

DO SOCIAL AND COMMERCIAL DESIRES INFLUENCE THE PURCHASING INTENTIONS OF GENERATION Z IN ONLINE SOCIAL SHOPPING?

Tang Kin Leong^{a*} and Huam Hon Tat^b

^aUniversiti Tunku Abdul Rahman, Selangor, Malaysia

^bPutra Business School, Selangor, Malaysia

*tangkl@utar.edu.my

ABSTRACT

It is already a fact that young people are addicted to social networks, particularly, generation Z. This social-savvy netizen uses social networks extensively to engage with socially connected people, but also actively interacts with online retailers and brands through social networks. This suggests that generation Z consumers seamlessly involve their connected social community to obtain reviews and recommendations, and then use this information to guide their purchasing decisions. This study argued that desire is the leading predictor influence online social shopping purchase intention. We applied the Model of Goal-directed behaviour to examine the influence of social desire and commercial desire on online social shopping purchase intention. At the same time, it attempts to examine whether social desire and commercial desire play a mediator role. This study, which is confined to Kuala Lumpur and Selangor, focuses on generation Z consumers aged 17 to 26 years old. A total of 288 samples were collected using the purposive sampling technique and analysed using the partial least square structural equation modelling (PLS-SEM) technique. The findings revealed that social attitude influences social desire and commercial attitude influenced commercial desire. Lastly, online social shopping purchase intention was influenced by both social desire and commercial desire. It indicates that both social desire and commercial desire play a mediating role. The results provide valuable insight for online social retailers, online social shopping platform operators, and marketers to develop a balanced social marketing strategy and to entice online social shopping purchase intention through social and commercial activity engagement.

Keywords: *Online Social shopping purchase intention; Model of Goad-directed Behaviour; Social attitude, Commercial attitude, Social Desire, Commercial Desire*

INTRODUCTION

Today, social networking sites have become an indispensable platform for social interaction in our lives. It provides an online venue and connects individuals who have the same interests to

socialise, find and exchange information. In addition, people also use social networks for self-disclosure and self-representation (Rassega et al., 2015). They seek recommendations online, purchase products via social networks, and share their user experience and product attributes online. This online social behaviour has a big impact on consumers, especially their buying behaviour. This is because peer social interaction influences their purchase decision, whereas social network advertising indirectly reinforces product engagement (Rassega et al., 2015).

In recent years, businesses have begun to sell and market their brand and products on social networking sites, and this is expected to continue growing. Social networks have also evolved into the most effective marketing and advertising tools. They integrate their commercial activities with social networking sites to engage and promote their products and brands. The benefits of social networks are not limited to marketing, but also impact the business-customer relationship, brand identity, endorsement, and ultimately, purchase intention.

Social commerce and social shopping are different (Decker, 2007). Social commerce is the use of social networking sites to promote and deliver e-commerce activities and transactions for products and services (Gibreel et al., 2018). In other words, businesses use social commerce as a strategy to engage customers in an online marketplace, build customer relationships, and support products/services (Huang & Benyoucef, 2017). Meanwhile, social shopping is the enjoyment of shopping with friends and family. Through online social interaction, they obtain credible suggestions about products and brands and purchase them (Hsu et al., 2018). Therefore, online social shopping is the combination of social networking with commercial functions to satisfy consumers' need for information searching, exchange purchasing and user experience, and assist in purchase decision making (Hsu et al., 2018). Social shopping can occur in two ways, i.e., brand supported social shopping platforms or social networks that seamlessly integrate commercial features (Coker et al., 2015). In a nutshell, social shopping combines social engagement for information exchange with commercial activities.

The impact of social networks on the Malaysian lifestyle is obvious. Certainly, people's attitudes towards online social shopping are gradually forming. However, there is a scarcity of research on social shopping behaviour. Abdulla Ali et al. (2019) argued that businesses still lack an understanding of what factors influence their consumers' engagement in social commerce. However, most of the research focuses on social commerce and looks at how the social networking features might influence consumers' online purchase intentions. Because social shopping is heavily reliant on connected people who share a common interest in products or services to solicit their purchase, a lack of understanding in this area would have an impact on the success of the business on social networks (Lee, 2017). Businesses are urged to understand how their customers are influenced by their friends and family, online community, or fans in brand groups in their online social shopping purchase intentions to generate higher turnover.

Malaysia's generation Z spends ever more time on social networks. To the best of our knowledge, there have been a little study in Malaysia on online social shopping purchase intention, particularly among generation Z consumers. Generation Z is born in a new era of social networking and communication technologies. They heavily rely on social networks. The eldest generation Z segment (aged between 17 and 26 as in 2021) is about to start or is now pursuing their tertiary education, while others are already employed. Many studies, however, disregarded this segment because of a lack of disposable income. Remarkably, they are the biggest consumer group in the next decade. They represented 57.9% of the market in Asia (UOB's Industry Insights, 2020).

In the context of social shopping, consumers in social networks seem to participate in the purchase process of social shopping. Their purchase intention in online social shopping is motivated by both social desire and commercial desire. Ko (2018) also stressed that there has been little study on the influence of an individual's desire on online social commerce activities. Thus,

to understand the consumer online social shopping behaviour, it is vital to understand how social desire and commercial desire play the role in motivating consumers to transform into such behaviour intention. This study focuses on the relationship between attitude-desire-intention as proposed in MGB and examines the impact on social shopping purchase intention particularly focusing on Malaysian generation Z, which is not well understood in the Malaysian marketplace.

Model of Goal-Directed Behaviour (MGB)

Although the Theory of Planned Behaviour (TPB) has been widely used to investigate consumer behaviour, it has been noted that there is a lack of a motivating component to promote purchase intention. In addition, TPB fails to account for affective influence, resulting in inadequately thoughtful decision making (Fry et al., 2014; Jung et al., 2018). Meng and Choi (2016) assert that people intend to do something only if they are motivated to do so. To overcome the above limitations, this study adopted the Model of Goal-directed Behaviour (MGB) as a theoretical foundation to investigate the factors that influence online social shopping on purchase intention among generation Z consumers in Malaysia. It focuses specifically on the direct effects and indirect effects of social desire and commercial desire on online social shopping purchase intentions.

Perugini and Bagozzi (2001) developed the Model of Goal-directed Behaviour (MGB) in response to the insufficient of TPB to explain behaviour intention. MGB retained all the TPB's significant concepts and asserted that a person's strong motivation to do something is because of a desire to participate in the behaviour. This argument is backed by Ko and Chang (2018). They explain that when motivation is lacking, an individual may not show the intention to engage in the behaviour even if the behaviour is attractive, social pressure exists, or they have the competence to perform such behaviour.

Desire, according to Perugini and Bagozzi (2001), is a crucial mediator between attitude and behavioural intention. An individual's favourable or unfavourable evaluation of a specific behaviour is referred to as an attitude (Meng & Choi, 2016). When an individual has a favourable attitude towards a given behaviour, he/she is more likely to engage in that behaviour (Hong, 2018). Meanwhile, desire is the motivational factor and reason that influences the intention or execution of an action in decision making or the achievement of a given goal (Fry et al., 2014; Perugini & Bagozzi, 2001). The intention is the likelihood that a person will perform a specific behaviour in the near future. When a person recognises and accepts his/her desire to act, it motivates the formation of an intention.

MGB extends TPB by adding new predictors to the model, as illustrated in Figure 1. Positive anticipated emotion consequences are associated with goal attainment, whereas negative anticipated emotion consequences are associated with goal failure. As a result, individuals are driven or to avoid the negative effect of anticipated emotions, which has a direct impact on desire (Kim & Preis, 2016). Subjective norms and perceived behavioural control are retained by Perugini and Bagozzi (2001). Subjective norms refer to social pressure that creates a sense of personal obligation or that one should act in accordance with what others expect of him. Meanwhile, perceived behaviour control refers to an individual's belief that he/she can perform some intended behaviour. It is posited to have a direct impact on the desire in a given behaviour. Notably, the frequency of past behaviour predicts desire, intention, and behaviour, but recency of past behaviour only predicts behaviour (Perugini & Bagozzi, 2001). According to Kim and Preis (2016), the frequency of past behaviour reflects the strength of habits and hence has a direct impact on future behaviour. When a behaviour is novel or unstable, the frequency of past behaviour affects people's intentions, because individuals prefer to do what they have done in the past (Kim & Preis, 2016). As a consequence, people may express a positive intention of doing what they used to do (Perugini & Bagozzi, 2001).

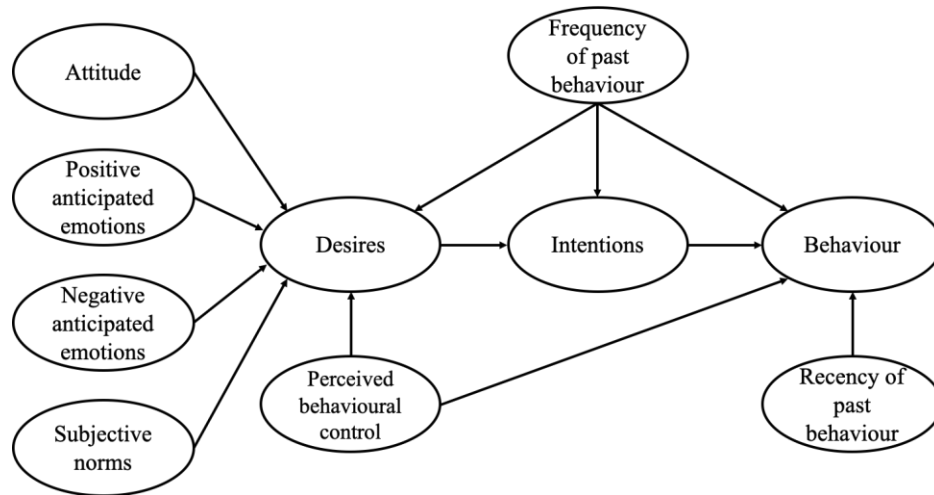


Figure 1: Model of Goal-directed Behaviour (MGB)

Source: Perugini & Bagozzi (2001)

LITERATURE REVIEW

Online social shopping purchase intention

Purchase intention is the likelihood of a consumer's intention to purchase or desire a particular product (Makmor & Alam, 2017). The plan to purchase a product or brand is reflected in the purchase intention (Darmawan et al., 2019). People participate in social shopping is because of the benefits of social networking sites. These sites allow the members of the connected social networking sites to interact, obtain information and opinions, support purchasing decision making, and confirm their purchase. Thus, social shopping purchase intention refers to a computer-mediated social environment that encourages customers to participate socially and subsequently assists them in making more effective purchasing decisions (Wu et al., 2018).

Social Desire

Social networks allow people to express themselves, communicate with and collaborate with others online, such as friends and family, colleagues, online acquaintances, fans of brand groups, and those who have similar interests. People use social networks to meet social needs (Ko, 2018). They use social networks to make friends, socialise with connected people, search for information or entertainment purposes. In the context of social shopping, social desire refers to the desire to engage with connected people (Khan, 2017). They update their social status, read other people's social updates, comment on other people's postings, exchange opinions, and seek out specific information from brands or people in their social network (Saleem & Iglesias, 2019; Tsai & Men, 2017).

Commercial Desire

Commercial desire is the motivation for people to engage in commercial activities such as social shopping. Commercial desire is defined by Ko (2018) as the motivation for the sharing and exchange of ideas, opinions, and feelings about product experiences. Consumers are increasingly turning to social networks to learn more about brands or products. Consumers with a strong

social desire are more likely to interact with others and contact online sellers. In the context of an online social shopping setting, commercial desire is motivation to behave due to positive expectations. These consumers will watch and like the commercial ads, search for commercial information about a brand or product, review products, and exchange their purchasing experiences with others.

HYPOTHESES DEVELOPMENT AND RESEARCH MODEL

Relationship between social attitude and social desire

An attitude toward a behaviour is the favourable or unfavourable evaluation of behaviour is performed (Meng & Choi, 2016). Today, social networking sites have added a wide range of social functions to entice more users to social interaction and engagement. Social networks primarily serve the purpose of connecting, interacting, and socialising with people who share similar interests (Thi et al., 2020). As a result, a social attitude refers to the user's assessment of social networks as a positive outcome for social interactions.

Social networks not only boost people's connectedness but also provide an online venue for obtaining desired information quickly and efficiently. Therefore, the motive for using social networks include social interaction, information and entertainment (Liu et al., 2018). People actively engage with friends and family, online acquaintances, fans in brand groups, or brands to obtain information and expertise to fulfil this objective. This suggests that people who have a highly positive social attitude toward social networking are more likely to have a high social desire because they are motivated to engage and achieve their desired goals.

In today's emerging communication and information technology era, information is no longer merely kept as webpages, but also kept on personal or brand-specific social networking sites, where it can be shared seamlessly. People tend to search/ask for answers from their social networks when they have a need for knowledge. Thus, people with a positive social attitude are more likely to interact with connected people to fulfil their information needs (Liu et al., 2018; Thi et al., 2020).

Similarly, Ko (2018) argues that social attitude impacts young Taiwanese Facebook users' social desire to engage with friends, get updates, and look for information about products and services. She explained that individuals use social networking for social interaction, which fuels their social desire to engage in social activities. Meng and Choi (2016) investigated the decision-making process of tourists and found that attitude plays a role in the tourist's desire for slow tourism. This argument is also supported by Pujadas-Hostench et al. (2019). These findings strongly suggest that there is a significant relationship between social attitude and social desire. Hence, we propose:

H1: Social attitude has a positive significant influence on social desire.

Relationship between social desire and online social shopping purchase intention

In addition to social engagement, social networks are also used to share and express one's thoughts and beliefs. People share their newly purchased products online, express their delight or dissatisfaction with the product experience, and some even become product advocates. People that have a high social desire will actively participate in social interaction and maybe aroused while discussing products and brands, thus influencing their purchase intention. This argument is supported by the findings of Rahman et al. (2018). Without the motivation of social desire to engage in social activities such as socialising, exchanging opinions, responding to comments or

writing an update on the social networking site, there will be little involvement, thus exhibiting less purchase intention (Rahman et al., 2018).

Meanwhile, Kudeshia et al. (2016) asserted that recommendations, endorsement, or other shopping experiences from a consumer's social circle might influence their purchase intention. Consumers with strong social desire will actively participate in discussions and exchange experiences through social engagement. They gather product or brand information and consolidate reviews and suggestions to assist in selecting the right product (Makmor & Alam, 2017). As a result, they are more likely to be persuaded or aroused by desire, which results in purchase intention. In the same way, Ko and Chang (2018) and Meng and Choi (2016) also confirm the association of desire and intention. Hence, this study proposes:

H2: Social desire has a positive significant influence on online social shopping purchase intention.

Social desire mediates the relationship between social attitude and online social shopping purchase intention

Hong (2018) argued that people's perceptions of social networks enable them to maintain good relationships with others. Perceived benefit from social networks' expected goal leads to the formation of an attitude toward social networks, which in turn promotes online social shopping purchase intention. In a similar fashion, consumers who have favourable social networks will pose a high social attitude and are likely to engage in social interaction. They spend more time on social networks to engage with people who share the same interest in the product, thus exhibiting a high degree of social desire. As a result, their product awareness and knowledge of the product or brand rise, resulting in stronger online social shopping purchase intentions. This argument is supported by Ko and Chang (2018).

Meanwhile, Kudeshia et al. (2016) argued that consumers who are active in social interaction in brand groups are more likely to have higher purchase intentions. They join the brand group because they have a shared interest. Thus, fans in the brand group will always read their peer's product evaluations, participate in the discussions, and share their product experience in the forum or group postings. Because of this, consumers are stimulated to browse and seek out further reviews, comments, and opinions, which in turn motivate the consumer's purchase intention. To summarise, social attitude will boot the motivation to engage in a high level of social network interaction to achieve the intended goal, i.e., online social shopping purchase intention. Hence, the following hypothesis is posited:

H3: Social desire mediates the relationship between social attitude and online social shopping purchase intention.

Relationship between commercial attitude and commercial desire

Businesses are increasingly using social networking sites to advertise their brand. They update and disseminate product information, as well as run promotion campaigns and support customers. Consumers tend to respond positively to the transparent and dynamic characteristics of an informative advertisement on social networking sites (Thi et al., 2020). Besides, the ability for consumers to express their views has motivated them to use social networking sites. Thus, when consumers are favourable to a brand's commercial ads, their participation in commercial activities will substantially increase. They will engage with the brand by "liking", watching or sharing the commercial post, which will captivate the commercial desire to acquire more commercial information about the product or brand.

Tsai and Men (2017) assert that people are motivated to engage in social to gain personal identity, entertainment, and information. Economic rewards and incentives are the motivation for social

shopping purchase intention. Consumers are looking for discounted products, coupons, and promotions that are regularly disseminated and shared via social networking sites. Similarly, brands are also constantly interacting with consumers to offer resources and product supports (Tsai & Men, 2017). Both result in the formation of a positive commercial attitude towards commercial desire in meeting their commercial objectives. Hence, we posit:

H4: Commercial attitude has a positive significant influence on commercial desire.

Relationship between commercial desire and online social shopping purchase intention

A consumer who is a market maven is likely to engage in commercial activities (Kang & Johnson, 2015). They search for product information that interests them, obtaining product reviews and recommendations. They also often pay attention to the brand and product announcements, join promotional events, and seek out discounted products. Thus, consumers with a high level of commercial desire are more likely to have purchase intentions.

Similarly, consumers who are motivated to engage with others in their circle or fans in brand groups for more information about the product or brand are more likely to be convinced to purchase it. For example, Rahman et al. (2018) argued that brand followers or members who demonstrate strong commercial desire would increase commercial contact and perform related commercial activities, and hence are more likely to form purchase intention. Besides, they stated that active consumer engagement will strengthen the brand's commitment and, consequently, have a higher purchase intention. In other words, consumers who are motivated to engage in commercial activities (i.e., commercial desire) will gradually form their brand's commitment. They will always exchange opinions and share purchase experiences, provide recommendations, and eventually lead to the formation of a purchase intention.

In brief, consumers who have a stronger social desire for a product or a brand are likely to be aware of the product and want to learn more about it. They demonstrate their affection for the brand or product through social interaction by endorsing or informing others about it (Kudeshia et al., 2016). Thus, when consumers have a higher level of product knowledge, it promotes their online social shopping purchasing intentions (Makmor & Alam, 2017). Hence, we posit that:

H5: Commercial desire has a positive significant influence on online social shopping purchase intention.

Commercial desire mediates the relationship between commercial attitude and online social shopping purchase intention

Rahman et al. (2018) argued that generating commercial traffic does not adequately influence purchase intention. This suggests that consumers with a strong commercial attitude favour commercial activities that do not necessarily arouse their purchasing intentions. Consumers have a positive commercial attitude, perhaps because of the pleasant nature of the commercial ads. They are enjoyable or entertaining. This explains why, in the absence of motivation, purchase intention is hard to form.

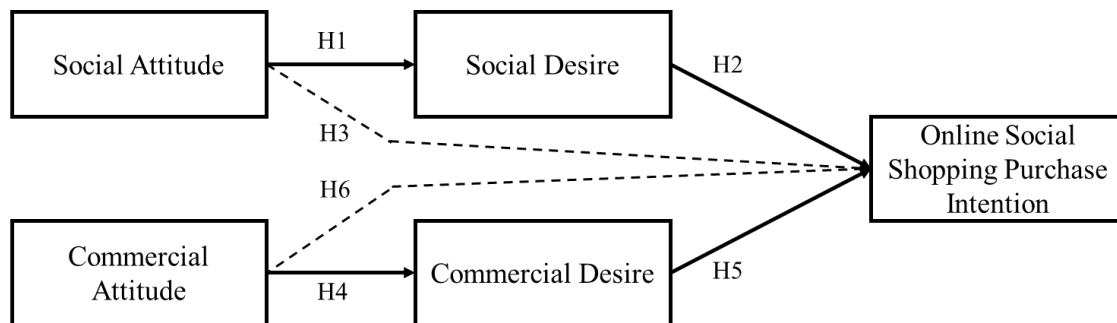
Furthermore, businesses that publish product promotions or brand posts are expected to generate customer engagement in the form of likes, shares, and comments. Consumers with a positive commercial attitude are more likely to favour commercial ads and engage in commercial activities such as liking or sharing the commercial ads, searching for product information, reading reviews, or exchanging shopping experiences with others on social networks (Rahman et al., 2018). When there is a high level of engagement in viewing the commercial ads, it increases brand or product arousal and subsequently forms purchase intention.

Commercial attitude has a direct impact on online social shopping purchase intention. When a consumer poses a positive commercial attitude, he/she is more likely to prefer the product or the brand represented in the commercial ads (Murwaningtyas et al., 2020). A similar study conducted by Mohd Noor et al. (2013) in Malaysia supports this argument. Thus, the commercial attitude has a direct impact on online social shopping purchase intention. At the same time, it suggests that commercial desire acts as a mediator between commercial attitude and online social shopping purchase intention. Hence, the hypothesis is as follow:

H6: Commercial desire mediates the relationship between commercial attitude and online social shopping purchase intention

Proposed Research Model

Today, social networks are used for social purposes, commercial purposes, or both. Besides, online social shopping purchase intention is a goal-directed behaviour that is mediated by social networks. This study's research model is depicted in Figure 2. This study aims to look into the impact of social desire and commercial desire on Malaysian generation Z online social shopping purchase intention. Perugini and Bagozzi (2001) argue that desire is the vital motivator for leading intention. Therefore, it is appropriate to apply MGB as the underpinning theory in this study. This study, in particular, focuses on the relationship between attitude-desire-intention. The rationale is marketers must understand what motivates their consumers to engage in social interaction and commercial activities that will later promote online social shopping purchase intention in developing a marketing strategy.



Mediator: Social Desire, Commercial Desire

H3: Social Attitude → Social Desire → Online Social Shopping Purchase Intention

H6: Commercial Attitude → Commercial Desire → Online Social Shopping Purchase Intention

Direct Effect ———→

Indirect Effect - - - - -→

Figure 2: Proposed research model

METHODS

Research Design and Sampling Technique

In this study, positivism philosophy and a deductive approach were used to develop hypotheses and evaluate hypotheses based on theory. A quantitative method was used to analyse and confirm

the relationships posited in this study. Cross-sectional data collection using a self-administrated survey was adopted during the data collection stage. This study's measurements were all adapted from existing literature, and all constructs are unidimensional. The respondent's response was measured using a five-point Likert scale. Pre-testing was done before distributing the survey. Five academics and two industry experts were invited to participate in the content validity test. The survey was modified as a result of feedback on the representativeness and clarity of constructs and questions. In addition, the pilot test was carried out right after the content validity test. In the pilot test with 28 samples, the internal consistency of each construct was assessed, and the results showed that the Cronbach's Alpha values of all constructions were more than 0.7.

This study aims to investigate the impact of social desire and commercial desire on generation Z consumers' online social shopping purchase intentions. The respondents are specifically between the ages of 17 and 26. Malaysia has 10 million youngsters aged 15 to 24 as of 2020, according to the Malaysia Department of Statistics (2020). Meanwhile, the generation Z population in Kuala Lumpur and Selangor accounted for 21.5% of the total generation Z population. This study is confined to Kuala Lumpur and Selangor since they are significant urban agglomerations concentrated and limited in terms of time and ability to reach greater locations during Covid-19. Because the study's subject is generation Z, a purposive sample technique was used. Furthermore, due to the large size of the generation Z population, no sampling frame was available.

The survey was distributed at several public and private universities, colleges, and secondary schools. The minimum sample size was determined using the G*Power statistical program. The result shows a minimum sample size of 85 at a 0.15 effect size (medium effect), a power of 0.8, and a 0.05 alpha (Memon et al., 2020). The data collection process spanned 2.5 months and ended on 16 December 2021. A total of 409 samples were received.

Data Processing

There is a lot of response bias detected at the data processing stage. This includes non-differentiation and extreme responses. All indicators have a standard deviation score of 0, outliers and eyeballing the data can be used as the technique to determine response bias. After the treatment of response bias and outliers, 288 samples remained usable, which meets the minimal sample size of 85 determined by using G*Power. Because a single method i.e., survey, was used in the data collection process, the likelihood of a common method bias issue may exist. This study adopted two approaches to address common method bias. First, a cover letter was included to explain the purpose of the survey, and an assurance of the confidentiality of personal data was provided. Second, a full multicollinearity test as suggested by Kock (2015) was performed. The test results show that all the constructions' VIFs are not more than 3, confirming that there is no issue with common method bias.

The data were analysed using statistical testing software such as the Statistical Package for Social Science (SPSS) and the SEMinR package using R (Chuah et al., 2021). The findings were obtained using the Partial-Least Square Structural Equation Modelling method. PLS-SEM is a nonparametric method that does not require the testing of multivariate assumptions. However, data that passes multivariate assumption tests will reduce the problem of parameter estimates. Thus, multivariate assumption tests including normality, linearity, homoscedasticity, and multicollinearity were conducted. The data passes all multivariate assumption tests. In this study, the inferential analysis is conducted by following a two-stage approach. The measurement model is first assessed, followed by the structural model assessment.

RESULTS AND FINDINGS

Descriptive Analysis

The demographic profile of the respondents is depicted in Table 1. The results show there is some bias in the respondents' gender, and educational level. Most of the respondents are female (73.61%), Chinese (49.31%) followed by Malay (38.54%) and are currently pursuing or have completed undergraduate studies ((90.97%). Instagram (30.3%) and YouTube (24.85%) are the most frequently used social networking sites. This survey also revealed that Malaysian generation Z spends a significant amount of time on social networking sites. The majority of them spend more than 4 hours per day on social networking (45.14%). When asked how much money they spent on online purchases, the majority spent less than RM100 (52.78%). The study also suggests that Malaysian generation Z is used to online social shopping. Only one of the 288 respondents said they had never done so.

Table 1: Summary of respondents' demographic profiles (N=288)

Attribute	Value	Frequency	Percentage (%)
Gender	Male	76	26.39
	Female	212	73.61
Ethnicity	Malay	111	38.54
	Chinese	142	49.31
	Indian	18	6.25
	Others	17	5.90
Education level	A-level/Foundation	2	0.69
	Diploma	16	5.56
	Undergraduate	262	90.97
	Postgraduate	8	2.78
Type of social media and networks typically use	Facebook	154	17.6
	Instagram	265	30.3
	Twitter	108	12.4
	YouTube	217	24.8
	Others	130	14.9
Time spends on using social media and networks	Less than an hour	3	1.04
	1 – 2 hours	37	12.85
	2 – 3 hours	55	19.10
	3 – 4 hours	63	21.88
	More than 4 hours	130	45.14
Amount spends on online shopping per month	None	2	0.69
	Under RM100	152	52.78
	RM101 – RM200	93	32.29
	RM201 – RM300	22	7.64
	More than RM301	19	6.60
Social shopping purchase experience	None	1	0.35
	Yes	287	99.65

Results of the measurement model assessment

The construct validity of this study was determined by convergent and discriminant validity. The statistical results shown in Table 2 indicate that all the items' loadings are greater than 0.7, except for PI2 (loading = 0.676). Notably, all constructs' composite reliability (CR) values are greater than the threshold value of 0.7, and their average variance extracted (AVE) values are greater than 0.5. Chin (1998) suggested that factor loading of at least 0.6 is acceptable since the CR and

AVE are in the acceptable range. As a result of this study, it was established that all constructs are highly reliable and latent constructs are well explained by observed variables. In addition, all constructs show high internal reliability, with Cronbach Alpha and RhoA values greater than 0.7.

Further analysis was carried out to determine the discriminant validity. Fornell and Larcker and HTMT criteria were used to assess discriminant validity. According to Table 3, the square root of AVE for each construct is greater than its inter-construct correlations. In the meantime, Table 4 shows the ratio of correlations within the construct to correlations between constructs. The results indicate that it fulfils the HTMT.90 and HTMT.85. Therefore, there is no discriminant validity concern.

Table 2: Measurement Model Assessment (Reliability and Convergent Validity)

Construct	Item	Loadings (>0.5)	rho _A	CR	AVE
SA	SA1	0.862	0.840	0.902	0.754
	SA2	0.905			
	SA3	0.837			
SD	SD1	0.765	0.876	0.915	0.729
	SD2	0.889			
	SD3	0.891			
	SD4	0.872			
CA	CA1	0.835	0.922	0.938	0.715
	CA2	0.827			
	CA3	0.850			
	CA4	0.844			
	CA5	0.855			
	CA6	0.860			
CD	CD1	0.835	0.893	0.925	0.756
	CD2	0.880			
	CD3	0.986			
	CD4	0.865			
OSSPI	PI1	0.721	0.759	0.843	0.574
	PI2	0.676			
	PI3	0.824			
	PI4	0.802			

Note: SA = Social Attitude; SD = Social Desire; CA = Commercial Attitude; CD = Commercial Desire; OSSPI = Online Social Shopping Purchase Intention

Table 3: Discriminant validity via Fornell and Larcker and correlation matrix

	SA	CA	SD	CD	OSSPI
SA	0.868				
CA	0.498	0.845			
SD	0.426	0.417	0.854		
CD	0.444	0.655	0.503	0.869	
OSSPI	0.420	0.502	0.329	0.376	0.758

Note: SA = Social Attitude; SD = Social Desire; CA = Commercial Attitude; CD = Commercial Desire; OSSPI = Online Social Shopping Purchase Intention; Bold values indicate the square root of AVE of each construct.

Table 4: Discriminant validity via HTMT

	SA	CA	SD	CD	OSSPI
SA					
CA	0.568				
SD	0.489	0.459			
CD	0.515	0.719	0.568		
OSSPI	0.533	0.601	0.402	0.460	

Note: SA = Social Attitude; SD = Social Desire; CA = Commercial Attitude; CD = Commercial Desire; OSSPI = Online Social Shopping Purchase Intention; HTMT should below 0.85.

Results of Structural Assessment Model

The structural model of the study is depicted in Figure 3. A bootstrapping method with 5000 samples was used to examine the significant level of path coefficients. Table 5 summarises the path coefficient, t-value, p-value and 95% confidence interval for the proposed. According to the statistical results, all hypotheses H1, H2, H3 and H4 were significant. This suggests that social attitude ($\beta=0.426$, $p<0.001$) has a positive significant relationship with social desire, whereas commercial attitude ($\beta=0.655$, $p<0.001$) has a positive significant relationship with commercial desire. Social desire ($\beta=0.187$, $p<0.01$) and commercial desire ($\beta=0.282$, $p<0.001$) are both significantly correlated to online social shopping purchase intention. The results also reveal that commercial desire has a greater impact on online social shopping purchase intention than social desire.

Table 5: Structural path analysis: Direct effect

Path	Beta	SE	T-value	P-value	95% CI		Decision
					Lower	Upper	
H1: SA → SD	0.426	0.533	7.986	0.000	0.324	0.533	Supported
H2: SD → OSSPI	0.187	0.070	2.763	0.004	0.053	0.329	Supported
H4: CA → CD	0.655	0.037	17.607	0.000	0.579	0.726	Supported
H5: CD → OSSPI	0.282	0.067	4.194	0.000	0.148	0.412	Supported

Note: SA = Social Attitude; SD = Social Desire; CA = Commercial Attitude; CD = Commercial Desire; OSSPI = Online Social Shopping Purchase Intention; SE = Standard Error

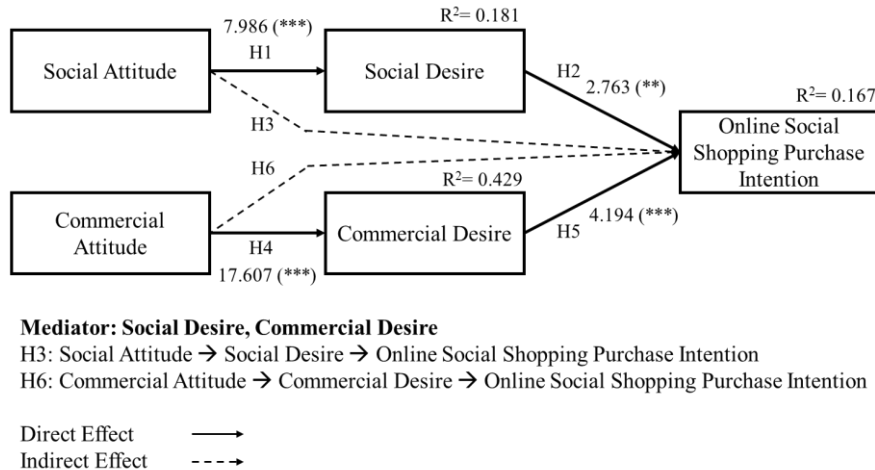


Figure 3: Structural model: Hypotheses testing

The study further investigates the indirect effects of social desire and commercial desire. The bootstrapping method, as suggested by Preacher et al. (2007) was used to assess the indirect effect. Table 6 shows the results of the indirect effects of social desire and commercial desire. Both hypotheses, H5 and H6 were supported. According to the results, it suggests that social attitude has a specific indirect effect on online social shopping purchase intention via social desire ($\beta=0.079$, $LCIL=0.019$, $UCIL=0.160$). Similarly, in the presence of social desire ($\beta=0.187$, $LCIL=0.094$, $UCIL=0.282$), the commercial attitude has a specific indirect effect on online social shopping purchase intention.

Table 6: Structural path analysis: Social desire and commercial desire as the mediator

Path	Direct Effect Beta	Indirect Effect			Mediation
		Beta	95% CI Lower	Upper	
H3: SA → SD → OSSPI	0.079	0.079	0.019	0.160	Complementary partial mediation
H6: CA → CD → OSSPI	0.187	0.185	0.094	0.282	Complementary partial mediation

Note: SA = Social Attitude; SD = Social Desire; CA = Commercial Attitude; CD = Commercial Desire; OSSPI = Online Social Shopping Purchase Intention

Table 7 shows the model's explanatory power. The results suggest that the R-square value of social desire ($R^2=0.181$) and online social shopping purchase intention ($R^2=0.167$) are weak (below the threshold value of 0.25), but commercial desire ($R^2=0.429$) is considered moderate. Notably, in certain disciplines, an R^2 value as low as 0.10 is considered satisfactory (Hair et al., 2021).

Table 7: R-square (R^2)

	SD	CD	OSSPI
R^2	0.181	0.429	0.167
Adjusted R^2	0.179	0.427	0.162

Meanwhile, when observing the effect size, social desire ($f^2=0.030$) and commercial desire ($f^2=0.069$) have a small effect size on online social shopping purchase intention. Social attitude ($f^2=0.222$) has a medium effect size on social desire, whereas commercial attitude ($f^2=0.750$) has a large effect size on commercial desire.

Table 8: F-square (f^2)

	SA	CA	SD	CD	OSSPI
SA			0.222		
CA				0.750	
SD					0.030
CD					0.069

There is no established Good-of-Fit statistics for PLS-SEM (Hair et al., 2017). Hair et al. (2017) suggested Standardized Root Mean Square Residual (SRMR) as the fit index. The SRMR of the structural model in this study is 0.043, which is below the threshold value of 0.08 (Hair et al., 2017). Meanwhile, the NFI is 0.64, which is slightly closer to 1. We concluded that there was a good fit.

DISCUSSION

This study applied MGB and focused on the relationship between attitude-desire-intention. It is argued that desire is the motivation and reason that determines intention. Nowadays, social networks are used for more than just social interaction; they may also be used for commercial purposes or both. As a result, this study asserts that social desire and commercial desire play an important role before the intention is formed.

The study investigated the impact of social desire and commercial desire on Malaysian generation Z consumers' online social shopping purchase intentions. The results indicate that social attitude has a direct effect on social desire, subsequently, online social shopping purchase intention.

Similarly, it also suggests that commercial desire has a direct impact on commercial desire, and in turn leads to online social shopping purchase intention. These findings were consistent with those of Ko and Chang (2018) and Meng and Choi (2016).

The social attitude was found to significantly impact social desire. This finding reveals that Malaysian generation Z has a positive attitude toward the use of social networks. The majority of them spend more than three hours per day on social networks. Social networks support them with social interaction, information, and entertainment. Because of the benefits and comfort of social networks, it has promoted a higher positive social desire to engage with others more active on social networks. This argument is supported by Hong (2018). However, this finding is inconsistent with the study conducted by Ko (2018).

This study also looks at another facet of social networking that was used for commercial purposes. According to the findings, Malaysian generation Z consumers have a positive commercial attitude toward commercial activities on social networks when such commercial activities are pleasant, entertaining, or enjoyable. When they find a product or brand that interests them, it promotes social desire. They are more likely to contact online social retailers or online social shopping platform operators for additional information, to like, watch, and share commercial ads, to seek out discounted products, or share their purchasing experience. This finding is supported by Ko (2018), Ko and Chang (2018) and Meng and Choi (2016).

As this study has shown, both social desire and commercial desire have a positive and significant relationship with online social shopping purchase intention. This finding is consistent with the findings of Ko and Chang (2018). The primary goal of social networking is to facilitate social interaction. Someone with a stronger social desire will often engage with others to discuss the product or brand. Consumers learn more about the product and its attributes as a result of their discussion. Besides, consumers communicate their views and recommendations about a product or brand, promoting purchase intention. One may also increase their confidence by being convinced or confirming the right purchase selection. Therefore, the greater the social desire, the more likely the online social shopping purchase intention is.

The finding also confirms that commercial desire has a positive impact on online social shopping purchase intention. This finding is supported by Ko (2018), Ko and Chang (2018) and Kircova et al. (2018). Not only that, commercial desire has a greater impact than social desire on online social shopping purchase intention. This is in line with the study by Ko and Chang (2018) on Taiwanese social shopping intentions. Social desire is associated with the consumer's willingness to pay attention to the product or brand and spend time seeking more information to clear their doubts. The high commercial engagement with connected people, online social retailers, online shopping platform operators, or brands will result in an increase in online social shopping purchase intention (Kircova et al., 2018).

In addition, the mediating roles of social desire and commercial desire were assessed. According to the results, both social desire and commercial desire have a mediating role. As suggested by Zhao et al. (2010), further analyses were conducted to determine the type of mediation. The findings show that both social attitude and commercial attitude have a direct effect on online social shopping purchase intention. This is because consumers with a positive social attitude actively engage in social interaction to kill their time. They might be interested in a product or brand that has been mentioned, discussed, or shared on social networking sites. Thereby, brand awareness and arousal were triggered, leading to online social shopping purchase intention. The positive direct effect of commercial attitude on online social shopping purchase intention is supported by (Murwaningtyas et al., 2020), which indicates that consumers with a positive commercial attitude are easily aroused by advertising and thereby influence their purchase intention. Thus, this study concludes that social desire and commercial desire are complementary partial mediators.

THEORETICAL AND PRACTICAL IMPLICATIONS

This study contributes to the development of MGB by demonstrating the presence of desire as a vital factor influencing the attitude-desire-intention relationship. The most important contribution is the application of MGB to investigate the online social shopping purchase intention among Malaysian generation Z consumers, which has gotten little attention in previous studies. It reaffirms the argument that desire is the motivator that shapes a behavioural intention. This study also provides a better understanding of the impact of social desire and commercial desire on online social shopping purchase intention. It revealed that commercial desire has a stronger impact on generation Z's online social shopping purchase intentions in Malaysia.

The primary purpose of social networks is to facilitate social interaction. This study reveals the importance of social connectedness. Consumers' social connectivity stimulates high engagement, creating an opportunity to attract consumers and arouse purchase intention. Marketers must thus understand what drives customers to read, "like," and use social networking sites or social shopping platforms to arouse purchase intentions (Tsai & Men, 2017). To develop the social attitudes of consumers, social retailers, social shopping platform operators, or marketers must strike a balance between social engagement and commercial activity. An effort is needed to increase the willingness of consumers to spend more time exploring and revisiting the brand's social networking sites and online social shopping platforms.

Social networking sites are an effective platform for commercial purposes. Online social networking sites and online social shopping platforms are used by online social retailers and online social shopping platform operators to promote their brands and products. Remarkable commercial ads can attract consumers' attention and evoke emotions, causing them to engage in commercial activities, which leads to purchase intention. Marketers must understand what motivates consumers to post/share on their social networking sites, as well as what content they are most likely to see (Kudeshia et al., 2016). To increase engagement, marketers should have a defined engagement strategy that specifies the compelling marketing content, platforms, and posting times to boost engagement (Rahman et al., 2018).

Maintaining good relationships while offering the right information, services, and products to the customers is vital to retaining their engagement. Marketers must understand how to leverage social shopping platforms and tools such as forums, reviews and ratings, and fan groups to facilitate social interaction, motivate engagement, and promote brands and products. This is because effective posts such as brand-related activities, interesting sharing or curiosities can boost customer-brand interaction (Thi et al., 2020). A positive social attitude and commercial attitude can then foster the customers' social desire and commercial desire to engage with their friends and family and online community, which will subsequently establish a stronger online social shopping purchase intention.

CONCLUSION

Consumers' purchasing decisions in the context of social shopping are always influenced or motivated by the connected people in their social networks. Malaysian generation Z consumers, who spend most of their time on social media, have altered their behaviour and consumption patterns. Thus, online social retailers, online social shopping platform operators, and marketers are urged to better understand how and why they engage in social shopping. As discussed above, online social shopping is more than just a commercial feature used to facilitate e-commerce transactions. Consumers use social networks to socialise, seek information, and entertainment, but they also use them to get answers from an online social community, as well as a source for product, promotional, and company information. They enlisted the help of their contacts to

participate in and support their purchasing decision. Because online social shopping is viewed as a goal-directed behaviour, and desire is asserted to be the motivator for forming a purchasing intention. Therefore, this study focused on the attitude-desire-intention relationship and applied MGB to investigate the impact of social desire and commercial desire on online social shopping purchase intention. The results have confirmed all the hypotheses, and at the same time revealed that social desire and commercial desire play a mediating role.

Limitations and future research recommendations

First, the investigation was confined to Kuala Lumpur and Selangor. Future studies might broaden the sample's geographic coverage to improve the generalisability of the findings. Second, future studies may compare other generations, particularly generation Y, which has some similarities in terms of characteristics to generation Z. They are heavily engaged in social networks and have strong social desires while making purchasing decisions (Zhang et al., 2021). In the future, generation Y and Z will contribute to the major purchase power. Thus, while establishing social marketing strategies, it is critical to recognise that there may be some differences in preferences, perceptions, and attitudes between the two generations. Marketers must consider that Gen Y and Gen Z customers may differ and, as a result, require separate marketing tactics. The unequal gender distribution of respondents is another limitation of this study. Male and female consumers behave differently when it comes to shopping. The majority of our respondents were female. Lastly, this study only focused on the relationship between attitude-desire-intention and did not take other factors into account, such as marketing mix factors. The marketing mix has been shown to have a considerable impact on customer behaviour. Understanding how the marketing mix influences consumers enables marketers to develop marketing strategies through effective tactics.

REFERENCES

- Abdulla Ali, W., Mukhtar, M., & Mohamed, I. (2019). Validating the factors influencing social commerce adoption in small and medium enterprise in Malaysia. *Indonesian Journal of Electrical Engineering and Computer Science*, 17(1), 440–447. <https://doi.org/10.11591/ijeecs.v17.i1.pp440-447>
- Chuah, F., Memon, M. A., Ramayah, T., Cheah, J. H., Ting, H., & Cham, T. H. (2021). PLS-SEM using R: An introduction to cSEM and SEMinR. *Journal of Applied Structural Equation Modeling*, 5(2), 1–35. [https://doi.org/10.47263/JASEM.5\(2\)01](https://doi.org/10.47263/JASEM.5(2)01)
- Coker, K. K., Smith, D. S., & Altobello, S. A. (2015). Buzzing with disclosure of social shopping rewards. *Journal of Research in Interactive Marketing*. <https://doi.org/10.1108/JRIM-06-2014-0030>
- Darmawan, D., Mardikaningsih, R., & Hariani, M. (2019). The effects of endorser credibility, attitude toward to ads, and brand attitude on purchase intention. In *Jurnal Ekonomi* (Vol. 15, Issue 2).
- Decker, S. (2007). *The big idea behind Social Commerce*. <https://econsultancy.com/the-big-idea-behind-social-commerce/>
- Department of Statistics. (2021). Current Population Estimates. *Department of Statistics Malaysia, December*, 1–141. https://www.dosm.gov.my/v1/index.php?r=column/cthemByCat&cat=155&bul_id=aWJZRk4UEdKcUZpT2tVT090Snpydz09&menu_id=L0pheU43NWJwRWVWSZklWdzQ4TlhUUT09
- Fry, M.-L., Drennan, J., Previte, J., White, A., & Tjondronegoro, D. (2014). The role of desire in understanding intentions to drink responsibly: an application of the Model of Goal-

- Directed Behaviour. *Journal of Marketing Management*, 30(5–6), 551–570. <https://doi.org/10.1080/0267257X.2013.875931>
- Gibreel, O., AlOtaibi, D. A., & Altmann, J. (2018). Social commerce development in emerging markets. *Electronic Commerce Research and Applications*, 27, 152–162. <https://doi.org/10.1016/j.elerap.2017.12.008>
- Hair, J. F., Hult, G. T. M., Ringle, C., Sarstedt, M., Danks, N., & Ray, S. (2021). Partial least squares structural equation modeling (PLS-SEM) using R: A workbook. In *Springer*.
- Hair, Joe F., Matthews, L. M., Matthews, R. L., & Sarstedt, M. (2017). PLS-SEM or CB-SEM: updated guidelines on which method to use. *International Journal of Multivariate Data Analysis*. <https://doi.org/10.1504/ijmda.2017.087624>
- Hong, I. B. (2018). Social and personal dimensions as predictors of sustainable intention to use facebook in Korea: An empirical analysis. *Sustainability (Switzerland)*, 10(8). <https://doi.org/10.3390/su10082856>
- Hsu, C. L., Chen, M. C., & Kumar, V. (2018). How social shopping retains customers? Capturing the essence of website quality and relationship quality. *Total Quality Management and Business Excellence*, 29(1–2), 161–184. <https://doi.org/10.1080/14783363.2016.1171706>
- Huang, Z., & Benyoucef, M. (2017). The effects of social commerce design on consumer purchase decision-making: An empirical study. *Electronic Commerce Research and Applications*, 25, 40–58. <https://doi.org/10.1016/j.elerap.2017.08.003>
- Jung, S. E., Santella, M., Hermann, J., & Lawrence, J. (2018). Understanding college students' intention to consume fruits and vegetables: an application of the Model of Goal Directed Behavior. *International Journal of Health Promotion and Education*, 56(4–5), 211–225. <https://doi.org/10.1080/14635240.2018.1505533>
- Kang, J. Y. M., & Johnson, K. K. P. (2015). F-Commerce platform for apparel online social shopping: Testing a Mowen's 3M model. *International Journal of Information Management*. <https://doi.org/10.1016/j.ijinfomgt.2015.07.004>
- Khan, M. L. (2017). Social media engagement: What motivates user participation and consumption on YouTube? *Computers in Human Behavior*. <https://doi.org/10.1016/j.chb.2016.09.024>
- Kim, M. J., & Preis, M. W. (2016). Why seniors use mobile devices: Applying an Extended Model of Goal-Directed Behavior. *Journal of Travel and Tourism Marketing*, 33(3), 404–423. <https://doi.org/10.1080/10548408.2015.1064058>
- Kırcova, İ., Yaman, Y., & Gizem Köse, Ş. (2018). Instagram, Facebook or Twitter: Which engages best? A comparative study of consumer brand engagement and social commerce purchase intention. *European Journal of Economics and Business Studies*, 10(1).
- Ko, H.-C. (2018). Social desire or commercial desire? The factors driving social sharing and shopping intentions on social commerce platforms. *Electronic Commerce Research and Applications*, 28, 1–15. <https://doi.org/10.1016/j.elerap.2017.12.011>
- Ko, H. C., & Chang, J. H. (2018). Exploring the motivations of social commerce: A perspective of consumer shopping value. *Proceedings - 2017 IEEE 8th International Conference on Awareness Science and Technology, ICAST 2017, 2018-Janua*, 394–399. <https://doi.org/10.1109/ICAwST.2017.8256486>
- Kock, N. (2015). Common method bias in PLS-SEM: A full collinearity assessment approach. *International Journal of E-Collaboration*, 11(4), 1–10. <https://doi.org/10.4018/ijec.2015100101>
- Kudeshia, C., Sikdar, P., & Mittal, A. (2016). Spreading love through fan page liking: A perspective on small scale entrepreneurs. *Computers in Human Behavior*, 54, 257–270. <https://doi.org/10.1016/j.chb.2015.08.003>
- Lee, I. (2017). A study of the effect of social shopping deals on online reviews. *Industrial Management & Data Systems*, 117(10), 2227–2240. <https://doi.org/10.1108/IMDS-09-2016-0378>

- Liu, L., Zhang, L., Ye, P., & Liu, Q. (2018). Influencing factors of university students' use of social network sites: An empirical analysis in China. *International Journal of Emerging Technologies in Learning*. <https://doi.org/10.3991/ijet.v13i03.8380>
- Makmor, N., & Alam, S. S. (2017). The power of social supports in social commerce among millennials generation. *10th International Conference on Law, Business, Marketing and Education (LBME-17)*.
- Memon, M. A., Ting, H., Cheah, J.-H., Ramayah, T., Chuah, F., & Cham, T. H. (2020). Sample size for survey research: Review and recommendations. *Journal of Applied Structural Equation Modeling*, 4(June).
- Meng, B., & Choi, K. (2016). The role of authenticity in forming slow tourists' intentions: Developing an extended model of goal-directed behavior. *Tourism Management*, 57, 397–410. <https://doi.org/10.1016/j.tourman.2016.07.003>
- Mohd Noor, M. N., Sreenivasan, J., & Ismail, H. (2013). Malaysian consumers attitude towards mobile advertising, the role of permission and its impact on purchase intention: A structural equation modeling approach. *Asian Social Science*, 9(5), 135–153. <https://doi.org/10.5539/ass.v9n5p135>
- Murwaningtyas, F., Harisudin, M., & Irianto, H. (2020). Effect of celebrity endorser through social media on organic cosmetic purchasing intention mediated with attitude. *KnE Social Sciences*, 2020, 152–165. <https://doi.org/10.18502/kss.v4i3.6393>
- Perugini, M., & Bagozzi, R. P. (2001). The role of desires and anticipated emotions in goal-directed behaviours: Broadening and deepening the theory of planned behaviour. In *British Journal of Social Psychology* (Vol. 40).
- Preacher, K. J., Rucker, D. D., & Hayes, A. F. (2007). Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate Behavioral Research*, 42(1), 185–227. <https://doi.org/10.1080/00273170701341316>
- Pujadas-Hostench, J., Palau-Saumell, R., Forgas-Coll, S., & Sánchez-García, J. (2019). Clothing brand purchase intention through SNS. *Online Information Review*, 43(5). <https://doi.org/10.1108/OIR-02-2017-0042>
- Rahman, Z., Moghavvemmi, S., Suberamaian, K., Zanuddin, H., & Bin Md Nasir, H. N. (2018). Mediating impact of fan-page engagement on social media connectedness and followers purchase intention. *Online Information Review*. <https://doi.org/10.1108/OIR-05-2017-0150>
- Rassega, V., T. O., & T. C. (2015). Social networks and the buying behavior of the consumer. *Journal of Global Economics*, 03(04). <https://doi.org/10.4172/2375-4389.1000163>
- Saleem, F. Z., & Iglesias, O. (2019). Exploring the motivation of affect management in fostering social media engagement and related insights for branding. *Internet Research, ahead-of-print*(ahead-of-print). <https://doi.org/10.1108/INTR-07-2018-0321>
- Thi, T., Phuong, K., & Vinh, T. T. (2020). The impact of customer engagement in social media on satisfaction : A preliminary study. *Asian Journal of Research in Business and Management*, 2(2), 60–75.
- Tsai, W. H. S., & Men, L. R. (2017). Consumer engagement with brands on social network sites: A cross-cultural comparison of China and the USA. *Journal of Marketing Communications*, 23(1), 2–21. <https://doi.org/10.1080/13527266.2014.942678>
- UOB's Industry Insights. (2020). *Industry perspective: Reformulating the home and personal care supply chain*. <https://doi.org/10.1109/MWC.2018.8524885>
- Wu, W., Huang, V., Chen, X., Davison, R. M., & Hua, Z. (2018). Social value and online social shopping intention: the moderating role of experience. *Information Technology and People*, 31(3), 688–711. <https://doi.org/10.1108/ITP-10-2016-0236>
- Zhang, B., Mulhern, F. J., Wu, Y., Xu, M., Wang, W., & Gao, L. (2021). Thirty years and “I'm still Lovin' it!": brand perceptions of McDonald's among generation Y and generation Z consumers in China. *Asia Pacific Journal of Marketing and Logistics, ahead-of-p*(ahead-of-print). <https://doi.org/10.1108/apjml-02-2021-0132>

Zhao, X., Lynch, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of Consumer Research*, 37(2), 197–206. <https://doi.org/10.1086/651257>