

Factors Influencing Muslim Credit Card Holders' Impulse Buying Behaviour in Malaysia

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Abstract

Studies on impulse buying have been substantially conducted in developing countries by vast researchers. Nevertheless, such studies are in scarcity amidst Asian countries, particularly Malaysia. Besides, studies that have looked into the variables of materialism, sale promotion, money and time availability, and hedonic motivation are also rather sparsely carried out in the light of impulse buying behaviour. As such, this study examined the correlations between situational variables (sale promotion, money and time availability) and individual variable (materialism and hedonic motivation) with impulse buying behaviour among Muslim credit cardholders in Malaysia. In terms of instrument development, this study instrument consisted of 44 items adopted and adapted from prior studies. Questionnaires were distributed to 1,000 Muslim credit cardholders in Malaysia via purposive and snowball sampling techniques and only 635 were usable for final data analysis. The analysis was performed via Partial Least Square (PLS-SEM) analysis. The outcomes revealed that materialism, sale promotion, money and time availability, and hedonic motivation displayed significant positive correlations with impulse buying behaviour.

Keyword- Impulse Buying Behaviour, Consumer Decision Making, Credit Card, Partial Least Square

Introduction

In Malaysia, consumer expenditure growth sustained at 7.0% in 2017 when compared to 6.1% in 2016. Although the increment seemed moderate, the spending of emoluments was high and influenced the growth of Malaysia's economy and spending pattern. Besides, the credit card remained the highest extensively used payment card in 2016, which contributed to 77% of the total transaction amount (Bank Negara Malaysia, 2016), which imply the increasing use of credit card payment service amongst Malaysian consumers. For instance, a survey performed by the Asian Institute of Finance (AIF) discovered that 47% of the generation Y were engaged in credit card borrowing, where 70% paid only the minimum of the monthly payment (Madden, 2015). This young generation seems to utilize the credit card payment service for their

expenditure, such as booking hotel accommodations, buying airline tickets, groceries, and also products of fashion (Vijaindren, 2017). The Malaysian young group appears to spend beyond what they can afford and frequently indulges in impulse buying behaviours by engaging in credit card and personal loans, wherein they find themselves in debt trap (Ismitz Matthew, 2017). It is supported via the report by (Jabatan Insolvency Malaysia, 2016) which stated credit card debt (11.48%) and personal loan debt (31.32%) among the highest reason for bankruptcy among Malaysian in 2016. Accordingly, there is high likelihood that the growth of consumer income (Bank Negara Malaysia, 2017), easy access to credit (Cakarnis and D'Alessandro, 2015), new product development, tempting sale promotions, and online shopping (Pradipto, Winata, Murti, & Azizah, 2016) that may escalate the spending pattern, which in turn, is expected to influence impulse buying behaviour.

Impulse buying behaviour is common and it is habitually exercised among consumer worldwide. In Malaysia, a study carried out by the Asian Institute of Finance (AIF) indicated that impulse buying behaviour was one of the main causes of debt woes faced by Gen-Y (AIF, 2015). Although several prior studies have investigated impulse buying behaviour (Badgaiyan and Verma, 2015; Ek Styven, Foster, & Wallstrom, 2017) among western countries and a non-particular group of consumer, studies in Asian countries and among Muslim credit card holder are in scarcity, particularly in Malaysia. Also, the variables of materialism, sale promotion, money and time availability, as well as hedonic motivation, were rarely assessed by previous researchers in light of impulse buying behaviour. Hence, this study addresses these issues as the major gap and extends the literature in the body of knowledge. Precisely, this study examined the factors that influence and stimulate Muslim credit cardholders in practising impulse buying behaviour, either by credit or by cash. This study incorporated a framework that classifies independent variables into two categories; situational variables (sales promotion, money and time availability) and individual variables (materialism and hedonic motivation).

Impulse Buying Behaviour

Generally, prior scholars unanimously defined impulse buying behaviour as "unplanned buying" (Rook, 1987; Applebaum, 1951) and spontaneous buying (Beatty and Elizabeth Ferrell, 1998). Past studies were keen on exploring impulse buying behaviour in a general shopping context or retail format that involved impulsive

consumption of goods (Hulten and Vanyushyn, 2014; Wu and Lee, 2015; Akram et al., 2018). Subsequently, researchers began extending their interest of study by examining the factors that stimulate impulse buying behaviour. Prior researches revealed several factors related to impulse buying, including individual and situational factors. However, only a handful of studies have associated money and time availability, sale promotion, materialism, and hedonic motivation with impulse buying behaviour.

Sale Promotion

A substantial number of studies have determined the impact of sales promotions on consumption (Osman, Fah, and Foon, 2011) and sales promotional techniques (Reid et al. 2015), which signified both positive and negative correlations concerning sales promotion activities as a function of the marketing discipline. The correlation between sales promotion and impulse buying behaviour from past studies suggests a significantly positive relationship with impulse buying behaviour (Badgaiyan and Verma, 2015; Chen and Wang, 2015). A recent study suggested that sales promotion is the primary factor that influenced online internet impulse buying (Lo, Lin, and Hsu, 2016). As for Malaysia, only a few studies have associated sales promotion with impulse buying behaviour. Accordingly, this study proposes the below hypothesis:

H1: There is a significantly positive relationship between sales promotion and impulse buying behaviour among Muslim credit cardholder.

Money and Time Availability

Time availability refers to the time that consumers have available on a particular day, while money availability is described as the amount of money available to spend, which reflect the capacity of the consumers to purchase using the available or extra money (Beatty and Elizabeth Ferrell, 1998). Consumers tend to browse longer if they have more time available and their negative feelings would tend to decrease, while their positive feelings to increase given the availability of both time and money (Beatty and Elizabeth Ferrell, 1998). Previous researchers have investigated and tested the roles of money and time availability towards influencing urge of consumers upon impulsive buying, which revealed that both elements do exert a positive relationship with impulse buying behaviour (Badgaiyan and Verma, 2015; Chang, Yan, and Eckman, 2014;). Accordingly, this study anticipates that consumers will spend more time at a shopping mall browsing with less buying, due to the shortage of money. Conversely, consumers are bound to browse less in a retail outlet when under time pressure, even though they

have extra money for spending. Therefore, this study concludes that a consumer will practice impulse buying behaviour with available time and money by proposing the below hypothesis:

H2: There is a significantly positive relationship between money and time availability and impulse buying behaviour among Muslim credit cardholder.

Materialism

Some researchers perceive materialism by applying three positive factors; centrality, happiness, and success (Richins and Dawson, 1992). Consumers perceive the element of materialism as their centrality of life or an indicator of happiness and success by pursuing their careers and success to thereby, create a sense of happiness and well-being in their lives. In precise, materialism refers to the importance of materialistic items in human life by perceiving material possession as the central indicator to attain happiness and success (Ilter, Bayraktaroglu, and Ipek, 2017). Materialistic consumers often feel satisfied if they can fulfil their worldly desires and goals, such as succumbing to large sums of money to impress others and using this to generate a symbol of wealth and success (Yamauchi and Templer, 1982). The previous study (see Khan et al. 2015) that explored the correlation between materialism and impulse buying behaviour reported a positive correlation between materialism and impulse buying behaviour. Based on the attributes of materialism mentioned above, it is indeed possible to claim that the materialistic consumer group as one of the leading groups that contribute towards impulse buying. Hence, the below hypothesis is proposed:

H3: There is a significantly positive relationship between materialism and impulse buying behaviour among Muslim credit cardholder.

Hedonic Motivation

Prominent scholars (see Hirschman and Holbrook, 1982) indicated that hedonic consumer behaviour is composed of "those facets of consumer behaviours related to the multisensory, fantasy, and emotional aspects of one's experience with products". This definition shows that hedonic motivation derives from two primary types of responses: multisensory and emotional arousal (Hirschman and Holbrook, 1982). Accordingly, a substantial number of studies have linked hedonic motivation with the marketing domain (Yim et al. 2014). Nevertheless, a handful of studies have explicitly

discussed the influence of hedonic motivation on impulse buying behaviour (Arnold and Reynolds, 2003, 2012; Parker and Wang, 2016). Still, there remain apparent knowledge gaps to be bridged by further probing into the subject matter; notably, the lack of diversity amongst the respondents and the study venue. Hence, this study bridges the mentioned knowledge gap by examining the impulsive buying behaviour amidst Muslim credit cardholders. Therefore, this study proposes the below hypothesis:

H4: There is a significantly positive relationship between hedonic motivation and impulse buying behaviour among Muslim credit cardholder.

Methodology

Sample and Scale

Questionnaires were distributed to 1,000 Muslim credit cardholders in Malaysia and only 635 usable questionnaires were used for actual data analysis. As the data in this study were regarded as non-probability sampling, the data collection activities were undertaken via purposive and snowball sampling techniques via two methods; the contact network and through self-assessment (Rowley, 2014). Table I presents the demographic profile of the respondents. The scale for this study was adopted and adapted from several questions derived from past studies related to this subject matter, as depicted in Table II:

Table 1: Demographic

Construct	Frequency	Percentage
<i>Gender</i>		
Male	249	39.2%
Female	386	60.8%
<i>Age</i>		
22 to 30	98	15.4%
31 to 41	299	47.1%
42 to 50	173	27.2%
51 to 65	65	10.2%
<i>Job Status</i>		
Government	387	60.9%
Private	189	29.8%
Self-Employed	34	5.4%
Retired	7	1.1%
Unemployed	18	2.8%

Income		
RM 2,000-RM 3,000	95	15.0%
RM 3,001-RM 6,000	289	46.9%
RM 6,001-RM 9,000	184	29.0%
RM 9,001 and above	58	9.1%
Number of Credit Card		
One only	406	63.9%
Two and more	229	36.1%

Table 2: Scale and References

Variables	Sources	Items
Impulse Buying Behaviour	(Rook and Fisher, 1995)	6
Materialism	(Richnis and Dawson, 1992) and (Richnis, 2004)	8
Hedonic Motivation	(Hausman, 2000) and (Arnold and Reynolds, 2003)	15
Money and Time Availability	(Beatty and Farrell, 1998)	5
Sale Promotion	(Karbasivar and Yarahmadi, 2011)	5

Data Analyses and Results

This study employed the Structural Equation Model (SEM) analysis technique via Partial Least Squares (PLS) to meet the study objectives. The PLS method was employed due to its outstanding benefits that can control and handle non-normal data, as well as intricate models with a massive number of constructs (Hair et al. 2017). The Partial Least Square-Structural Equation Model is also appropriate for a small sample size with a highly complex model, which can handle both formative and reflective constructs (Hair et al. 2017). In examining the hypotheses, two models were measured in the PLS-SEM analysis; measurement and structural models. The assessment of measurement model included two analyses; convergent validity and discriminant validity. Meanwhile, as for the structural model, the estimation comprised of the coefficient of determination (R^2), predictive relevance (Q^2), size and significance of path coefficients, f^2 effect size, and q^2 effect size.

Analysis of Measurement Model

Convergent validity incorporates three additional analyses; Outer Loading Analysis, Average Variance Extracted (AVE), and Composite Reliability (CR) functions to measure the extent to which a measured item relate with other items within the same construct (Hair, Hult, Ringle, & Sarstedt, 2017). The outer loading was performed to identify items with high and low loading. Accordingly, low outer loading was discarded, while high outer loading determined the similarity of the indicators. A standard rule of thumb for standardizing the outer loading should be 0.708 or higher (Hair et al., 2017). However, in social science studies, it is common for researchers to obtain a weaker outer loading, which is below 0.70, mainly when related to newly-developed scales (Hulland, 1999). In this study, the value of the outer loading for each construct indicator met the standard rule of thumb in standardizing the outer loading at 0.708 or above. Nonetheless, some outer loading values fell between 0.40 and 0.60, thus retained following the suggestions given by scholars.

Hair, Ringle, and Sarstedt (2011), and Hair et al., (2017) asserted that outer loading values between 0.40 and 0.70 should be eliminated only if the deleted indicator increased the values of composite validity and AVE. Hair et al. (2017) suggested that an indicator should be discarded only if the outer loading value increases the measures above the threshold and after weighing in the impact on content validity. Second, if the removal does not increase the measures greater than the threshold, the indicator is retained. Hence, if the AVE values exceed 0.50, the outer loading values that range between 0.40 and 0.60 should be retained to maintain content validity. As for the AVE estimation, an AVE should exceed the value 0.50, hence explaining that the construct reflects more than half of the variances of its indicator (Hair et al., 2011). On the contrary, the AVE reflects less of the indicators variance if the value is less than 0.50 (Hair et al., 2017). As portrayed in Table III, the values of AVE for all constructs met the threshold value by exceeding 0.50, wherein the AVE ranged between 0.502 and 0.648. The AVE was assessed as one of the analyses that explained the convergent validity to identify how well an indicator correlated with other indicators of the same construct. Next, the CR values differ in terms of exploratory and advanced research. In exploratory research, CR is acceptable with values ranging from 0.60 to 0.70, while values between 0.70 and 0.90 are acceptable in advanced research, and values less than 0.60 as lacking in reliability (Hair et al., 2017). In this study, the CR and Cronbach's Alpha for all constructs appeared to meet the threshold values, which fell

between 0.749 and 0.933, as well as 0.800 and 0.922, respectively. However, one of the variables; money and time availability, displayed a moderate Cronbach's Alpha value of 0.418, which in this instance, considered to below. Nevertheless, this study preferred using CR as the alternate assessment for reliability, mainly because the Cronbach's Alpha results in relatively small reliability values (Hair et al., 2017). Also, referring to Jackson (2009), the correlation coefficient between 0.30 and 0.69 can be categorized as moderate. Therefore, Cronbach's Alpha at 0.418 had been considered as sensible and applicable.

The purpose of discriminant validity is to identify the extent to which a given construct is distinct from other constructs. This assessment employed three measurements of discriminant validity; Fornell-Larcker Criterion, Cross loading, and Heterotrait-Monotrait Ratio (HTMT) (Hair et al., 2017). In Fornell-Larcker criterion estimation, the square root of each AVE for the construct should be higher than its correlation with the other constructs (Hair et al., 2017). Based on Table III, the result of using Fornell-Larcker criterion demonstrated that the discriminant validity was indeed established in this study by obtaining higher values of square roots of each AVE for the constructs; hedonic motivation (0.709), impulse buying behaviour (0.754), materialism (0.721), sale promotion (0.805), as well as money and time availability (0.782).

Table 3: Average Variance Extracted (AVE), Composite Reliability, Cronbach's Alpha Assessment, Cross-Loading, and Fornell-Larcker.

Construct	Items	Loading	Average Variance Extracted (AVE)	Composite Reliability	Cronbach's Alpha	Fornell-Larcker
Hedonic Motivation	HMQ1	0.656	0.502	0.933	0.922	0.709
	HMQ2	0.677				
	HMQ3	0.772				
	HMQ4	0.813				
	HMQ5	0.679				
	HMQ6	0.816				
	HMQ7	0.803				
	HMQ8	0.739				
	HMQ9	0.781				
	HMQ10	0.718				
	HMQ11	0.561				

	HMQ12	0.652				
	HMQ14	0.550				
	HMQ15	0.634				
Impulse Buying Behaviour	IBBQ1	0.792	0.569	0.887	0.847	0.754
	IBBQ2	0.839				
	IBBQ3	0.708				
	IBBQ4	0.764				
	IBBQ5	0.710				
	IBBQ6	0.704				
Money and Time Availability	MTAQ2	0.590	0.611	0.749	0.418	0.782
	MTAQ3	0.935				
Materialism	MTRLQ1	0.703	0.520	0.896	0.867	0.721
	MTRLQ2	0.634				
	MTRLQ3	0.726				
	MTRLQ4	0.756				
	MTRLQ5	0.717				
	MTRLQ6	0.763				
	MTRLQ7	0.753				
	MTRLQ8	0.706				
Sale Promotion	SPQ1	0.738	0.648	0.902	0.863	0.805
	SPQ2	0.788				
	SPQ3	0.765				
	SPQ4	0.863				
	SPQ5	0.863				

Analysis of Structural Model

The structural model demonstrates the causal relationship between the constructs embedded in the model. This is inclusive of the estimates of the path coefficient, which indicate the correlations between exogenous (independent) and endogenous (dependent) variables, as well as R^2 value, which demonstrate the numbers of variances explained by exogenous variables, effect size (f^2), and predictive relevance (Q^2) assessment (Hair et al., 2017). Table IV displays the outputs of the structural model analysis for the direct relationship between the independent variables (materialism, sale promotion, money and time availability, and hedonic motivation) and the dependent variable (impulse buying behaviour) employed in this study. In order to identify the significant level of one-tailed test, the t values must be higher than these

three levels of critical value, namely, 1.28 (significant level = 10 %), 1.65 (significant level = 5 %), and 2.33 (significant level = 1 %).

Table 4: Hypotheses Test (Direct Relationship)

Hypothesis & Path	Beta Values	Standard Error	T Values	P Values	Significance Level
H1: SP→IBB	0.227	0.044	5.159***	0.000	Significant
H2: MTA→IBB	0.066	0.033	1.986 **	0.024	Significant
H3: MTRL→IBB	0.186	0.038	4.852***	0.000	Significant
H4: HM→IBB	0.323	0.044	7.320***	0.000	Significant

Note: Significant Level: *p<0.1, **p<0.05, ***p<0.01 NS: Not Significant, S: Significant

The results, therefore, are indicated in the following:

H1: There is a significantly positive relationship between sale promotion and impulse buying behaviour among Muslim credit cardholder.

The results established a significantly positive relationship between sale promotion and impulse buying behaviour ($\beta = 0.227$, $t = 5.159$, $p < 0.01$) and therefore, this hypothesis is accepted.

H2: There is a significantly positive relationship between money and time availability and impulse buying behaviour among Muslim credit cardholder.

In light of money and time availability, a significantly positive relationship was founded with impulse buying behaviour ($\beta = 0.066$, $t = 1.986$, $p < 0.05$). Therefore, hypothesis H2 is accepted.

H3: There is a significantly positive relationship between materialism and impulse buying behaviour among Muslim credit cardholder.

The result for hypothesis H1a shows that materialism has a significantly positive relationship with impulse buying behaviour ($\beta = 0.186$, $t = 4.852$, $p < 0.01$). Thus, hypothesis H3 is accepted.

H4: There is a significantly positive relationship between hedonic motivation and impulse buying behaviour among Muslim credit cardholder.

As for hedonic motivation, a significantly positive relationship was established between hedonic motivation and impulse buying behaviour ($\beta = 0.323$, $t = 7.320$, $p < 0.01$). Hence, hypothesis H4 is accepted.

Table 5: Assessment of Coefficient of Determination (R^2), the Effect Size (f^2) and the Predictive Relevance (Q^2) of Direct Relationship.

Construct	f square	R square	Q square
SP→IBB	0.051		
MTA→IBB	0.007		
MTRL→IBB	0.042		
HM→IBB	0.093		
IBB		0.427	0.225

Following the path coefficient assessment, the coefficient of determination (R^2), the effect size (f^2), and the predictive relevance (Q^2) were assessed. The estimation for a coefficient of determination (R^2) is to determine the amount of variance in the dependent variable constructs explained by all the independent variables. To assess the coefficient of determination (R^2), scholars have identified three levels to consider; R^2 values of 0.75 (substantial), 0.50 (moderate), and 0.25 (weak) (Hair et al., 2011). As depicted in Table V, R^2 of this analysis appeared to be moderate with a coefficient value at 0.427. According to Cohen et al., (2003), based on the guideline to assess the effect size of R^2 , the three levels of effect sizes that can be measured are large (0.26), medium (0.13), and small (0.02). Therefore, based on the results reported above, the f square (f^2) displayed that all the independent variables had an impact on the dependent variable, but with notable small effect size, and with values ranging from 0.003 to 0.093. Next, as for the predictive relevance (Q^2), the path model exhibited the predictive relevance of the dependent variable by Q^2 value at 0.225, which exceeds zero.

Discussion

Specifically, impulse buying behaviour happens when a consumer experiences three situations, of which feels a sudden, often compelling, and persistent desire to immediately buy something (Rook, 1987). Buying something spontaneously in a shopping outlet without making any decision before entering the store can also be translated as impulse buying. The general objective of this study is to explore the factors that influence impulse buying behaviour among Muslim credit cardholders in

Malaysia. Based on the study outcomes, it is reasonable to conclude that the factors of materialism, sale promotion, money and time availability, and hedonic motivation drove the consumers to involve in impulse buying behaviour. As such, the ability and the capacity to control one's desire are the central points of this issue. If Muslims strive to fight and avoid their unnecessary and inappropriate desires towards being moderate in every aspect of their lives, they would be able to avoid extravagance and lavish spending behaviour, which inevitably results in financial difficulties and a miserable life due to escalating debts, bankruptcy, social relationship issues, as well as health and mental illnesses. It seems that Muslim consumers tend to have a weakness in overcoming the desires and urges related to sales promotions, money and time availability, materialism, and hedonic motivation. Sadly, they are concerned with satisfying their demands and desires, regardless of the unfavourable outcomes and effects of such behaviour.

The Implication of the Study

The study outcomes offer several theoretical and methodological implications for buying behaviour and impulse buying fields of study. As described earlier, the study variables; sales promotion, money and time availability, materialism, and hedonic motivation, are the main elements that differentiate this study from those of past studies, mainly because the variables incorporated in this study are sparsely explored. Therefore, it is possible to claim that this study is one of the initial studies that have looked into impulse buying behaviour among Muslim credit cardholders in Malaysia. The type of respondents, the study venue, and the analysis of the study were identified as the main factors that contributed towards the methodological implications of this study.

Future Research

As this study examined impulse buying behaviour among Muslim consumers in Malaysia, future researches may explore impulse buying behaviour among multiracial consumers in Malaysia due to the melting pot of races, cultures, and religions in this nation. Additionally, one can also investigate online impulse buying within the context of Malaysian consumers. Prior studies (see Chen, Su, and Widjaja, 2016) have assessed and discussed online impulse buying, which further pointed out that impulse buying has a significant relationship with online buying. Since online buying has gained

tremendous attention from consumers, it is essential to examine online impulse buying from varied perspectives.

Limitations of this Study

The two important limitations in this study are the restriction to access the actual list of credit cardholders in Malaysia, and the use of an old version of the scale measurement as an essential variable.

The first limitation refers to the restricted access to the list of credit cardholders and the number of credit cardholders in Malaysia. The Payment System Act 2003 restricts the disclosure of the actual list and the number of credit cardholders in Malaysia. Second, as the selected independent variables assessed in this study have been sparsely investigated in past studies, neither sufficient nor appropriate scale had been available to measure the variables. For instance, the measurement scale for variables sales promotion, as well as money and time availability, had been composed of out-dated or obsolete questions of measurement. Nonetheless, this study utilized this scale measurement due to time constriction and the inability to design a new scale measurement.

References

- Akram, U., Hui, P., Khan, M. K., Tanveer, Y., Mehmood, K., & Ahmad, W. (2018). How website quality affects online impulse buying: moderating effects of sales promotion and credit card use. *Asia Pacific Journal of Marketing and Logistics*, 30(1), 235–256.
- Applebaum, W. (1951). Studying Customer Behavior in Retail Stores. *The Journal of Marketing*, 16(2), 172–179.
- Arnold, M. J., & Reynolds, K. E. (2003). Hedonic shopping motivations. *Journal of Retailing*, 79(2), 77–95.
- Arnold, M. J., & Reynolds, K. E. (2012). Approach and Avoidance Motivation: Investigating Hedonic Consumption in a Retail Setting. *Journal of Retailing*, 88(3), 399–411.
- Asian Institute of Finance. (2015). *Bridging the Knowledge Gap of Malaysia's Millennials*. Asian Institute of Finance (AIF)'s Report, Kuala Lumpur, Malaysia.
- Bank Negara Malaysia. (2016). *Financial Stability and Systems Report 2016*. Retrieved September 12, 2017, from http://www.bnm.gov.my/files/publication/fsps/en/2016/fs2016_book.pdf
- Badgaiyan, A. J., & Verma, A. (2015). Does the urge to buy impulsively differ from impulsive buying behaviour? Assessing the impact of situational variables. *Journal of Retailing and Consumer Services*, 22, 145–157.
- Beatty, S. E., & Elizabeth Ferrell, M. (1998). Impulse buying: Modeling its precursors. *Journal of Retailing*, 74(2), 169–191.
- Cakarnis, J., & D'Alessandro, S. P. (2015). Does knowing overcome wanting? The

- impact of consumer knowledge and materialism upon credit card selection with young consumers. *Young Consumers*, 16(1), 50–70.
- Central Bank of Malaysia. (2016). *Annual Report 2016*. Malaysia
- Chang, H. J., Yan, R.-N., & Eckman, M. (2014). Moderating effects of situational characteristics on impulse buying. *International Journal of Retail & Distribution Management*, 42(4), 298–314.
- Chen, J. V., Su, B. C., & Widjaja, A. E. (2016). Facebook C2C social commerce: A study of online impulse buying. *Decision Support Systems*, 83, 57–69.
- Ek Styven, M., Foster, T., & Wallstrom, A. (2017). Impulse buying tendencies among online shoppers in Sweden. *Journal of Research in Interactive Marketing*, 11(4), 416–431.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). The Use of Partial Least Squares (PLS) to Address Marketing Management Topics: From the Special Issue Guest Editors. *Journal of Marketing Theory and Practice*, 18(2), 135–138.
- Hair, J., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A Primer On Partial Least Squares Structural Equation Modeling (PLS-SEM)* (Second Edition). USA: SAGE Publication, Inc
- Hirschman, E. C., & Holbrook, M. B. (1982). Hedonic Consumption: Emerging Concepts, Methods, and Propositions. *Journal of Marketing*, 46(3), 92–101.
- Hulland, J. (1999). Use of Partial Least Squares (Pls) in Strategic Management Research: a Review of Four Recent Studies. *Strategic Management Journal*, 20(4)(November 1996), 195–204.
- Hulten, P., & Vanyushyn, V. (2014). Promotion and shoppers' impulse purchases: the example of clothes. *Journal of Consumer Marketing*, 31(2), 94–102.
- Ilter, B., Bayraktaroglu, G., & Ipek, I. (2017). Impact of Islamic religiosity on materialistic values in Turkey. *Journal of Islamic Marketing*, 8(4), 533–557.
- Ismith Matthew. (2017, July). Impulse Buying: Gen-Y faces online shopping debt trap. *News Straits Times Online*. Retrieved Oktober 10, from <https://www.nst.com.my/news/exclusive/2017/07/255745/impulse-buying-gen-y-face-online-shopping-debt-trap>
- Jabatan Insolvency Malaysia. (2016). Laporan Tahunan Bahagian Hal Ehwal Undang-Undang. Kuala Lumpur, Malaysia.
- Jackson, S. L. (2009). *Research Methods and Statistics: A Critical Thinking Approach* (Third Edition). USA: Wadsworth Publishing.
- Karbasivar, A., & Yarahmadi, H. (2011). Evaluating Effective Factors on Consumer Impulse Buying Behavior. *Asian Journal of Business Management Studies*, 2(4), 174–181.
- Khan, N., Hui Hui, L., Booi Chen, T., & Yong Hoe, H. (2015). Impulse Buying Behaviour of Generation Y in Fashion Retail. *International Journal of Business and Management*, 11(1), 144-151
- Madden, R. (2015, October 16). Malaysia's Gen Y face financial stress, live beyond their means. *The Star Online*. Retrieved December 2016 from <http://www.thestar.com.my/business/business-news/2015/10/16/study-malaysias-gen-y-living-on-financial-edge/?style=biz>
- Osman, S., Fah, B. C. Y., & Foon, Y. S. (2011). Simulation of Sales Promotions towards Buying Behavior among University Students. *International Journal of Marketing Studies*, 3(3), 78–88.
- Parker, C. J., & Wang, H. (2016). Examining hedonic and utilitarian motivations for m-commerce fashion retail app engagement. *Journal of Fashion Marketing and Management: An International Journal*, 20(4), 487–506.
- Pradipto, Y. D., Winata, C., Murti, K., & Azizah, A. (2016). Think Again Before You Buy :

- The relationship between self-regulation and impulsive buying behaviours among Jakarta young adults. *Procedia - Social and Behavioral Sciences*, 222, 177–185.
- Reid, M., Thompson, P., Mavondo, F., & Brunso, K. (2015). Economic and utilitarian benefits of monetary versus non-monetary in-store sales promotions. *Journal of Marketing Management*, 31(3–4), 247–268.
- Richins, M. L. (2004). The material values scale: Measurement properties and development of a short form. *Journal of Consumer Research*, 31(1), 209–219
- Richins, M. L., & Dawson, S. (1992). A consumer values orientation for materialism and its measurement: Scale development and validation. *Journal of Consumer Research*, 19(3), 303–316.
- Rook, D. W. (1987). The Buying Impulse. *Journal of Consumer Research*, 14(2), 189–199.
- Rook, D. W., & Fisher, R. J. (1995). Normative Behavior Influences on Impulsive Buying Trait Aspects of Buying Impulsiveness. *Journal of Consumer Research*, 22(3), 305–31
- Rowley, J. (2014). Designing and using research questionnaires. *Management Research Review*, 37(3), 308–330.
- Vijaindren, A. (2017, July). Impulse Buying: Gen-Y faces online shopping debt trap. *News Straits Times*. Retrieved Oktober 15 from <https://www.nst.com.my/news/exclusive/2017/07/255745/impulse-buying-gen-y-face-online-shopping-debt-trap>
- Wu, P.T., & Lee, C.J. (2015). Impulse buying behaviour in cosmetics marketing activities. *Total Quality Management & Business Excellence*, (July), 1–21.
- Yamauchi, K. T., & Templer, D. I. (1982). The Development of Money Attitude Scale. *Journal of Personality Assessment*, 46(5), 522–528.
- Yim, M. Y.-C., Yoo, S.-C., Sauer, P. L., & Seo, J. H. (2014). Hedonic shopping motivation and co-shopper influence on utilitarian grocery shopping in superstores. *Journal of the Academy of Marketing Science*, 42(5), 528–544.