

The Effect of Affective Components on Impulse Buying

Ooi Ennie^{1*}, Rabeatul Husna Abdull Rahman¹, Choi Sang Long² and Halimah M. Yusof¹

¹*School of Human Resource Development & Psychology, Faculty of Social Sciences & Humanities, Universiti Teknologi Malaysia, Malaysia.*

²*Faculty of Business, Raffles University Iskandar, Malaysia.*

ABSTRACT

This paper investigates the effect of affective components (positive and negative affects) on impulse buying behavior among Malaysian youths. A total of 106 questionnaires were distributed to youths in a shopping mall in Skudai, Johor, however only 102 were usable. The correlation analysis revealed insignificant relationship between positive affect and impulse buying behavior, and a weak positive significant relationship between negative affect and impulse buying behavior. These findings provide valuable information for youths to exert better control over their negative feelings and mood in order to avoid impulse buying. Shopping malls on the other hand could employ certain marketing strategies to influence compensatory impulse buying among visitors.

Keywords: Affective Commitment, Buying Behavior, Impulse Buying, Marketing, Youth.

1. INTRODUCTION

Impulse buying is an unplanned and sudden urge to purchase. This topic has been prominent for more than 50 years (Lin & Chen, 2013; Shen & Khalifa, 2012; Sun & Wu, 2011). Impulse buying has become a part of consumers' everyday activities, either in grocery shopping or recreational shopping. Undoubtedly, impulse buying behavior has a tendency to influence customers spending more than they planned. Whilst the effect appears to be negative for the consumers, impulse buying behavior on the other hand is profitable for businesses. Consequently, this topic has generated interests among consumers and psychology researchers (Lin & Chen, 2013; Shen & Khalifa, 2012; Sun & Wu, 2011). Researchers have suggested a comprehensive definition for impulsive buying (Angela, 2000; Kacen & Lee, 2002; Parboteeah, 2005; Piron, 1991; Rook, 1987; Vohs & Faber, 2003) and exploring the factors that cause impulse buying behavior (Mihic & Kursan, 2010; Rook, 1987).

Today, emotion becomes more prominent with the growth of the consumer pleasure principle (Consoli, 2009). The element of affect must be added to enhance the basis supply of product or service (Consoli, 2009). The consumers not only look for product or service that meets both their requirements, but also a product that becomes a basis of connections and feelings (Consoli, 2009). Emotions may have a positive or negative effect on customers' purchasing attitudes and actions (Elfriede & Margaret, 2011).

Since affective components are having high importance in marketing and consumer behavior researches, many researchers have focused on emotional states and their connection to customers' decisions and behaviors (Yeung & Wyer, 2004). Researchers have begun to recognize that impulse buying is a consumption experience which involve a rich affective implications (Dđncer, 2010). Many studies suggested that impulse buying is often associated with affective components (Dđncer, 2010; Foroughi, Buang, & Sadeghi, 2012; Graa & Dani-elKebir, 2012; Huang

*Corresponding Author: rabeatulhusna@utm.my

& Hsieh, 2011; Lee & Yi, 2008; Meniawy, 2012; Shirmohammadi, Ebrahimi, & Ghane, 2014; Verhagen & van Dolen, 2011). For instance, there are evidences showing that when consumers experience positive affect, they are prone to enter the store and stay longer in the store (Yalch & Spangenberg, 2000). In a different study, affective components were found to influence shopping behavior positively through the formulation of positive emotion or negatively through negative emotion (Pappas, Kourouthanassis, Giannakos, & Chrissikopoulos, 2014).

Malaysia has a steady economic growth and a solid retail growth (Kearney, 2013). The expansion of the Malaysian economy increases the number of shopping malls in Malaysia (Ahmed, Ghingold, & Dahari, 2007). Today, shopping malls in Malaysia no longer only focus on their initial role in economic activity, but they transcended to become a community center for social and recreational activity (Ahmed *et al.*, 2007). For example, consumers go to shopping mall for shopping, recreational pursuits, entertainment, meeting friends, simply browsing around, and so on (Ahmed *et al.*, 2007). This is due to an increasing trend of Malaysians shopping for pleasure (Ahmed *et al.*, 2007).

Ahmed *et al.* (2007) conducted a study to examine Malaysian shopping behavior. The finding of this study proved that shopping malls are major spending destinations for Malaysian youth (Ahmed *et al.*, 2007). In particular, the results reported 41.7% of the study's respondents visited shopping malls at least once a week, 25.8% visited shopping malls once every two weeks, 23.5% of respondents visited the shopping malls once a month or less and 9.1% visited a mall every day (Ahmed *et al.*, 2007). Besides, the finding also indicated that 56% of the respondents spent more than 10% of their monthly expenditures in malls, and more than 37% respondents spent more than 15% of monthly expenditures in malls (Ahmed *et al.*, 2007). This finding proved that Malaysian youths are a key customer for shopping malls. Moreover, they constitute the largest population in the country (Muda *et al.*, 2016). Nevertheless, research on this area, particularly among Malaysian youth is still scarce.

Studies in the foreign context have shown that impulse buying behaviour is also more prevalent among youth. A study by Datta & Sharma (2017) in India, have shown that the generation Y (18 to 35 years old) have a tendency to purchase on impulse, mostly branded clothes, followed by shoes, food, and movies. Their study also revealed that more than 50% of the youth bought on impulse products with unfamiliar brands.

Hence, this study was conducted to investigate the relationship between affective components and impulse buying behavior among youth in Skudai, Johor. This study will be useful not only for marketing practitioners to manipulate youth impulsive behavior to increase sales of business, but more importantly it provides valuable information for youths on how their negative and positive feelings and mood could influence their impulse buying behaviour. The latter is perceived as more important as impulsive spending behaviour may be the cause of financial problems among youth particularly university students (Md Razak *et al.*, 2014). Moreover, the spending trend among youth, if uncontrolled, could bring further negative consequences in the future. As revealed by the 2018 Malaysian Literacy Survey – it was found that nearly 60% of Malaysians do not have a minimum of 3 months saving, and that 34% spend more than their monthly salary (Pang, 2018). Therefore, youth has to be educated with financial management knowledge in order for them to make good spending decision (Peng *et al.*, 2007), one which is not affected either by their negative or positive feelings.

2. LITERATURE REVIEW

2.1 The Relationship between Affective Components and Impulse Buying

Extensive research has been conducted to investigate the link between mood and emotion towards impulse buying behavior. For example Pradhan (2016) found that mood (both negative and positive feelings) is significantly influencing customers' impulsive behaviour. Similar findings can be found in Huang & Hsieh (2011), Cho *et al.* (2014), Suhud & Herstanti (2017). These studies revealed that consumer's positive emotion relates positively to their impulse buying behavior. In other words, consumers with positive emotions bought more items on impulse than their counterparts (Park, Kim, & Forney, 2006). This means that the higher positive emotion feeling engaged by an individual, the higher the likelihood of overspending and impulse buying (Verplanken & Herabadi, 2001, Sultan *et al.* 2018). Furthermore, there is a positive relationship between positive affect and urge to buy (Foroughi *et al.*, 2012; Foroughi *et al.*, 2013; Shirmohammadi *et al.*, 2014; Verhagen & van Dolen, 2011) whereby urge to buy is positively related to impulse buying (Shirmohammadi *et al.*, 2014; Verhagen & van Dolen, 2011). But, another research claimed that the higher the frequency of felt urges to buy impulsively, does not mean the greater the likelihood of making an impulse purchase (Foroughi *et al.*, 2012). In particular, past researches showed that positive emotions influenced impulse buying in the context of purchasing fashion items (Park *et al.*, 2006) as well as for music compact discs (Adelaar, Chang, Lancendorfer, Lee, & Morimoto, 2003). According to Meniawy (2012), people were likely to purchase impulsively when they were in a positive mood. In other words, when consumers experience positive emotions, they are more likely to evaluate a product more favorably (Yalch & Spangenberg, 2000). Besides, impulse buying is contributed by positive emotion because impulse buying function as a way to reward oneself when he or she is in positive emotion (Verplanken & Herabadi, 2001).

Interestingly, positive relationship was found between impulse buying behavior and negative emotion too. According to Huang & Hsieh (2011), impulse buying behavior is not reduced when consumers are in negative emotion. In fact, Chavosh *et al.* (2011) have found that consumers in a negative mood are more likely to purchase impulsively. Similar findings can also be found in a study by Miltenberger *et al.* (2003) and Verplanken & Herabadi (2001). Apparently negative moods trigger impulse buying which provides temporary relief and function as a way to comfort oneself (Miltenberger *et al.*, 2003; Verplanken & Herabadi, 2001). In addition to that, Verplanken *et al.* (2005) suggested that chronic impulse buying is caused by negative state of mind rather than positive state of mind. However, despite many studies showing significant relationship between positive and negative affect on impulse buying, some studies are showing contradicting results. For instance, a study by Pandey (2016) found that moods have no effects on young Indian consumers' compulsive buying. This implies that the factors that trigger impulse buying behaviour may differ between developed and less developed countries. Apart from that, Pornpitakpan *et al.* (2017) have revealed that positive moods trigger impulse buying more than negative mood.

Therefore this study is conducted to investigate whether a relationship exists between Malaysian youth consumers' affective components and their impulse buying behaviour. Figure 1 illustrates the relationship between affective components and impulse buying behavior.

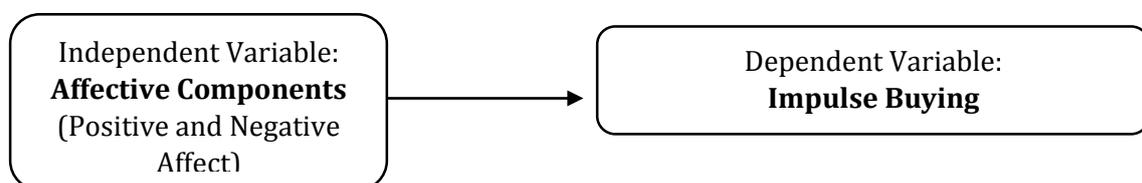


Figure 1. Conceptual model.

3. RESEARCH METHOD

3.1 Research Design

This study adopted a quantitative research design in which data was collected using questionnaire. It consists of seven demographic items, twenty items from the Positive and Negative Affect Schedule (PANAS) by Watson *et al.* (1988) and nine items from the Buying Impulsiveness Scale by Rook & Fisher (1995). A pilot study was also conducted prior to data collection which yielded an acceptable Cronbach's alpha values - above 0.80 for all variables. Data was then collected among youths who visited a shopping mall in Skudai, Johor on a particular chosen day. This area was chosen because it has several educational institutions which include secondary schools, private colleges and public university. Since the population of the study is unknown, the researcher determined the sample size for this research based on the formula by Mendenhall, Beaver & Beaver (2013). For the purpose of this study, confidence level of 0.1 (z-score = 1.64) and standard deviation of 50% (p=0.5) were applied into the formula. According to Krejcie & Morgan (1970), these values are considered acceptable for social science research. The standard deviation was assumed to be at 0.50 since this would provide the maximum sample size (Krejcie & Morgan, 1970). Based on this formula, n = 67. In order to increase the response rate, a total of 106 questionnaires were distributed.

4. DATA ANALYSIS

4.1 Demographic Analysis

Out of 106 questionnaires distributed, only 102 were usable (96% response rate). Overall, majority of the respondents were female (56%), aged between 20-29 years old (72%), and of Malay ethnicity (56%). Approximately 57% of them were students whereby 76% of them received scholarship.

4.2 Objective 1: To Identify the Level of Affective Components

The first objective of this study is to identify the level for each affective component. Table 1 shows the result for positive affect dimension.

Table 1 Positive affect dimension

Items	1 f (%)	2 f (%)	3 f (%)	4 f (%)	5 f (%)	Mean	SD	Level
Interested	4 (3.9)	27 (26.5)	35 (34.3)	27 (26.5)	9 (8.8)	3.10	1.02	Moderately High
Excited	13 (12.7)	12 (11.8)	27 (26.5)	35 (34.3)	15 (14.7)	3.26	1.23	Moderately High
Strong	13 (12.7)	12 (11.8)	24 (23.5)	41 (40.2)	12 (11.8)	3.26	1.20	Moderately High
Enthusiastic	12 (11.8)	17 (16.7)	32 (31.4)	26 (25.5)	15 (14.7)	3.15	1.21	Moderately High
Proud	28 (27.5)	12 (11.8)	23 (22.5)	28 (27.5)	11 (10.8)	2.82	1.38	Moderately Low
Alert	9 (8.8)	22 (21.6)	22 (21.6)	31 (30.4)	18 (17.6)	3.26	1.23	Moderately High
Inspired	25 (24.5)	20 (19.6)	19 (18.6)	26 (25.5)	12 (11.8)	2.80	1.37	Moderately Low

Determined	13 (12.7)	16 (15.7)	28 (27.5)	25 (24.5)	20 (19.6)	3.23	1.29	Moderately High
Attentive	9 (8.8)	19 (18.6)	30 (29.4)	36 (35.3)	8 (7.8)	3.15	1.09	Moderately High
Active	7 (6.9)	10 (9.8)	20 (19.6)	42 (41.2)	23 (22.5)	3.63	1.14	Moderately High
OVERALL						3.17	0.80	Moderately High

*Notes: 1 = Very slightly or Not at all, 2 = A little, 3 = Moderately, 4 = Quite a bit, 5 = Extremely, f = Frequency, % = Percent, SD = Standard Deviation

The finding presented in Table 1 shows that positive affect dimension is moderately high among the respondents. This moderately high level shows high presence of emotional involvement of most items such as the feelings of *interested, excited, strong, enthusiastic, alert, determined, attentive* and *active*. Among all, the feelings of *active* received the highest mean score followed by *excited, alert* and *strong*. This suggests that the respondents were energetic, happy, and vigilant. However, the feelings of *proud* and *inspired* were moderately low among the respondents.

On contrary, finding depicts on Table 2 shows that negative affect dimension is low among the respondents. This low level of negative affect implies an absence of emotional feelings of most items such as the feelings of *upset, guilt, scared, hostile, ashamed, jittery* and *afraid*. The respondents however were moderately *distressed, irritable, and nervous*. The item with the lowest mean score is *afraid* which implies that the respondents were not scared when shopping at the shopping mall.

Table 2 Negative affect dimension

Items	1 f (%)	2 f (%)	3 f (%)	4 f (%)	5 f (%)	Mean	SD	Level
Distressed	29 (28.4)	34 (33.3)	19 (18.6)	17 (16.7)	3 (2.9)	2.32	1.14	Moderately Low
Upset	57 (55.9)	27 (26.5)	5 (4.9)	7 (6.9)	6 (5.9)	1.80	1.18	Low
Guilt	51 (50.0)	25 (24.5)	13 (12.7)	8 (7.8)	5 (4.9)	1.93	1.18	Low
Scared	66 (64.7)	20 (19.6)	8 (7.8)	7 (6.9)	1 (1.0)	1.60	0.97	Low
Hostile	76 (74.5)	10 (9.8)	6 (5.9)	6 (5.9)	4 (3.9)	1.55	1.10	Low
Irritable	51 (50.0)	24 (23.5)	9 (8.8)	11 (10.8)	7 (6.9)	2.01	1.29	Moderately Low
Ashamed	51 (50.0)	26 (25.5)	17 (16.7)	7 (6.9)	1 (1.0)	1.83	1.01	Low
Nervous	52 (51.0)	17 (16.7)	17 (16.7)	8 (7.8)	8 (7.8)	2.05	1.31	Moderately Low
Jittery	48 (47.1)	31 (30.4)	16 (15.7)	7 (6.9)	0 (0.0)	1.82	0.94	Low
Afraid	65 (63.7)	25 (24.5)	10 (9.8)	1 (1.0)	1 (1.0)	1.51	0.79	Low
OVERALL						1.84	0.67	Low

*Notes: 1 = Very slightly or Not at all, 2 = A little, 3 = Moderately, 4 = Quite a bit, 5 = Extremely, f = Frequency, % = Percent, SD = Standard Deviation

4.3 Objective 2: To Identify the Level of Impulse Buying

The second objective of this study is to identify the level of impulse buying. The result in Table 3 shows that impulse buying behavior is moderately low among the respondents. The item that received the lowest score is 'I buy things without thinking'. This suggests that the respondents were critical in making purchase decision. However, two items were rated moderately high by the respondents; 'I buy things spontaneously' and 'I buy things according to how I feel'. This result implies some extent of impulse buying behavior.

Table 3 Impulse buying

Items	1 f (%)	2 f (%)	3 f (%)	4 f (%)	5 f (%)	Mean	SD	Level
I buy things spontaneously.	16 (15.7)	11 (10.8)	36 (35.3)	23 (22.5)	16 (15.7)	3.12	1.26	Moderately High
'Just do it' describes the way I buy things.	15 (14.7)	29 (28.4)	22 (21.6)	25 (24.5)	11 (10.8)	2.88	1.25	Moderately Low
I buy things without thinking.	35 (34.3)	42 (41.2)	12 (11.8)	9 (8.8)	4 (3.9)	2.07	1.08	Moderately Low
'I see it, I buy it' describes me.	24 (23.5)	41 (40.2)	13 (12.7)	17 (16.7)	7 (6.9)	2.43	1.21	Moderately Low
'Buy now, think about it later' describes me.	27 (26.5)	34 (33.3)	18 (17.6)	17 (16.7)	6 (5.9)	2.42	1.21	Moderately Low
I buy things on the spur-of-the-moment.	24 (23.5)	31 (30.4)	31 (30.4)	14 (13.7)	2 (2.0)	2.40	1.06	Moderately Low
I buy things according to how I feel.	6 (5.9)	13 (12.7)	31 (30.4)	36 (35.5)	16 (15.7)	3.42	1.08	Moderately High
I carefully plan most of my purchase.	23 (22.5)	38 (37.3)	29 (28.4)	10 (9.8)	2 (2.0)	2.31	0.99	Moderately Low
[Reverse Item] I am a bit reckless about what I buy.	14 (13.7)	28 (27.5)	29 (28.4)	27 (26.5)	4 (3.9)	2.79	1.10	Moderately Low
OVERALL						2.65	0.70	Moderately Low

*Note: 1 = Strongly Disagree, 2 = Disagree, 3 = Somehow Agree, 4 = Agree, 5 = Strongly Agree, f = Frequency, % = Percent, SD = Standard Deviation

4.4 Objective 3: To Investigate the Relationship between Affective Components and Impulse Buying

Pearson correlation analysis was used to determine the relationship between the variables. Table 4 shows the result of the analysis. Overall there is a positive significant relationship between negative affect and impulse buying; however, there is insignificant relationship between positive affect and impulse buying. This suggests that the latter has not relationship with each other. Instead, impulse buying is influenced by negative affect. However, the relationship is weak. In other words, the higher the negative feelings, the more likely for them to buy impulsively.

Table 4 correlation analysis between affective components and impulse buying

Independent Variable: Affective Components	Dependent Variable: Impulse Buying	
	r	p
Positive Affect	0.128	0.201
Negative Affect	0.261**	0.008

Note: p**<0.01; n=102

5. DISCUSSION

5.1 Objective 1: To Identify the Level of Affective Components

The first objective of this study is to identify the level of affective components which consists of positive affect and negative affect. The findings present a moderately high level of positive feelings and emotions and a low level of negative feelings and emotions among the youths when visiting the shopping mall. This finding is supported by Ahmed *et al.* (2007) who indicated that going to shopping malls are generally a pleasurable activity, hence generating the positive feelings and emotions among the youths. In specific, according to Ahmed *et al.* (2007), young consumers have more favorable shopping orientations towards malls than older consumers. They are attracted to the interior design of the mall, they feel that it's fun to visit the stores in the shopping mall and they regard it as an enjoyable experience to be with friends. The result also revealed a low level of negative feelings and emotions among the youths. This might be due to the generally pleasurable atmosphere in the research setting which is in a shopping mall. However, according to Yarrow (2013), customers might experience a negative feeling or emotion before entering the store; hence, they visit shopping malls to improve the mood.

5.2 Objective 2: To Identify the Level of Impulse Buying

The second objective of this study is to identify the level of impulse buying. The results suggest that Malaysian youths demonstrate a low level of impulse buying. This result is different from previous studies which associated youths with impulsive behaviors such as Eppinger *et al.* (2012); Reimers *et al.* (2009); and Samanez-Larkin *et al.* (2011). This result may be contributed by the fact that majority of the respondents were students who received scholarships. This implies that the respondents of this study have limited purchasing power thereafter reducing their impulsive buying behavior. According to Lake (2009), purchasing power is defined as the customer's ability to use the money he or she has to purchase products in order to achieve his or her needs. Another possible contributing factor is the fear to purchase due to the implementation of Goods and Services Tax (GST) on 1 April 2015 which affected the price of certain goods (Sen, 2014). Moreover, the depreciating value of Ringgit Malaysia has caused the imported goods to be more expensive (Kim-Hwa & Schoepp, 2015) such as imported text book, personal computer, cosmetic products, clothing and others. These economic factors have created a negative perception over the country's current economic status (Bernama, 2015). Generally, consumers experience an economic uncertainty, and this uncertainty generally makes Malaysian more cautious about their spending.

5.3 Objective 3: To Investigate the Relationship between Affective Components and Impulse Buying

The third objective of this study is to determine the relationship between affective components and impulse buying among Malaysian youths. In this study, positive affect shows no significant relationship with impulse buying. This result is supported by Grizāne & Deksnis (2011). However, it also contradicts with previous studies, in which, Huang & Hsieh (2011) found a significant

relationship between positive affect and impulse buying. According to Foroughi *et al.* (2012), the greater the frequency of urges to buy impulsively does not mean the higher the possibility of an impulse purchase.

This study has also found a significant positive relationship between negative affect and impulse buying. In other words, consumers with negative mood are more likely to do impulse buying. However, the strength of the relationship is weak. This finding is supported by previous researchers for instance Huang & Hsieh (2011) and Chavosh *et al.* (2011). This relationship can be explained from psychological perspective; in which, humans either consciously or unconsciously use compensation as a strategy to cover up their weaknesses, frustration, desires, inadequacy or incompetence in one aspect with gratification or excellence in another aspect (Reviews, 2014). Additionally, Bayley and Nancarrow (1998) stated that compensatory impulse refers to a condition whereby people buy impulsively to compensate his or her own feeling of self-deficit. Moreover, impulse buying might function as a way to comfort one's negative feelings or emotions (Verplanken & Herabadi, 2001).

6. CONCLUSION

This study has revealed that Malaysian youths' impulse buying behavior is contributed by their negative feelings or emotions rather than by their positive feelings. However, the relationship is weak due to low purchasing power, as majority of the respondents were students and do not have other income other than their scholarships. Although the relationship is weak, the significant relationship signifies the possibility of impulse buying to further increase as a result of negative feelings when these youths have earned more money in the future.

The findings from this study thus provide valuable information for youths to exert better control over their negative feelings and mood in order to avoid impulse buying. They should avoid going to shopping malls when experiencing negative feelings or emotions. Shopping malls on the other hand could employ certain marketing strategies in order to influence compensatory impulse buying among visitors such as creating an exciting and pleasant environment to improve the visitors' mood. However, more importantly, this study suggests the need for financial management education for Malaysian youth to improve their financial literacy and raise awareness about impulse buying and the negative consequences of this behavior.

REFERENCES

- Adelaar, T., Chang, S., Lancendorfer, K. M., Lee, B., & Morimoto, M. (2003). Effects of media formats on emotions and impulse buying intent. *Journal of Information Technology, 18*(4), 247-266.
- Ahmed, Z. U., Ghingold, M., & Dahari, Z. (2007). Malaysian shopping mall behavior: an exploratory study. *Asia Pacific Journal of Marketing and Logistics, 19*(4), 331-348.
- Angela, H. (2000). A multi-method investigation of consumer motivations in impulse buying behavior. *Journal of Consumer Marketing, 17*(5), 403-426.
- Bayley, G., & Nancarrow, C. (1998). Impulse purchasing: a qualitative exploration of the phenomenon. *Qualitative Market Research: An International Journal, 1*(2), 99-114.
- Bernama. (2015). A Must to Correct Negative Perception on Economy. *Malaysiakini*. from <http://m.malaysiakini.com/news/309378>
- Chavosh, A., Halimi, A. B., Namdar, J., Choshaly, S. H., & Abbaspour, B. (2011). *The contribution of Product and Consumer characteristics to Consumer's Impulse purchasing Behaviour in Singapore*. Paper presented at the Proceedings of 2011 International Conference on Social Science and Humanity.

- Cho, J., Ching, G. S., & Luong, T.H. (2014). Impulse buying behavior of Vietnamese consumers in supermarket setting. *International Journal of Research Studies in Management*, Vol. 3(2), 33-50.
- Consoli, D. (2009). *Emotions that influence purchase decisions and their electronic processing*. Paper presented at the Proceedings of international conference "Challenges of contemporary knowledge-based economy" (ICMEA).
- Datta, D. & Sharma, B. (2017). Impulse purchase behaviour among the millennials at Agartala Tripura India. *International Journal of Marketing and Financial Management*. 5(6), 01-15
- Dđncer, C. (2010). The influence of affect and cognition on impulse buying behavior. *Oneri.C.9.S.33*, 153-158
- Elfriede, P., & Margaret, K. H. (2011). The role of mixed emotions in consumer behaviour. *European Journal of Marketing*, 45(1/2), 104-132.
- Eppinger, B., Nystrom, L. E., & Cohen, J. D. (2012). Reduced Sensitivity to Immediate Reward during Decision-Making in Older than Younger Adults. *PLoS ONE*, 7(5), e36953.
- Foroughi, A., Buang, N. A., & Sadeghi, R. H. M. (2012). Exploring the Influence of Situational Factors (Money&Time Available) on Impulse Buying Behaviour among Different Ethnics. *Int. J. Fundam. Psychol. Soc. Sci*, 2(2), 41-44.
- Foroughi, A., Buang, N. A., Senik, Z. C., & Hajmisadeghi, R. S. (2013). Impulse Buying Behaviour and Moderating Role of Gender among Iranian Shoppers. *Journal of basic and Applied Scientific Research*, 3(4), 760-769
- Graa, A., & Dani-elKebir, M. (2012). Application of stimulus & response model to impulse buying behavior of Algerian consumers. *Serbian Journal of Management*, 7(1), 53-64.
- Grizāne, L., & Deksnis, H. (2011). Impact of altered emotional state on impulse purchasing behaviour: Are happier people more likely to make impulse purchases? *SSE Riga Student Research Papers*, 4(133).
- Huang, L.-Y., & Hsieh, Y. (2011). What drives consumer impulse buying? Evidence from a retail setting in Taiwan. *Journal of International Management Studies*, 6(1), 1-8.
- Kacen, J. J., & Lee, J. A. (2002). The influence of culture on consumer impulsive buying behavior. *Journal of Consumer Psychology*, 12(2), 163-176.
- Kearney, A. (2013). The 2013 Global Retail Development Index Global Retailers: Cautiously Aggressive or Aggressively Cautious.
- Kim-Hwa, L., & Schoepp, T. N. (2015). Winners and losers as the Ringgit falls. *Penang Monthly*. from <http://penangmonthly.com/winners-and-losers-as-the-ringgit-falls/>
- Krejcie, R.V. & Morgan, D.W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*. 30, 607-610.
- Lake, L. (2009). *Consumer Behavior For Dummies*: Wiley.
- Lee, G. Y., & Yi, Y. (2008). The effect of shopping emotions and perceived risk on impulsive buying: the moderating role of buying impulsiveness trait. *Seoul Journal of Business*, 14(2)
- Lin, Y. H., & Chen, C. F. (2013). Passengers' shopping motivations and commercial activities at airports - The moderating effects of time pressure and impulse buying tendency. *Tourism Management*, 36(0), 426-434.
- Md Razak, M.I.; Abidin, N.E.; Mohd Yusof, M.A.; Sakarji, S. R.; Mohd Nor, K. (2014). Spending trends among youth in Malaysia. *Journal of Economics and Development Studies*, 2(1), pp. 277-288.
- Mendenhall, W.; Beaver, R.J. & Beaver, B.M. (2013). Introduction to probability and statistics. 14th edition. USA: Brooks/Cole Publishing Company.
- Meniawy, A. M. E. (2012). *Personal characteristics and situational influences affecting consumers adoption of impulse buying behavior*. Paper presented at the International conference on business and economic research.
- Mihić, M., & Kursan, I. (2010). Assessing the situational factors and impulsive buying behavior: Market segmentation approach. *Management: Journal of Contemporary Management Issues*, 15(2), 47-66.
- Miltenberger, R.G., Redlin, J., Crosby, R., Stickney, G., Mitchell, J., Wonderlich, S., et al.. (2003). Direct and retrospective assessment of factors contributing to compulsive buying. *Journal of Behavioral Therapy and Experimental Psychiatry*, 34(10), 1-9.

- Muda, M.; Mohd, R.; Hassan, S. (2016). Online purchase behaviour of generation Y in Malaysia. *Procardia Economics and Finance*, pp. 292-298.
- Pandey, S. K. (2016). The effect of deals and moods on compulsive buying: A study on young Indian consumers. *Global Business Review*. 17(2), pp. 438-449.
- Pang, T. Y. (2018). 5 stats that show Malaysians' shocking financial habits. <https://ringgitplus.com/en/blog/Personal-Finance-News/5-Stats-That-Show-Malaysians-Shocking-Financial-Habits.html>
- Pappas, I. O., Kourouthanassis, P. E., Giannakos, M. N., & Chrissikopoulos, V. (2014). Shiny happy people buying: the role of emotions on personalized e-shopping. *Electronic Markets*, 24(3), 193-206.
- Parboteeah, D. V. (2005). *A model of online impulse buying*. Washington State University.
- Park, E. J., Kim, E. Y., & Forney, J. C. (2006). A structural model of fashion-oriented impulse buying behavior. *Journal of Fashion Marketing and Management: An International Journal*, 10(4), 433-446.
- Peng, T.-C. M., Bartholomae, S., Fox, J. J., & Cravener, G. (2007). The impact of personal finance education delivered in high school and college courses. *Journal of Family and Economic Issues*, 28 (20), 265-284.
- Piron, F. (1991). Defining impulse purchasing. *Advances in Consumer Research*, 18, 509-514.
- Pradhan, V. (2016). Study on impulsive buying behaviour among consumers in supermarket in Kathmandu Valley. *Journal of Business and Social Science Research*. 1(2), pp. 215-233
- Reimers, S., Maylor, E. A., Stewart, N., & Chater, N. (2009). Associations between a one-shot delay discounting measure and age, income, education and real-world impulsive behavior. *Personality and Individual Differences*, 47(8), 973-978.
- Reviews, C. T. (2014). *e-Study Guide for: Psychology: Modules for Active Learning*: Cram101.
- Rook, D. W. (1987). The buying impulse. *Journal of Consumer Research*, 189-199.
- Rook, D. W., & Fisher, R. J. (1995). Normative influences on impulsive buying behavior. *Journal of Consumer Research*, 305-313.
- Samanez-Larkin, G. R., Mata, R., Radu, P. T., Ballard, I. C., Carstensen, L. L., & McClure, S. M. (2011). Age differences in striatal delay sensitivity during intertemporal choice in healthy adults. *Frontiers in neuroscience*, 5.
- Sen, T. E. (2014). All Prices to "Increase Slightly" on Average after GST, says Treasury Sec-Gen *Astro Awani News*. from <http://english.astroawani.com/business-news/all-prices-increase-slightly-average-after-gst-says-treasury-sec-gen-37894>
- Shen, K. N., & Khalifa, M. (2012). System design effects on online impulse buying. *Internet Research*, 22(4), 396-425.
- Shirmohammadi, M., Ebrahimi, M. R., & Ghane, N. (2014). Investigating and prioritizing the effective factors on online impulse buying in electronic commerce (case study: discount group sites in Iran). *European Journal of Business and Management*, 6(4), 142-152.
- Shirmohammadi, M., Ebrahimi, M. R., & Ghane, N. (2014). Investigating and prioritizing the effective factors on online impulse buying in electronic commerce (case study: discount group sites in Iran). *European Journal of Business and Management*, 6(4), 142-152.
- Suhud, U.; Herstanti, G. (2017). Investigating the impulse buying of young online shoppers. *Advanced Science Letters*, 23(1), pp. 660-66
- Sultan, S.; Ali Jan, F.; Basit, A.; Rafiq, A. (2018). Impact of environmental factors on impulse buying: Mediating role of consumers positive emotions. *International Conference on Contemporary Issues in Business and Economics*. 527-535
- Sun, T., & Wu, G. (2011). Trait predictors of online impulsive buying tendency: A hierarchical approach. *Journal of Marketing Theory and Practice*, 19(3), 337-346.
- Verhagen, T., & van Dolen, W. (2011). The influence of online store beliefs on consumer online impulse buying: A model and empirical application. *Information & Management*, 48(8), 320-327.
- Verplanken, B., & Herabadi, A. (2001). Individual differences in impulse buying tendency: Feeling and no thinking. *European Journal of personality*, 15(S1), S71-S83.

- Verplanken, B.; Herabadi, A.G.; Perry, J.A.; Silvera, D.H. (2005). Consumer style and health: The role of impulsive buying in unhealthy eating. *Psychology & Health*, 20(4), pp. 429-441.
- Vohs, K., & Faber, R. (2003). Self-regulation and impulsive spending patterns. *Advances in Consumer Research*, 30, 125-126.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: the PANAS scales. *Journal of personality and social psychology*, 54(6), 1063.
- Yalch, R. F., & Spangenberg, E. R. (2000). The effects of music in a retail setting on real and perceived shopping times. *Journal of Business Research*, 49(2), 139-147
- Yeung, C. W. M., & Wyer, R. S. (2004). Affect, appraisal, and consumer judgment. *Journal of Consumer Research*, 31(2), 412-424.
- Verplanken, B., Herabadi, A. G., Perry, J. A., & Silvera, D. H. (2005). Consumer style and health: The role of impulsive buying in unhealthy eating. *Psychology & Health*, 20(4), 429-441.

