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***The Role of Materialism on Perceived Values and Online Impulse Buying Behaviour among Generation Y: A Research Framework Proposition***

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ABSTRACT

The purpose of this paper is to develop a research framework based on previous literature review related to perceived values, materialism and online impulse buying behaviour among Generation Y, which is supported by the Stimulus-Organism-Response Model. In this paper, three components of perceived value from the theory of consumption values by Sheth et al. (1991) have been utilised due to its relevance to the impulse buying context, namely, social value, emotional value and epistemic value. The social value is further divided into social bridging and social bonding which is derived from the theory of social capital. Furthermore, materialism functions as the mediator between perceived values and online impulse buying behaviour. This paper expects to assist practitioners and academicians in gaining further understanding on online impulse buying behaviour. The present paper serves as one of the early studies on perceived values, materialism and online impulse buying behaviour and among the few addressing Generation Y in Malaysia. Finally, this study adds to the existing literature on the mediating effect of materialism towards perceived values and online impulse buying behaviour.

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**1. INTRODUCTION**

The advancement of the Internet has affected the everyday life and activities of people around the world. The Internet facilitates in terms of communication, entertainment, business activities,

education and information exchange. The Internet has become a necessity for every individual which is proven through the Internet penetration worldwide. Approximately 3.68 billion Internet

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users have been identified worldwide with the highest number of users coming from the Asian region (1.85 billion users) (InternetWorldStats, 2016).

Table 1 depicts the number of Internet users worldwide according to the regions. North America has the highest percentage of Internet penetration (89%) while the growth of internet users is at the peak in the African region (7,448.8 %). The number of websites in the Internet has touched 1.12 billion as of 12<sup>th</sup> of December 2016 (InternetWorldStats, 2016). The increasing number of Internet users and websites signifies the rapid development of technology and the growing importance of the Internet in everyday life.

One of the popular activities among Internet users is online buying (Jayawardhena, 2004). According to Raman and Annamalai (2011), online buying behaviour is defined as the process of purchasing any products or services through the Internet. Statista.com (2016) further confirmed that online buying activity topped the list as the most common activity, followed by social networking, online video and online search. The number of online buyers in 2015 has reached 1.46 billion and is forecasted to extend to over 2 billion worldwide in

the year 2019. In 2013, worldwide e-commerce sales exceeded 1.2 trillion US dollars.

Online buying behaviour offers many benefits to its consumers. Namely, the accessibility and availability of the Internet provides a better and more convenient shopping atmosphere for consumers (Javadi et al., 2012). Other than that, online buying enables consumers to get the lowest price for products through price comparison. However, online buying behaviour also has a few shortcomings which might affect the consumers well-being. One of the drawback is, unlike traditional stores, consumers are not able to touch or experience the products beforehand.

Another significant issue which has to be regarded is the rise in online buying behaviour which has consequently led to serious problems such as online impulse buying behaviour. The convenience of the online buying platforms and 24 hours availability have led the buying behaviour of the consumers to be out of control (Greenfield, 1999; Li et al., 1999). LaRose (2014) backed this notion by confirming that consumers were overwhelmed with the savings through online promotions and discounts which resulted in impulse buying behaviour.

**Table 1: Internet Users and Internet Penetration According to Region**

World Regions	Population (2016 Est.)	Population (% of World)	Internet Users 30 June 2016	Penetration (% Population)	Growth 2000-2016 (%)
Asia	4,052,652,889	55.2	1,846,212,654	45.6	1,515.2
Europe	832,073,224	11.3	614,979,903	73.9	485.2
Latin America	626,119,788	8.5	384,751,302	61.5	2,029.4
Africa	1,185,529,578	16.2	340,783,342	28.7	7,448.8
North America	359,492,293	4.9	320,067,193	89.0	196.1
Middle East	246,700,900	3.4	141,489,765	57.4	4,207.4
Australia	37,590,820	0.5	27,540,654	73.3	261.4
<b>Total</b>	<b>7,340,159,492</b>	<b>100.0</b>	<b>3,675,824,813</b>	<b>50.1</b>	<b>918.3</b>

Source: Adapted from InternetWorldStats (2016)

The impact of online buying could be seen in all the generation cohorts especially Generation Y. Generation Y which is the largest generation cohort have been actively purchasing through the Internet and play a significant role in the advancement of the e-commerce market. Generation Y are described as the individuals born between the year 1982 to 2004 (Strauss & Howe, 1991). According to Strauss and Howe (1991), those who are born within a specific era share similar principles and values which are shaped by their family, peers, society as

well as the significant incidents that occur during the particular era.

According to Erin Adlina Adnan, the Public Mutual Agency Manager-Unit Trust Consultant, young Malaysians have been encountering difficulties in handling their financial issues due to their lavish lifestyle (TheMalaysianDigest, 2014). This young generation were found to indulge in branded products, cars and electronic gadgets. This is a serious issue as Generation Y represented

approximately 11.4 million which is 46% of the total Malaysian population in the year 2012 (Sukumaran, 2012).

Generation Y give importance to acquisition of possessions and consequently encourage their materialistic attitude. This materialistic attitude is influenced by perceived values which represent the values that the consumer wants to obtain through their purchases. These values can be divided into social bridging, social bonding, emotional value and epistemic value. Generation Y purchase products even though they could not afford it in the hope of being accepted within their social circle. Reference groups also play a role in influencing consumers' buying activity through symbolic consumption values.

Besides that, emotional value such as pleasure and fun further influence the materialistic attitude of consumers (Richins, 2013). These emotions surface when consumers purchase products that they assume will satisfy their emotional cravings. Other than that, materialistic consumers are found to always be discontented with their possessions which lead them towards seeking new and latest products in order to satisfy their epistemic value.

Even though numerous studies have focused on impulse buying behaviour, literature on online impulse buying among Generation Y, focusing primarily in Malaysia, remains low. Studies in various countries have been concentrating on this buying disorder for some time now (Lo et al., 2016; Madhavaram & Laverie, 2004; Park et al., 2011; Sharma et al., 2010). Since Malaysia has a large proportion of Generation Y, it would be vital to investigate the online impulse buying phenomena among this generation. More precisely, theoretical frameworks should be developed to provide more knowledge and understanding on online impulse buying behaviour.

The objective of this paper is to develop a conceptual model on the influence of perceived values, materialism and impulse buying behaviour in the online settings. Moreover, the paper discusses the mediating role of materialism on perceived values and online impulse buying behaviour. Accordingly, three research questions were developed to further examine this issue. The first research question of the paper is "Do perceived values (social bridging, social bonding, emotional and epistemic) influence materialism?". The next research question is "Does materialism influence online impulse buying behaviour?" and the final

one is "Does materialism mediate the relationship between perceived values and online impulse buying behaviour?".

## 2. LITERATURE REVIEW

The literature review section covers the conceptualisations of the online impulse buying behaviour, perceived values, materialism, underlying theories and development of research propositions.

### Online Impulse Buying Behaviour

Impulse buying behaviour occurs when consumers go through a sudden and strong urge to purchase immediately (Rook, 1987). Purchasing behaviour without having any prior plan is also known as impulse buying behaviour (Beatty & Ferrell, 1998). For the past four decades, impulse buying behaviour has been studied by numerous researchers in the area of psychology, marketing and economics. Piron (1991) conducted a review on the definitions of impulse buying behaviour from past studies and integrated it into a comprehensive definition. Firstly, impulse buying is a purchasing activity which is unintentional and influenced by stimulus. The stimulus is referring to any internal or external factor that could influence the individual's purchasing activity (Shirmohammadi et al., 2015). Consequently, the individual purchases without thinking and spontaneously. However, after the buying activity, the individual faces emotional and cognitive reactions.

Impulse buying behaviour is primarily influenced by internal and external stimuli. Internal stimuli represent psychological factors, situational factors, demographic factors and socio-economic factors. Conversely, external stimuli refer to product's attributes and environmental characteristics (Karbasivar & Yarahmadi, 2011; Muruganantham & Bhakat, 2013). One of the factor is consumer's personal characteristics such as powerful urge (Park et al., 2011; Rook, 1987), immediate gratification (Kacen & Lee, 2002), consumer's impulse buying tendency (Kacen et al., 2012; Rook, 1987; Sharma et al., 2010), pleasure and excitement (Beatty & Ferrell, 1998; Flight et al., 2012). Besides that, sociodemographic attributes play a role in triggering impulse buying behaviour too. In terms of age, younger individuals are more prone to be impulse buyers compared to those who are older (Amos et al., 2014). In addition, female consumers are inclined towards impulse buying behaviour compared to male consumers (Dittmar et al., 1995).

Environmental aspects such as type of store, product line, atmospherics, product presentation and advertisement exposure also influence impulse buying behavior (Kollat & Willett, 1969; Xiao & Nicholson, 2013).

The evolution of impulse buying behaviour has moved to the Internet due to the importance of information technology in the online environment. Online buying overcomes the challenges that consumers face in the brick and mortar stores, which increases the possibility of online impulse buying behaviour. Online impulse buying behaviour is defined as the outcome of the consumer's instant reaction towards external stimuli which is influenced hedonically (Madhavaram & Laverie, 2004). Impulse buying takes place when a change in the consumer's intention to purchase before and after exposure to the stimuli. Recently, Lo et al. (2016) defined impulse buying behaviour as an expression of consumers' inability to control their shopping impulse when facing consumptive stimuli.

LaRose and Eastin (2002) were among the pioneer researchers who investigated on online impulse buying behaviour and they managed to provide an explanation for unregulated buying over the Internet. In 2003, a study utilised the environmental psychology approach to explain the influence of several websites media formats on impulse buying intention (Adelaar et al., 2003). Some studies justified that impulse buying takes place in the online environment due to the nature of the Internet itself. Dittmar (2004) described that online transactions leads consumers to spend more than they initially planned because the consumers do not feel like they are actually spending real money in the virtual settings. Madhavaram and Laverie (2004) further confirmed that the online marketing stimuli encourages impulse buying. Park et al. (2006) identified that irrational emotional temptations attract consumers to buy apparels, making them one of the highest product categories that is purchased impulsively through the Internet. The factors of online impulse buying behaviour slightly differs from brick and mortar based on some aspects. Situational factors and environmental characteristics are substantially different from the factors of traditional impulse buying behaviour (Lim & Yazdanifard, 2015).

## **Perceived Value**

Consumer perceived value has been found in literature since the past 20 years. According to Sikka Kainth and Verma (2011), perceived value is frequently studied in the area of marketing and consumer behaviour recently. One of the most common definition of perceived value is an individual's comprehensive assessment of the utility of a product or service which relies on the outlook of what is received and contributed (Zeithaml, 1988). Monroe (1990) referred to perceived value as a trade-off between traits and benefits that consumers see in a particular product and sacrifices that they make to get the product.

Later, Sikka Kainth and Verma (2011) mentioned that perceived value is the value that an individual obtains for what they pay which is beyond the physical product itself. Many terms such as consumption value, consumer value, perceived consumption value and customer value has been utilised interchangeably in past studies which actually carries the same meaning (Gallarza & Saura, 2006; Jensen & Hansen, 2007).

The theory of consumption values which was developed by Sheth et al. (1991) divides perceived consumption values into five categories which are functional, social, emotional, epistemic and conditional. However, this paper will only be concentrating on three dimensions of perceived value namely, social, emotional and epistemic value. This is because these three dimensions of perceived value lies within the hedonic values category. Hedonic value is identified to be positively associated with impulse buying behaviour (Eren et al., 2012). Therefore, these value components are deemed appropriate in the context of online impulse buying behaviour.

## **Social Bridging**

Social value is defined as the perceived utility which is received through a person's relationship with their social community (Sheth et al., 1991). Social value is measured through the product's association with different reference groups (Suki & Suki, 2015). Based on Sheth et al. (1991), social value is image drive which can be achieved through the purchase of appearance related products or services. Younger individual's choice of product or brand is usually influenced by their peers and friends. Usually, these individuals purchase products that have been accepted and approved by

their reference group. Generation Y consumers was discovered to give importance to the opinion of their friends compared to advertisements. They also use social networks such as Facebook to get information about the products before making a purchase which is called crowd sourcing.

Bridging social capital describes weak ties, those loose social connections that permit information exchange and diffusion. In online networks, Generation Y will be able to gather new and useful resources (such as information or perspectives) from loose connections with minimal emotional support. Weak ties represent the distant acquaintances who may be known in certain settings but can also provide many ideas and experiences (Chi, 2011). Bridging social capital further explains about the social networks that gather people of different backgrounds.

### **Social Bonding**

Bonding social capital takes place between members of closely knit social relations who are emotionally dependent. In online networks, tightly knit, strong ties include close friends and family members, who can be depended on and have similar interests and beliefs (Chi, 2011). Consumers that hold bonding social capital receive emotional or substantive support from each other through continuous reciprocity (Williams, 2006). The individuals with bonding social capital have slight diversity in their backgrounds but have stronger individual connections. The sustained reciprocity found in bonding social capital offers strong emotional and substantive support as well as allows mobilisation.

### **Emotional Value**

Emotional value is defined as the perceived utility obtained from the stimulation of emotions, affective states and feelings (Sheth et al., 1991). Emotional value emerges when in association with impulsive and continuous act to attain a particular feeling. Products or services that are purchased by consumers usually have specific emotional attributes which depends on the customers themselves. Based on past studies, emotional value is related to unconscious and non-cognitive decisions such as childhood experiences (Hirmer & Cruickshank, 2014; Sheth et al., 1991). Generally, previous literature assessed emotional value based on the relationship between feelings and alternatives. Therefore, similar associations can affect consumers' purchase decision (Suki & Suki,

2015).

### **Epistemic Value**

Epistemic value is a component under the area of epistemology which is often associated with "method or grounds of knowledge" (Hirmer & Cruickshank, 2014). Epistemic value is identified as the perceived utility gained from an alternative's ability to offer novelty, provoke curiosity, and/or gratify desire for knowledge (Sheth et al., 1991). Epistemic value depicts the innovative and creative features of a product (Candan et al., 2013). According to Hirmer and Cruickshank (2014), new experiences increase the epistemic value that consumers receive. Sheth et al. (1991) further explained that consumers tend to purchase if they are feeling bored or satisfied with the existing product, while some are curious and desire to experiment new product.

### **Materialism**

Belk (1985) was one of the first authors who discovered the concept of materialism. He defined materialism as "the importance a consumer attaches to worldly possessions" and this acquisition is crucial to achieve their goals and desired image. Ward and Wackman (1971) expressed materialism as an orientation to justify social achievements and happiness through acquisition of products. Besides that, materialism is also known as "a mind-set or constellation of attitudes regarding the relative importance of acquisition and possession of objects in one's life" (Richins & Dawson, 1992).

In past literatures, materialism has been conceptualised in different forms. Browne and Kaldenberg (1997) supported this by claiming that materialism was viewed as value (Richins & Dawson, 1992), attitude (Kilbourne et al., 2005), belief, mood state, personality traits (Belk, 1984) and lifestyle (Ahuvia, 2008) in prior works. This paper will be implementing the Richins and Dawson (1992)'s conceptualisation of materialism as attitude comprising three dimensions encompassing of centrality, success and happiness. Centrality is described as the belief that the ownership of materials acts as an important element in the consumer's life. Subsequently, success refers to the achievement that the consumer assumes to get when they purchase a particular product. Finally, happiness represents the belief that buying a product will make the consumer feel better.

## Underlying Theories

Three underlying theories have been used to explain the relationship between the variables. Stimulus-Organism-Response Model (S-O-R) provides understanding on the flow of the framework from perceived values, materialism and online impulse buying behaviour. Next, theory of consumption value provides the three dimensions of perceived values used in this study namely, social value, emotional value and epistemic value. Finally, theory of social capital offers a more comprehensive dimension for the social value which is divided into social bridging and social bonding relevant to the online context of the paper.

### The S-O-R Model

The S-O-R model has played an important role in the cognitive psychology field offering frameworks and guidelines to understand and create the decision making process of consumer buying behaviour. Based on the S-O-R model, stimulus (S) influences a person's emotional evaluation which in turn affects their conforming or avoidance behaviour (R). Stimulus is the factor that affects the internal state of an individual and the catalyst in the impulse buying process (Sherman et al., 1997). Next, organism acts as the mediating variable that is related to psychology, feeling and consumer's mind. Response represents the outcome or the reaction of the consumer in terms of their behaviour.

### Theory of Consumption Values

The theory of consumption values provides explanation on consumption values, clarifying why consumers choose to purchase or not to purchase a product, why they select one product type over another, and why consumers pick one brand over another (Sheth et al., 1991). Theory of consumption

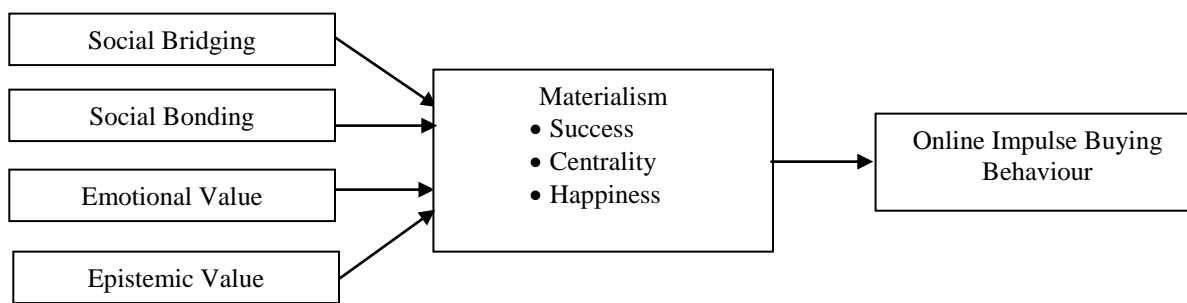
values has three conditions that has to be taken into account which are: 1) consumer's selection is based on several consumption values, 2) consumption values have different impact in a particular circumstance, and 3) consumption values are independent (Sheth et al., 1991). Consumption values are split into five dimensions namely functional, emotional, social, epistemic and conditional values (Lin & Huang, 2012). This paper uses three dimensions of value from the theory which are social, emotional and epistemic value.

### Theory of Social Capital

Many studies have been focusing on information and communications technology (ICT) since the emergence of Putnam (2000), which focused on the theory of social capital. Putnam's study incorporates the value and importance of bridging, across group and social ties. In previous literature, Coleman (1988) investigated the value of bonding, within group social ties. Meanwhile, Lin et al. (2001) described the relationship between social capital theory and social network theory. According to Putnam (2000), social capital can be divided into two categories, namely, social bridging and social bonding which is used in this paper. Social bridging refers to benefits that is gained through relationship between groups while social bonding addresses the relationship between those inside the cohesive groups.

### Proposed Conceptual Framework

Based on the key findings and frameworks from previous literature, a conceptual model of the factors that influence online impulse buying behaviour is provided in Figure 1. Figure 1 displays online impulse buying behaviour which is influenced by perceived values and materialism.



**Figure 1: Proposed research model**

## Development of Research Propositions

Materialism has been found to influence the bridging social capital. It should be noted that materialism can be categorised as a positive or negative concept. When consumers give importance to products that they purchase, they value the opinion of those around them. Additionally, these materialistic consumers need to feel wanted within their social group. According to Inglehart and Baker (2000), materialism can be reflected through the bridging social capital. Therefore, it is proposed that:

*P1: There is a positive relationship between social bridging and materialism.*

While parents might display exemplary behaviour, particularly on their buying activities, studies on numerous forms of risky behaviour implies that social norming is a major process where parental influence takes place. Moreover, peers are also an important influence when it comes to risky behaviour. Studies have revealed that communication with peers on consumption-related matters positively affects young people's social motivation for consumption and materialistic values (Luo, 2005; Mangleburg et al., 2004; Moschis & Churchill, 1978). Furthermore, people who are materialistic are more worried about social comparison (Larsen et al., 1999) and vulnerable to normative influence. Their buying patterns are more inclined towards their reference groups as they desire for approval from others on their purchases (Schroeder & Dugal, 1995). Therefore, the following proposition is derived:

*P2: There is a positive relationship between social bonding and materialism.*

In the traditional shopping environment, individual values have been associated with attitude and buying behaviour (Shim & Eastlick, 1998). Richins (1994) acknowledged the positive relationship between pleasure of obtaining and exhibiting possessions with materialism. Additionally, Richins (2013) discovered that emotions such as pleasure, fun and happiness are more dominant among materialistic consumers. These emotions influenced the consumers when they buy and utilise a specific product. It was also found that positive feelings such as excitement were prevalent within materialistic consumers. Similarly, Millar and Thomas (2009) claimed that happiness which was

classified as emotional value displayed a significant relationship with materialism. Therefore, this paper proposes that:

*P3: There is a positive relationship between emotional value and materialism.*

New and latest products have been able to attract the attention of materialistic consumers who crave to stay informed on the current trend. Belk (1984) recognised materialists to be repeatedly discontented with their possessions and continue exploring newer products with improved and better features than their current products. Goldberg et al. (2003) established that novelty seeking positively leads to materialism. This steered to the proposition that:

*P4: There is a positive relationship between epistemic value and materialism.*

Previous literatures explain that materialism would lead towards impulse buying behaviour and individuals who are materialistic have higher probability of being impulse buyers (Xu, 2007). Based on Attiq (2013), consumers who have greater desire to acquire possessions are basically motivated by their materialistic attitude. There is a vast amount of literature that supports the claim that materialism is positively related to impulse buying behaviour (Podoshen & Andrzejewski, 2012; Xiao & Nicholson, 2013). Therefore, the following proposition is derived:

*P5: There is a positive relationship between materialism and online impulse buying behaviour.*

According to Homer and Kahle (1988), value which is most abstract influences buying behaviour through mediating factors such as attitude. Furthermore, value leads to attitude and ends with a particular behaviour. Another study by Milfont et al. (2010) supports that value indirectly influences behaviour with attitude in between. Sevgili and Cesur (2014) further confirmed that materialism mediates the relationship between value and shopping frequency. This leads to the following proposition:

*P6: Materialism mediates the relationship between perceived values and online impulse buying behaviour.*

### 3. RESEARCH METHODOLOGY

The paper intends to explain the proposed research framework based on the theories used. The authors recommend to use the quantitative approach to empirically test the framework that has been developed in this paper. The survey method is suggested as it will be easier to reach the sample which are Generation Y who have purchased products or services through the online platform within the past 12 months. Partial Least Squares-Structural Equation Modelling (PLS-SEM) can be used further to analyse the collected data.

### 4. CONCLUSION

The main focus of this paper is to gain further understanding on online impulse buying behaviour and propose a research framework for the benefit of academicians and practitioners. Through the literature review, it has been found that most studies have focused on the impulse buying behaviour in the brick and mortar settings. However, very few researchers have studied online impulse buying behaviour primarily in the online environment in Malaysia. The online impulse buying phenomena is important since its popularity has been increasing.

In order to address this issue, this paper provides a comprehensive framework which explains the antecedents of online impulse buying behaviour. The proposed framework incorporates the Stimulus-Organism-Response Model, theory of consumption values and social capital theory. This paper covers an important variable namely, perceived value and its impact on materialism and online impulse buying behaviour. Also, this framework hopes to provide more knowledge on the internal factors that influence materialism and online impulse buying behaviour.

Furthermore, this paper expects to expose marketers on understanding this deviant buying behaviour which might not be a common buying behaviour. The prominent role of the Internet to consumers provides further justification that impulse buying behaviour in the online environment is increasing. Therefore, by acknowledging this problem, it is hoped that marketers would be able to predict and provide solutions to overcome online impulse buying behaviour among Generation Y consumers.

### 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.
- Ahuvia, A. (2008). If money doesn't make us happy, why do we act as if it does? *Journal of Economic Psychology*, 29(4), 491-507.
- Amos, C., Holmes, G. R., & Keneson, W. C. (2014). A meta-analysis of consumer impulse buying. *Journal of Retailing and Consumer Services*, 21, 86-97.
- Attiq, S. (2013). *Tendencies of Consumer's Compulsive Buying Behavior*. (PhD in Management Sciences), Mohammad Ali Jinnah University, Islamabad.
- Beatty, S. E., & Ferrell, M. E. (1998). Impulse buying: Modeling its precursors. *Journal of Retailing*, 74(2), 169-191.
- Belk, R. W. (1984). Three scales to measure constructs related to materialism: Reliability, validity, and relationships to measures of happiness. *Advances in Consumer Research*, 11(1), 291-297.
- Belk, R. W. (1985). Materialism: Trait aspects of living in the material world. *Journal of Consumer Research*, 265-280.
- Browne, B. A., & Kaldenberg, D. O. (1997). Conceptualizing self-monitoring: Links to materialism and product involvement. *Journal of Consumer Marketing*, 14(1), 31-44.
- Candan, B., Ünal, S., & Erciş, A. (2013). Analysing the relationship between consumption values and brand loyalty of young people: A study on personal care products. *European Journal of Research on Education* (Special Issue: Human Resource Management), 29-46.
- Chi, H.-H. (2011). Interactive digital advertising vs. virtual brand community: Exploratory study of user motivation and social media marketing responses in Taiwan. *Journal of Interactive Advertising*, 12(1), 44-61.



- Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, 94, S95-S120.
- Dittmar, H. (2004). *Understanding and diagnosing compulsive buying*. New Jersey: John Wiley & Sons.
- Dittmar, H., Beattie, J., & Friese, S. (1995). Gender identity and material symbols: Objects and decision considerations in impulse purchases. *Journal of Economic Psychology*, 16(3), 491-511.
- Eren, S. S., Eroğlu, F., & Hacıoğlu, G. (2012). Compulsive buying tendencies through materialistic and hedonic values among college students in Turkey. *Procedia-Social and Behavioral Sciences*, 58, 1370-1377.
- Flight, R. L., Rountree, M. M., & Beatty, S. E. (2012). Feeling the urge: Affect in impulsive and compulsive buying. *Journal of Marketing Theory and Practice*, 20(4), 453-466.
- Gallarza, M. G., & Saura, I. G. (2006). Value dimensions, perceived value, satisfaction and loyalty: an investigation of university students' travel behaviour. *Tourism Management*, 27(3), 437-452.
- Goldberg, M. E., Gorn, G. J., Peracchio, L. A., & Bamossy, G. (2003). Understanding materialism among youth. *Journal of Consumer Psychology*, 13(3), 278-288.
- Greenfield, D. N. (1999). *Virtual addiction*. Oakland: New Harbinger Publications.
- Hirmer, S., & Cruickshank, H. (2014). The user-value of rural electrification: An analysis and adoption of existing models and theories. *Renewable and Sustainable Energy Reviews*, 34, 145-154.
- Homer, P. M., & Kahle, L. R. (1988). A structural equation test of the value-attitude-behavior hierarchy. *Journal of Personality and Social Psychology*, 54(4), 638-646.
- Inglehart, R., & Baker, W. E. (2000). Modernization, cultural change, and the persistence of traditional values. *American Sociological Review*, 19-51.
- InternetWorldStats. (2016). World Internet Users and 2016 Population Stats. Retrieved from <http://www.internetworldstats.com/stats.htm>
- Javadi, M. M., Dolatabadi, H., Nourbakhsh, M., Poursaeedi, M., & Asadollahi, A. (2012). An Analysis of Factors Affecting Online Shopping Behavior of Consumers. *International Journal of Marketing Studies*, 4(5), 81-98.
- Jayawardhena, C. (2004). Personal values' influence on e-shopping attitude and behaviour. *Internet Research*, 14(2), 127-138.
- Jensen, Ø., & Hansen, K. V. (2007). Consumer values among restaurant customers. *International Journal of Hospitality Management*, 26(3), 603-622.
- Kacen, J. J., Hess, J. D., & Walker, D. (2012). Spontaneous selection: The influence of product and retailing factors on consumer impulse purchases. *Journal of Retailing and Consumer Services*, 19(6), 578-588.
- Kacen, J. J., & Lee, J. A. (2002). The influence of culture on consumer impulsive buying behavior. *Journal of Consumer Psychology*, 12(2), 163-176.
- Karbasivar, A., & Yarahmadi, H. (2011). Evaluating effective factors on consumer impulse buying behavior. *Asian Journal of Business Management Studies*, 2(4), 174-181.
- Kilbourne, W., Grünhagen, M., & Foley, J. (2005). A cross-cultural examination of the relationship between materialism and individual values. *Journal of Economic Psychology*, 26(5), 624-641.
- Kollat, D. T., & Willett, R. P. (1969). Is impulse purchasing really a useful concept for marketing decisions? *The Journal of Marketing*, 33, 79-83.
- LaRose, L. (2014). Are you a compulsive shopper? Retrieved from [www.thestar.com website: http://www.thestar.com/life/2014/09/18/are\\_you\\_a\\_compulsive\\_shopper.html](http://www.thestar.com/life/2014/09/18/are_you_a_compulsive_shopper.html)
- LaRose, R., & Eastin, M. S. (2002). Is online buying out of control? *Electronic*

- commerce and consumer self-regulation. *Journal of Broadcasting & Electronic Media*, 46(4), 549-564.
- Larsen, V., Sirgy, M. J., & Wright, N. D. (1999). Materialism: The construct, measures, antecedents, and consequences. *Academy of Marketing Studies Journal*, 3(2), 78-110.
- Li, H., Kuo, C., & Rusell, M. G. (1999). The impact of perceived channel utilities, shopping orientations, and demographics on the consumer's online buying behavior. *Journal of Computer-Mediated Communication*, 5(2), 0.
- Lim, P. L., & Yazdanifard, R. (2015). What Internal and External Factors influence Impulsive Buying Behavior in Online Shopping? *Global Journal of Management And Business Research*, 15(5), 25-32.
- Lin, N., Fu, Y.-c., & Hsung, R.-M. (2001). Measurement techniques for investigations of social capital. *LIN, N.; GRUYTER, A. Social capital: theory and research*. New York.
- Lin, P.-C., & Huang, Y.-H. (2012). The influence factors on choice behavior regarding green products based on the theory of consumption values. *Journal of Cleaner Production*, 22(1), 11-18.
- Lo, L. Y.-S., Lin, S.-W., & Hsu, L.-Y. (2016). Motivation for online impulse buying: A two-factor theory perspective. *International Journal of Information Management*, 36(5), 759-772.
- Luo, X. (2005). How does shopping with others influence impulsive purchasing? *Journal of Consumer Psychology*, 15(4), 288-294.
- Madhavaram, S. R., & Laverie, D. A. (2004). *Exploring impulse purchasing on the internet*. Paper presented at the NA-Advances in Consumer Research, Valdosta, Georgia.
- Mangleburg, T. F., Doney, P. M., & Bristol, T. (2004). Shopping with friends and teens' susceptibility to peer influence. *Journal of Retailing*, 80(2), 101-116.
- Milfont, T. L., Duckitt, J., & Wagner, C. (2010). A cross-cultural test of the value-attitude-behavior hierarchy. *Journal of Applied Social Psychology*, 40(11), 2791-2813.
- Millar, M., & Thomas, R. (2009). Discretionary activity and happiness: The role of materialism. *Journal of Research in Personality*, 43(4), 699-702.
- Monroe, K. B. (1990). *Pricing: Making Profitable Decisions* (2nd ed.). New York: McGraw-Hill.
- Moschis, G. P., & Churchill, G. A. (1978). Consumer socialization: A theoretical and empirical analysis. *Journal of Marketing Research*, 599-609.
- Muruganatham, G., & Bhakat, R. S. (2013). A Review of Impulse Buying Behavior. *International Journal of Marketing Studies*, 5(3).
- Park, E. J., Kim, E. Y., Funches, V. M., & Foxx, W. (2011). Apparel product attributes, web browsing, and e-impulse buying on shopping websites. *Journal of Business Research*, 65, 1583-1589.
- Park, E. J., Young Kim, E., & Cardona Forney, J. (2006). A structural model of fashion-oriented impulse buying behavior. *Journal of Fashion Marketing and Management: An International Journal*, 10(4), 433-446.
- Piron, F. (1991). Defining impulse purchasing. *Advances in Consumer Research*, 18, 509-514.
- Podoshen, J. S., & Andrzejewski, S. A. (2012). An Examination of the Relationships Between Materialism, Conspicuous Consumption, Impulse Buying, and Brand Loyalty. *Journal of Marketing Theory and Practice*, 20(3), 319-334.
- Putnam, R. D. (2000). Bowling alone: America's declining social capital *Culture and Politics* (pp. 223-234): Springer.
- Raman, A., & Annamalai, V. (2011). Web services and e-shopping decisions: A study on malaysian e-consumer. *IJCA Special Issue on "Wireless Information Networks &*

- Business Information System*” WINBIS, 54-60.
- Richins, M. L. (1994). Special possessions and the expression of material values. *Journal of Consumer Research*, 21(3), 522-533.
- Richins, M. L. (2013). When wanting is better than having: Materialism, transformation expectations, and product-evoked emotions in the purchase process. *Journal of Consumer Research*, 40(1), 1-18.
- 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.
- Rook, D. W. (1987). The buying impulse. *Journal of Consumer Research*, 14(2), 189-199.
- Schroeder, J. E., & Dugal, S. S. (1995). Psychological correlates of the materialism construct. *Journal of Social Behavior and Personality*, 10(1), 243.
- Sevgili, F., & Cesur, S. (2014). The Mediating Role of Materialism on the Relationship between Values and Consumption. *Educational Sciences: Theory & Practice*, 14(6), 2083-2096.
- Sharma, P., Sivakumaran, B., & Marshall, R. (2010). Impulse buying and variety seeking: A trait-correlates perspective. *Journal of Business Research*, 63(3), 276-283.
- Sherman, E., Mathur, A., & Smith, R. B. (1997). Store environment and consumer purchase behavior: mediating role of consumer emotions. *Psychology and Marketing*, 14(4), 361-378.
- Sheth, J. N., Newman, B. I., & Gross, B. L. (1991). Why we buy what we buy: A theory of consumption values. *Journal of Business Research*, 22(2), 159-170.
- Shim, S., & Eastlick, M. A. (1998). The hierarchical influence of personal values on mall shopping attitude and behavior. *Journal of Retailing*, 74(1), 139-160.
- Shirmohammadi, M., Ghane, N., & Ebrahimi, M. R. (2015). Investigating and prioritizing the effective factors on internet impulse buying behavior of customers (case study: discount group sites). *European Journal of Business and Management*, 6(4), 142-152.
- Sikka Kainth, J., & Verma, H. V. (2011). Consumption values: scale development and validation. *Journal of Advances in Management Research*, 8(2), 285-300.
- Statista.com. (2016). Number of worldwide internet users from 2000 to 2015 (in millions). Statista.com Retrieved 10 Jan 2016 <http://www.statista.com/statistics/273018/number-of-internet-users-worldwide/>
- Strauss, W., & Howe, N. (1991). *Generations: The History of America's Future, 1584 to 2069*. New York: William Morrow.
- Suki, N., & Suki, N. (2015). Consumption values and consumer environmental concern regarding green products. *International Journal of Sustainable Development & World Ecology*, 22(3), 269-278.
- Sukumaran, T. (2012, 06/10/2012). Quality lure for Gen Y youths. *The Star*. Retrieved from <http://www.thestar.com.my/news/nation/2012/10/06/quality-lure-for-gen-y-youths/>
- TheMalaysianDigest. (2014). Debts Among Us: Young Malaysians Are Going Bankrupt [Press release]. Retrieved from <http://www.akpk.org.my/happenings/news/press-release/id/1159/debts-among-us-young-malaysians-are-going-bankrupt>
- Ward, S., & Wackman, D. (1971). Family and media influences on adolescent consumer learning. *American Behavioral Scientist*.
- Williams, D. (2006). On and Off the 'Net: Scales for Social Capital in an Online Era. *Journal of Computer-Mediated Communication*, 11(2), 593-628.
- Xiao, S. H., & Nicholson, M. (2013). A Multidisciplinary Cognitive Behavioural Framework of Impulse Buying: A Systematic Review of the Literature. *International Journal of Management Reviews*, 15, 333-356

Xu, Y. (2007). Impact of store environment on adult generation Y consumers' impulse buying. *Journal of Shopping Center Research*, 14(1), 39-56.

Zeithaml, V. A. (1988). Consumer perceptions of price, quality, and value: a means-end model and synthesis of evidence. *The Journal of Marketing*, 52, 2-22.