media advertising	191	95.5	95.5
	Key Opinion Leader (KOL) promotion of products	177	88.5	88.5
	Online shops' promotion of products	170	85.0	85.0
	Total	538	100.0	100.0

4. I notice the social media mode(s) selected above quite often.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	1	0.5	0.5	0.5
	Neutral	2	1.0	1.0	1.5
	Agree	15	7.5	7.5	9.0
	Strongly Agree	77	38.5	38.5	47.5
	Very Strongly Agree	105	52.5	52.5	100.0
	Total	200	100.0	100.0	

5. I enjoy watching the promotion on social media.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Strongly Disagree	1	0.5	0.5	0.5
	Strongly Disagree	30	15.0	15.0	15.5
	Disagree	50	25.0	25.0	40.5
	Neutral	17	8.5	8.5	49.0
	Agree	74	37.0	37.0	86.0
	Strongly Agree	25	12.5	12.5	98.5
	Very Strongly Agree	3	1.5	1.5	100.0
	Total	200	100.0	100.0	

6. The social media promotion triggers me to look for more details of the promoted items.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	1.0	1.0	1.0
	Disagree	2	1.0	1.0	2.0
	Neutral	5	2.5	2.5	4.5
	Agree	36	18.0	18.0	22.5
	Strongly Agree	125	62.5	62.5	85.0
	Very Strongly Agree	30	15.0	15.0	100.0
	Total	200	100.0	100.0	

7. I take action to access the social media networking sites of the promoted items I saw on social media.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	7	3.5	3.5	3.5
	Neutral	8	4.0	4.0	7.5
	Agree	39	19.5	19.5	27.0
	Strongly Agree	122	61.0	61.0	88.0
	Very Strongly Agree	24	12.0	12.0	100.0
	Total	200	100.0	100.0	

8. I take action to buy the promoted items I saw on social media.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	4	2.0	2.0	2.0
	Disagree	8	4.0	4.0	6.0
	Neutral	7	3.5	3.5	9.5
	Agree	94	47.0	47.0	56.5
	Strongly Agree	79	39.5	39.5	96.0
	Very Strongly Agree	8	4.0	4.0	100.0
	Total	200	100.0	100.0	

9. The social media promotion triggers me to have online consumption behavior.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	1.5	1.5	1.5
	Disagree	1	0.5	0.5	2.0
	Neutral	10	5.0	5.0	7.0
	Agree	49	24.5	24.5	31.5
	Strongly Agree	115	57.5	57.5	89.0
	Very Strongly Agree	22	11.0	11.0	100.0
	Total	200	100.0	100.0	

10. The social media promotion communicates well with consumers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	10	5.0	5.0	5.0
	Neutral	8	4.0	4.0	9.0
	Agree	112	56.0	56.0	65.0
	Strongly Agree	60	30.0	30.0	95.0
	Very Strongly Agree	10	5.0	5.0	100.0
	Total	200	100.0	100.0	

11. The social media promotion attracts my attention.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	3	1.5	1.5	1.5
	Neutral	2	1.0	1.0	2.5
	Agree	46	23.0	23.0	25.5
	Strongly Agree	110	55.0	55.0	80.5
	Very Strongly Agree	39	19.5	19.5	100.0
	Total	200	100.0	100.0	

12. I do research to look for more details after watching the social media promotion.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Strongly Disagree	1	0.5	0.5	0.5
	Strongly Disagree	1	0.5	0.5	1.0
	Disagree	6	3.0	3.0	4.0
	Neutral	7	3.5	3.5	7.5
	Agree	32	16.0	16.0	23.5
	Strongly Agree	133	66.5	66.5	90.0
	Very Strongly Agree	20	10.0	10.0	100.0
	Total	200	100.0	100.0	

13. Social media promotion triggers my online-buying motivation.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	1.5	1.5	1.5
	Disagree	1	0.5	0.5	2.0
	Neutral	4	2.0	2.0	4.0
	Agree	53	26.5	26.5	30.5
	Strongly Agree	114	57.0	57.0	87.5
	Very Strongly Agree	25	12.5	12.5	100.0
	Total	200	100.0	100.0	

14. Social media promotion prompts my desire to own the promoted item

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	1.0	1.0	1.0

	Frequency	Percent	Valid Percent	Cumulative Percent
Disagree	10	5.0	5.0	6.0
Neutral	5	2.5	2.5	8.5
Agree	54	27.0	27.0	35.5
Strongly Agree	100	50.0	50.0	85.5
Very Strongly Agree	29	14.5	14.5	100.0
Total	200	100.0	100.0	

Session 2 — The Most Effective Social Media Mode Drives Consumption
RQ2: Which social media mode can best trigger the students' desire to purchase products?

1. Which of the following social media promotion modes can best trigger your desire to purchase products online?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Social media advertising (e.g. pop-up, flash and video ads)	149	73.5	73.5	73.5
	Key Opinion Leader (KOL) promotion of products	37	18.5	18.5	92.0
	Online shops' promotion of products	14	7.0	7.0	100.0
	Total	200	100.0	100.0	

RQ3: How does the best triggered social media mode drive students to consume online?

3. I pay attention to the social media mode that best triggers me to make purchase online.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	19	12.8	12.8	12.8
	Strongly Agree	76	51	51	63.8
	Very Strongly Agree	54	36.2	36.2	100
	Total	149	100	100	

4. My selected social media mode is the biggest factor triggers me to consume online.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	1	0.7	0.7	0.7
	Disagree	12	8.1	8.1	8.7
	Neutral	3	2	2	10.7
	Agree	43	28.9	28.9	39.6
	Strongly Agree	82	55	55	94.6
	Very Strongly Agree	8	5.4	5.4	100
	Total	149	100	100	

5. My selected social media mode affects my consumption behavior.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Strongly Disagree	3	2	2	2
	Disagree	14	9.4	9.4	11.4
	Neutral	3	2	2	13.4
	Agree	39	26.2	26.2	39.6
	Strongly Agree	79	53	53	92.6
	Very Strongly Agree	11	7.4	7.4	100
	Total	149	100	100	

6. My selected social media mode boosts my online consumption.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Neutral	2	1.3	1.3	1.3

		Frequency	Percent	Valid Percent	Cumulative Percent
	Agree	39	26.2	26.2	27.5
	Strongly Agree	82	55	55	82.6
	Very Strongly Agree	26	17.4	17.4	100
	Total	149	100	100	

7. I ask my friends' opinions before I make online consumption.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	11	7.4	7.4	7.4
	Neutral	5	3.4	3.4	10.7
	Agree	104	69.8	69.8	80.5
	Strongly Agree	27	18.1	18.1	98.7
	Very Strongly Agree	2	1.3	1.3	100
	Total	149	100	100	

8. I ask my family members' opinion before I make online consumption.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Strongly Disagree	43	28.9	28.9	28.9
	Strongly Disagree	45	30.2	30.2	59.1
	Disagree	23	15.4	15.4	74.5
	Neutral	8	5.4	5.4	79.9
	Agree	20	13.4	13.4	93.3
	Strongly Agree	4	2.7	2.7	96
	Very Strongly Agree	6	4	4	100
	Total	149	100	100	

9. I have made a thoughtful consideration before making online purchase

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Strongly Disagree	2	1.3	1.3	1.3
	Strongly Disagree	3	2	2	3.4
	Disagree	76	51	51	54.4
	Neutral	13	8.7	8.7	63.1
	Agree	42	28.2	28.2	91.3
	Strongly Agree	12	8.1	8.1	99.3
	Very Strongly Agree	1	0.7	0.7	100
	Total	149	100	100	

10. I thought of my needs and desires on the products before making online purchase

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	12	8.1	8.1	8.1
	Neutral	22	14.8	14.8	22.8
	Agree	96	64.4	64.4	87.2
	Strongly Agree	18	12.1	12.1	99.3
	Very Strongly Agree	1	0.7	0.7	100
	Total	149	100	100	

11. I am rational in making online purchase.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	51	34.2	34.2	34.2
	Disagree	34	22.8	22.8	57
	Neutral	9	6	6	63.1
	Agree	44	29.5	29.5	92.6
	Strongly Agree	11	7.4	7.4	100
	Total	149	100	100	

12. I am indulged in indulgent or frivolous shopping.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	18	12.1	12.1	12.1
	Disagree	23	15.4	15.4	27.5
	Agree	63	42.3	42.3	69.8
	Strongly Agree	42	28.2	28.2	98
	Very Strongly Agree	3	2	2	100
	Total	149	100	100	

Appendix G: Questionnaire data — Descriptive Statistics (Mode)

Personal Information

		Gender	Year of study
N	Valid	200	200
	Missing	0	0
Mode		Female	Year 3

Session 1 — Social Media Promotion and Online Consumption
RQ1: What is the relationship between social media promotion and online consumption of EdUHK students?

		1. Do you use the social media networking site(s) below:	2. How often do you access to the social media networking site(s) selected above?	3. Have you ever noticed the following social media modes in your social media networking site(s) selected above?	4. I notice the social media mode(s) selected above quite often.	5. I enjoy watching the promotion on social media.	6. The social media promotion triggers me to look for more details of the promoted items.	7. I take action to access the social media networking sites of the promoted items I saw on social media.	8. I take action to buy the promoted items I saw on social media.	9. The social media promotion triggers me to have online consumption behavior.	10. The social media promotion communicates well with consumers.	11. The social media promotion attracts my attention.	12. I do research to look for more details after watching the social media promotion.	13. Social media promotion triggers my online-buying motivation.	14. Social media promotion prompts my desire to own the promoted item.
N	Valid	200	200	200	200	200	200	200	200	200	200	200	200	200	200
	Missing	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mode		Instagram	Daily	Social media advertising	Very Strongly Agree	Agree	Strongly Agree	Strongly Agree	Agree	Strongly Agree	Agree	Strongly Agree	Strongly Agree	Strongly Agree	Strongly Agree

Session 2 — The Most Effective Social Media Mode Drives Consumption
RQ2: Which social media mode can best trigger the students' desire to purchase products?

		1. Which of the following social media promotion modes can best trigger your desire to purchase products online?	3. I pay attention to the social media mode that best triggers me to make purchase online.
N	Valid	200	149
	Missing	0	0
Mode		Social media advertising	Strongly Agree

RQ3: How does the best triggered social media mode drive students to consume online?

		4. My selected social media mode is the biggest factor triggers me to consume online.	5. My selected social media mode affects my consumption behavior.	6. My selected social media mode boosts my online consumption.	7. I ask my friends' opinions before I make online consumption.	8. I ask my family members' opinion before I make online consumption.	9. I have made a thoughtful consideration before making online purchase.	10. I thought of my needs and desires on the products before making online purchase.	11. I am rational in making online purchase.	12. I am indulged in indulgent or frivolous shopping.
N	Valid	149	149	149	149	149	149	149	149	149
	Missing	0	0	0	0	0	0	0	0	0
Mode		Strongly Agree	Strongly Agree	Strongly Agree	Agree	Strongly Disagree	Disagree	Agree	Strongly Disagree	Agree

Appendix H: Interview data — Interview Questions

1. Have you noticed the personalized advertisements in your social media? How do you think on those personalized advertisement? Do you think those advertisements can effectively trigger your desire to purchase?

2. When considering others' opinions before online consumption, who, family members or friends, would you rather ask?

3. Hence, why do you have such consideration?

4. Do you think you are indulged in indulgent or frivolous shopping in making purchase online?

5. Why you are impulse in making purchase?

6. Do you think you are emotional in online shopping?

7. From the previous research, it mentioned that males are less influenced by emotion, do you think so?

8. What content attached on the social media advertisement can attract you the most? Do you think social media advertising regarding sales or discount can attract you to make online consumption?

9. What is/are the most important criterion(s) for you to buy a product?

Appendix I: Interview data — Interview Summary

1. Have you noticed the personalized advertisements in your social media? How do you think on those personalized advertisement? Do you think those advertisements can effectively trigger your desire to purchase?

    - Males:
        - Social media advertising are always in proportion to their preferences
        - Less time-consuming

    - Females:
        - Similar or same as their searched items
        - Seizes their favorites and recommends suitable items
        - Enhance their desire to consume

2. When considering others' opinions before online consumption, who, family members or friends, would you rather ask?

    - Males:
        - Rather look for the ideas from friends or experts

    - Females:
        - Rather ask friends

3. Hence, why do you have such consideration?

    - Males:
    - Friends can point out the superior or inferior of the products and more understandable to my personal features or preference
    - Less likely to ask for family ideas as they don't have knowledge on the promoted products (education level)

    - Females:
        - Provide ideas regarding suitability, attractiveness or desire on ownership
        - Only ask for family members' ideas opinions if they have a close relationship

4. Do you think you are indulged in indulgent or frivolous shopping in making purchase online?

    - Males:
        - Compare their needs and desire before purchasing

    - Females:
        - Tend to have emotional shopping

5. Why you are impulse in making purchase?

- Males:
  - When there is emotional thought
  - Over attracted by the promoted items without thinking much

- Females: Less thoughtful to make online purchase
  - Frequently browse on social media sites
  - Have desire to consume when noticing the social media promotion
  - Impulse to consume when there is shopping discount

6. Do you think you are emotional in online shopping?

- Males and Females: Yes

7. From the previous research, it mentioned that males are less influenced by emotion, do you think so?

- Males:
  - Would compare their needs and desire before consumption

- Females:
  - Prefer to consume if they have a desire on the products

8. What content attached on the social media advertisement can attract you the most? Do you think social media advertising regarding sales or discount can attract you to make online consumption?

- Males:
  - Yes, when there is online sales or discount, my friends and I will inform each other and consume together.

- Females:
  - Yes, shopping discount seems that there is a rapid fall at the selling price, seems cheaper and more worthy to consume.
  - The more I buy, the higher discount I can get.

9. What is/are the most important criterion(s) for you to buy a product?

- Males:
  - Value of the products
  - Tend to trust the ideas from experts

- Females:
  - The product packages
  - The usefulness of the product