ABSTRACT

The introduction of electronic marketing (e-marketing) has a huge impact on consumer behavior as products are brought closer to consumers and barriers are lifted by breaking the time and physical constraints in marketing activities. A pertinent question to ask if the COVID-19 pandemic have further increased the tendency of consumers’ involvement in e-marketing? This study aims to explore the impact of e-marketing on the propensity to indebtedness among the Millennials in Malaysia during the COVID-19 outbreak. According to the literature, the purchasing intention and behavior of consumers are influenced by advertising in its various forms. Constant exposure to advertisements encourages people to make unplanned purchases and increases the likelihood of tolerating compulsive shopping. As a result, financial complications and over-spending are the most obvious problems associated with compulsive shopping, as people more often spend beyond their means. With the temptations presented by marketers and easy access to a wide range of payment methods, the financial well-being of customers, especially the technology-oriented generation, is threatened. Thus, it is expected that being constantly exposed to e-marketing could lead to risky financial situations, with greater tendency to incur debt. In testing this hypothesis, the study adopts a quantitative research to determine the impact of e-marketing on respondents’ tendency towards indebtedness. A survey was conducted for data collection, with relevant questionnaires being designed to address this issue in the context of the undergraduate and postgraduate students at several universities in Malaysia. In analyzing the data, descriptive statistics and multivariate analysis techniques were applied using the SPSS and AMOS software.

Keywords: Electronic marketing, Consumer behavior, Compulsive shopping, Financial well-being, Millennials

INTRODUCTION

The emergence of information technology has lifted barriers and brought products closer to consumers through electronic commerce (e-commerce). Due to e-commerce, geographical limitations in trade are no longer a major issue since with just a few clicks on the IT gadgets while sitting in his living room, a customer could buy a product from anywhere in the world.
In a borderless market, consumers can easily get anything from any place through online shopping that is promoted by e-commerce.

In the marketing sphere, electronic marketing (e-marketing) which is an important component of e-commerce, is expanding very rapidly. Also known as internet marketing, web marketing, digital marketing, or online marketing, e-marketing is the process of marketing a product or service via the internet using a range of technologies that connect businesses to their customers. E-marketing relies on three categories of platforms, namely, search engine web (Google, Yahoo, Hotmail, etc.), social media (Facebook, Instagram, LinkedIn, etc.), and video platforms (YouTube, Twitch, etc.)

With e-marketing, companies have found an opportunity by deploying already existing social media platforms to reach a larger number of participants. These platforms are no longer used solely for entertainment, but they have started to have commercial implications. In addition to pushing products to consumers, companies could also gain customers’ feedback and reactions on their products on social media. Apart from giving companies a major efficient channel for marketing their products, e-marketing also enable companies to collect big data about detailed information of their customer, particularly on their main interests and preferences. In fact, the data collected through social media is so important that it could be used to define an individual's credit worthiness. For example, an Islamic fintech in Indonesia - Angsur provides lending services using the Murabaha contract to undergraduate students and uses relevant data collected on social networks to reduce asymmetric information. Through the data collected from their customers, the company is able to determine the profiles of borrowers and define their ability to pay debts on the basis of data collected from their social media accounts (Firmansyah & Ramdani, 2018).

Technology has made it easier to gather data related to customers' needs and predict their intentions. Unfortunately, to become contextually relevant to individual consumers, and to offer a personalized product, some marketers are hacking into a targeted segment of individuals via social media. With advertisement appearing frequently based on users' interests and payment methods easily available and accessible, consumers, especially young people, may not have control over their purchase decisions and spend more than they can. This behavior will have a direct impact on their financial well-being.

As the world begins handling the COVID-19 crisis to the recovery and reopening of economies, it is clear that the lockdown period has had a profound impact on the way people live. The period of contagion, self-isolation, and economic uncertainty has changed the way consumers behave. New consumer behaviors cover all areas of life, from how we work to how we shop. The COVID-19 outbreak has affected almost every aspect of people’s lives around the world. Since most people need to stay home more, and especially with the implementations of the movement control order (MCO) in several countries, consumers have been spending more time online. This change in behavior has presented new opportunities for e-commerce. The MCO has sped up the commerce digitalization after witnessing a shift in consumers' shopping preference to online. In fact, according to a survey conducted by Rakuten Insight in Malaysia (Insight, 2020), 62% of the respondents said they had increased their online shopping to minimize their time outside. In the same survey, 64 per cent of the respondents stated they purchased more online during the COVID-19 pandemic. From his side, the Director of Shopee stated that consumers are spending an average of 20% more time on the platform per week (Thestar, 2020). Moreover, to reply to consumers' demand during 'Hari Raya', online bazaars have been established and promoted during the MCO. This variety of products is continually being promoted and pushed towards consumers who, due to the MCO, found themselves spending more time on their electronic gadgets.
Marketing has an impact on the purchasing category, choice of brand and household purchasing quantity decision (Chintagunta, 1993). E-marketing simulates behaviors that will lead the individual to acquire debt. According to the literature, materialism is also a factor that has a significant impact on individuals' debt levels. Through this study, we try to identify a link between e-marketing and this factor and its impact on the tendency of individuals to indebtedness. The use of e-marketing has increased dramatically over the past few years, and even more during the MCO period. Nowadays, it has been a major research topic in the marketing field. However, few are the studies that link it to the financial stability of individuals. In this research, we aim to study the direct and indirect impact of E-marketing on the propensity to indebtedness of Millennials.

In addition, COVID-19 pandemic is having a devastating impact on the global economy. Since the start of the pandemic, it has created a growing number of unemployed people who subsequently become financially vulnerable. Changes in personal circumstances, such as layoff, can make people financially vulnerable. This can cause them to change their financial behavior and engage in activities, such as gambling to make more money or using payday loans (Mogaji, 2020). However, one of the significant changes in household spending behavior during these time periods is the significant increase in food delivery services and spending on groceries (Baker et al., 2020).

This study intends to increase awareness among internet and social media users of the aggressive advertisement content to which they are continually exposed to, thus affecting their spending behavior. By adopting a quantitative research approach through survey method targeting undergraduate and postgraduate students of Malaysian universities, the questionnaire was developed by adopting and adapting questions from previous studies (Chugh & Tewari, 2014; Davies & Lea, 1995; Padmalia, 2019; Potrich & Vieira, 2018; Richins & Dawson, 1992). Findings of this study provide important inputs to various stakeholders in understanding the huge impact of internet marketing on the financial stability, especially to consumers so that they must increase their resilience to this type of advertising. The findings should also encourage policymakers to control and regulate the internet-based marketing in order to protect the consumers.

LITERATURE REVIEW

E-Marketing and Indebtedness

Online shopping is a type of e-commerce that includes any activities pertaining to buying and selling goods and services on internet (Urne, 2020). An online shop stimulates the physical interactions of buying products and services based on an electronic platform. This process is called business-to-consumer online shopping. Other researchers argue that e-shopping is not only limited to complementary products (Ankita Srivastava & Premaram, 2019). Products of first need such as groceries products are also in high demand in online stores; reason being that is doing groceries can be time consuming and rather boring for many consumers. This results from the fact that, online shopping has become easier, time saving, effective, and even fun. Similarly, a study shows that there is a positive relationship between E-marketing and FMCG "Fast-moving consumer goods" (Balamurugan, 2020). Swadia (2018) found that more than 65% of respondents agreed that e-shopping more convenient for several reasons. However, with the emergence of technology and easy access to a variety of online stores, consumers are increasingly deploying internet in their daily purchases. This new commercial trend requires new marketing policies and techniques (Swadia, 2018).
Digital marketing is the utilization of electronic media by the marketers to promote products or services into the market. It refers to a set of powerful tools and methodologies used for promoting products and services through Internet. According to Balamurugan (2020), it is the marketing of goods and services via an electronic tool. It can also be defined as the marketing of products and services through electronic platforms. It is one of the latest and emerging tools of marketing. It includes advertisements, product display, product navigation, 3D product view, basket selection, and checkout and payment (Swadia, 2018). The introduction of E-marketing, especially through social media has drastically impacted consumer behavior. This modern marketing has the ability to attract and capture the attention of a wide range of consumers. It can attract an important segment of consumers, which cannot be reached through traditional marketing techniques such as TV ads, billboards, magazines, etc. Balamurugan (2020) found that there is a positive relationship between social media and E-marketing. Kalyanam and McIntyre (2002) define eleven functions of E-marketing which are product, price, place, promotion, personalization, privacy, customer service, community, site, and sales promotion. They found that promotion, personalization, customer service, community, and site are the functions that have a significant impact on the customers’ decisions (Millennials and non-Millennials generation) (Kalyanam & McIntyre, 2002).

Kassim and Hussein (2016), tried to link the increasing credit card default in Malaysia with the marketing strategies used by the credit card providers. The researchers believe that the used marketing strategies have an impact on credit card users. The results of the study show that there is a significant positive relationship between product, price, and place marketing strategies and frequency of using the credit cards. The same study found that compulsive spenders are significantly influenced by pricing and promotional strategies and are not concerned with product characteristics or product availability (Kassim & Hussin, 2016). Another study found that most of the respondents would rather use credit cards as the most suitable option of settling online purchases. This is due to the easy access to this payment mean and because they can purchase products/services on a credit without having any money in their account. Therefore, the irresponsible use of credit cards increases the indebtedness level of consumers (Swadia, 2018). From there side, Larsson et al (2017) argue that e-commerce has led people to risky financial situations and has even led them to over-indebtedness. The same study found that most defaults for people between the ages of 12 and 25 are related to online shopping (Carlsson et al., 2017).

Being constantly exposed to advertisements encourages people to make unplanned purchases and increases the likelihood that they will tolerate compulsive shopping and, as a result, become addicted to e-commerce. Generally, financial problems are the most obvious problems associated with compulsive shopping, as people most often spend beyond their means. In fact, between 2011 and 2015, 22,663 Malaysians under 35 were declared bankrupt (MFPC, 2016). Combined with easy access to credit, intensive marketing contributes to increase private borrowing, thus creating a debtor culture. In some countries, for example, Denmark, aggressive marketing (i.e. unsolicited offers) is prohibited (Jørgensen, 2014).

Who are the Millennials: Definition and Related Issues

Researchers commonly define millennials (or Generation Y) as the demographic cohort born between the early 80s and the late 90s. Some researchers found that traditional models of marketing are not working on generation Y consumers. They believe that the decision-making process of generation Y consumers is very complicated and that their behaviors are different. Their study has shown that the best way to reach the segment of generation Y consumers is by using social media (Davidaviciene et al., 2019). Each generation has its own features and
characteristics. Nonetheless, both scientists and practitioners are searching for innovative ways and creating new marketing strategies that will suit each generation. Generation Y for example is more technology oriented. In order to promote a product, marketers should focus on the use of technology, hence the appearance of E-marketing. Recently, we are facing a huge flow of new type advertisements in our daily life. Whether it is on Facebook, Instagram, Twitter, or even YouTube, marketers continue to solicit and sometimes harass customers through all apps on their phones, especially social media. 

Firmansyah and Ramdani (2018) found that more than 50% of online shoppers are between the ages of 16 and 35. Accordingly, another study shows that there is no significant difference between internet surfing and gender of the respondents, and that the age group of 18 to 30 years use the internet the most, which means that this category is more exposed to the E-marketing (Swadia, 2018). However, cash on delivery is the most preferred method of payment. While some researchers (Ankita Srivastava & Premaram, 2019; Swadia, 2018) argue that gender doesn’t have any significant relationship with online shopping, Srivastava and Premaram (2019) found that married graduate women aged 20 to 35 are more likely to be affected by the E-marketing and buy groceries online. Another study reveals that females represent a huge portion of online buyers. Also, the younger generation is more often purchasing from online platforms (Chugh & Tewari, 2014).

Consumer Behavior Towards E-Marketing

This study is based on the theory of buyer behavior. This theory argues that marketing stimuli are, among others, crucial factors that influence the purchasing decision of customers (Bitta & Della, 1998). In the context of this study, Internet-based marketing is expected to be a major determining factor in the tendency of consumers to acquire debt. 

According to Balamurugan (2020), between 80 and 90% of users of social websites are attracted to online advertising, which is mainly done on social platforms. He found that there is a positive impact of e-advertisements on consumer purchase behavior and intention. Indeed, it increases sales tremendously as there is a positive relationship between online shopping and E-marketing. Similarly, in a survey made by Davidaviciene et al. (2019), 96.7% of the respondents stated that information posted on social media (i.e. YouTube, Facebook, Instagram, etc.) influences their decisions to buy, which means that individuals are responsive to the existing information and reactions on a product. The main reasons that drove them to buy are recommendations and advice by other persons (mostly influencers), attractive price, available discount, and delivery service.

Another study found that consumer behavior was changing with the increasing use of technology for purchases (the number of online buyers has increased over 8 times from 2013 to 2017). The researcher argues that consumer behavior had changed because of technological interference and so is the consumer behavioral theory. Furthermore, he explains that there was no comprehensive theory which could exactly predict the e-consumer behavior and, therefore, there is a need to develop a new consumer behavioral model especially in the context of India (Nageswari, 2019). Sudden browsing ads appear on users’ screen all the time when playing games or watching interactive videos through their gadgets. Some researchers argue that online ads, especially pop-up ads are perceived as intrusive by social media users (Wang et al., 2014). These intrusive acts will trigger the feeling of purchase among users of digital technology and will, therefore, lead to spontaneous and unplanned purchases among the young generation.

Pure marketing consists of convincing clients to choose a company's product among others. Other forms of marketing consist of manipulating consumers’ own decisions and behaviors. Several factors are influencing consumers' behavior among them peer pressure and
social pressure. Accordingly, some companies use aggressive advertising in their marketing strategies, with the aim to manipulate customers’ feelings and desires. In Malaysia, credit card providers are implementing many marketing strategies to encourage customers not only to buy more credit cards but also to use their existing cards more frequently. Sometimes consumers are very influenced and manipulated by marketers to use their credit cards excessively, which can affect their financial stability and cause them to spend more than they can. Indeed, consumers should be aware of marketing strategies implemented by the credit card providers to avoid falling in unmanageable level of debt (Kassim & Hussin, 2016).

DATA AND METHODOLOGY

Consumer decision-making has long been of interest to researchers. The theory of buyer behavior is one of the largely used theories as it provides a sophisticated integration of different social, psychological and marketing influences on consumer choice into a coherent sequence of information processing (Bray, 2000). This theory was established in 1988 with the aim of building a comprehensive model that could be used to analyze a variety of purchasing scenarios (Bitta & Della, 1998). The researchers used the term “buyer” instead of “consumer” to not exclude commercial purchases.

The input variables are the environmental stimuli to which the consumer is subjected and are communicated from various sources. We can distinguish significative, symbolic and social stimuli. Significative stimuli are the real elements of products and brands that the buyer confronts. However, symbolic stimuli refer to the representations of products and brands as constructed by marketers through advertising. Social stimuli include the influence of family and other peer and reference groups. While the output is considered as the actual purchase behavior. Hypothetical Constructs can be classified into Perceptual constructs and Learning constructs. In this study, we focus on symbolic stimuli (advertisement) as the main motivation for purchasing behavior. We believe that a high exposure to advertisements drive buyers to buy excessively which may lead them to Indebtedness. Particularly, materialistic individuals are more likely to be influenced by the advertisements to which they are exposed.

Although the impact of traditional marketing on compulsive buying has been studied, little is known about the effect of internet-based marketing on the consumers' tendency to acquire debt and the underlying mechanisms that explain this relationship. With the increased use of the internet and the expansion of online marketing, it is becoming very important to examine its impact on the propensity of consumer to indebtedness.

The revolution of information and communication technologies changes the way companies do business. Nowadays, more companies use internet and electronic platforms to conduct marketing and promote their product. However, the expansion of money and financial services has facilitated access to money, which has increased the propensity to take on debt.
(Falahati & Sabri, 2015). Other studies show that banks are continually involved in certain personal debt issues by adopting aggressive banking marketing (Skalamera-Alilovic & Dimitric, 2017). Accordingly, another study indicates that easy access to credit, combined with intensive marketing, contributes to the increase in borrowing, thus creating a culture of indebtedness. The study suggests that a possible solution is to limit marketing operations (Jørgensen, 2014). Based on that, the first research hypothesis to support relates E-marketing and debt propensity.

**H1:** E-marketing has an influencing role on the tendency of the Millennials to acquire debt.

The devotion of the individual to material desires, the need to own more material things and the attachment to material goods to achieve desired conditions ultimately determine and promote materialism in individuals (Omar et al., 2014). Researchers argue that the materialistic commercial media messages that frequently bombard young people build in them the idea that happiness, beauty, and popularity can be bought (Gardarsdóttir & Dittmar, 2012). Thus, the second hypothesis of this study is:

**H2:** E-marketing impacts positively on materialism among Millennials.

Materialistic individuals are more inclined to take out consumer loans, with much stronger positive attitudes towards indebtedness, in other words, the higher the level of materialism, the greater the propensity to indebtedness (Ponchio, 2006). Researchers have found that materialism is a determining factor in an individual's propensity to acquire debts. In fact, materialistic individuals tend to have a higher positive attitude towards debt acquisition (Gardarsdóttir & Dittmar, 2012). Accordingly, Ponchio (2006) concluded that materialistic people are more likely to use credit and have more tendencies to accumulate debt. In addition, individuals with higher levels of materialism are likely to poorly allocate their resources; therefore, they have more propensities for debt (Cakarnis & D’Alessandro, 2015). Furthermore, a research conducted by Richins (1992) identified that materialism leads to indebtedness. We believe that higher E-marketing stimuli triggers materialism which in its turn increase the tendency of the young to take debts. For this reason, we assume that materialism acts as a mediator between E-marketing and debt propensity (H4).

**H3:** Materialism influences tendency to acquire debt among the Millennials

**H4:** Materialism is a mediating variable between E-marketing and propensity to indebtedness.

In view of the above constructs and assumptions, the conceptual framework of the study can be presented as in Figure 2 below:
For the purpose of this study, we have adopted a quantitative research design. The study’s target population consisted of millennials postgraduate and undergraduate students from all universities across Malaysia. Each respondent was asked to complete a questionnaire distributed via an online form in order to collect primary data. The collection instrument has Yes/No and multiple-choice questions, which evaluated the profile of the respondents and the impact of E-marketing on their purchasing habits, as well as five-point “Likert-type” questions to determine E-marketing perception, propensity to indebtedness, materialism.

To evaluate the impact of E-marketing, we developed a 5-scale construct. This construct aims to understand the impact of the constant exposure of respondents to E-marketing on their purchasing behaviors and their tendency to acquire debt. However, to measure the propensity to indebtedness, we adopted an instrument resulting from a study by Lea et al. (1995), Chugh & Tewari, (2014) and Potrich & Vieira, (2018). The scale includes 17 questions aimed, among others, at identifying how individuals behave with regard to money, how they plan their purchases, and whether they deem it appropriate to buy forward. Apart from the first seven questions which are reversed, the more the individual agrees, the lower his propensity to indebtedness. Subsequently, there is a scale of questions to measure materialism, as originally developed by Richins (1992). This nine-item scale was adopted to understand the materialism level of respondents. Except for the first one, these questions have been designed in such a way that the more the individual agrees, the more materialistic he is. In addition, we sought to understand the impact of E-marketing on the consumers’ behavior and their propensity to take debt. To achieve this, we adapted a six-item scale from a previous study (Padmalia, 2019).

Determining the optimal size of a sample before collecting the data is very essential to prevent the sample from turning out to be too small after processing the data (Thietart, 2014). Since the population is unknown, our sampling method will follow the method of calculation by Hair (Hair et al., 2014). In this method, the minimum sample size is as much as 5 times the number of items used in research instruments (5 x 25 = 125 respondents). This research will be distributed online questionnaires and will gather 176 respondents. The sampling strategy used in this study is the stratified random technique. In this strategy, each member of the population of interest has an equal chance of being selected as a research participant but within predefined subgroups (Majid, 2018).

To analyze the data, we used exploratory factor analysis (EFA), confirmatory factor analysis (CFA), and structural equation modeling (SEM) with SPSS and Amos software. We started with EFA since the scale appropriate to E-marketing was adopted by the authors and has not been the subject of previous studies. We performed checked the content validity test based on the Pearson test. With a degree of freedom $DF = 153$ and a significant level of 0.05,
the value obtained for all the items is significant and greater than the critical value. We have concluded that all elements related to E-Marketing are valid.

After testing the model, we removed three items (EMD1, EMD3, PI2) to improve the KMO, the proportion of explained variance (PVE), and eliminate cross-loadings. After that, CFA was used to validate the constructs, by checking their reliability and validity. The convergent validity of each construct was analyzed according to the magnitude and meaningful statistics of its standardized coefficients, as well as the absolute fit indices: chi-square statistics, root mean square error of approximation (RMSEA), goodness-of-fit index (GFI), and the comparative fit index (CFI). There is no consensus in the existing literature regarding the acceptable values for these indices. However, for the Df, the recommendations have values less than five. For GFI and CFI it is suggested that their values should be greater than 0.90 while for RMSEA the recommendations suggest it should be less than 0.08.

To verify whether the coefficients or the factor loads were significant, we performed the statistical test of the values. In CFA, it is necessary to observe the magnitude of the factor load, and the variables with low loadings should be dropped from the model. To measure the reliability of the construct, we used Cronbach alpha test, we accepted values greater than 0.7. The uni-dimensionality of the construct is verified by the evaluation of the standardized residuals. Finally, the integrated model was built and evaluated using SEM, and we verified the statistical significance of the estimated coefficients of regression to assess the adjustment indices of the model and the hypothesized theoretical structure. The adjustment indices were the same as those already used to validate the measurement model. From effect decomposition, we estimated direct, indirect, and total effects (Kline, 2015). To provide robustness to the analysis, we used the bootstrap estimation. According to (Hair et al., 2014), this technique validates a multivariate model by drawing a large number of sub-samples, estimating models for each sub-sample, and then determining the values of the parameter estimates from the set of models by calculating the mean of each coefficient estimated across the sub-sample. The bootstrap process was estimated with a sample of 2,000 people.

FINDING AND DISCUSSION

In the sample of 176 individuals, only 153 responses were deemed appropriate for the study. Dropped responses relate to people that don’t buy online from universities outside Malaysia or non-millennial participants. Among the 153 restrained respondents, 43.1 percent are female, 83.7% belong to the age range (20 to 30 years old while 16.3% are between 30 and 38 years old) and 37.3% are Malaysians; Most of the respondents (62%) are from the International Islamic University while the remainder is distributed among other Malaysian universities. The majority of respondents (66%) rely on parents funding to finance their studies and expenses while others rely on full/part-time jobs, scholarships, student loans, etc. With respect to online shopping habits, more than 60% of the individuals' purchases are complementary products, about 60% of individuals buy online at least once per month. Debit cards, credit cards, and cash on delivery are the preferred payment methods of respondents. Only 33.3% of individuals make planned purchases, while the rest is a combination of planned and unplanned purchases. Over 70% of respondents are convinced that online advertising has an impact on their purchasing behavior, while 62.1% believe that E-marketing causes them to have compulsive buying tendencies. More than 60% of respondents judged a product they bought online as unnecessary to buy, similarly, 57.5% felt manipulated after making an online purchase. However, 53.6% of respondents agree that being constantly exposed to E-marketing can lead to critical financial situations. Accordingly, 22.2% of respondents borrowed to buy a product online, 29% of them had difficulty in repaying.
Once the profile of the respondents was known, we developed the first objective of the paper to validate the constructs used by the exploratory and then confirmatory factor analysis. For the four constructs, the model proposed is the one with all variables in the original scale, and the results indicate that the model is inadequate because the CFI was less than 0.90 while RMSEA was greater than 0.08. Therefore, in the search for the suitable model, two main measures were adopted, removal of non-significant variables and insertion of correlations between variables’ errors, which were suggested by the software, and which made theoretical sense (Figure 2). After these changes, the model presented adequate adjustment: convergent validity because the CFI and GFI indices were higher than 0.90 and the RMSEA index was lower than 0.08. Regarding the reliability, the CR and the AVE were respectively higher than 0.6 and 0.5; and uni-dimensionality, as evidenced by all standardized residuals falling below 2.58 (Table 1).

![Figure 3: Measurement model](image)

**Table 1: Results of Reliability and Validity**

<table>
<thead>
<tr>
<th></th>
<th>CR</th>
<th>AVE</th>
<th>MSV</th>
<th>MaxR(H)</th>
<th>Mat</th>
<th>EMktg</th>
<th>PTIndb</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mat</td>
<td>0.830</td>
<td>0.553</td>
<td>0.282</td>
<td>0.846</td>
<td>-</td>
<td>0.743</td>
<td>-</td>
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<tr>
<td>EMktg</td>
<td>0.851</td>
<td>0.657</td>
<td>0.254</td>
<td>0.922</td>
<td>0.263</td>
<td>0.811</td>
<td>-</td>
</tr>
<tr>
<td>PTIndb</td>
<td>0.861</td>
<td>0.556</td>
<td>0.282</td>
<td>0.950</td>
<td>0.531</td>
<td>0.504</td>
<td>0.746</td>
</tr>
</tbody>
</table>

By analyzing the final constructs, it can be seen that 3 of the 6 items that were initially established for E-marketing have been retained. Those who have the most impact on this aspect is those who question whether people find that constant exposure to E-marketing increases compulsive online shopping behavior, increases the propensity for debt, and leads to debt problems. The model for materialism was built with four of the nine proposed items.
Respondents who agreed with the retained items are more likely to adopt materialistic behavior. The propensity to indebtedness was the construct with the greatest instability in the scale, among the sixteen proposed questions only five made part of the final model. Respondents who disagreed with the retained items are those with the highest tendency to fall into debt.

![Integrated measurement model](image)

Figure 4: Integrated measurement model

After analyzing the model, we found that all the direct effects are significant. In other words, E-marketing and materialism have a significant positive impact on the individual's propensity to indebtedness (Table 2). Afterward, we tried to find the indirect relationship that E-marketing has with the propensity to indebtedness. For that, we took materialism as mediating variable, and then we ran the model (Figure 4).

<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>S.E.</th>
<th>C.R.</th>
<th>P</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMktg &lt;-- Mat</td>
<td>.180</td>
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<td>EMktg &lt;-- PTIndb</td>
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<td>4.010</td>
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</table>
The first hypothesis (H1) was confirmed, E-marketing has a positive impact on the propensity to indebtedness. These findings corroborate with other previous studies (Falahati & Sabri, 2015; Skalamera-Alilovic & Dimitric, 2017). The second hypothesis which states that E-marketing has a positive impact on materialism was as well confirmed (H2). This finding was supported by previous studies (Gardarsdóttir & Dittmar, 2012; Omar et al., 2014). Materialism was also found to have a significant positive impact on the propensity to indebtedness (H3), This finding corroborate other previous studies (Cakarnis & D’Alessandro, 2015; Gardarsdóttir & Dittmar, 2012; Ponchio, 2006; Richins & Dawson, 1992). The indirect effect is significant (Table 3 and 4). This means that there is a partial mediation between E-marketing and the propensity to indebtedness while materialism is the mediating variable (Table 5).

![Figure 5: Final model with standardized relationships](image)

**Table 3: Results of Regression Weights (Direct effects)**

<table>
<thead>
<tr>
<th></th>
<th>EMktg</th>
<th>Mat</th>
<th>PTIndb</th>
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<tr>
<td>Mat</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>PTIndb</td>
<td>.083</td>
<td>.000</td>
<td>.000</td>
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</table>

**Table 4: Significance level of the indirect effects**

<table>
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<th></th>
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<th>PTIndb</th>
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<td>PTIndb</td>
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**Table 5: Results of Regression Weights (Indirect effects)**

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<th>S.E.</th>
<th>C.R.</th>
<th>P</th>
<th>Label</th>
</tr>
</thead>
<tbody>
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<td>.071</td>
<td>4.078</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>PTIndb &lt;--- Mat</td>
<td>.341</td>
<td>.085</td>
<td>4.020</td>
<td>***</td>
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</tr>
</tbody>
</table>
Table 6: Hypotheses confirmation

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1 E-marketing has an influencing role on the tendency of the Millennials to acquire debt.</td>
<td>Confirmed</td>
</tr>
<tr>
<td>H2 E-marketing impacts positively on materialism among Millennials</td>
<td>Confirmed</td>
</tr>
<tr>
<td>H3 Materialism influences tendency to acquire debt among the Millennials.</td>
<td>Confirmed</td>
</tr>
<tr>
<td>H4 Materialism is a mediating variable between E-marketing and propensity to indebtedness.</td>
<td>Confirmed</td>
</tr>
</tbody>
</table>

After all, these findings are important to understand the impact of internet-based marketing on the tendency of millennials to acquire debt. This is in line with the consumer behavior theory which states that marketing, in its different forms, influences consumer behaviors.

CONCLUSION AND RECOMMENDATIONS

Millennials are the most exposed to electronic channels and, therefore, the most targeted by e-marketers. However, with the dramatic increase in the use of internet-based marketing over the past few years, several studies have been conducted to understand the impact of this emerging form of advertising on consumer's behaviors and decisions. This study is among the pioneer and in a way is unique as it investigates the direct and indirect impacts of E-marketing on consumers' propensity to indebtedness during the Covid-19 outbreak. This study aimed to develop a model that was able to identify the integrated effect of E-marketing on materialism and the propensity to indebtedness by means of the construction and validation of a structural equation model.

In view of the above, this study is unique and innovative, as it measures the real direct and indirect impact of E-marketing on the debt trend of Millennials in Malaysia during the pandemic. It concludes, also, that electronic marketing stimulates materialism among consumers, especially the younger generation. This behavior in its turn increases the propensity of consumers to take on more debt to satisfy their desires. This study should make Internet and social media users aware of the aggressive advertising content to which they are continually exposed, and which can impact their spending behavior and, as a result, can push them into further debt.

Recognizing the enormous impact of Internet marketing on the buyers’ behaviors and their financial stability, consumers should increase their resilience to this type of advertising. The results of this research should further encourage policymakers to control and regulate internet-based marketing by developing new policies restricting it (prohibition of aggressive marketing) and supervising the audience target in order to protect consumers. At the academic level, this study concluded that electronic marketing has an impact on consumer behavior since it simulates materialistic behavior and increases their chances of getting into debt. Further studies may investigate the impact of electronic marketing on the debt propensity in an elderly population (Generation X). Researchers can use the Theory of Planned Behavior (TPB) and include the E-marketing and materialism variables.
REFERENCES


