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EXAMINING THE ROLE OF MATERIALISM, PERCEIVED STRESS

AND GENDER DIFFERENCES IN COMPULSIVE BUYING BEHAVIOR

AMONG YOUNG ADULTS IN MALAYSIA

LOOI KE XIN

TAN KAI NI

TEE GEOK HONG

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LOOI KE XIN

TAN KAI NI

TEE GEOK HONG

**DECLARATION**

We declare that the material contained in this paper is the end result of our own work and that due acknowledgement has been given in the bibliography and references to ALL sources be they printed, electronic or personal.


Name       : LOOI KE XIN

Student ID: 18AAB02281

Signed    :

Date       : 1st April 2022
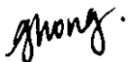

Name       : TAN KAI NI

Student ID: 18AAB05031

Signed    :
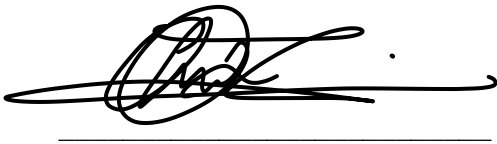
Date       : 1st April 2022


Name       : TEE GEOK HONG

Student ID: 18AAB02164

Signed    :

Date       : 1st April 2022

**APPROVAL FORM**

This research paper attached hereto, entitled "Examining the Role of Materialism, Perceived Stress and Gender Differences in Compulsive Buying Behavior among Young Adults in Malaysia" prepared and submitted by Looi Ke Xin, Tan Kai Ni and Tee Geok Hong in partial fulfilment of the requirements for the Bachelor of Social Science (Hons) Psychology is hereby accepted.

_____                                    Date: _____ 05/04/2022

Supervisor

Dr. Chie Qiu Ting

**Abstract**

It was found that compulsive buying is a serious issue, especially while Malaysia was undergoing the Movement Control Order in 2020 to 2021, because there are more Malaysian young adults spending out of their affordable range and eventually, they go bankrupt. Hence, this study aims to examine the role of materialism, perceived stress and gender differences in compulsive buying behavior among young adults in Malaysia. A survey research design was applied. There were 209 respondents, consisting of 90 males (43.1%) and 119 females (56.9%) with the mean age of 22.02 years ($SD = 1.602$) recruited in the study through purposive and snowball sampling methods. An online questionnaire consisting of Material Values Scale, Perceived Stress Scale and Edwards Compulsive Buying Scale were distributed through online platforms, like Instagram and Microsoft Team. The result showed that materialism was a negative predictor of compulsive buying behavior, perceived stress was not a significant predictor of compulsive buying behavior and there was no significant gender difference in compulsive buying behavior among males' and females' young adults in Malaysia. This study has introduced a new perspective, whereby different types of materialists may have the different extent of engagement in compulsive buying behavior, besides contributing to the understanding of the current research topic in Malaysia context that is enriched with people from different cultures and materialism values. Meanwhile, the policymakers can develop financial programs to educate young adults in financial management based on the findings. This study also increases the awareness of marketers to practice marketing ethics.

*Keywords:* materialism, perceived stress, gender differences, compulsive buying behavior, young adults in Malaysia

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## Chapter I

## Introduction

### 1.1 Background of Study

Buying or shopping is a common activity in every nation. Research on shopping stated that shopping is an essential activity in the individual's lives nowadays, and it is a type of leisure activity and valuable form of entertainment to some people (Maraz et al., 2015). Nevertheless, it will lead to compulsive buying, as well as becoming an unwelcome and harmful phenomenon (Aw et al., 2018). Maraz et al. (2015) also mentioned that shopping can become harmful and destructive for minorities when they go to the extreme level. For instance, in terms of economic impact, the compulsive buying was causing compulsive buyers to experience excessive use of credit cards and lead them to have large amounts of debt (Loh & Harvey, 2018). Besides, the prevalence rate of compulsive buying worldwide is between 1% and 8% (Weinstein et al., 2016). Compulsive buying is a topic that consumer researchers have been interested in (Kukar-Kinney et al., 2016; Müller et al., 2015). According to the American Psychiatric Association (2013), compulsive buying was not included in DSM-5 under behavioral addiction as it has insufficient research in this area. However, recent study suggested that compulsive buying behavior (CBB) should be classified as one of behavioral addictions (Granero et al., 2016).

Gupta (2013) stated that the recent attention and surge in social issues of the college student's debt and housing crisis has raised awareness of the negative effects of compulsive buying. People who engage in compulsive buying are because of the reasons such as wanting to escape from negative emotions like anxiety, depression, and so forth. Maraz et al. (2015) found that compulsive buyers usually described that increasing in drive or anxiety can only be eased when they purchase something as it leads to a sense of completion. On the other hand, self-

esteem is also related to compulsive buying. Individuals with low self-esteem tend to buy compulsively because their objective system is driven by external goals which frequently reflect feelings of insecurity about themselves (Gupta, 2013). They will be scared to be judged by other people about their appearance, and simultaneously feel stress due to their low self-esteem. Hence, they will purchase compulsively in order to make themselves comfortable.

The current research study aims to examine the role of materialism, perceived stress and gender differences in compulsive buying behavior among young adults in Malaysia. Compulsive buying behavior and materialism are deemed to be the dark side of buying behavior (Moschis, 2017). According to Eren et al. (2012), materialistic values have three aspects which are obtaining material wealth, as a sign of being successful; viewing the materialistic items, as a center of life; and the acquisition of material objects, which is a way to acquire happiness by having the key to life satisfaction and well-being. Materialism can lead people to buy compulsively in order to make themselves feel good. Besides, Wang et al. (2016) mentioned that materialists evaluate their possession higher than other events and living things. This is because they want to get the attention from other people, to be respected by others, as well as to meet their satisfaction and happiness.

Furthermore, perceived stress is another predictor to predict compulsive buying behavior in this study. Stress is one of the negative emotions that will cause people to consume compulsively. Roberts and Roberts (2012) stated that compulsive buyers were reported to have higher levels of anxiety in response to stressful events than non-compulsive buyers. They tend to relieve their stress through compulsive buying. According to Singh and Nayak (2015), scholars view that life-changing events can be a way to deal with stress by suggesting that individuals who feel stressful may change their spending habits and behaviors to experience a sense of relief.

Some scholars believe that perceived stress contributed to the development of compulsive buying and materialism (Singh & Nayak, 2015). This study also examines the gender differences on compulsive buying. This is because males and females are different in using or dealing with money. For example, men tend to purchase functional products while women prefer to purchase good-looking products. Besides, most of the studies showed that females have a higher prevalence of compulsive buying compared to males (Aw et al., 2018; Roberts & Roberts, 2012).

Nevertheless, compulsive buying behavior will lead to severe and negative consequences to compulsive buyers. Materialism causes people to spend less time with their families and even shows less interest in social issues (Wang et al., 2016). According to Roberts and Roberts (2012), they found that compulsive buying may also cause relationship problems such as divorce. In addition, a person tends to experience feelings of guilt, worry, shame, and even depression after the compulsive buying behavior. This is because these negative feelings will soon replace the excitement that was brought by compulsive shopping experience, once the desired item was purchased (Roberts & Roberts, 2012).

On top of that, according to Aw et al. (2018), compulsive buying is one of the factors that lead to financial problems, including debts and bankruptcy. This scenario is comparatively happening more frequently in Malaysia, as it is classified as a highly indulgent cultures' country. It was found that Malaysians are more prone to live a luxurious lifestyle and tend to spend money as they wish. Thus, such culture has contributed to high bankruptcy rates and debts among Malaysians, especially the young adults (Ong et al., 2021). This claim is supported by the findings from the Malaysia Department of Insolvency in 2017, which reported that during the period of 2012 to 2016, there is a 153.04% increase in the bankruptcy cases that arises from

credit card overuse. Consequently, individuals with compulsive buying behavior will face the inability to afford certain needs and wants due to having large debts, which then trigger them to be involved in criminal issues such as robbery, fraud, and so on (Maraz et al., 2015). It is consistent with the claims proposed by Gupta (2013) which mentioned that massive amounts of uncontrollable debts accumulated by compulsive buyers can cause economic and emotional problems to them and their family members. From this point of view, it can be concluded that compulsive buying behavior not only will bring severe impacts to compulsive buyers, but also to their family members and society.

**1.2 Research Objectives**

1. To examine whether there is any significant relationship between materialism with compulsive buying behavior among young adults in Malaysia.

2. To examine whether there is any significant relationship between perceived stress with compulsive buying behavior among young adults in Malaysia.

3. To investigate whether materialism predicts compulsive buying behavior among young adults in Malaysia.

4. To investigate whether perceived stress predicts compulsive buying behavior among young adults in Malaysia.

5. To investigate if there are gender differences between males and females in compulsive buying behavior among young adults in Malaysia.

**1.3 Research Questions**

1. Is there a significant positive relationship between materialism with compulsive buying behavior among young adults in Malaysia?

2. Is there a significant positive relationship between perceived stress with compulsive buying behavior among young adults in Malaysia?

3. Does materialism predict compulsive buying behavior among young adults in Malaysia?

4. Does perceived stress predict compulsive buying behavior among young adults in Malaysia?

5. Is there any gender differences in compulsive buying behavior among young adults in Malaysia?

**1.4 Hypotheses**

$H_0$: Materialism has no significant positive relationship with compulsive buying behavior among young adults in Malaysia.

$H_1$: Materialism has a significant positive relationship with compulsive buying behavior among young adults in Malaysia.

$H_0$: Perceived stress has no significant positive relationship with compulsive buying behavior among young adults in Malaysia.

$H_2$: Perceived stress has a significant positive relationship with compulsive buying behavior among young adults in Malaysia.

$H_0$: Materialism does not predict compulsive buying behavior among young adults in Malaysia.

$H_3$:  Materialism positively predicts compulsive buying behavior among young adults in Malaysia.

$H_0$: Perceived stress does not predict compulsive buying behavior among young adults in Malaysia.

$H_4$:  Perceived stress positively predicts compulsive buying behavior among young adults in Malaysia.

$H_0$: There is no significant gender difference in compulsive buying behavior among males' and females' young adults in Malaysia.

$H_5$: Malaysian females' young adults are more likely to engage in compulsive buying behavior than Malaysian males' young adults.

**1.5 Problem Statement**

Due to the COVID-19 pandemic, Malaysia's government had implemented Movement Control Order (MCO). This restriction of movement had brought significant impact to the shopping mode for Malaysians as they are not allowed to shop physically anymore. Therefore, online shopping became more prominent during the COVID-19 pandemic. A survey done by Facebook and Brain & Company showed that consumers tend to shop online more than four times in the past three months (Ganesan, 2021). According to New Straits Times (2021), the average purchasing items of Malaysians via Lazada Mall have increased more than 10 times during 9.9 Biggest Brand Sale as compared to the usual month. This showed that even under the COVID-19 pandemic, people are still willing to spend money on purchasing online and even spend more if there is any promotion. Online shopping can give people an illusion that they are not really spending money (Chuah et al., 2018). This is due to online shopping usually paying with a credit card or e-wallet method that shortens the process of paying and consumers feel less financial pinch. Therefore, consumers tend to spend more money on online shopping unconsciously rather than physical shopping.

However, compulsive buying behavior was not limited only in online shopping but also in physical shopping. Before the COVID-19 pandemic, compulsive buying behavior was more outstanding on physical shopping than online shopping. As mentioned before, COVID-19 caused people to switch their compulsive buying behavior from physical shopping to online shopping. A survey done by Hong Kong Trade Development Council (HKTDC) research (2020) showed that 74% of Malaysians shop physical stores at least once a month while 65% of Malaysians shop online stores at least once a month. It is worth noting that this survey was conducted during January 2020 which was near to outbreak time for COVID-19 in Malaysia. This evidence

showed that Malaysians preferred shops physically before COVID-19. Apart from this, this survey also indicated that Malaysians tend to purchase non-essential products in physical stores which is a tendency of compulsive buying behavior to occur. Compulsive buying behavior in physical stores may be due to physical stores can lead them to feel more real about the switching negative to positive mood and relief tension.

Compulsive buying is a serious issue because it was found that there are more young people in Malaysia spending out of their affordable range and eventually, they go bankrupt (Zainal, 2019). Regardless of online or physical shopping, both platforms should be concerned with the compulsive buying behavior issue. This has drawn researchers' interest to explore the spending behavior of Malaysians in online and physical shopping. On top of that, research showed that Malaysians have become more materialistic (Zakaria et al., 2020). Materialism value can change a human's money attitude and spending behavior. Researchers would like to know the materialism value of Malaysian young adults and whether it has an impact on their compulsive buying behavior.

The compulsive buying issue became more severe when Malaysia was undergoing the process of Movement Control Order (MCO) in 2020 to 2021. This can be supported by the data that reported there are 10, 317 individuals who went bankrupt from March 2020 to July 2021, which is during the MCO period (Rahim et al., 2021). Besides that, personal loans also occupied more proportions as the reason for bankruptcy in Malaysia which 31% in 2016 increased to 53% in 2020 and to 54% in the first four months of 2021 (Lee, 2021). It is undeniable that the MCO had led Malaysians to develop more negative emotions such as fear and anxiety. Researchers found that individuals tend to change their behavior in accordance with the emergency events that happened (Yuen et al., 2020). Emergency events cause people to feel psychological distress

which leads them to change their spending levels on necessary and unnecessary items (Di Crosta et al., 2021). Increased purchasing of unnecessary items may lead to compulsive buying behavior. Hence, researchers are interested in examining the impact of perceived stress on compulsive buying.

Different genders having different perceptions and motives on buying. According to a study done by Nicoli de Mattos et al. (2016), there is no difference between the compulsive buying behavior among males and females. The mean age of the respondents that were involved in that study was 38.71 years. Meanwhile, another study conducted by Pérez de Albéniz-Garrote et al (2021), found that females aged within 14 to 17 years old showed more engagement in compulsive buying behavior as compared to males. A study conducted in the Pakistan context also showed that females have higher engagement in compulsive buying behavior (Moon & Attiq, 2018). All these past studies have adopted some different aspects from our study such as different age groups, different cultures, not latest data and different contexts. These different aspects may affect the respondents' spending behavior, income, and spending on what product. To fill in the gap of the limited recent study that has a similar background in examining compulsive buying behavior in Malaysia, researchers are interested in examining the gender differences in compulsive buying behavior for both online and physical shopping among young adults in Malaysia.

## 1.6 Significance of Study

*Knowledge Contribution.* This study is important as it could make knowledge contributions to the Social Science's research fields in Malaysia by drawing the public's attention to the seriousness of the issue of compulsive buying behavior in today's society.

Compulsive buying behavior as one of behavioral addiction and social problems deserved more attention from the public. However, there is a lack of knowledge and local research in examining compulsive buying behavior among Malaysian young adults. Numerous local past studies mainly addressed other common types of behavioral addiction, such as alcohol addiction, Internet addiction and more (Billieux et al., 2015; Tang et al., 2016).

Meanwhile, most of the past studies that discussed compulsive buying behavior had been conducted in Western context. For example, in the United Kingdom, India, Brazil, Spain and so forth (Dittmar, 2005; Granero et al., 2016; Nicoli de Mattos et al., 2016; Taneja, 2015). The findings from Western context might not be suitable to generalize to Malaysia, which is an Eastern country, due to cultural differences in terms of spending behavior. It caused the findings of compulsive buying behavior to remain much unknown in the local context. Hence, it can be claimed that the issue of compulsive buying behavior quite often appears to be unknown to the Malaysian, and fewer to be raised (Moon & Attiq, 2018). It might be due to the compulsive buying behavior being an underlying and hidden type of addictive behavior, individuals might not even perceive themselves to suffer from this kind of addiction.

Furthermore, current study focuses on examining the compulsive buying behavior among young adults, which is one of the novelties of the study. The current study focuses on young adults aged between 18 to 30 years old, which covered different types of population, including adolescents, undergraduates' students and working adults. This population is the best representative as they involve the most in the buying activities, and thus, are high likely to be involved in compulsive buying behavior too (Kowalska, 2012). On top of that, it had become the novelty for the current study, because previous studies solely focus on one population, like undergraduate students (Andreou et al., 2011; Aw et al., 2018; Baker et al., 2013; Ong et al.,

2021). Therefore, the current study is significant as it could make knowledge contribution to this research area and the result of current study can be used as a reference for various parties to know the seriousness of compulsive buying behavior in Malaysia in general.

Therefore, current study can make knowledge contributions by delivering the knowledge gap and renewing the database of consumers' research on compulsive buying behavior in Malaysia, specifically through how materialism, perceived stress and gender differences contribute to the seriousness of compulsive buying behavior in Malaysia.

***Practical Contribution.*** In terms of practical contribution, the current study can serve as a reference for the practitioners from various fields. Firstly, the finding for this study can assist psychologists in developing effective intervention strategies that can assist compulsive buyers to control their compulsive buying behavior in daily lives. By understanding how materialism, perceived stress and gender differences related with compulsive buying behavior, psychologists can better understand the antecedents of compulsive buying behavior and hence developed intervention strategies based on it. The treatment plan can be more effective if it can be tailored according to an individual's compulsiveness level. In addition, psychologists also can cooperate with educators to deliver and raise the awareness of this behavioral addiction disorder among students. By doing so, it can serve as a preventive strategy for students to develop compulsive buying behavior by knowing its antecedents and consequences.

Furthermore, current study can serve as a guideline to educate the public on the importance of managing own compulsive buying behavior in daily spending. Parents may also know the importance of delivering the correct materialistic value and good spending behavior to their children starting from a young age (Palan et al., 2011). Some workshops may also be held

so that they can better educate parents on the correct parenting skills that can ensure they are using the right ways to deliver the correct materialistic value and spending behavior to their children.

Meanwhile, the findings from this study can contribute to the Consumer Psychology field in Malaysia to develop ethical and socially responsible marketing strategies. By understanding the psychological perspective of consumers' buying behavior and spending patterns, consumer psychologists may tailor the marketing strategy along with the consideration for some ethical standards that can attract more buyers. Different marketing strategies should also be altered based on gender as well (Moschis, 2017). On top of that, it can also invoke the marketers to be more ethical and socially responsible by urging customers to avoid overspending that resulted from compulsive buying (Ong et al., 2021).

## 1.7 Conceptual Definitions

*Materialism.* An intense crave for material items that are important for one's life, which are able to show identity and bring pleasure (Manchada, 2016).

*Perceived Stress.* Refers to a person's feelings or thoughts on to what extent they feel stress on a particular time or a given period (Phillips, 2013).

*Gender.* Refers to male or female, and it specifically refers to the differences caused by socialization and culture, rather than biological differences (Lee & Workman, 2018).

*Compulsive Buying Behavior.* A repetitive, long-standing, persistent purchasing behavior that happens as the first reaction when experiencing a negative mood or incident. It may contain some signs similar to craving and withdrawal (Lejoyeux & Weinstein, 2010).

**1.8 Operational Definitions**

*Materialism*. Materialism will be measured by the Material Values Scale (MVS) developed by Richins (2004). MVS consists of 15 items that cover 3 dimensions, including success, centrality, and happiness. It is measured by using a 5-point Likert scale, ranging from 1 (*strongly disagree*) to 5 (*strongly agree*) based on self-reporting methods. The higher the total score, indicates the higher the materialism.

*Perceived Stress.* Perceived stress will be measured by the Perceived Stress Scale (PSS-10) that is coined by Cohen and Williamson (1988). PSS-10 consists of 10 items in total and each item was graded based on a 5-point Likert scale, ranging from 0 (*never*) to 4 (*very often*) through self-reporting methods. The higher score indicates a person having a higher level of perceived stress.

*Compulsive Buying Behavior*. Compulsive buying behavior will be examined by the Edwards Compulsive Buying Scale (ECBS), developed by Edwards in 1993. This scale consists of 13 items and is graded through a 5-point Likert scale, ranging from 1 (*often*) to 5 (*never*) based on self-reporting methods. The higher the total score, indicates the higher the compulsivity level of a person.

**Chapter II**

**Literature Review**

**2.1 Compulsive Buying Behavior**

Compulsive buying behavior can be defined as extreme focus on buying and shopping, often losing control of purchases, and ending up with excessive consumption of unwanted and unused items (Mueller et al., 2011). People with compulsive buying behavior will encounter financial issues such as having large debts or loans. This is because when their emotions are in a negative state, they will purchase expensive items as they believe that the expensive items will make them feel happy and superior (Ong et al., 2020). Other research done by Müller et al. (2015) described compulsive buying behavior as shopping addiction, pathological buying, or compulsive buying disorder. It is a mental health condition which is characterized by persistent, excessive, impulsive, and uncontrollable consumption of products, regardless of the seriousness of psychological, social, occupational, and economic consequences (Müller et al., 2015).

Additionally, the shopping motivation of individuals with non-compulsive buying behavior is valuable and useful, while compulsive buyers bought something because they wanted to get approval from others, deal with their negative emotions, and improve their self-image (Granero et al., 2016). Konkolÿ Thege et al. (2015) stated that the long-term consequences of compulsive buying behavior involve the feelings of guilt, shame, facing financial problems, as well as relationship issues, but individuals who engage in compulsive buying behavior have difficulty in stopping this behavior. Other than that, another research mentioned that individuals tend to purchase compulsively due to their internal tension and often feel frustration. Those feelings only could be relieved by consuming compulsively (Flight et al., 2012).

On the other hand, several studies have examined psychological factors that will lead to the behavior of compulsive buying. Past research studies had shown that anxiety had a positive contribution to compulsive buying behavior. Individuals with higher anxiety levels will buy compulsively (Gallagher, 2017; Zhang et al., 2016). In addition, Biolcati (2017) stated that individuals with low self-esteem also had the tendency to become compulsive buyers. Moreover, perceived stress is another factor that leads to compulsive buying behavior. Numerous past studies depended on stress to explain the development of compulsive behavior (Grougiou et al., 2015; Rahim & Rahim, 2018). Rahim and Rahim (2018) mentioned that, in order to follow the current social trends, individuals will compare themselves with other individuals who have better lives, and therefore that comparison leads them to become more stressful, and willing to do anything to improve their current lives. By the passage of time, they tend to engage in behavioral problems such as compulsive buying behavior (Rahim & Rahim, 2018). Hence, the present study aims to examine the role of materialism, perceived stress and gender difference in compulsive buying behavior among young adults in Malaysia.

## 2.2 Materialism

Materialism is a kind of value that people attach to property and is a necessary or desirable form of action to achieve an ideal state (Tarka, 2019). It is also intrinsically linked to an individual's short-term happiness, contentment, and false sense of well-being. Besides, people have the tendency to judge themselves and others' success by comparing the quantity of materials that they have acquired (Eren et al., 2012). Another past study stated that individuals with materialism were viewed as diligent to work for a long time in order to earn more money to fulfill their desired goods and services, and they will spend more time on shopping, as well as

acquire more knowledge about those goods and services (Duh, 2015). Nonetheless, the author also mentioned that individuals with materialism tend to set unreasonable objectives or expectations to themselves and make bad evaluations on their standard of living. This behavior had negatively influenced the emotions and life satisfaction of them (Duh, 2015). While Wang (2016) described materialism as a characteristic of modern culture which expressed as possessiveness, jealousy and stinginess. This author also mentioned that individuals with lower socioeconomic status, and lower self-esteem were more likely to have tendencies in developing higher levels of materialism. In addition, individuals with materialism were observed to be less satisfied with their lives. They tend to spend more money and show a positive attitude toward borrowing money in order to consume luxury goods, so they will have a higher compulsive buying tendency (Nga et al., 2011).

## 2.3 Materialism and Compulsive Buying Behavior

Compulsive buyers would think that the more money they have spent on certain items such as bags, shoes or other things might increase their status in the society. Several past studies found that materialism has a positive relationship on compulsive buying (Ong et al., 2021; Rahim & Rahim, 2018). According to Ong et al. (2021), materialism had worked as a mediator in the relationship between power and prestige, as well as between anxiety and compulsive buying among Malaysian young adults. However, materialism would work as an independent variable in present study. Additionally, most of the studies about materialism and compulsive buying behavior were conducted in other nations. One of the past researches' finding revealed that young adults in Pakistan with materialistic are more likely to be engaged in compulsive buying behavior compared to young adults with less materialistic (Islam et al., 2017). The same result was found among Turkish college students (Eren et al., 2012). They found that there was a

significant positive correlation between compulsive buying tendency and material value among college students. Nonetheless, there was research that showed different results as materialism of Malaysian students has less tendency towards compulsive buying (Omar et al., 2015). Therefore, it is important to examine the role of materialism among young adults in Malaysia towards compulsive buying behavior.

**2.4 Perceived Stress**

In psychological perspectives, perceived stress can be defined as stimulus or response or combination of both. The stimulus of perceived stress is primarily related to external life events such as accidents, loss of a spouse and so forth which are called stressors as those events create changes in people's lives that need to be recalibrated (Koh et al., 2020; Singh & Nayak, 2015). Further, psychological imbalances can be formed by individuals' life events, and those psychological imbalances will lead individuals to perceived stress (Weaver et al., 2011). According to Lee et al. (2016), perceived stress is not just an assessment of stressful life events, but to assess the severity of the living conditions that are thought to be more stressful. They also described that when an individual perceives that his or her current life circumstances were stressful and threatening, they will evaluate themselves negatively in dealing with stress.

**2.5 Perceived Stress and Compulsive Buying Behavior**

The term 'perceived stress' is similar to stress, as past studies had used perceived stress to determine the stress level (Canale, 2019; Das et al., 2020; Samah & Hawi, 2016; Zheng et al., 2020). Thus, these two terms can be used interchangeably. Several past studies revealed that stress had a positive relationship to compulsive buying behavior (Harvanko et al., 2013; Singh &

Nayak, 2015; Zheng et al., 2020). Singh and Nayak (2015) found that adolescents in India that experienced stress had revealed higher tendencies in compulsive buying behavior compared to adolescents with less perceived stress. In addition, according to Zheng et al. (2020), the findings also showed that perceived stress was a significant predictor of compulsive buying, and they suggested that women in China with higher levels of perceived stress may be at higher risk for such compulsive behavior. Besides, Roberts and Roberts (2012) stated the early adolescents with higher levels of stress responded to have higher levels of compulsive buying behavior. Also, one of the past research findings revealed that, compulsive buyers of full-time college students from the United States, China, and Korea were scored lower on self-efficacy, and higher on measures of stress and depressive symptoms (Koh et al., 2020). Nevertheless, another finding of past research revealed that stress was a significant mediator to compulsive buying among undergraduate students in Australia (Weaver et al., 2011). Hence, the present study aims to examine the role of perceived stress in compulsive buying behavior among young adults in Malaysia.

## 2.6 Gender Differences and Compulsive Buying Behavior

Gender also known as sex, referring to the male or female, and gender specifically refers to social and culture differences, rather than biological differences (Lee & Workman, 2018). There is some difference in items purchasing between males and females. Men with compulsive buying behavior buy more electronics products, automotive and hardware; while women like to buy clothes, jewelry, shoes, and others (Lee & Workman, 2015; Nicoli De Mattos, 2016).

Numerous studies revealed that women have a higher tendency involved in compulsive buying (Lee & Workman, 2015; Weaver et al., 2011). According to Weaver et al. (2011), the findings showed that female undergraduates in Australian universities had a higher tendency to be involved in compulsive buying. Another research finding also found that there was a significant difference between male and female in compulsive buying behavior, in which females had been reported to have a higher compulsive buying tendency as compared to males among students in the United States university (Lee & Workman, 2015). Further, past research findings showed the compulsive buying index of female students was higher than male students in universities of Fuzhou and Chongqing in China (Li et al., 2014). Other than that, there was a past study conducted in Denmark about Danish's consumers that studied the age and gender in compulsive buying behavior, the results showed that women in different age groups also had a higher prevalence of compulsive buying (Reisch et al., 2011). In addition, according to Unger and Raab (2015), the findings showed that women in China and Germany had a higher level of compulsive buying than men. However, past research findings revealed that there was no difference in the compulsive buying tendency between males and females among students in the United States midwestern university (Lee & Workman, 2018). Hence, it seems to be significant in examining the role of gender differences in compulsive buying behavior among young adults in Malaysia.

## 2.7 Theoretical Framework

There are few theories that are able to support the current study, which are Social Learning Theory, Escape Theory, and Social Comparison Theory.

***Social Learning Theory***. Social Learning Theory describes how a person's new behaviors can be learnt through observation and imitation. This theory was proposed by Albert Bandura in the 1977s. He suggested that learning was a cognitive process that takes place in a social context and can occur purely through observation, imitation or direct instruction from the social interaction with socialization agents. For example, peers, family, and the mass media. In addition to the observation of behavior, learning also occurs through the observation of rewards and punishments, a process known as vicarious reinforcement. When a particular behavior was rewarded regularly, it will be most likely to occur again; conversely, if a particular behavior was often been punished, it will be most likely to be diminished (Workman & Paper, 2010).

In this study context, Albert Bandura proposed that social and cultural influences, especially family and peer influences, play a significant role in driving a person to buy compulsively (Moon et al., 2017). A person might learn from their social groups that compulsive buying can help to relieve stress. Researchers suggest that people tend to engage in compulsive buying behavior as one of the coping mechanisms for them to cope with stressful events (Granero et al., 2016). Whenever encountering negative emotion or uncomfortable feelings, compulsive buyers will have the urge to go shopping as it can help them to divert their negative emotions and temporarily relieve them from stressful events. Thus, if a person perceived people surrounding them using compulsive buying as a stress coping mechanism and they observed that it was an effective way to cope with stress, then they were more likely to learn and imitate that behavior as well (Woong, 2020). Consequently, perceived stress had exposed people to the risk of becoming compulsive buyers.

Furthermore, according to a study conducted by Duh (2015), researchers found that materialistic attitude is also learnt and cultivated throughout the socialization process with peers

and parents. It claims that the frequency of children shopping with their parents will influence the children's consumption orientation and buying behavior, including materialism. Also, children that often communicate with their parents regarding the consumption issues will be highly likely to cultivate a more rational buying behavior. In contrast, researchers reported that if parents were materialistic, then there was a higher chance for the children to be materialistic too.

Meanwhile, from the same study, researchers also found that young adults tend to refer to the buying behavior and consumption values from their peers as well. Individuals who get along with peers with less materialism were found to be less materialistic too (Duh, 2015). This is because throughout the social learning process, a person has learnt the materialistic value and buying behavior from surrounding people and at the same time they already get used to it (Richins & Chaplin, 2015). From this point of view, it can be said that materialism and compulsive buying behavior are founded and enforced through social learning, including from parents and peers (Duh, 2015).

*Escape Theory*. The Escape Theory was founded by Ronald J. Faber in 2006, and it can be used to explain the relationship between perceived stress and compulsive buying behavior. Escape Theory is talk about an individual's inclination to involve in behaviors that allow them to avoid those unpleasant psychological reactions, including negative self-perception. This theory was commonly used to explain the human behaviors, like alcohol abuse, suicide and binge eating. On top of that, Escape Theory also applied in compulsive buying with the purpose of escaping themselves from reality and compensating their personal deficiencies through compulsive buying (Rahim & Rahim, 2018).

According to this theory, it claimed that individuals who set extremely high expectations for themselves will eventually encounter self-awareness that was painful. This is due to those who set high expectations will feel stressed, depressed and anxious when they fail to meet their expectations. In turn, it will induce them to engage in compulsive buying behavior in order for them to escape from painful self-awareness. Eventually, they tend to engage themselves with some prompt activities to lift away their negative emotions, such as compulsive shopping. During that period, an individual will become irrational, and will not consider the consequences of his or her spending pattern. It may trigger them to perform compulsive buying behavior that arises from the uncontrollable urge to buy things even if they were not indeed because they just buy based on the intention of escaping themselves from the stressful events (Moon et al., 2017).

Other researchers also having a consistent viewpoint to the above claims and concluded that compulsive buying behavior was a way that can be used by a person to avoid the stress, frustration, escape from their self-awareness and reality in daily lives. In another word, compulsive buyers are able to perceive their irrational buying behavior, but they choose to fall deeper into it (Ridgway & Benson, 2006).

**Social Comparison Theory**. According to Leon Festinger (1954), Social Comparison Theory referred to the desire of humans to evaluate themselves through comparing themselves to others. It explained a person engaging in social comparison as a means for self-enhancement and self-evaluation. This theory was expanded into two domains, which are downward and upward comparisons.

Researchers found that social comparisons had played a significant role in affecting the behavioral intention of an individual, especially among the younger adults. Specifically, in this

study, researchers claimed that the Social Comparison Theory had a great impact in the development of a person's materialistic values and compulsive buying behavior (Islam et al., 2018). Individuals tend to engage in making comparisons with people around them, in terms of comparing the material possessions. This is because individuals would like to acquire extrinsic satisfaction by having a similar or a better lifestyle compared to others. This scenario is increasing along with the increased use of social media in this modern era because social media has been a new platform for people to show off their material possessions. Consequently, this social comparison has then risen the materialistic values among the individual. As time passed by, this social comparison had become a common scenario for a human's social life (Coyne et al., 2017; Liu et al., 2017).

From consumers' perspective, most of the people will compare themselves with others to figure out their own buying abilities over the others (Villardefrancos & Otero-López, 2016). This theory supported that a person who has high materialism has a higher tendency to be involved in compulsive buying behavior. This is due to materialistic people tend to compare themselves with others by using the things that they possess. In order to feel superior to others, they tend to buy things even though they do not need it, merely want to satisfy their materialistic desires (Kalhour & Ng, 2015).

Researchers also found that people who were highly comparative will have the mindset of materialistic values that they were holding would drive them to success and happiness. From this point of view, individuals with high materialism tend to be involved in social comparison and emphasize on pursuing those materials goods and set it as their central life goals. In short, Social Comparison Theory supported that high materialistic value would result in compulsive buying behavior (Islam et al., 2018).

**2.8 Conceptual Framework**

*Figure 1* below has presented the proposed conceptual framework for this study. The aim of this study is to examine the role of materialism, perceived stress and gender differences in compulsive buying behavior among young adults in Malaysia. The conceptual framework is supported by the Social Learning Theory, which is the main theory that guided the current study.

In this study, compulsive buying behavior will be the dependent variable, while materialism, gender differences and perceived stress will be the independent variables. Based on the Social Comparison Theory, this study hypothesized that materialism positively predicts compulsive buying behavior among young adults in Malaysia. Meanwhile, Escape Theory supports that perceived stress positively predicts compulsive buying behavior among young adults in Malaysia. Lastly, it is also hypothesized that there are gender differences on compulsive buying behavior, in which females have a significantly greater score compared to males in compulsive buying behavior among young adults in Malaysia.
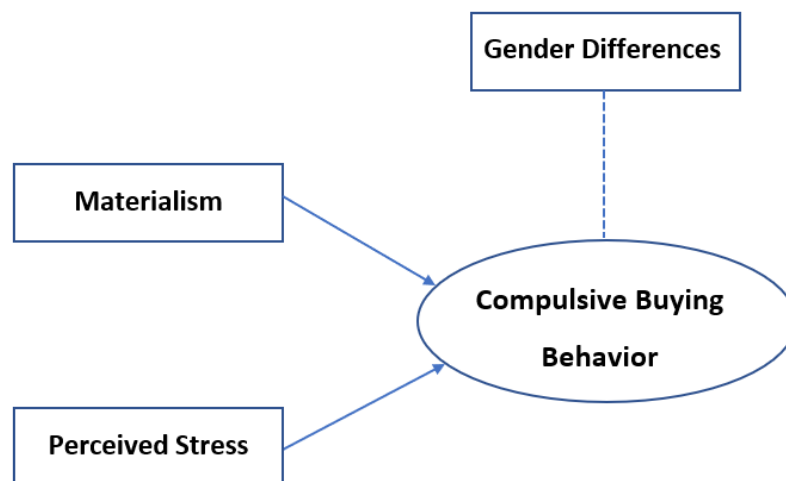


*Figure 1. The Conceptual Framework for Examining the Role of Materialism, Perceived Stress and Gender Difference in Compulsive Buying Behavior among Young Adults in Malaysia.*

## Chapter III

## Methodology

### 3.1 Research Design

A quantitative research design was conducted in this study. According to Rutberg and Bouikidis (2018), to collect data in quantitative design, researchers will use standardized questionnaires or experiments. Besides, this study had also applied survey research design to collect data. Survey research design can be defined as collecting information from respondents through answering the questions which are stated in questionnaires (Ponto, 2015). In this research, a cross-sectional study was conducted. It was used to examine the variables, which are materialism, perceived stress, and gender differences in compulsive buying behavior among young adults in Malaysia. This is because the cross-sectional study only selects the respondents based on the criteria that researchers had set for the study, as well as collect data at a time (Setia, 2016). Therefore, the cross-sectional study is mostly used to make an approximation of the prevalence of a behavior in the population (Sedgwick, 2014).

### 3.2 Sampling Procedures

*Participants*. The respondents of this study are young adults in Malaysia. According to the National Youth Development Policy, the Malaysian Youth Policy was implemented in 2018, which stated that classification of youths' age range is from 18 to 30 (*Country Youth Profile*, 2019). In this study, a non-probability sampling method was used. Firstly, a purposive sampling method was applied to recruit respondents. The purposive sampling method means selection of respondents are made based on the criteria and research objectives (Crossman, 2020). The criteria for this study are females and males young adults aged between 18 to 30 with shopping

experience, excluding non-Malaysians. Besides, the snowball sampling method was also conducted. By using this method, researchers could ask respondents to help to recruit more respondents for this study. Hence, the snowball sampling method is applicable when the population of interest is difficult to reach, as well as the compilation of population inventories poses difficulties for researchers (Abubakar et al., 2015). Meanwhile, it also enables researchers to reach out to the target population and meet the targeted number of respondents in a more effective manner.

*Location*. The research was conducted through online platforms as it is a cost and time effective method. Student researchers used online platforms as it could reach the respondents from other states in Malaysia, including East Malaysia, which are Sabah and Sarawak. The student researchers found respondents who meet the criteria of this study via social media such as Facebook, Instagram, WeChat, WhatsApp, Microsoft Teams and so forth.

*Ethical Clearance Approval*. Ethical clearance approval was applied from the UTAR Scientific and Ethical Review Committee (SERC) prior to conducting the pilot and actual data collection, to ensure the present study was conducted ethically. This study has been approved by UTAR SERC on 30 December 2021 (Re: U/SERC/299/2021) (refer to Appendix A).

*Pilot Study.* Once the ethical clearance approval was obtained, a pilot study was carried out prior to the actual data collection. The main purpose of pilot study is to examine the reliability of the scales adopted in this study as well as to examine the feasibility of the proposed research method and procedures to be applied in the study with larger scale.

According to Viechtbauer et al. (2015), he recommends the rule of thumb in determining the sample size for pilot study is 59. Thus, the current pilot study involved 59 Malaysian young adults, with shopping experience, and aged 18 to 30 years old. The data collection period for pilot study was lasted for two weeks, starting from 1 January 2022 until 15 January 2022.

*Actual Study.* After completing the pilot study, the data collection for actual study was proceeded. As calculated using G Power, the target sample size for the actual study was 129 respondents. However, at the end, the student researchers were able to recruit 210 respondents to participate in the current study. The data collection period for the actual study was lasted for 1 month, which was from 15 January 2022 till 15 February 2022.

*Reliability Test of Pilot Study and Actual Study.* A reliability test was conducted for both the pilot and the actual study, to test the reliability of each of the three instruments individually as well as the total reliability of the questionnaire. Ursachi et al. (2015) proposed that, an instrument with Cronbach alpha ($\alpha$) ranging between .60 to .70 shows an acceptable level of reliability, while Cronbach alpha ($\alpha$) of .80 or greater was considered as having a good internal consistency. The reliability result of the pilot study was portrayed in Table 1. The result indicated that all the reliability for three scales adopted in the present study fell within the acceptable range, which are MVS (.757), PSS-10 (.697) and ECBS (.830). Additionally, ECBS has a good internal consistency. Therefore, it indicated that all the scales used in the questionnaire were reliable and may proceed to the actual study.

After completing the data collection for actual study, a reliability test was also conducted to assess the reliability of all the three scales in the actual study. As reported in Table 1, three of the scales reported to have acceptable reliability as well. The Cronbach's alpha values for MVS, PSS-10 and ECBS were found to be .604, .637, and .751 respectively. It constitutes the total reliability to be .537.

**Table 1**

*Display of Cronbach's Alpha for MVS, PSS-10, and ECBS in the Pilot Study (N = 59) and the*

*Actual Study (N = 210)*

| Variables | Number of Item | Pilot Study (N = 59) | Actual Study (N = 210) |
|---|---|---|---|
| Material Values Scale (MVS) | 15 | .757 | .604 |
| Perceived Stress Scale (PSS-10) | 10 | .697 | .637 |
| Edwards Compulsive Buying Scale (ECBS) | 13 | .830 | .751 |
| Total Reliability for 3 Scales | 38 | .595 | .537 |

**3.3 Sample Size, Power and Precision**

This study was using G Power to conduct the sample size analysis. Linear multiple regression: Fixed model, R2 deviation from zero in F tests was used. In G Power software, the calculation of sample size requires effect size, the type I error or alpha, power and the number of

predictors. According to Cohen's (1988) guideline, the medium effect size, 0.15 was used in this analysis. 0.05 alpha and 0.95 power was used. There were two predictors in this study, which were materialism and perceived stress. Analysis showed that the sample size was 107 (refer to Appendix B). Since the medium effect size was used, more than 107 data were encouraged to collect. Past study recommended 10% to 30% for non-response rate (Israel, 1992). Another study recommended that 10% to 20% respondents should be added to the estimated sample size to compensate for incomplete data such as missing response, withdrawal and inability to follow-up response (Suresh & Chandrashekara, 2012). The same study also suggested that 20% should be added to the calculated sample size to avoid confounding variables for non-randomized research. Since this study was conducted by using a non-random sampling method, 20% was highly recommended. After adjusting the non-response rate, the targeted sample size for this study was 128.4 and round off became 129 respondents.

**3.4 Data Collection Procedures**

*Inclusion Criteria and Exclusion Criteria.* There are few inclusion criteria used to recruit respondents for the current study. This study focused on recruiting male and female respondents who are young adults that were aged between 18 to 30 years old and local Malaysian only. Most importantly, the respondents must have had the experience of shopping before, either through online or physical shopping. For those who out of these criteria, such as out of the age range of 18 to 30 years old, non-Malaysian, and without shopping experience will be excluded. In order to ensure the respondents fulfil these inclusion criteria, three screening questions will be asked at the first page of the survey. The three screening questions are "Are you a Malaysian citizen?", "Are you aged between 18 to 30 years old?" and "Do you have any shopping

experience before?" By doing so, it can make the respondents aware of whether they are eligible to participate in the study as well as it can facilitate the data cleaning process after the data collection is done.

*Procedures of Obtaining Consent.* Before the respondents started to answer the survey, there was an informed consent in the first page of the questionnaire. The informed consent will include the information such as the research topic, an introduction on student researcher's background and research purpose, procedures and confidentiality, the breakdown of the questionnaire, expectation on completion time needed, inclusion criteria, researchers' contact details and so on. Respondents who agree to give full consent to participate in the study will only proceed to answering the survey.

*Description of Data Collection Procedure.* Firstly, an online questionnaire was created via Qualtrics software (refer to Appendix C). After that, the questionnaire was distributed to young adults from different states in Malaysia by sharing the link to respondents through online platforms and social media such as WhatsApp, Facebook, WeChat and Instagram. Before answering questionnaires, a briefing was provided to the respondents regarding the purpose of current study. An informed consent was also attached on the first page of the questionnaire.

## 3.5 Instruments

This study adapted self-report questionnaires as the measurement in collecting data. The questionnaire started with an informed consent, "Personal Data Protection Notice" and followed by Section A to Section E. Section A of the questionnaire consisted of three screening questions

to check the eligibility of the respondents. Section B consisted of 9 questions, which required

respondents to provide their basic demographics information, including age, gender, nationality,

ethnicity, current living state, employment status, relationship status, shopping experience and

income per month. The purpose of collecting these demographic data is to enable the student

researchers to have a better understanding of the characteristics of the respondents. After that, the

following Section C, D and E of the questionnaire involved the relevant scales for this study,

which were Material Values Scale (15 items), Perceived Stress Scale (10 items) and Edwards

Compulsive Buying Scale (13 items). All the questions and scales were prepared in the English

version for respondents' better understanding, as English is the language that is most likely to be

understood by all the respondents from all races.

*Material Values Scale (MVS).* The Material Values Scale (MVS) developed by Richins

(2004), is an instrument used to examine the level of materialism of a person through their belief

of the importance of possessing material goods. It was a short version scale which consists of 15

items, instead of 18 items in the original version that was developed by Richins and Dawson

(1992). This shorter version of MVS was found to have a dimensional structure that is more

stable than the original version as well as the 15-items scale possesses a better psychometric

property than the original scale. MVS covered 3 subscales, which are success (5 items),

centrality (5 items) and happiness (5 items).

It is graded through a 5-point Likert scale, ranging from 1 (*strongly disagree*) to 5

(*strongly agree*) based on self-reporting methods. The examples of the questions asked in the

scale of success are "The things I own say a lot about how well I'm doing in life." and "I like to

own things that impress people". For the subscales of centrality, "The things I own aren't all that

important to me." and "I like a lot of luxury in my life." are the example of questions being asked. Meanwhile, the examples of questions under happiness are "I have all the things I really need to enjoy life." and "My life would be better if I owned certain things I don't have."

There are 6 reverse-scoring items in this scale. After reversing the items with reversed scoring, the total score is computed for each respondent by summing up the score for each item. The higher the total score, indicates the higher the level of materialism. This scale was reported to have good reliability for all the subscales, success ($\alpha$ =.76), centrality ($\alpha$ =.67), and happiness ($\alpha$ =.78). It then contributes to the combined scale to have a high internal consistency ($\alpha$ =.86). This scale also has good content validity, which is .35 in overall, which consists of success (.30), centrality (.24), and happiness (.32) (Richins, 2004).

*Perceived Stress Scale (PSS-10).* The Perceived Stress Scale (PSS-10) is coined by Cohen and Williamson (1988), and it is used to measure a person's perception of stress, whereby the extent to which a situation that happened in one's life is perceived as stressful. PSS-10 consists of 10 items that cover 2 factors, which are 6 negatively worded items representing perceived helplessness and 4 positively worded items representing perceived self-efficacy. Each item was graded based on a 5-point Likert scale, ranging from 0 (*never*) to 4 (*very often*) through self-reporting methods. For each question in this scale, respondents are required to answer how frequently they felt in a particular way under the situation. Questions such as "In the last month, how often have you felt nervous and stressed?" and "In the last month, how often have you felt that you were on top of things?" were asked in this questionnaire.

There are four reverse-scoring items under PSS-10, which are questions 4, 5, 7, 8. The total score is calculated through summing up all the scores for each item after reversing the score

for those reverse-scoring items. The possible score is ranging from 0 to 40, the higher score

indicates a person having a higher level of perceived stress. In detail, the score can be

categorised into 3 levels, which are low perceived stress (0 - 13); moderate perceived stress (14 -

26); and high perceived stress (27 - 40). PSS-10 has a high internal consistency ($\alpha = .82$). The

average inter-item correlations for PSS-10's negative subscale was 0.79 and 0.69 for its positive

subscale. In addition, this scale also has an adequate convergent validity for stressful life events

($r = .13$, $p < .001$) (Andreou et al., 2011; Bastianon et al., 2020).


**Edwards Compulsive Buying Scale (ECBS).** Edwards Compulsive Buying Scale

(ECBS) is coined by Edwards (1993) to determine the compulsivity or tendency of buying

behavior of an individual. This scale consists of 13 items and is graded through a 5-point Likert

scale, ranging from 1 (*often*) to 5 (*never*) based on self-reporting methods. The respondent will

answer the questionnaire by indicating how often they involve in certain behavior or agreement

level towards that particular behavior.

ECBS covered five factors regarding the compulsive buying behavior, including the

tendency to spend (item 4, 12); feelings and experiences during shopping (item 2, 3, 5, 7);

impulsive or unplanned buying (item 6); post-purchase guilt (item 9 and 11) and dysfunctional

spending (item 1, 8, 10, 13). Few examples of questions asked in this scale are "I buy things I

don't need or won't use.", "I sometimes feel compelled to go shopping.", "I go on a buying binge

when I'm upset, disappointed, depressed, or angry." and so forth.

There are 2 reverse-scoring items out of 13 items in the scale. Thus, the total score is

computed for each respondent by reversing the score of the reverse-scoring item and then

summing up the score for each item. There is no cut-off score for this scale. Thus, the higher the

total score, suggested the higher compulsivity buying tendency. This scale has an excellent

internal consistency ($\alpha$ = .87), composed of Cronbach's alpha for 5 subscales, ranging from .76

to .91. Meanwhile, the goodness of fit index (GFI) for ECBS is .912; degrees of freedom (*p*

=.093). From this perspective, it proved that ECBS had excellent construct validity (Edwards,

1993).

## Chapter IV

## Results

### 4.1 Assumption of Normality

In this study, there are five indicators which are skewness, kurtosis, Kolmogorov-Smirnov test (K-S test) and Shapiro-Wilk, histogram and Q-Q plot were used to test the normality distribution of every variable.

The Table 2 showed that the skewness value of materialism, perceived stress and compulsive buying behavior were .130, -.002, and -.061. While for kurtosis values, materialism was -.103, perceived stress was -.054, and compulsive buying behavior was -.270. According to Hair et al. (2010) and Bryne (2010), the acceptable values for skewness were within the range of ±2, while kurtosis were ±7. Therefore, the skewness and kurtosis values of all variables revealed that there was no violation for the assumption.

**Table 2**

*Skewness Value and Kurtosis Value for All Variables*

|  | Skewness | Kurtosis |
| --- | --- | --- |
| Materialism | .130 | -.103 |
| Perceived stress | -.002 | -.054 |
| Compulsive buying behavior | -.061 | -.270 |

Additionally, Kolmogorov-Smirnov test (K-S test) and Shapiro-Wilk test were used to examine the normality in this study. Gupta et al. (2019) stated that when *p* value is greater

than .05, the data are called normal distribution. Based on Table 3, compulsive buying behavior was normally distributed as its $p$ value is greater than .05 in K-S test and Shapiro-Wilk test which was .200 and .456. However, the value of the K-S test for materialism was $D(210) = .068$, $p = .020$, for perceived stress was $D(210) = .066$, $p = .029$ which are considered as non-normal. Besides, the $p$ value of all variables for the Shapiro-Wilk test was above .05. According to Mohd Razali and Yap (2011), for all types of distributions and sample sizes, the Shapiro-Wilk test is the most valid test as compared to the K-S test. Hence, this assumption was not violated.

**Table 3**

*Kolmogorov-Smirnov Test and Shapiro-Wilk Test for All Variables*

|  | Kolmogorov-Smirnov[a] | | | Shapiro-Wilk | | |
|---|---|---|---|---|---|---|
|  | Statistic | df | Sig. | Statistic | df | Sig. |
| Materialism | .068 | 210 | .020 | .988 | 210 | .072 |
| Perceived stress | .066 | 210 | .029 | .992 | 210 | .337 |
| Compulsive buying behavior | .055 | 210 | .200[*] | .993 | 210 | .456 |

[*]. This is a lower bound of the true significance.

For histograms, it revealed that all variables had normal curves, which indicated that those variables were normally distributed (refer to Appendix F). Lastly, based on the appendix F, Q-Q plots presented that the observed values for every variable fell on the diagonal line which implied a good sign. Thus, the assumption was not violated.

**4.2 Assumptions of Multiple Linear Regression (MLR)**

The student researchers had tested this study with multicollinearity, independence of errors, normality of residual, linearity of residual, homoscedasticity, and multivariate outliers and influential cases.

*Multicollinearity.* This assumption was not violated when tolerance value was higher than .10 and Variance Inflation Factor (VIF) was lower than 10 (Hair et al., 2010). Table 4 showed the tolerance value for both materialism and perceived stress was .970, while the VIF value for both of them was 1.031. The results showed both variables scored more than .10 in tolerance and less than 10 in VIF. Therefore, this multicollinearity assumption was not violated.

**Table 4**

*Collinearity Statistics for Materialism and Perceived Stress*

|  | Collinearity Statistics | |
| --- | --- | --- |
|  | Tolerance | VIF |
| Materialism | .970 | 1.031 |
| Perceived Stress | .970 | 1.031 |

***Independence of Error.*** Durbin-Watson was used to check the independence of error. Based on Field (2009), the assumption was violated when the Durbin-Watson's value was smaller than 1 or greater than 3. Table 5 showed the Durbin-Watson's value for the model of materialism, perceived stress and compulsive buying behavior was 1.785, which was in the range of 1 and 3. It concluded that the model met to this assumption.

**Table 5**

*Durbin-Watson Analysis of Materialism and Perceived Stress as Predictors of Compulsive Buying*

| Model | Durbin-Watson |
| --- | --- |
| 1 | 1.785 |

***Normality of Residual, Linearity of Residual and Homoscedasticity.*** According to Field in 2013, these three assumptions were not violated when the residuals were scattered on the plots randomly. According to the figure 1 in appendix G which is in page 88, the residuals were randomly scattered, and it showed an oval shape. The figure indicated all these three assumptions were met.

***Multivariate Outliers and Influential Cases.*** Based on the Table 6, cases 67, 93, 100, 101, 102, 127, 135, 144, 161 and 174 showed they might be the potential outliers. To sort out the real multivariate outliers and influential cases, student researchers have used three methods which were Cook's distance, Centered-leverage, and Mahalanobis distance.

The outliers happened when Cook's distance value greater than 1 (Cook & Weisberg, 1982); greater than 3 times of leverage's value (Pituch & Stevens, 2016), and the *p* value of Mahalanobis's distance smaller than 0.001 (Chang, 2014). The leverage value was calculated by using the formula of $(p + 1)/n$ which *p* is the predictor and *n* is the sample size of the study. In this study, the leverage value was (2+1)/210 =.014. Three times of leverage's value should be calculated as Ellis and Morgenthaler (1992) suggested. Hence, the centered leverage value of this study was .042.

From the ten cases of potential outliers, all cases showed less than 1 in the cook's distance, nine cases smaller than .042 in centered leverage and all cases were more than 0.001 in the *p* value of Mahalanobis's distance.

There was one outlier or influential case, which is the case number of 67 due to it greater than .042 in centered leverage. In this case, student researchers have decided to remove case number 67. The remaining number of respondents were 209.

**Table 6**

*Casewise Diagnostics*

| Case Number | Std. Residual | Total_ECBS | Predicted Value | Residual |
|---|---|---|---|---|
| 67 | 2.219 | 53 | 39.55 | 13.450 |
| 93 | 2.018 | 59 | 46.77 | 12.233 |
| 100 | 2.089 | 56 | 43.34 | 12.665 |
| 101 | 2.519 | 60 | 44.73 | 15.272 |
| 102 | 2.014 | 54 | 41.79 | 12.208 |
| 127 | -2.771 | 30 | 46.80 | -16.798 |
| 135 | 2.162 | 60 | 46.89 | 13.105 |
| 144 | -2.660 | 29 | 45.13 | -16.126 |
| 161 | -2.402 | 32 | 46.56 | -14.563 |
| 174 | -2.225 | 33 | 46.49 | -13.488 |

**Table 7**

*Case Summaries*

| Case Number | Mahalanobis Distance | P value | Cook's Distance | Centered Leverage Value |
|---|---|---|---|---|
| 67 | 10.33031 | .66969 | .09940 | .04943 |
| 93 | 1.37587 | .95139 | .01576 | .00658 |
| 100 | .95951 | .17224 | .01387 | .00459 |
| 101 | 3.51772 | .22696 | .04772 | .01683 |
| 102 | 2.96600 | .25942 | .02662 | .01419 |
| 127 | 2.40172 | .12798 | .04299 | .01149 |
| 135 | .81992 | .80958 | .01377 | .00392 |
| 144 | .16719 | .50054 | .01327 | .00080 |
| 161 | 2.30248 | .37255 | .03134 | .01102 |
| 174 | 1.71038 | .44151 | .02193 | .00818 |

All variables did not violate the assumptions of multiple linear regression.

**4.3 Descriptive Statistics**

Table 8 revealed the demographic information of the respondents, which are age, gender, nationality, ethnicity, current living state, employment status, relationship status, shopping experience, as well as income level. The mean ($M$) and standard deviation ($SD$) of age were 22.02 years and 1.602. There were 48.3% were aged 22 ($n = 101$), followed by 20.1% were aged 21 ($n = 42$), 11.5% were aged 23 ($n = 24$), 10% were aged 20 ($n = 21$), 2.9% were aged 25 ($n = 6$), 1.9% were aged 28 ($n = 4$), 1.4% for aged 24 ($n = 3$) and 27 ($n = 3$), 1% were aged 19 ($n = 2$), 0.5% for aged 18 ($n = 1$), 26 ($n = 1$) and 29 ($n = 1$). In this study, most of the respondents were females as it constituted for 56.9% ($n = 119$), while the males were 43.1% ($n = 90$), and the mean and standard deviation were 1.57 and .496.

For nationality ($M = 1.00$, $SD = .000$), 100% of respondents were Malaysian ($n = 209$), which means that non - Malaysian were excluded from this study. Besides, for ethnicity ($M = 2.02$, $SD = .267$), most of the respondents were Chinese which was 94.3% ($n = 197$), followed by 3.3% of Indians ($n = 7$), 1.9% of Malays ($n = 4$), and 0.5% of others ($n = 1$) which is from Punjabi. Additionally, the current living state of respondents were 29.7% from Perak ($n = 62$), followed by 23.9% from Penang ($n = 50$), 20.1% from Selangor ($n = 42$), 10% from Johor ($n = 21$), 4.3% from Kedah ($n = 9$), 3.3% from Kuala Lumpur ($n = 7$), 2.4% from Melaka ($n = 5$), 1.9% from Negeri Sembilan ($n = 4$) and Pahang ($n = 4$), 1.4% from Sarawak ($n = 3$), and 1% from Sabah ($n = 2$).

Moreover, the employment status ($M = 2.76$, $SD = .622$) in the present study was mostly students ($n = 179$) which occupied 85.6%, followed by 10% employed ($n = 21$) and 4.3% unemployed ($n = 9$). Further, for relationship status ($M = 1.45$, $SD = .831$), more than half of the respondents, 77% of them were single ($n = 161$), 1% was married ($n = 2$), and 22% were in a

relationship ($n$ = 46). For shopping experience ($M$ = 2.90, $SD$ = .432), 94.7% of respondents

have online and physical shopping experience ($n$ = 198), followed by 4.8% of respondents only

have online shopping experience before ($n$ = 10), and 0.5% of respondents only have physical

shopping experience before ($n$ = 1). In addition, the mean and standard deviation of income level

were 1.11 and .343. 90% of respondents ($n$ = 188) have income between RM0 to RM1999, 9.1%

of them ($n$ = 19) between RM2000 to RM4999, and 1% of respondents ($n$ = 2) were above

RM5000.

Based on Table 9, it showed the mean and standard deviation of all variables. The

independent variables in this study were materialistic, perceived stress, and also gender

differences. The mean and standard deviation of materialism were 46.67 and 5.369. For

materialism, 48.8% ($n$ = 102) were lower than mean, and 51.2% ($n$ = 107) were higher than

mean. Further, for perceived stress ($M$ = 19.72, $SD$ = 4.467), 47.8% ($n$ = 100) were lower than

mean, while 52.2% ($n$ = 109) were higher than mean. In addition, compulsive buying behavior

was the dependent variable in this study, the mean and standard deviation for this variable were

45.05 and 6.350. 53.6% ($n$ = 112) were lower than mean, and 46.4% ($n$ = 97) were higher than

mean in this dependent variable.

Table 10 revealed the level of perceived stress of the respondents. It showed that 86.6%

of respondents ($n$ = 181) have moderate perceived stress, followed by 7.2% of them ($n$ = 15)

have low perceived stress, as well as 6.2% of respondents ($n$ = 13) have higher levels of

perceived stress.

**Table 8**

*Demographics Information of Respondents (N = 209)*

| Variable | | Frequency | Percentage (%) | Mean | SD |
|---|---|---|---|---|---|
| Age | | | | 22.02 | 1.602 |
| | 18 | 1 | .5 | | |
| | 19 | 2 | 1.0 | | |
| | 20 | 21 | 10.0 | | |
| | 21 | 42 | 20.1 | | |
| | 22 | 101 | 48.3 | | |
| | 23 | 24 | 11.5 | | |
| | 24 | 3 | 1.4 | | |
| | 25 | 6 | 2.9 | | |
| | 26 | 1 | .5 | | |
| | 27 | 3 | 1.4 | | |
| | 28 | 4 | 1.9 | | |

|  |  | 29 | 1 | .5 |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Gender |  |  |  |  | 1.57 | .496 |
|  | Male | 90 |  | 43.1 |  |  |
|  | Female | 119 |  | 56.9 |  |  |
| Nationality |  |  |  |  | 1.00 | .000 |
|  | Malaysian | 209 |  | 100 |  |  |
| Ethnicity |  |  |  |  | 2.02 | .267 |
|  | Malays | 4 |  | 1.9 |  |  |
|  | Chinese | 197 |  | 94.3 |  |  |
|  | Indians | 7 |  | 3.3 |  |  |
|  | Others | 1 |  | .5 |  |  |
| Current living state |  |  |  |  |  |  |
|  | Johor | 21 |  | 10.0 |  |  |
|  | Kedah | 9 |  | 4.3 |  |  |

| | | | | | |
|---|---|---|---|---|---|
| | Kuala Lumpur | 7 | 3.3 | | |
| | Melaka | 5 | 2.4 | | |
| | Negeri Sembilan | 4 | 1.9 | | |
| | Pahang | 4 | 1.9 | | |
| | Penang | 50 | 23.9 | | |
| | Perak | 62 | 29.7 | | |
| | Sabah | 2 | 1.0 | | |
| | Sarawak | 3 | 1.4 | | |
| | Selangor | 42 | 20.1 | | |
| Employment status | | | | 2.76 | .622 |
| | Employed | 21 | 10.0 | | |
| | Unemployed | 9 | 4.3 | | |
| | Students | 179 | 85.6 | | |

| | | | | | |
|---|---|---|---|---|---|
| Relationship status | | | | 1.45 | .831 |
| | Single | 161 | 77.0 | | |
| | Married | 2 | 1.0 | | |
| | In a relationship | 46 | 22.0 | | |
| Shopping experience | | | | 2.90 | .432 |
| | Yes, I only have online shopping experience before. | 10 | 4.8 | | |
| | Yes, I only have physical shopping experience before. | 1 | .5 | | |
| | Yes, I have both online and physical | 198 | 94.7 | | |

| | | | | | |
|---|---|---|---|---|---|
| | shopping experience before. | | | | |
| Income level | | | | 1.11 | .343 |
| | RM0-RM1999 | 188 | 90.0 | | |
| | RM2000-RM4999 | 19 | 9.1 | | |
| | RM5000 above | 2 | 1 | | |

**Table 9**

*Demographic Information of Variables (N = 209)*

| Variables | Frequency | Percentage (%) | M | SD |
|---|---|---|---|---|
| Materialism | | | 46.67 | 5.369 |
|     Lower than mean | 102 | 48.8 | | |
|     Higher than mean | 107 | 51.2 | | |
| Perceived stress | | | 19.72 | 4.467 |
|     Lower than mean | 100 | 47.8 | | |
|     Higher than mean | 109 | 52.2 | | |
| Gender differences | | | 1.57 | .496 |
| Compulsive buying behavior | | | 45.05 | 6.350 |
|     Lower than mean | 112 | 53.6 | | |
|     Higher than mean | 97 | 46.4 | | |

**Table 10**

*Level of Perceived Stress (N = 209)*

| Variables | Frequency | Percentage (%) |
|---|---|---|
| Low perceived stress | 15 | 7.2 |
| Moderate perceived stress | 181 | 86.6 |
| High perceived stress | 13 | 6.2 |

## 4.4 Inferential Analysis

Several inferential analyses were conducted through SPSS Version 23 to examine the five hypotheses for current study, including Pearson's Product-Moment Correlation (PPMC), Multiple Linear Regression (MLR), and Independent Sample t-test.

### 4.4.1 Pearson's Product-Moment Correlation (PPMC) in Examining Hypothesis 1 and 2

Firstly, PPMC was carried out to examine the strength and direction between two variables. In the present study, hypotheses 1 and 2 were analyzed using PPMC.

***H₁: Materialism has a significant positive relationship with compulsive buying behavior among young adults in Malaysia.*** A PPMC was run to examine the relationship between materialism and compulsive buying behavior. Table 11 reported there was a relationship between materialism and compulsive buying behavior, $r(209) = -.332$, $p < .01$. On top of that, based on Cohen's Rule of Thumb (1988), there was a medium relationship between materialism and

compulsive buying behavior, as the *r* value in the present study ranged in between .300 to .499. This result showed that materialism does have a relationship with compulsive buying behavior, but its relationship was negative. In this case, where a hypothesis was not completely confirmed, the alternate hypothesis was considered as partially accepted (Nelson, 1958), Hence, it can be concluded that there was a negative and medium relationship between materialism and compulsive buying behavior.

**Table 11**

*Pearson's Product-Moment Correlation (PPMC) between Materialism and Compulsive Buying Behavior*

|  |  | Compulsive Buying Behavior |
| --- | --- | --- |
| Materialism | Pearson's Correlation | -.332** |
|  | Sig. (2 tailed) | .000 |
|  | N | 209 |

**. Correlation is significant at the 0.01 level (2-tailed).

**H2: Perceived stress has a significant positive relationship with compulsive buying behavior among young adults in Malaysia.** According to Table 12, there was no significant positive relationship between perceived stress and compulsive buying behavior, $r$ (209) = -.106, $p > .001$. In addition, according to Cohen's Rule of Thumb (1988), it indicated that perceived stress and compulsive buying behavior had a weak relationship, as its $r$ value ranged between .100 to .299. Hence, the alternative hypothesis was rejected.

**Table 12**

*Pearson's Product-Moment Correlation (PPMC) between Perceived Stress and Compulsive Buying Behavior*

|  |  | Compulsive Buying Behavior |
|---|---|---|
| Perceived Stress | Pearson's Correlation | -.123** |
|  | Sig. (2 tailed) | .076 |
|  | N | 209 |

**. Correlation is significant at the 0.01 level (2-tailed).

### 4.4.2 Multiple Linear Regression (MLR) in Examining Hypothesis 3 and 4

MLR was used to test if materialism and perceived stress significantly predicted compulsive buying behavior. Therefore, it was suitable to test for hypothesis 3 and 4 in the present study.

*H3: Materialism positively predicts compulsive buying behavior among young adults in Malaysia.*

*H4: Perceived stress positively predicts compulsive buying behavior among young adults in Malaysia.*

Based on Table 13, the result had reported that the model was statistically significant, $F(2, 207) = 11.482$, $p = .000$ and accounted for 9.1% of the variance (see Table 14). Furthermore, it was found that materialism ($\beta = -.302$, $p = .000$) is a negative predictor of compulsive buying behavior. The third hypothesis is partially accepted. Meanwhile, perceived stress ($\beta = -.053$,

$p > .001$) was reported as not a significant predictor of compulsive buying behavior (refer to

Table 15). Therefore, the fourth hypothesis was not supported.

**Table 13**

*ANOVA Table*

| Model | | Sum of Square | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 843.827 | 2 | 421.913 | 11.482 | .000[b] |
| | Residual | 7606.630 | 207 | 36.747 | | |
| | Total | 8450.457 | 209 | | | |

a.     Dependent Variable: Total_ECBS

b.     Predictors: (Constant), Total_PSS, Total_MVS

**Table 14**

*Model Summary*

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|---|---|---|---|---|---|
| 1 | .316[a] | .100 | .091 | 6.062 | 1.785 |

a.     Predictors: (Constant), Total_PSS, Total_MVS

b.     Dependent Variable: Total_ECBS

**Table 15**

*Coefficients Table*

| | Unstandardized Coefficients | | Standardized Coefficients | | |
| --- | --- | --- | --- | --- | --- |
| Model | B | Std. Error | Beta | t | Sig. |
| 1  (Constant) | 63.105 | 3.832 | | 16.467 | .000 |
| Total_MVS | -.354 | .078 | -.302 | -4.516 | .000 |
| Total_PSS | -.075 | .094 | -.053 | -.799 | .425 |

a.    Dependent Variable: Total_ECBS

### 4.4.3 Independent Sample T-Test in Examining Hypothesis 5

A t-test analysis was conducted to compare differences between two independent groups. Among the three types of t-tests, an independent sample t-test was chosen in the current study. The reason was the two independent groups that referred to in the current study were the variables of gender differences, which consists of males' and females' respondents. They are derived from the same study, data collected at the same time, and they are mutually exclusive.

*$H_5$: Malaysian female young adults are more likely to engage in compulsive buying behavior than Malaysian male young adults.* An independent-samples *t*-test was conducted to test the difference in compulsive buying behavior among males' and females' young adults in Malaysia. As depicted from Table 16, there was no significant gender difference in the score for compulsive buying behavior, $t(207) = 2.904$, $p > .001$. The mean compulsive buying score for males ($M = 46.49$, $SD = 6.232$) was slightly higher than the mean for females ($M = 43.96$, $SD =$

6.246). In summaries, there is no significant gender difference in compulsive buying behavior among males' and females' young adults in Malaysia.

**Table 16**

*Independent Sample t-test in Comparing Gender Difference Compulsive Buying Behavior among Young Adults in Malaysia (N = 209)*

| Gender | N | Mean | SD | $t$ | df | $p$ | Decision |
|--------|-----|-------|-------|-------|-----|------|-------------|
| Male | 90 | 46.49 | 6.232 | 2.904 | 207 | .004 | Reject $H_5$ |
| Female | 119 | 43.96 | 6.246 | | | | |

## Chapter V

## Discussion

### 5.1 Discussion of Findings

*H1: Materialism has a significant positive relationship with compulsive buying behavior among young adults in Malaysia.* The first hypothesis was partially supported based on the results. Various past studies were supporting the idea that materialism has a positive relationship with compulsive buying behavior (Ong et al., 2021; Rahim & Rahim, 2018). However, our result showed a negative and medium relationship between materialism and compulsive buying behavior. The inconsistency between present results and past findings may be due to the differences in demographic of respondents, such as their purchasing power and student status.

From the demographic of our respondents, it can be seen that 85.6 % of them are students and 90% of them are having the income level between RM0 to RM1999. This can be concluded as most of the respondents are not having the enough purchasing power although they are materialist and willing to buy compulsively. University students in Malaysia also find it difficult to borrow money from various sources, due to not having enough credit to borrow bank loans and the requirement to borrow student loans is also high, such as they need to submit their university results and family socioeconomic background as evidence to apply for it. Hence, university students may not be equipped with the financial condition that is able to support and fulfil their compulsive buying behavior. Research also showed young adults who have been working early are more likely to show high compulsive buying than young adults who are still in universities (Ye et al., 2021). This evidence implies that university students did not have enough money or credit to borrow money for them to buy compulsively. Therefore, it might explain the

result obtained in this study, whereby materialism has a negative relationship with compulsive buying behavior among young adults in Malaysia.

Besides that, past studies suggested that materialists preferred to purchase luxury products than normal products (Cuandra & Kelvin, 2021; Zakaria et al., 2020). This leads to the idea that materialists who did not have enough money to purchase a luxury product are inclined to save their money temporarily and plan their future purchasing behavior. Hence, it decreases the chances of them to have compulsive buying behavior, and it may explain why materialists from young adults in Malaysia tend to not have compulsive buying behavior.

**$H_2$: Perceived stress has a significant positive relationship with compulsive buying behavior among young adults in Malaysia.** The findings of the present study found that the second hypothesis was not supported as there was no significant positive relationship between perceived stress and compulsive buying behavior among young adults in Malaysia. This result was not supported by other past studies. The findings from several past studies stated that there was a significant positive relationship between stress and compulsive buying behavior (Harvanko et al., 2013; Singh & Nayak, 2015; Zheng et al., 2020). According to Gallagher et al. (2017), compulsive buying behavior is associated with psychopathology, including mood and anxiety disorders, and compulsive buying behavior is most likely to occur in negative emotional states such as stress and anxiety.

The result may be explained by the demographic background of the respondents. In this study, half and above of the respondents were aged 21 and 22, and 85.6% of them were students. Some of the past studies reported that students tend to be involved in compulsive buying behavior as they want to escape from stressful events, such as poor academic performance

(Gallagher et al., 2017; Zheng et al., 2020). Nevertheless, the findings from Rosiek et al. (2016), revealed that the self-reporting from medical students have mentioned some sports such as cycling, running and swimming were great ways for them to cope with stress. Other than engaging in sports, they also stated that listening to music, talking to a person with closer relationships, resting and sleeping were able to assist people to deal with their stress (Rosiek et al., 2016).

In addition, the income level for most of the respondents in the present study were RM 0 to RM 1999, which had occupied for 90%. From this point of view, due to the financial constraint, they may find other alternative ways that involve lower cost to relieve their stress. Al-Dubai et al. (2011) claimed that exercise regularly, praying, counselling, watching entertainment programmes, including yoga and tai chi were the universal strategies that Malaysian students used to cope with their stress. It has explained the result of the current study, whereby there was no significant positive relationship between perceived stress and compulsive buying behavior among young adults in Malaysia, as in addition to engaging in compulsive buying behavior, there are still a lot of ways in which the respondents may use to release their stress.

*H3:  Materialism positively predicts compulsive buying behavior among young adults in Malaysia.* According to the results, the third hypothesis was not supported, in which materialism does not positively predict compulsive buying behavior among young adults in Malaysia. According to various past literatures (Bhatia, 2019; Dittmar & Drury 2000; Harnish et al., 2018; Islam et al., 2017; Krueger, 1988; Manolis & Roberts, 2012; Moulding et al., 2017; Yurchisin & Johnson, 2004), their results showed that materialists have more spending behavior which indirectly indicated that people who are high materialism have high compulsive buying

behavior, no matter buying in a practical shop or online platform. However, based on our result, young adults in Malaysia who have high materialism tend to have less compulsive buying behavior.

The outcome can be described by the perspective demonstrated by a psychologist, Miriam Tatzel (2002). He suggested that there were two types of materialists which were loose type and tight type. This perspective is also similar to the view by Gornik-Durose and Pilch (2016), whereby there were mouse type materialists and peacock type materialists.

Although both materialists are concerned about their money and material, people who are loose or mouse type materialist will tend to spend money by consuming goods to increase their security and value, whereas people who are tight or peacock type materialist will prefer to accumulate their money and their materialism value become more internalized. The example of the peacock type materialist is Silas Marner.

Górnik-Durose and Pilch (2016) suggested that the materialist type may affect the findings of compulsive buying. Hence, the finding from present study can be explained by the respondents that recruited in the present study may be more inclined on tight or peacock materialists which showed they are more interested in accumulating wealth, less likely to purchase materials and less compulsive buying behavior to occur.

*H4: Perceived stress positively predicts compulsive buying behavior among young adults in Malaysia.* The findings of the present study also showed that the fourth hypothesis was not supported as perceived stress was not a significant predictor for compulsive buying behavior among young adults in Malaysia. One of the past studies revealed that materialism and stress are the determining factors which influence the compulsive buying behavior of Generation Y in

Malaysia (Rahim & Rahim, 2018). The result of this past study was not consistent with the current study. As mentioned above, most of the respondents were students, they may choose to attend various physical activities such as exercise to cope with their stress instead of engaging in compulsive buying (Al-Dubai et al., 201; Rosiek et al., 2016).

On the other hand, the fourth hypothesis of current study was inconsistent with past studies because the target sample and sample size were distinctive. According to Singh and Nayak (2015), their study recruited 246 adolescents with the age range of 15 to 18 as target samples. As their research was conducted in India, the survey used Hindi and English language in order to ease the respondents to understand the questions from questionnaires. Another past study was conducted in China, researchers only recruited female consumers aged between 16 to 45 years (Zheng et al., 2020). In that research, researchers used a Sojump software, which is a famous online consumer research company in China to obtain data. By using Sojump, female consumers could fill out the questionnaire voluntarily via the link of the website, as well as they successfully collected data from 548 female respondents (Zheng et al., 2020).

On the contrary, the target samples of the current study were 209 young adults aged 18 to 30, and only the English version of questionnaires was distributed to the respondents through online platforms such as Microsoft Team and so forth. Besides, the present study only recruited males' and females' respondents from Malaysia. Therefore, the finding of this study was different from past studies as different age ranges of target samples would take various actions to deal with their stress.

Apart from that, this finding may claim that the respondents may have developed proper self-control. According to Youn and Faber (2000), people who are able to perform more self-control over their lives were more likely to make purchases for rational, rather than emotion and

other reasons. Hence, the finding in this study revealed that perceived stress was not a significant predictor for compulsive buying behavior among young adults in Malaysia.

**H5: *Malaysian female young adults are more likely to engage in compulsive buying behavior than Malaysian male young adults.*** Based on the findings of the current study, the fifth hypothesis was not supported, whereby there is no significant gender difference in compulsive buying behavior among males' and females' young adults in Malaysia. On the contrary, the result also suggested that males have slightly greater scores compared to females in compulsive buying behavior among young adults in Malaysia. This result is contrary to the expectation, as most of the past studies claimed that there is gender difference and women are more likely to engage in compulsive buying behavior than men (Lee & Workman, 2015; Li et al., 2014; Unger & Raab, 2015; Weaver et al., 2011).

Nonetheless, several studies also claimed that there is no gender difference in compulsive buying behavior, and both males and females have compulsive buying tendencies, which may support the result for present study (Biolcati, 2016; Dittmar, 2005; Lee & Workman, 2018; Wang et al., 2021; Ye et al., 2021). One of the possible reasons to explain this result is because of the demographic background of the respondents. 85.6% of the respondents in the present study consisted of students. Since students are still considered as financially dependent, they might have not much pocket money for them to buy things compulsively, as their parents may limit and monitor their expenses. Hence, the gender difference in compulsive buying behavior does not play a significant role in the current study.

On the other hand, Biolcati (2016) claims that males and females have equal tendency to be involved in compulsive buying behavior, as each of them have different areas of interest in

purchasing various kinds of products. For instance, females tend to spend more on clothing or shoes as compared to males, whereas males tend to spend more on technology products and sports equipment than females. However, most people tend to hold the misconception that only females are more likely to engage in compulsive buying behavior because females are more prone to acknowledge that they enjoy shopping instead of males. In fact, both genders are equally susceptible to be engaged in compulsive buying behavior (Fattore et al., 2014).

A study also reported that females and males have different viewpoints towards shopping. Women are inclined to take shopping as a positive leisure activity, while men view shopping as a negative activity and even a task that they need to complete (Ye et al., 2021). Nevertheless, in view of the prevalence of online shopping trends, shopping has become an easy task for both men and women, with just a mobile phone and a click on hand. In addition, the present research was conducted during the Covid-19 period, whereby most of the respondents, including men, might engage more in online shopping instead of physical shopping due to health concerns. As discussed previously, online shopping often comes with limited time sales, and many other promotions, which may trigger more compulsive buying behavior among consumers (Chuah et al., 2018). Therefore, it can be said that men are also vulnerable to engage in compulsive buying behavior too, as online shopping brings convenience and makes it an easy task for them, especially during the pandemic. In summary, gender differences become insignificant predictors of compulsive buying behavior as both males and females may enjoy and benefit from shopping nowadays (Ye et al., 2021).

**5.2 Implication of the Study**

*Theoretical Implication for Future Research.* There are two theoretical implications from the current study. This study has introduced a new perspective, in which different types of materialists may have the different extent of engagement in compulsive buying behavior. It provides a new research direction in which the relationship between non-materialist, tight materialist, and loose materialist may have different involvement on compulsive buying behavior among young adults, especially from the student population. Future research could work in this direction to extend the knowledge between the type of materialist and compulsive buying behavior. Besides that, it can be seen that young adults in Malaysia do not use compulsive buying behavior as the way of handling stress, which is inconsistent with the past literature from different countries. This can increase the awareness of researchers that there might be other factors that can influence the compulsive buying behavior to happen among young adults in Malaysia such as family issues, personal level of self-control and financial condition.

Moreover, this study also contributes to the understanding of the relationship between materialism, perceived stress, and gender differences with compulsive buying behavior in Malaysia context, which is a country that is enriched with people from different cultures and being educated with different materialism values. This is important to psychology findings as well as consumer psychology in Malaysia to understand the factors that can influence compulsive buying behavior in Malaysia such as differences in terms of cultures, materialism value, family background and financial situation. This can help researchers from Malaysia to sort out which factors influence the compulsive buying behavior of young adults in Malaysia.

***Practical Implication for Programs and Policies.*** In addition to that, there are two practical implications that this paper could achieve. Policymakers can use the findings as the guidelines for coming out of the financial program that can educate young adults to have better financial management. Meanwhile, financial programs that can encourage or train young adults to hold the correct attitude of materialism and encourage them to accumulate wealth instead of spending, are also crucial in decreasing the compulsive buying behavior to occur among young adults. Higher institutions also can play a role in this context, by making financial management as one of the main subjects that is compulsory for all the undergraduate students to take during their university time. Some knowledge related to consumer behavior can also be added as part of the subject's topic. By doing so, it can increase their awareness of the existence of compulsive buying and influence their attitudes towards materialism. As for the current financial program that is available, the implementer should ensure the program is consistently improved and revised in line with the current trend from time to time, to maximize its effectiveness and achieve the goal of shaping the correct spending attitude and holding correct materialism values.

Next, another practical implication derived from this study is to increase awareness of marketers to carry out the practice of marketing ethics. As we all know, compulsive buying behavior can be categorized as positive in a marketer viewpoint although it is a destructive behavior in non-marketer viewpoint. From the present findings, marketers are able to tailor their products and plan the best market strategy in targeting the young adult's market who are buying compulsively. However, the marketers should also have the awareness and consideration that their marketing strategy will have a big impact on the consumer behavior and more seriously may affect the whole society and nation. The marketers should target in selling products that can attract young adults to purchase even when they are not in the compulsive buying state. At the

same time, government should ensure that policies enforcing ethical marketing be widely implemented to maintain a proper balance within the market so that consumers will not end up in debt due to compulsive buying.

## 5.3 Limitations of the Study

There are some limitations in this study that need to be considered. Firstly, the age of the respondents recruited in the present study is unequal. The present study targeted on young adults who are aged between 18 to 30 years old. However, most of the respondents are between the age range of 21 to 22, which accounted for 68.4% of the total respondents.

Besides, the snowball sampling method was used in this study, and some of the respondents would help to share the questionnaire link to people around them, such as their peers of the same age and so forth. The results revealed oversampling because the majority of the respondents who responded to the topic are young adults aged 21 to 22. Therefore, the results of the present study might become biased, as the study has fewer respondents who are aged above 22 and who are employed. Consequently, the result might not be able to generalize to the whole young adult's population in Malaysia.

Moreover, the issue of response bias may have occurred. Since the survey method was adopted in the present study, the respondents were required to self-report. Thus, respondents might have the likelihood to provide inaccurate or false answers to the survey questions. For instance, respondents may provide extreme response, neutral response, or answer the questions based on social desirability rather than provide sincere response. As a result, the issue of response bias may arise, which then affects the result obtained.

Lastly, the language barrier may be one of the limitations as well. This is owing to some of the questions in the questionnaires using abstruse words. For example, the questions of "In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?", and "I feel "high" when I go on a buying spree.". The words "piling up" and "buying spree" might be hard to understand by some of the respondents with lower English proficiency. As a result, they may misunderstand the meaning of the words or even the meaning of the particular questions. Hence, the response received may not be reliable and thus affected the accuracy of the results obtained.

**5.4 Recommendations for Future Research**

In the future study, it was suggested that researchers control the survey distribution process and monitor the response collected from time to time. Researchers should recruit respondents from various demographic backgrounds based on the target population, such as employment status, age group, and so on. With this, it could help to minimize the big gap of the demographic background of the respondents. For instance, in the present study, the researcher should recruit respondents for each age group under young adults, and also recruit more working adults. On top of that, in order to avoid oversampling, the future researchers may stop recruiting a certain target population with a particular demographic background when it has met the targeted number. For instance, in the present study, the researcher may stop recruiting respondents aged 21 and 22 when it reaches the target number for this age group. It can ensure the result obtained to be more reliable and reduce biases in the result obtained. Most importantly, to increase the generalizability of the result so that it can be more widely applicable to the young adult's population.

Moreover, the researchers were suggested to improve the methodological design by using a multi-methods approach to investigate more on the current research topic. Instead of solely using the survey method, interviews could also be conducted to follow-up with some of the respondents selected and agreed to participate in the interview session. By doing so, researchers could explore more and have a deeper understanding of the response received as well as to know why there is a difference between the result obtained in the present study and past studies.

Furthermore, in order to address the limitation of language barriers, future researchers were recommended to replace the difficult words in the questionnaire with simple and easy to understand terms. For example, replace the word "piling up" with "accumulating". Some explanations or definitions for the difficult words can also be provided in the questionnaire. These might be helpful for the respondents with lower English proficiency to answer the questionnaire and provide a more accurate response based on the questions. However, the future researchers should run an analysis to test the construct validity for the modified version that is replaced with simple words to ensure it is compatible with the original version.

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**Appendices**

*Appendix A: Ethical Approval for Research Project*



**UNIVERSITI TUNKU ABDUL RAHMAN**
Wholly Owned by UTAR Education Foundation (Company No. 578227-M)

Re: U/SERC/299/2021

30 December 2021

Dr Pung Pit Wan
Head, Department of Psychology and Counselling
Faculty of Arts and Social Science
Universiti Tunku Abdul Rahman
Jalan Universiti, Bandar Baru Barat
31900 Kampar, Perak.

Dear Dr Pung,

**Ethical Approval For Research Project/Protocol**

We refer to the application for ethical approval for your students' research projects from Bachelor of Social Science (Hons) Psychology programme enrolled in course UAPZ3013/UAPZ3023. We are pleased to inform you that the application has been approved under Expedited Review.

The details of the research projects are as follows:

| No | Research Title | Student's Name | Supervisor's Name | Approval Validity |
|----|----------------|----------------|-------------------|-------------------|
| 1. | Social Loafing Behaviour in Collaborative Group Work Among University Students in Malaysia: Self-Efficacy, Group Cohesion and Task Interdependence | 1. Dheenosheeni a/p Maganthrin Kumar 2. Khoo Jing Wen 3. Kishuvan a/l Marimuthu | Dr Chie Qiu Ting | |
| 2. | Examining the Role of Materialism, Perceived Stress and Gender Difference in Compulsive Buying Behavior Among Young Adults in Malaysia | 1. Looi Ke Xin 2. Tan Kai Ni 3. Tee Geok Hong | | |
| 3. | The Mediating role of Social Anxiety on Perceived Stress and Internet Addiction Among Undergraduate Students in Malaysia | 1. Chong Khai-Juen 2. Lai Ming Han 3. Len Wan Qi | | |
| 4. | The Association of Psychological Distress and Burnout on Job Satisfaction Among Frontliners in The Healthcare Industry During the Pandemic COVID-19 in Malaysia | 1. Loochana a/p Krishna Rao 2. Adrianna a/l P Silvarajah 3. Visshan a/l Miyanthan | Dr Nurul Iman binti Abdul Jalil | 30 December 2021 - 29 December 2022 |
| 5. | Perceived Stress and Emotional Intelligence as Predictors of Life Satisfaction Among Undergraduates in Malaysia | 1. Ooi Yu Jie 2. Lim Syi Wei 3. Cham Han Tein | | |
| 6. | The Mediating Role of Money Desire in Death Anxiety Toward Materialism Among Young Adults in Malaysia | 1. Britney Bong Sue Fun 2. Jemimah Choong Giet Hee 3. Kwok Koh Yee | | |
| 7. | Social Anxiety, Perceived Stress Level and Perceived Social Support as Predictors of Smartphone Addiction Among Undergraduate Students in Malaysia | 1. Chua Pei Yi 2. Chuah Yi Ting 3. See Jie Sheng | | |
| 8. | The Relationship Between Intrinsic Motivation, Extrinsic Motivation on Job Performance and Job Satisfaction Among Academic Staff in Malaysia | 1. Chen Chi Shan 2. Ishwinder Kaur a/p Jasper Singh 3. Jessica Teoh Wan Jie | Mr Tay Kok Wai | |
| 9. | Cognitive Behavioral Therapy Informed Workshop on Sleep: A Preliminary Randomized Controlled Trial | 1. Joanna Eileen Chan 2. Michele Chu Hiew Mun 3. Sanjeetra a/p Ravindharan | | |

| No | Research Title | Student's Name | Supervisor's Name | Approval Validity |
|---|---|---|---|---|
| 10. | Cognitive Behavioral Therapy Informed Workshop on Procrastination: A Preliminary Randomized Controlled Trial | 1. Phuah Wai Hong<br>2. Wong Weng Han | Mr Tay Kok Wai | |
| 11. | Relationship Between Self-Esteem, Fear of Covid-19 and Instagram Addiction Among Undergraduates in Malaysia | 1. Lee Jia Jie<br>2. Loon Ling Lee<br>3. Thio Kai Qi | Ms Evelyn Toh Kheng Lin | |
| 12. | The Relationship Between Perfectionism, Cognitive Flexibility and Suicide Ideation Among Malaysian Undergraduates | 1. Zoe Chng Woon Chin<br>2. Liew Kee Yee<br>3. Tiong Wei Jie | | |
| 13. | The Relationship Between Depression, Anxiety, Perceived Social Support and Suicidal Intention Among Gay and Lesbian Young Adults' Community | 1. Fo Han Sien<br>2. Gabriel Chai Yeet Jher<br>3. Beh Jin Ying | | 30 December 2021 - 29 December 2022 |
| 14. | Knowledge, Risk Perception and Protective Behaviour Among Malaysian Young Adults During COVID-19 Pandemic | 1. Gan Hui Min<br>2. Jeanette Elena Tan<br>3. Swi Zi Qing | Dr Gan Su Wan | |
| 15. | Online Social Support, Offline Social Support and Academic Readiness as Predictors of Academic Resilience Among Undergraduates in Malaysia | 1. Kenny Ng Kai Feng<br>2. Ng In Yan<br>3. Karthiyaini a/p Sathiyaseelan | | |
| 16. | Big 5 Personality Traits as the Predictors of Psychological Well-being Among Adults Working from Home (WFH) in Malaysia During COVID-19 Pandemic | 1. Liew Qian Qi<br>2. Lim Yee Wen | Ms Sanggari a/p Krishnan | |
| 17. | Impact of Psychological Distress, Fear, Changes in Lifestyle-Related Behavior and Life Satisfaction Among Working Adults During Movement Control Order (MCO) in Malaysia | 1. Chua Wan Yi<br>2. Koo Yu Wen<br>3. Ng Pui Ye | | |

The conduct of this research is subject to the following:

(1) The participants' informed consent be obtained prior to the commencement of the research;

(2) Confidentiality of participants' personal data must be maintained; and

(3) Compliance with procedures set out in related policies of UTAR such as the UTAR Research Ethics and Code of Conduct, Code of Practice for Research Involving Humans and other related policies/guidelines.

(4) Written consent be obtained from the institution(s)/company(ies) in which the physical or/and online survey will be carried out, prior to the commencement of the research.

Should the students collect personal data of participants in their studies, please have the participants sign the attached Personal Data Protection Statement for records.

Thank you.

Yours sincerely,

**Professor Ts Dr Faidz bin Abd Rahman**
Chairman
UTAR Scientific and Ethical Review Committee

c.c     Dean, Faculty of Arts and Social Science
        Director, Institute of Postgraduate Studies and Research

*Appendix B: G Power Analysis*
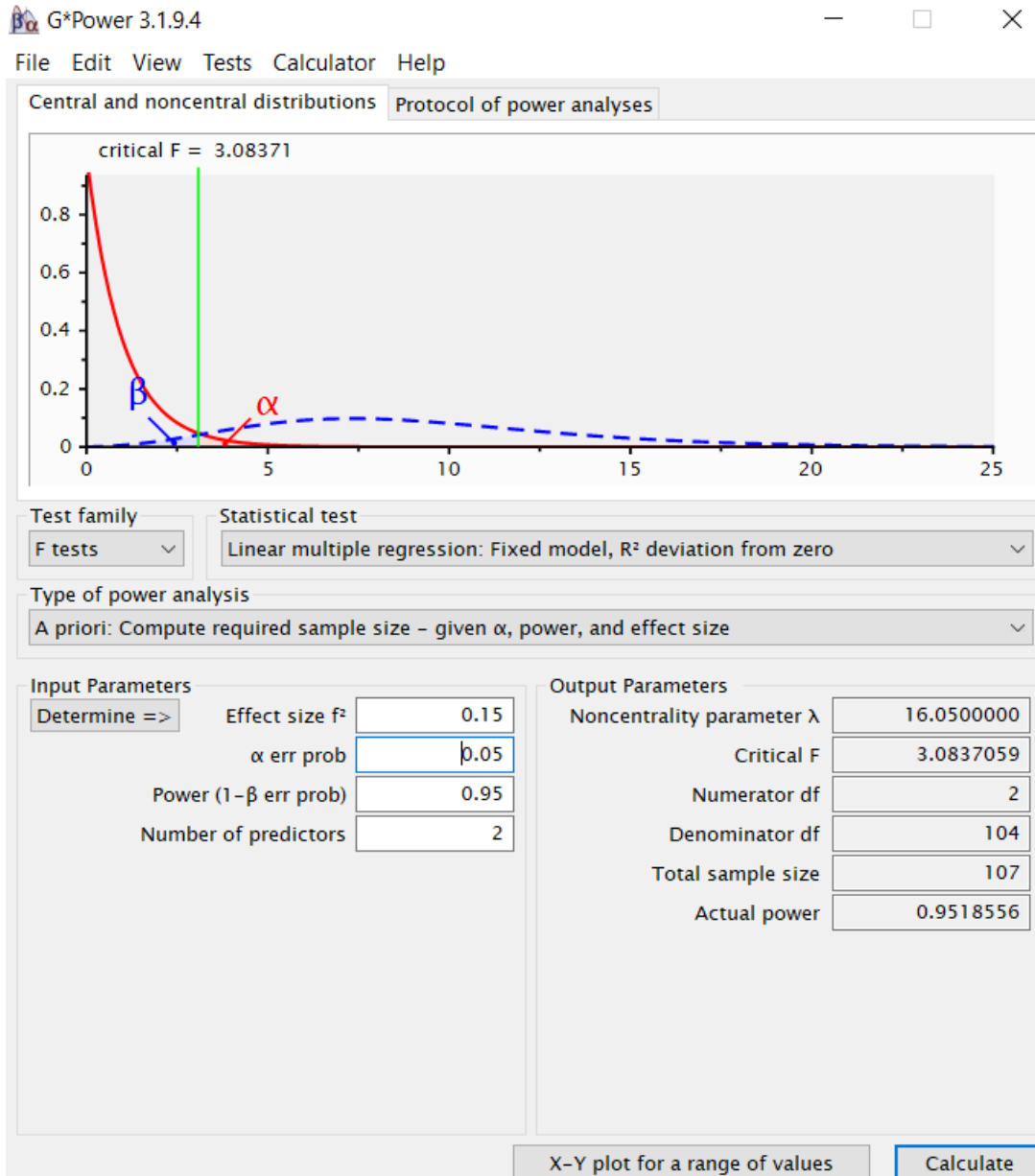
*Appendix C: Questionnaire*

Tools ⌄     Saved Feb 17, 2022 at 4:28 PM     Draft          🔍     Preview     Publish

Role of Materialism, PS & Gender Differences In CBB          💡 ExpertReview score   Fair

⌄     Informed Consent

Informed Consent                                              ...

**Informed Consent**

**Research Topic**
Examining the Role of Materialism, Perceived Stress and Gender Differences in
Compulsive Buying Behavior among Young Adults in Malaysia.

**Introduction and Purpose of the Study**
We are Year 3, final year undergraduate students of Bachelor of Social Science (Hons)
Psychology from Universiti Tunku Abdul Rahman. We would like to invite you to
participate in the study entitled "Examining the Role of Materialism, Perceived Stress and
Gender Differences in Compulsive Buying Behavior among Young Adults in Malaysia".
This study is conducted to fulfil the requirement of UAPZ3013 Final Year Project I and
UAPZ3023 Final Year Project II.

**Procedures and Confidentiality**
The following questionnaire consists of five sections (Section A to Section E) and will
require approximately 15-20 minutes to complete. All information provided will remain as
private and confidential. Your responses will be coded numerically for research
interpretation. The responses provided will only be reported as group data with no
identifying information and will only be used for academic purposes. In order for us to
complete this research study, your participation in this research study is highly
appreciated.

**Participation**
Your participation will remain anonymous and confidential. Your information will not be
disclosed to any unauthorized person and would be accessible only by the researchers of
this study. Participation in this study is voluntary, you are free to withdraw from this study
at any time. Your cooperation would be greatly appreciated.

You are eligible to participate in this study if you are:
• A Malaysian
• Aged between 18 to 30 years old
• Having shopping experience before (either through physical shopping, online shopping
or both)

**Contact Information**
If you have any questions concerning this research, please feel free to contact the
students researchers:

1. Tee Geok Hong (016-3648812)
   (librahongtee1010@1utar.my)

2. Looi Ke Xin (016-5169443)

(kexin3650@1utar.my)

3. Tan Kai Ni (018-5722373)
   (kaini0417@1utar.my)

You may also contact our supervisor, Dr. Chie Qiu Ting (chieqt@utar.edu.my) if you wish to enquire future directions regarding this research project.

**\* This study has been approved by UTAR SERC (Re: U/SERC/299/2021)**

☐ Import from library        Add new question

Add Block

▾  Personal Data Protection Statement

Informed Consent 2

**Personal Data Protection Notice**

**Please be informed that in accordance with Personal Data Protection Act 2010 ("PDPA") which came into force on 15 November 2013, Universiti Tunku Abdul Rahman ("UTAR") is hereby bound to make notice and require consent in relation to collection, recording, storage, usage and retention of personal information.**

1. Personal data refers to any information which may directly or indirectly identify a person which could include sensitive personal data and expression of opinion. Among others it includes:

a) Name
b) Identity card
c) Place of Birth
d) Address
e) Education History
f) Employment History
g) Medical History
h) Blood type
i) Race
j) Religion
k) Photo
l) Personal Information and Associated Research Data

2. The purposes for which your personal data may be used are inclusive but not limited to:

a) For assessment of any application to UTAR
b) For processing any benefits and services
c) For communication purposes
d) For advertorial and news
e) For general administration and record purposes

f) For enhancing the value of education

g) For educational and related purposes consequential to UTAR

h) For replying any responds to complaints and enquiries

i) For the purpose of our corporate governance

j) For the purposes of conducting research/ collaboration

3. Your personal data may be transferred and/or disclosed to third party and/or UTAR collaborative partners including but not limited to the respective and appointed outsourcing agents for purpose of fulfilling our obligations to you in respect of the purposes and all such other purposes that are related to the purposes and also in providing integrated services, maintaining and storing records. Your data may be shared when required by laws and when disclosure is necessary to comply with applicable laws.

4. Any personal information retained by UTAR shall be destroyed and/or deleted in accordance with our retention policy applicable for us in the event such information is no longer required.

5. UTAR is committed in ensuring the confidentiality, protection, security and accuracy of your personal information made available to us and it has been our ongoing strict policy to ensure that your personal information is accurate, complete, not misleading and updated. UTAR would also ensure that your personal data shall not be used for political and commercial purposes.

---

🖵 Import from library     Add new question

---

**Add Block**

---

Consent Form for Research Participation and Personal Data Protection

Informed Consent 3

**Consent:**

6. By submitting or providing your personal data to UTAR, you had consented and agreed for your personal data to be used in accordance to the terms and conditions in the Notice and our relevant policy.

7. If you do not consent or subsequently withdraw your consent to the processing and disclosure of your personal data, UTAR will not be able to fulfill our obligations or to contact you or to assist you in respect of the purposes and/or for any other purposes related to the purpose.

8. You may access and update your personal data by writing to us at librahongtee1010@1utar.my (Tee Geok Hong), kexin3650@1utar.my (Looi Ke Xin) or kaini0417@1utar.my (Tan Kai Ni).

Informed Consent 4    ✴

▾   **Skip to**

End of Survey   if   I disagree, my personal dat...   Is Selected

**Acknowledgment of Personal Data Protection Notice**

○ I have been notified by you and that I hereby understood, consented and agreed per UTAR above notice.

○ I disagree, my personal data will not be processed.

    ▭ Import from library     Add new question

**Add Block**

▾   A) Screening Questions

Q7

**SECTION A**

**Screening Questions**

*Instruction:* Kindly indicate your answer to the questions below honestly.

SECTION A Screening    ✴

1. Are you a Malaysian citizen?

○ Yes

○ No

Q8    ✴

2. Are you aged between 18 to 30 years old?

○ Yes

○ No

Q9

3. Do you have any shopping experience before?(either through online shopping, physical shopping or both)

○ Yes

○ No

🖵 Import from library    Add new question

Add Block

B) Demographic Information

Q15

**SECTION B**

**Demographic Information**

*Instruction:* Please fill in your personal details and provide the answers which best fits you. This information will be kept confidential and will be used for research purposes only.

Q16

1. Age

Q17

2. Gender

○ Male

○ Female

Q19

3. Nationality

○ Malaysian

○ Non-Malaysian, please specify

Q18                                                              ✱

4. Ethnicity

○ Malay

○ Chinese

○ Indian

○ Others, please specify

Q20                                                              ✱

5. Current living state (e.g. Perak)

Q21                                                              ✱

6. Employment status

○ Employed, occupation:

○ Unemployed

○ Student

Q22                                                              ✱

7. Relationship status

○ Single

○ Married

○ In a relationship

Q23                                                              ✱

8. Do you have any shopping experience before?

○ Yes, I only have **online** shopping experience before.

○ Yes, I only have **physical** shopping experience before.

○ Yes, I have **both** online and physical shopping experience before.

○ No, I have **no** online or physical shopping experience before.

Q24                                                                          ★

9. How much is your income per month?

○ RM 0 - RM 1999

○ RM 2000 - RM 4999

○ RM 5000 above

▲                                               📖 Import from library     Add new question

**Add Block**

▼     C) Materialism

Q12                                                                    💡   ★

**SECTION C**

**Material Values Scale (MVS)**

*Instruction:* Please select a number from 1 (Strongly disagree) to 5 (Strongly agree) for each statement below to indicate the extent to which you agree or disagree with that statement.

|  | 1 = Strongly disagree | 2 = Disagree | 3 = Neither agree nor disagree | 4 = Agree | 5 = Strongly agree |
|---|---|---|---|---|---|
| 1. I admire people who own expensive homes, cars, and clothes. | ○ | ○ | ○ | ○ | ○ |
| 2. Some of the most important achievements in life include acquiring material possessions. | ○ | ○ | ○ | ○ | ○ |
| 3. I don't place much emphasis on the amount of material objects people own as a sign of success. | ○ | ○ | ○ | ○ | ○ |
| 4. The things I own say a lot about how well I'm doing in life. | ○ | ○ | ○ | ○ | ○ |
| 5. I like to own things that impress people. | ○ | ○ | ○ | ○ | ○ |

|  | 1 = Strongly disagree | 2 = Disagree | 3 = Neither agree nor disagree | 4 = Agree | 5 = Strongly agree |
|---|---|---|---|---|---|
| 6. I try to keep my life simple, as far as possessions are concerned. | ○ | ○ | ○ | ○ | ○ |
| 7. The things I own aren't all that important to me. | ○ | ○ | ○ | ○ | ○ |

that important to me.

8. Buying things gives me a lot of pleasure.

| | | | | |
|---|---|---|---|---|
| ○ | ○ | ○ | ○ | ○ |

9. I like a lot of luxury in my life.

| | | | | |
|---|---|---|---|---|
| ○ | ○ | ○ | ○ | ○ |

10. I put less emphasis on material things than most people I know.

| | | | | |
|---|---|---|---|---|
| ○ | ○ | ○ | ○ | ○ |

| | 1 = Strongly disagree | 2 = Disagree | 3 = Neither agree nor disagree | 4 = Agree | 5 = Strongly agree |
|---|---|---|---|---|---|
| 11. I have all the things I really need to enjoy life. | ○ | ○ | ○ | ○ | ○ |
| 12. My life would be better if I owned certain things I don't have. | ○ | ○ | ○ | ○ | ○ |
| 13. I wouldn't be any happier if I owned nicer things. | ○ | ○ | ○ | ○ | ○ |
| 14. I'd be happier if I could afford to buy more things. | ○ | ○ | ○ | ○ | ○ |
| 15. It sometimes bothers me quite a bit that I can't afford to buy all the things I'd like. | ○ | ○ | ○ | ○ | ○ |

Import from library      Add new question

Add Block

D) Perceived Stress

Q13

**SECTION D**

**Perceived Stress Scale (PSS-10)**

*Instruction:* The questions in this scale ask you about your feelings and thoughts during the last month. In each case, you will be asked to indicate how often you felt or thought a certain way.

|  | 0 = Never | 1 = Almost Never | 2 = Sometimes | 3 = Fairly Often | 4 = Very Often |
|---|---|---|---|---|---|
| 1. In the last month, how often have you been upset because of something that happened unexpectedly? | ○ | ○ | ○ | ○ | ○ |
| 2. In the last month, how often have you felt that you were unable to control the important things in your life? | ○ | ○ | ○ | ○ | ○ |
| 3. In the last month, how often have you felt nervous and "stressed"? | ○ | ○ | ○ | ○ | ○ |
| 4. In the last month, how often have you felt confident about your ability to handle your personal problems? | ○ | ○ | ○ | ○ | ○ |
| 5. In the last month, how often have you felt that things were going your way? | ○ | ○ | ○ | ○ | ○ |

|  | 0 = Never | 1 = Almost Never | 2 = Sometimes | 3 = Fairly Often | 4 = Very Often |
|---|---|---|---|---|---|
| 6. In the last month, how often have you found that you could not cope with all the things that you had to do? | ○ | ○ | ○ | ○ | ○ |
| 7. In the last month, how often have you been able to control irritations in your life? | ○ | ○ | ○ | ○ | ○ |
| 8. In the last month, how often have you felt that you were on top of things? | ○ | ○ | ○ | ○ | ○ |
| 9. In the last month, how often have you been angered because of things that were outside of your control? | ○ | ○ | ○ | ○ | ○ |
| 10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them? | ○ | ○ | ○ | ○ | ○ |

Import from library          Add new question

Add Block

E) Compulsive Buying Behavior

Q14

SECTION E

**Edwards Compulsive Buying Scale (ECBS)**

*Instruction:* The questions in this scale ask about your attitudes toward shopping. Please select how often you felt or thought a certain way.

| | 1 = Very Often | 2 = Fairly Often | 3 = Sometimes | 4 = Almost Never | 5= Never |
|---|---|---|---|---|---|
| 1. I feel driven to shop and spend, even when I don't have the time or the money. | ○ | ○ | ○ | ○ | ○ |
| 2. I get little or no pleasure from shopping. | ○ | ○ | ○ | ○ | ○ |
| 3. I hate to go shopping. | ○ | ○ | ○ | ○ | ○ |
| 4. I go on buying binges. | ○ | ○ | ○ | ○ | ○ |
| 5. I feel "high" when I go on a buying spree. | ○ | ○ | ○ | ○ | ○ |

| | 1 = Very Often | 2 = Fairly Often | 3 = Sometimes | 4 = Almost Never | 5= Never |
|---|---|---|---|---|---|
| 6. I buy things even when I don't need anything. | ○ | ○ | ○ | ○ | ○ |
| 7. I go on a buying binge when I'm upset, disappointed, depressed, or angry. | ○ | ○ | ○ | ○ | ○ |
| 8. I worry about my spending habits but still go out and shop and spend money. | ○ | ○ | ○ | ○ | ○ |
| 9. I feel anxious after I go on a buying binge. | ○ | ○ | ○ | ○ | ○ |
| 10. I buy things even though I cannot afford them. | ○ | ○ | ○ | ○ | ○ |

| | 1 = Very Often | 2 = Fairly Often | 3 = Sometimes | 4 = Almost Never | 5= Never |
|---|---|---|---|---|---|
| 11. I feel guilty or ashamed after I go | ○ | ○ | ○ | ○ | ○ |

on a buying binge.

12. I buy things I don't need or won't use.          ○          ○          ○          ○          ○

13. I sometimes feel compelled to go shopping.          ○          ○          ○          ○          ○

▲                                                        📖 Import from library          Add new question

Add Block

End of Survey

We thank you for your time spent taking this survey.

Your response has been recorded.

*Appendix D: Reliability Test of Pilot Study*

Appendix D1: Reliability of Material Value Scale (MVS) for 59 respondents

**Reliability Statistics**

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|---|---|---|
| .757 | .751 | 15 |

Appendix D2: Reliability of Perceived Stress Scale (PSS) for 59 Respondents

**Reliability Statistics**

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|---|---|---|
| .697 | .698 | 10 |

Appendix D3: Reliability of Edwards Compulsive Buying Scale (ECBS) for 59 Respondents

**Reliability Statistics**

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|---|---|---|
| .830 | .832 | 13 |

Appendix D4: Total Reliability of 3 Scales for 59 Respondents

**Reliability Statistics**

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|---|---|---|
| .595 | .600 | 38 |

*Appendix E: Reliability Test of Actual Study*

Appendix E1: Reliability of Material Value Scale (MVS) for 210 respondents

**Reliability Statistics**

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|---|---|---|
| .604 | .607 | 15 |

Appendix E2: Reliability of Perceived Stress Scale (PSS) for 210 Respondents

**Reliability Statistics**

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|---|---|---|
| .637 | .626 | 10 |

Appendix E3: Reliability of Edwards Compulsive Buying Scale (ECBS) for 210 Respondents

**Reliability Statistics**

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|---|---|---|
| .751 | .749 | 13 |

Appendix E4: Total Reliability of 3 Scales for 210 Respondents

**Reliability Statistics**

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|---|---|---|
| .537 | .529 | 38 |

*Appendix F: Normality Assumptions*

**Descriptives**

| | | | Statistic | Std. Error |
|---|---|---|---|---|
| TOTAL_MVS | Mean | | 46.74 | .375 |
| | 95% Confidence Interval for Mean | Lower Bound | 46.00 | |
| | | Upper Bound | 47.48 | |
| | 5% Trimmed Mean | | 46.71 | |
| | Median | | 47.00 | |
| | Variance | | 29.534 | |
| | Std. Deviation | | 5.435 | |
| | Minimum | | 34 | |
| | Maximum | | 60 | |
| | Range | | 26 | |
| | Interquartile Range | | 7 | |
| | Skewness | | .130 | .168 |
| | Kurtosis | | -.103 | .334 |
| TOTAL_PSS | Mean | | 19.77 | .312 |
| | 95% Confidence Interval for Mean | Lower Bound | 19.16 | |
| | | Upper Bound | 20.39 | |
| | 5% Trimmed Mean | | 19.78 | |
| | Median | | 20.00 | |
| | Variance | | 20.464 | |
| | Std. Deviation | | 4.524 | |
| | Minimum | | 8 | |
| | Maximum | | 32 | |
| | Range | | 24 | |
| | Interquartile Range | | 6 | |
| | Skewness | | -.002 | .168 |
| | Kurtosis | | -.054 | .334 |
| TOTAL_ECBS | Mean | | 45.09 | .439 |
| | 95% Confidence Interval for Mean | Lower Bound | 44.22 | |
| | | Upper Bound | 45.95 | |
| | 5% Trimmed Mean | | 45.12 | |
| | Median | | 45.00 | |
| | Variance | | 40.433 | |
| | Std. Deviation | | 6.359 | |

| Minimum | 29 | |
| --- | --- | --- |
| Maximum | 60 | |
| Range | 31 | |
| Interquartile Range | 8 | |
| Skewness | -.061 | .168 |
| Kurtosis | -.270 | .334 |

**Extreme Values**

| | | | Case Number | Value |
| --- | --- | --- | --- | --- |
| TOTAL_MVS | Highest | 1 | 13 | 60 |
| | | 2 | 67 | 60 |
| | | 3 | 73 | 60 |
| | | 4 | 134 | 59 |
| | | 5 | 5 | 58[a] |
| | Lowest | 1 | 184 | 34 |
| | | 2 | 75 | 34 |
| | | 3 | 35 | 34 |
| | | 4 | 49 | 35 |
| | | 5 | 201 | 36[b] |
| TOTAL_PSS | Highest | 1 | 95 | 32 |
| | | 2 | 67 | 31 |
| | | 3 | 107 | 31 |
| | | 4 | 20 | 30 |
| | | 5 | 61 | 28[c] |
| | Lowest | 1 | 209 | 8 |
| | | 2 | 179 | 9 |
| | | 3 | 91 | 9 |
| | | 4 | 205 | 10 |
| | | 5 | 201 | 10[d] |
| TOTAL_ECBS | Highest | 1 | 101 | 60 |
| | | 2 | 135 | 60 |
| | | 3 | 93 | 59 |
| | | 4 | 126 | 59 |
| | | 5 | 49 | 57[e] |
| | Lowest | 1 | 144 | 29 |
| | | 2 | 73 | 29 |

| | 3 | 128 | 30 |
| | 4 | 127 | 30 |
| | 5 | 161 | 32 |

a. Only a partial list of cases with the value 58 are shown in the table of upper extremes.

b. Only a partial list of cases with the value 36 are shown in the table of lower extremes.

c. Only a partial list of cases with the value 28 are shown in the table of upper extremes.

d. Only a partial list of cases with the value 10 are shown in the table of lower extremes.

e. Only a partial list of cases with the value 57 are shown in the table of upper extremes.

**Tests of Normality**

| | Kolmogorov-Smirnov[a] | | | Shapiro-Wilk | | |
|---|---|---|---|---|---|---|
| | Statistic | df | Sig. | Statistic | df | Sig. |
| TOTAL_MVS | .068 | 210 | .020 | .988 | 210 | .072 |
| TOTAL_PSS | .066 | 210 | .029 | .992 | 210 | .337 |
| TOTAL_ECBS | .055 | 210 | .200[.] | .993 | 210 | .456 |

**\*. This is a lower bound of the true significance.**

**a. Lilliefors Significance Correction**

**TOTAL_MVS**

Normal Q-Q Plot of TOTAL_MVS

Detrended Normal Q-Q Plot of TOTAL_MVS

TOTAL_MVS

**TOTAL_PSS**

### Histogram

Mean = 19.77
Std. Dev. = 4.524
N = 210

— Normal

Normal Q-Q Plot of TOTAL_PSS

Detrended Normal Q-Q Plot of TOTAL_PSS

**TOTAL_ECBS**



Histogram

Mean = 45.09
Std. Dev. = 6.359
N = 210

Normal Q-Q Plot of TOTAL_ECBS
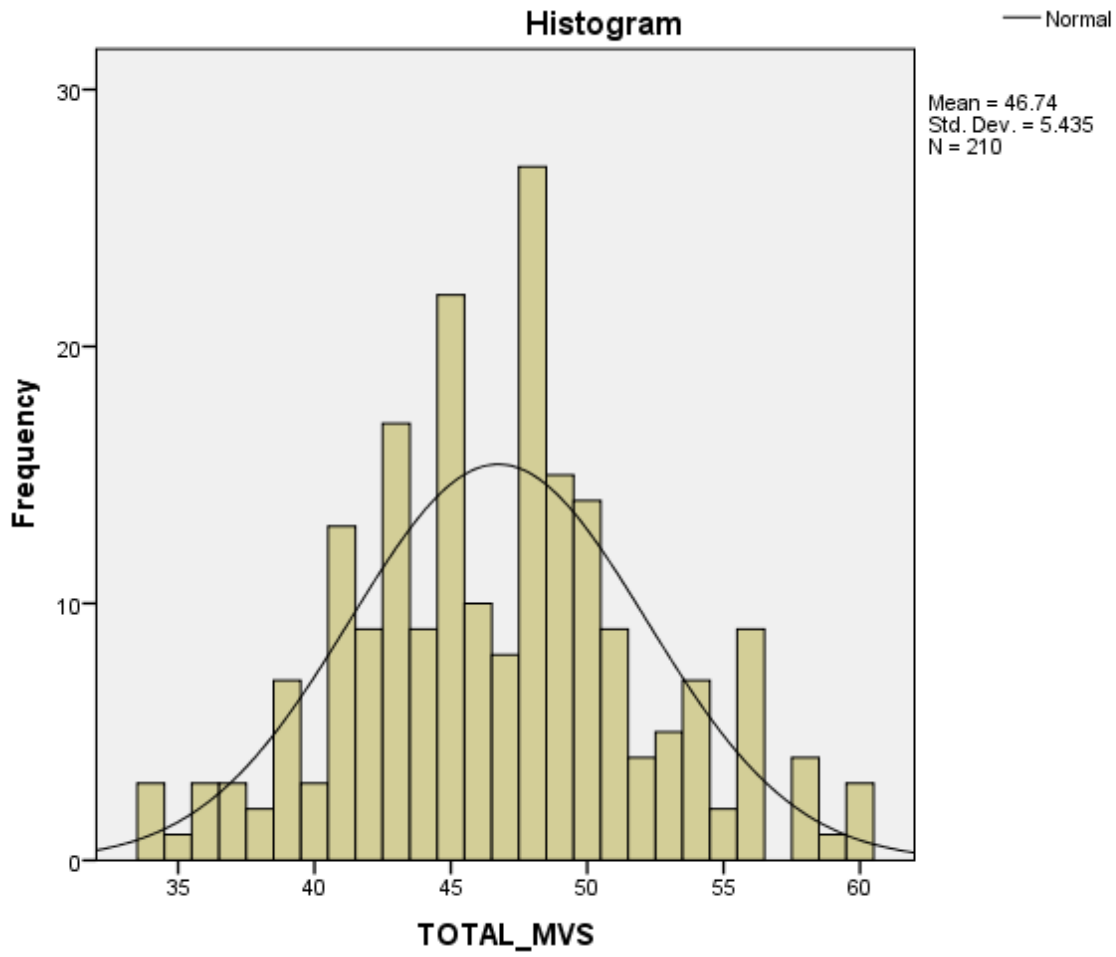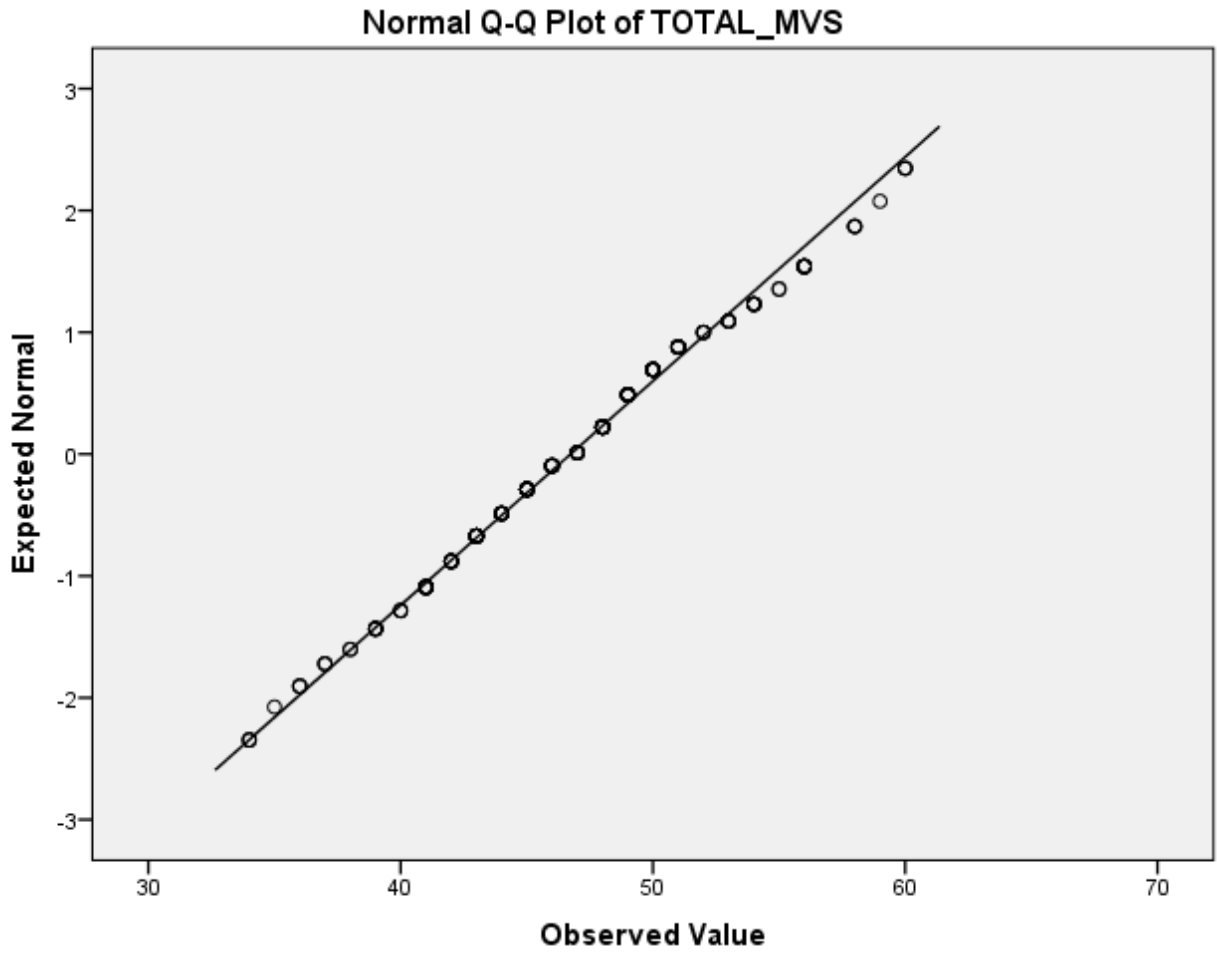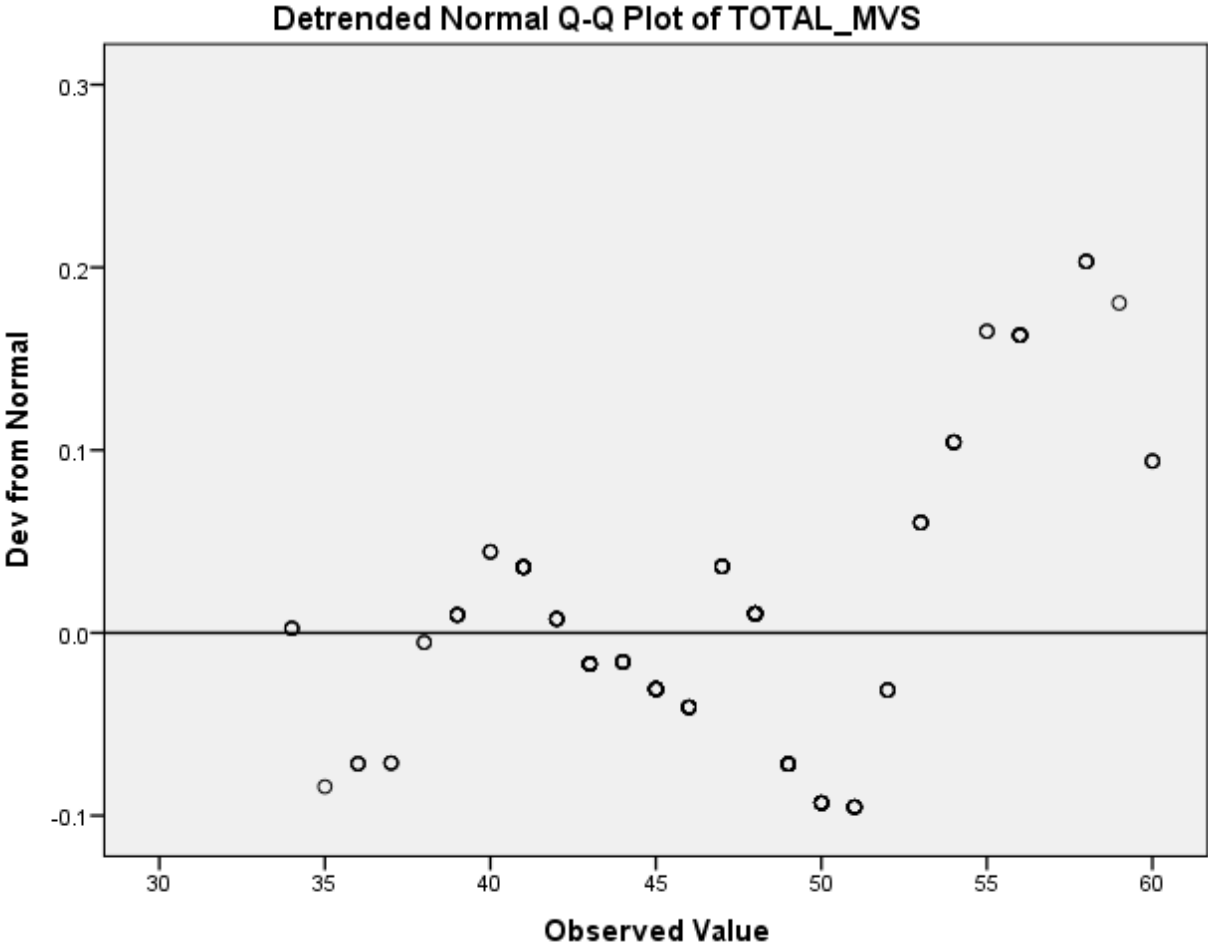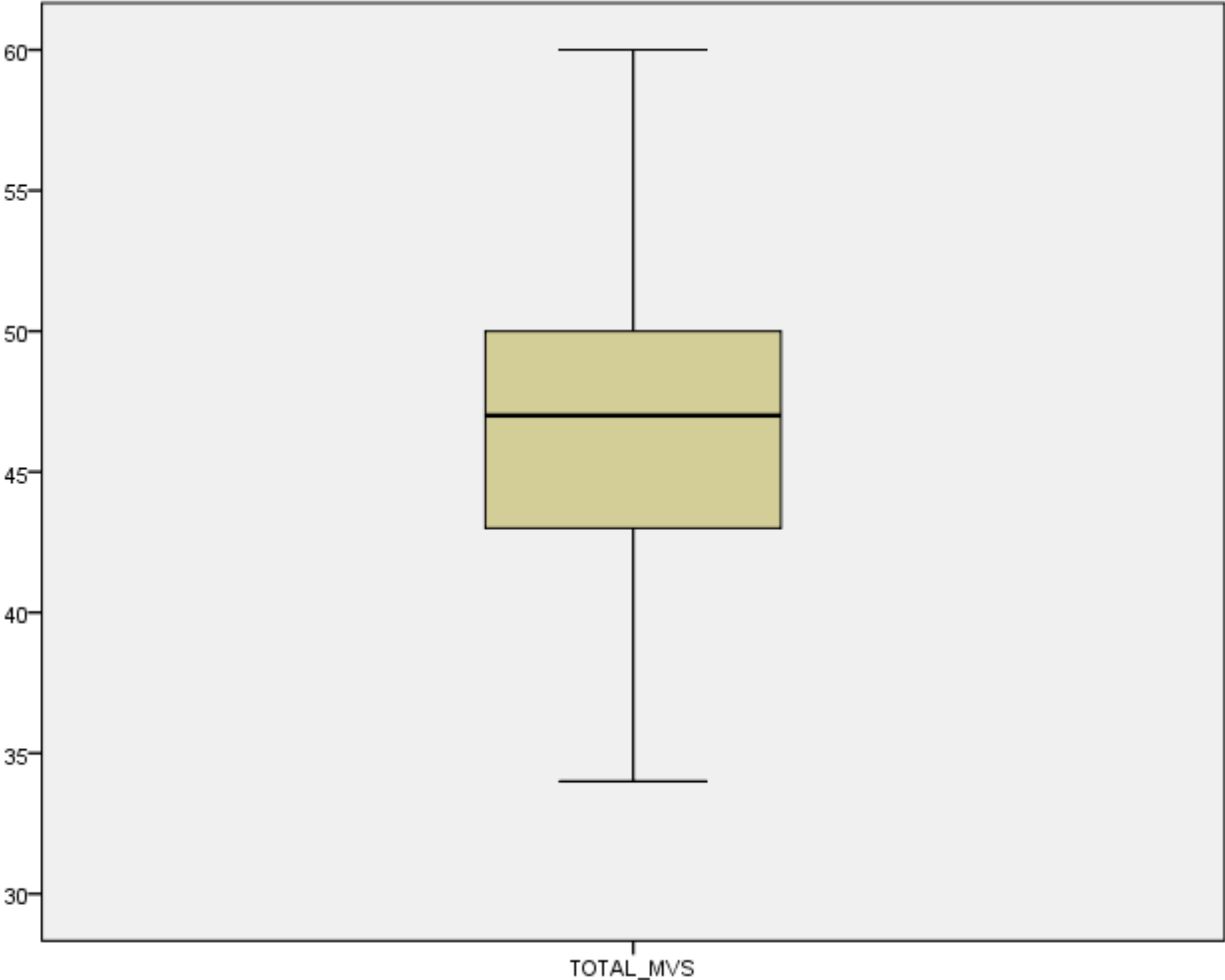
Detrended Normal Q-Q Plot of TOTAL_ECBS
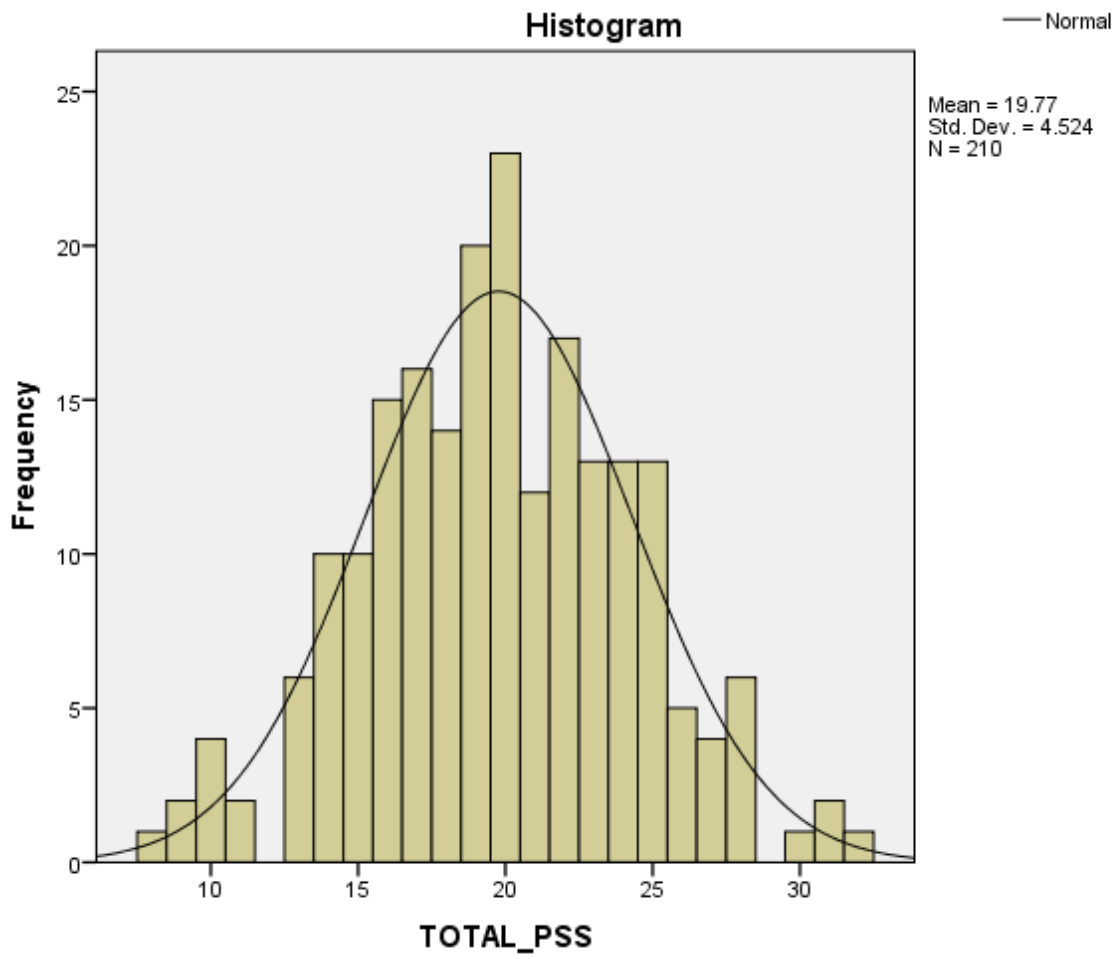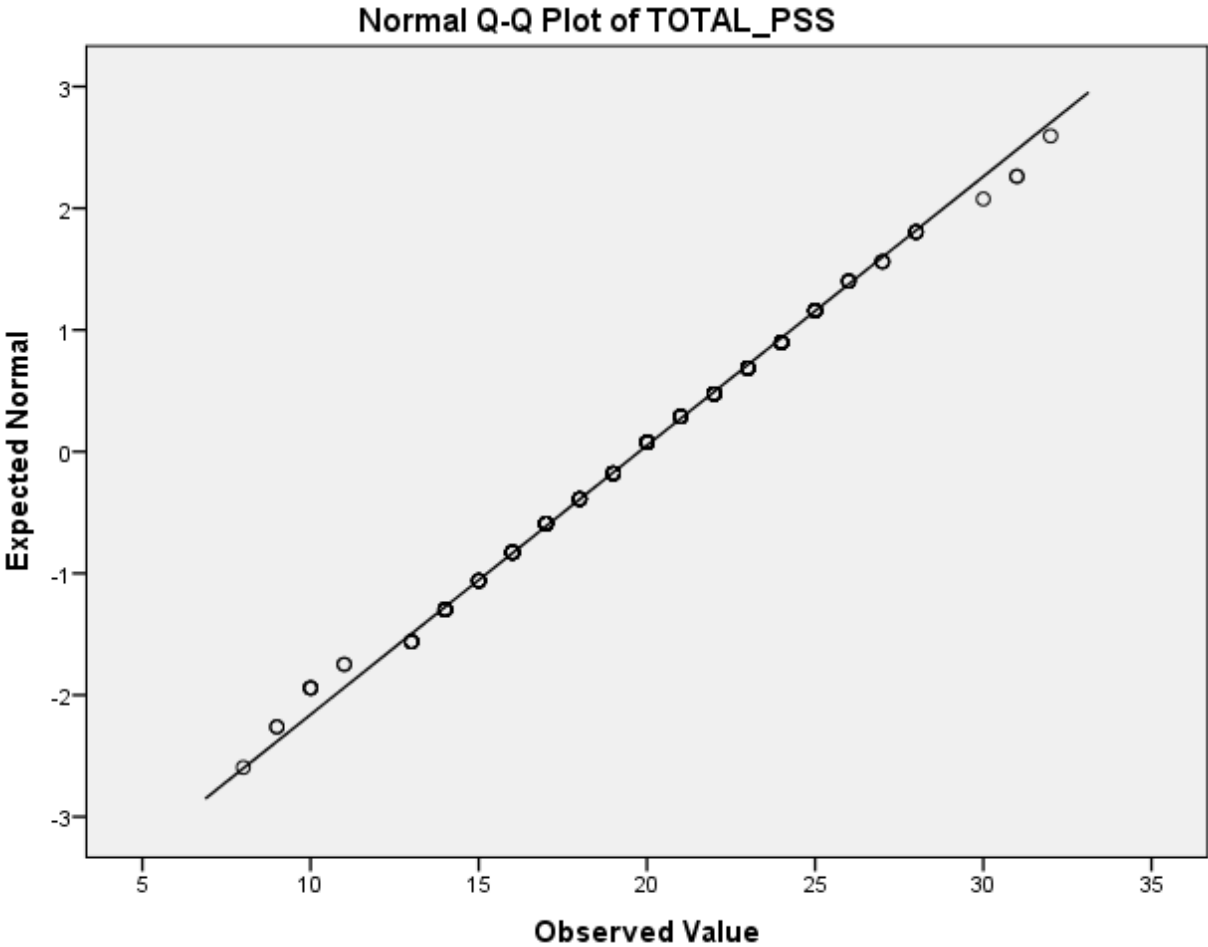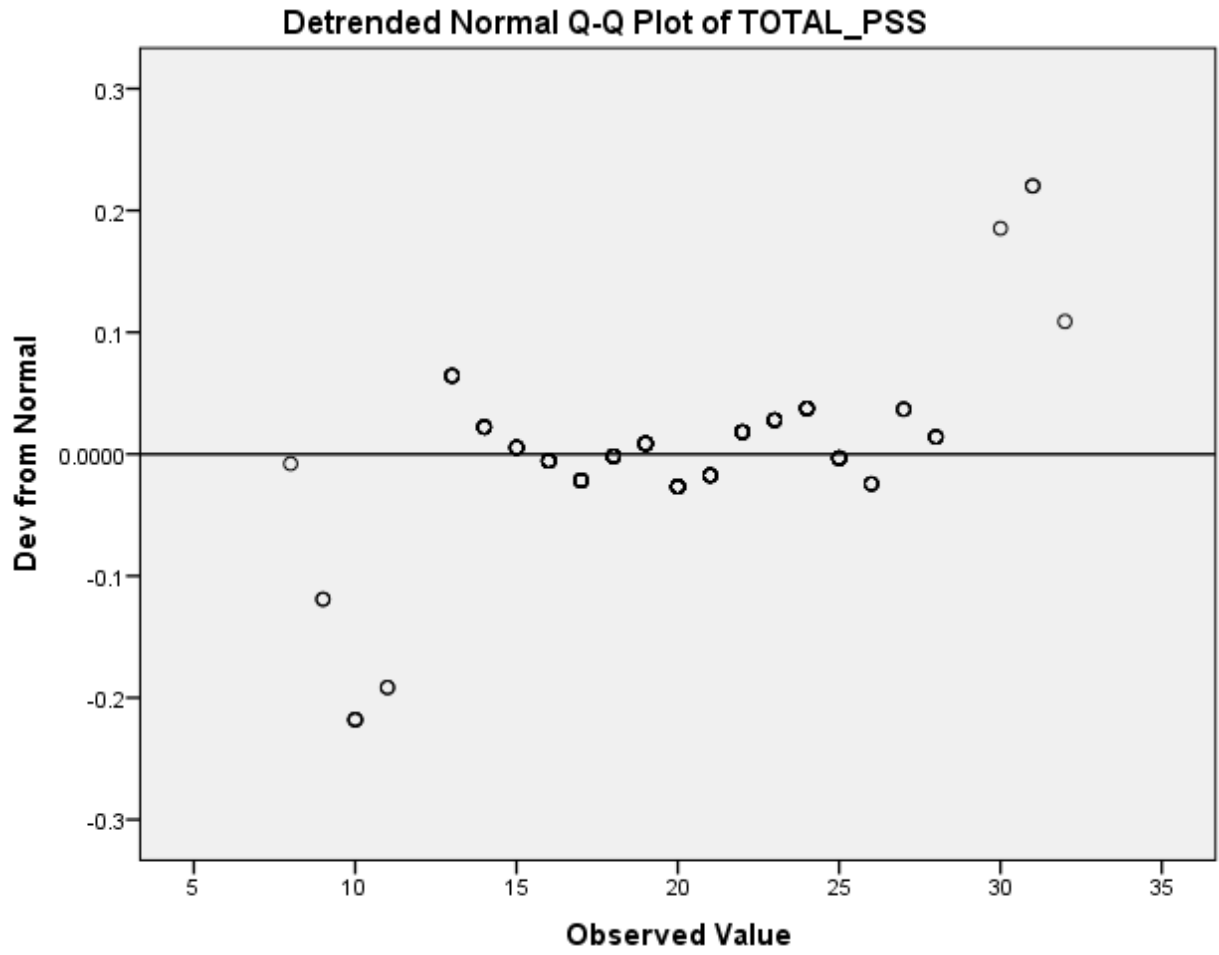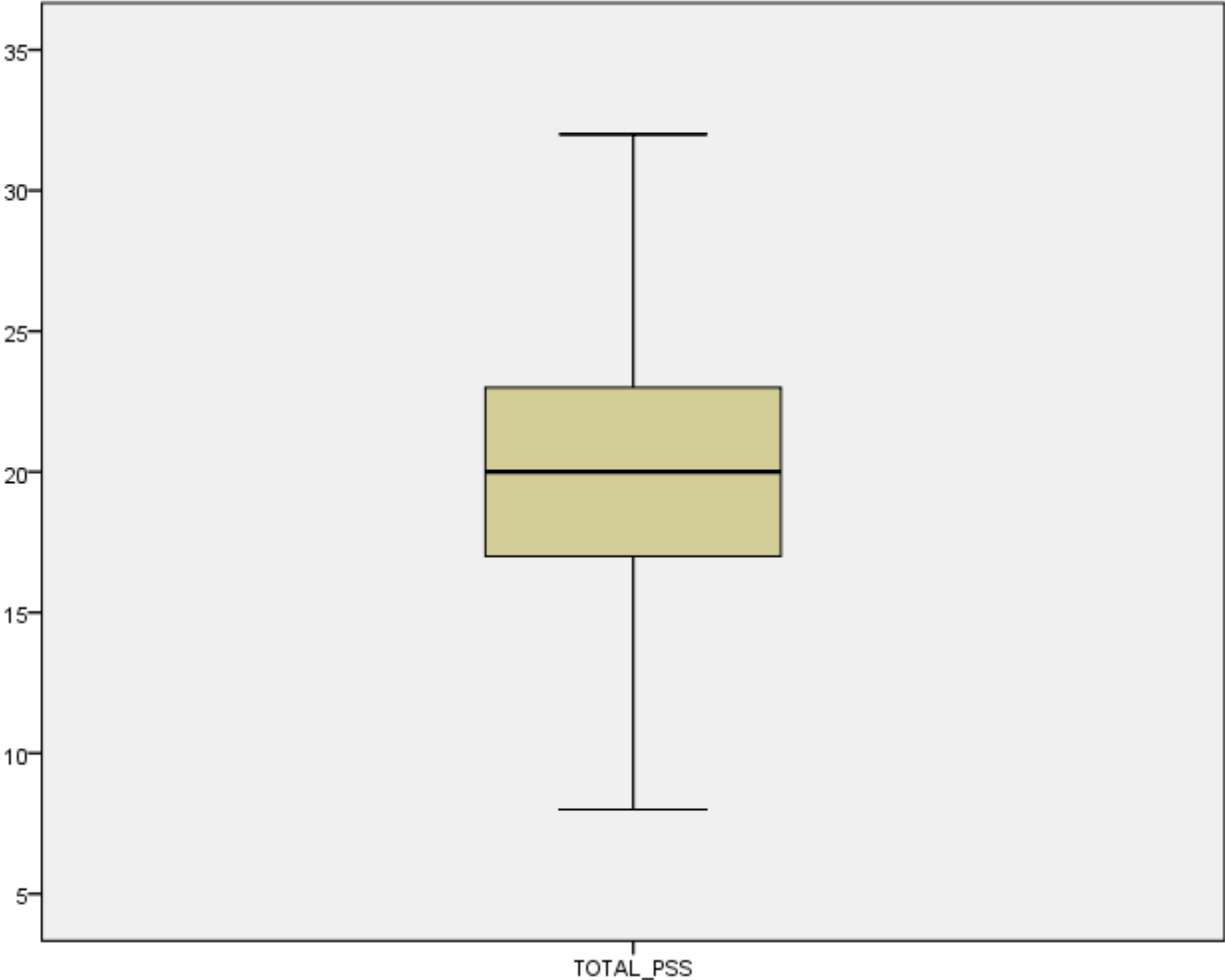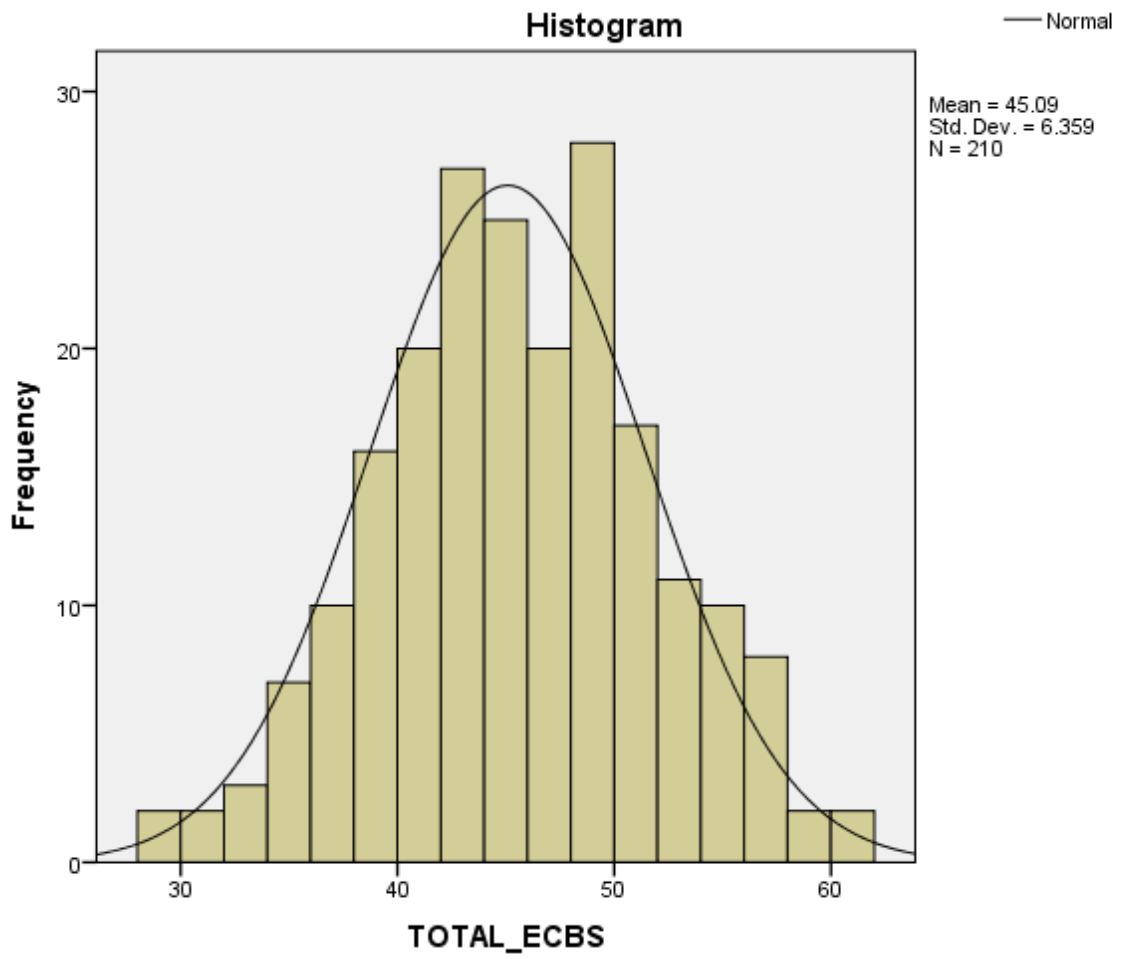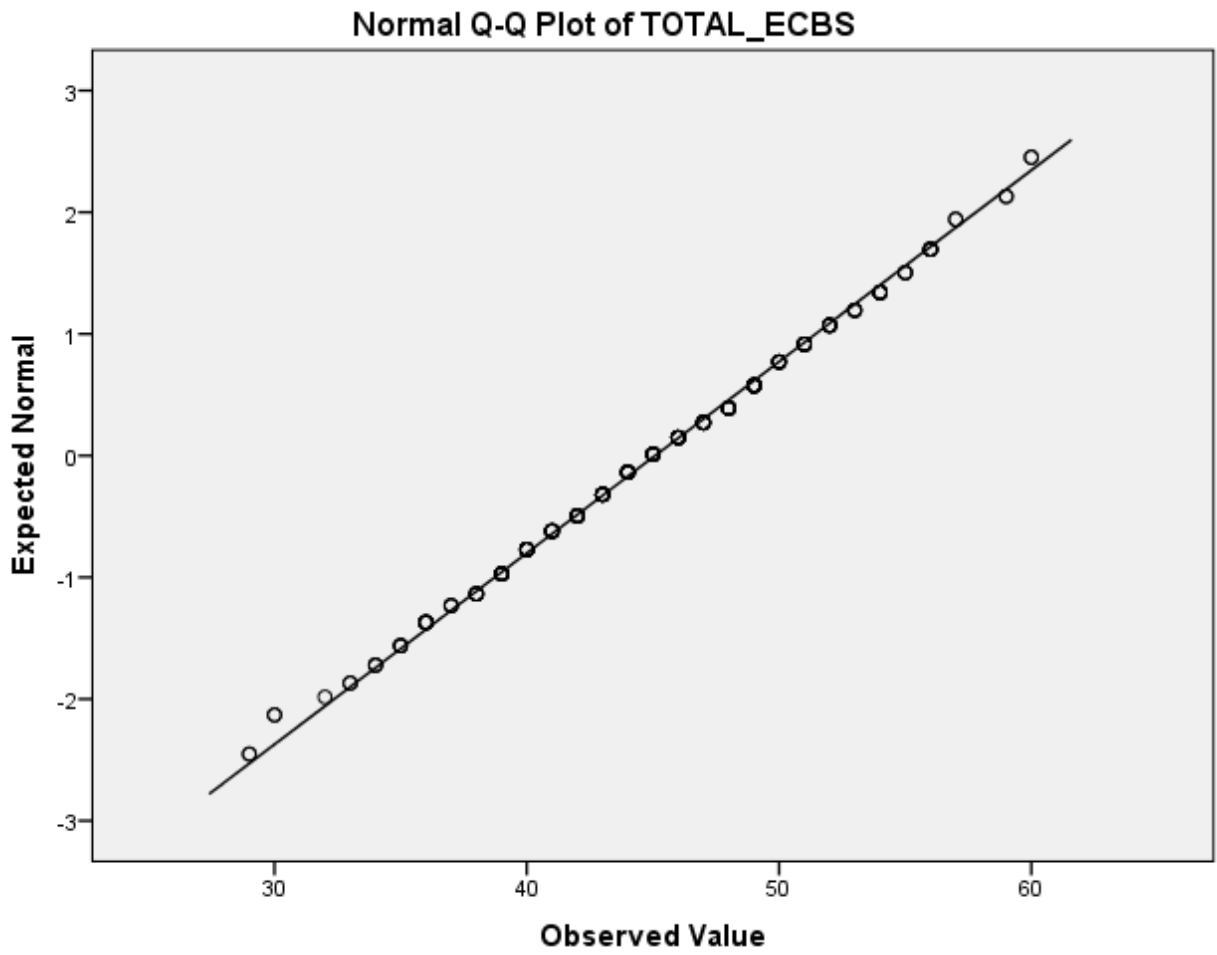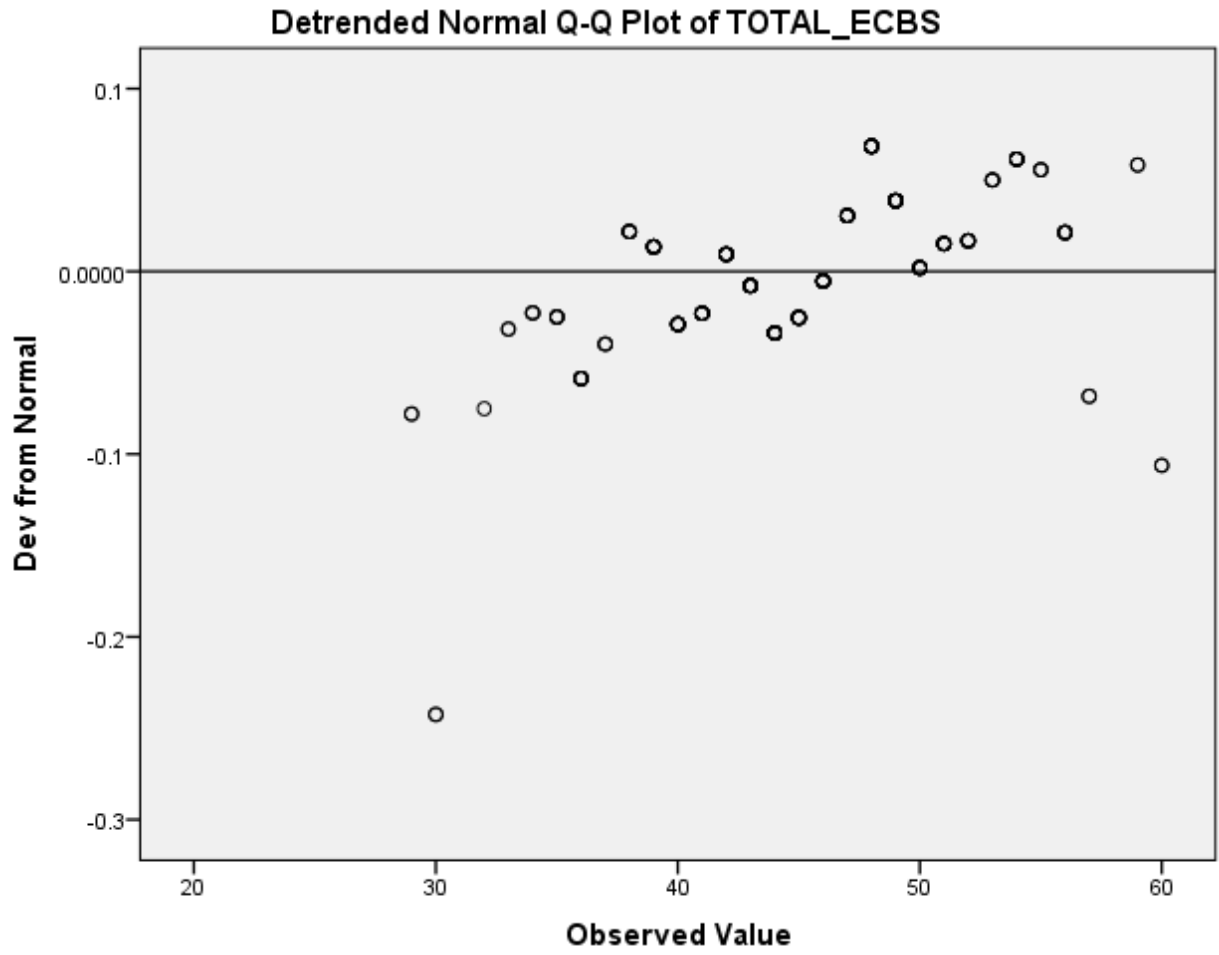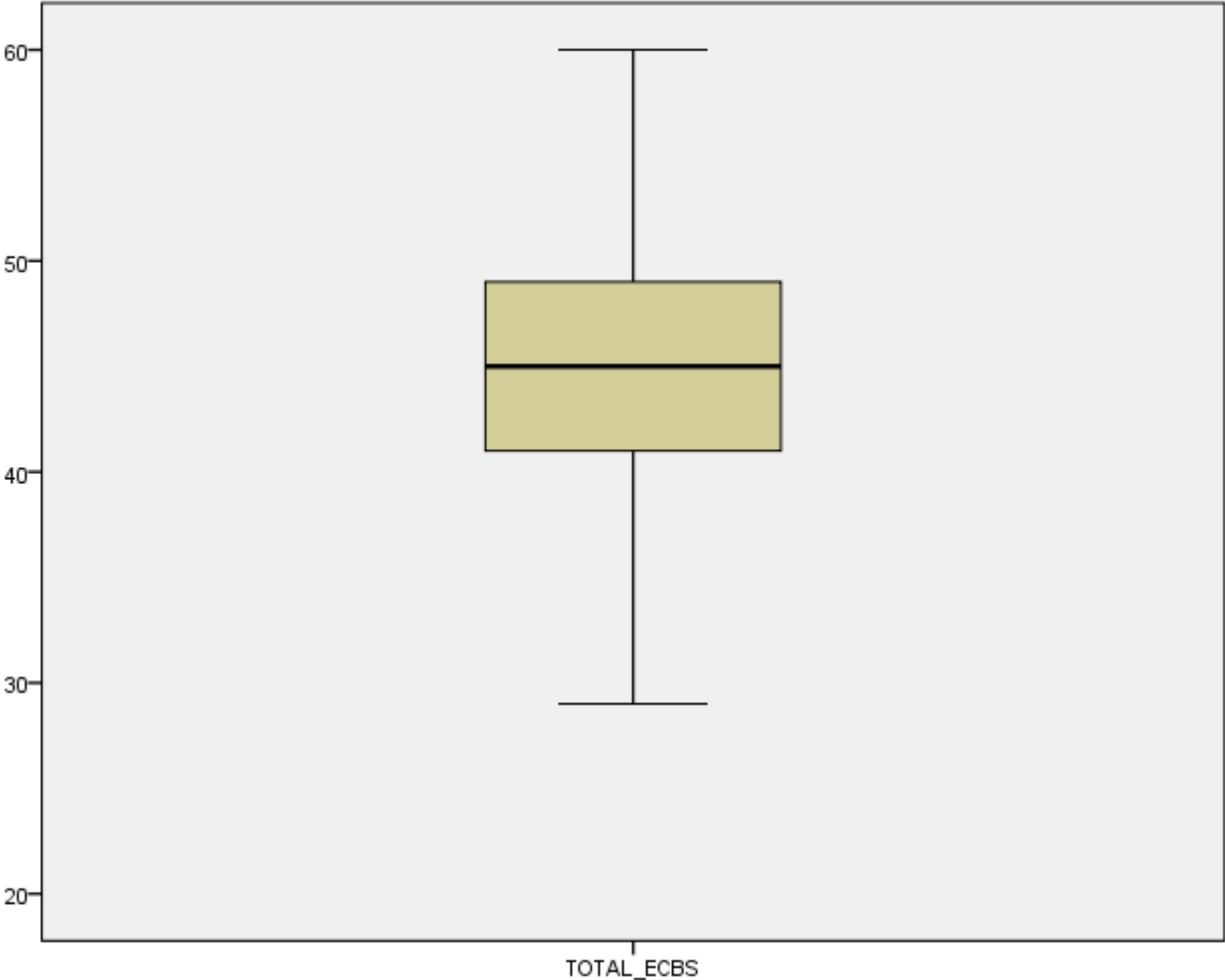
TOTAL_ECBS

*Appendix G: Multiple Linear Regression (MLR) Assumption*

**Model Summary**[b]

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|---|---|---|---|---|---|
| 1 | .316[a] | .100 | .091 | 6.062 | 1.785 |

a. Predictors: (Constant), TOTAL_PSS, TOTAL_MVS

b. Dependent Variable: TOTAL_ECBS

**ANOVA**[a]

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 843.827 | 2 | 421.913 | 11.482 | .000[b] |
| | Residual | 7606.630 | 207 | 36.747 | | |
| | Total | 8450.457 | 209 | | | |

a. Dependent Variable: TOTAL_ECBS

b. Predictors: (Constant), TOTAL_PSS, TOTAL_MVS

**Coefficients***

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Collinearity Statistics | |
|---|---|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | | Tolerance | VIF |
| 1 | (Constant) | 63.105 | 3.832 | | 16.467 | .000 | | |
| | TOTAL_MVS | -.354 | .078 | -.302 | -4.516 | .000 | .970 | 1.031 |
| | TOTAL_PSS | -.075 | .094 | -.053 | -.799 | .425 | .970 | 1.031 |

a. Dependent Variable: TOTAL_ECBS

**Collinearity Diagnostics[a]**

| Model | Dimension | Eigenvalue | Condition Index | Variance Proportions | | |
|---|---|---|---|---|---|---|
| | | | | (Constant) | TOTAL_MVS | TOTAL_PSS |
| 1 | 1 | 2.961 | 1.000 | .00 | .00 | .01 |
| | 2 | .033 | 9.528 | .05 | .08 | .98 |
| | 3 | .007 | 21.171 | .95 | .92 | .01 |

a. Dependent Variable: TOTAL  ECBS

**Casewise Diagnostics[a]**

| Case Number | Std. Residual | TOTAL_ECBS | Predicted Value | Residual |
|---|---|---|---|---|
| 67 | 2.219 | 53 | 39.55 | 13.450 |
| 93 | 2.018 | 59 | 46.77 | 12.233 |
| 100 | 2.089 | 56 | 43.34 | 12.665 |
| 101 | 2.519 | 60 | 44.73 | 15.272 |
| 102 | 2.014 | 54 | 41.79 | 12.208 |
| 127 | -2.771 | 30 | 46.80 | -16.798 |
| 135 | 2.162 | 60 | 46.89 | 13.105 |
| 144 | -2.660 | 29 | 45.13 | -16.126 |
| 161 | -2.402 | 32 | 46.56 | -14.563 |
| 174 | -2.225 | 33 | 46.49 | -13.488 |

a. Dependent Variable: TOTAL_ECBS

**Residuals Statistics**[a]

| | Minimum | Maximum | Mean | Std. Deviation | N |
|---|---|---|---|---|---|
| Predicted Value | 39.55 | 49.88 | 45.09 | 2.009 | 210 |
| Std. Predicted Value | -2.755 | 2.384 | .000 | 1.000 | 210 |
| Standard Error of Predicted Value | .419 | 1.467 | .690 | .222 | 210 |
| Adjusted Predicted Value | 38.78 | 49.90 | 45.08 | 2.021 | 210 |
| Residual | -16.798 | 15.272 | .000 | 6.033 | 210 |
| Std. Residual | -2.771 | 2.519 | .000 | .995 | 210 |
| Stud. Residual | -2.794 | 2.547 | .001 | 1.003 | 210 |
| Deleted Residual | -17.075 | 15.609 | .009 | 6.133 | 210 |
| Stud. Deleted Residual | -2.841 | 2.582 | .001 | 1.008 | 210 |
| Mahal. Distance | .004 | 11.246 | 1.990 | 2.094 | 210 |
| Cook's Distance | .000 | .099 | .006 | .011 | 210 |
| Centered Leverage Value | .000 | .054 | .010 | .010 | 210 |

a. Dependent Variable: TOTAL_ECBS

Scatterplot

Dependent Variable: TOTAL_ECBS
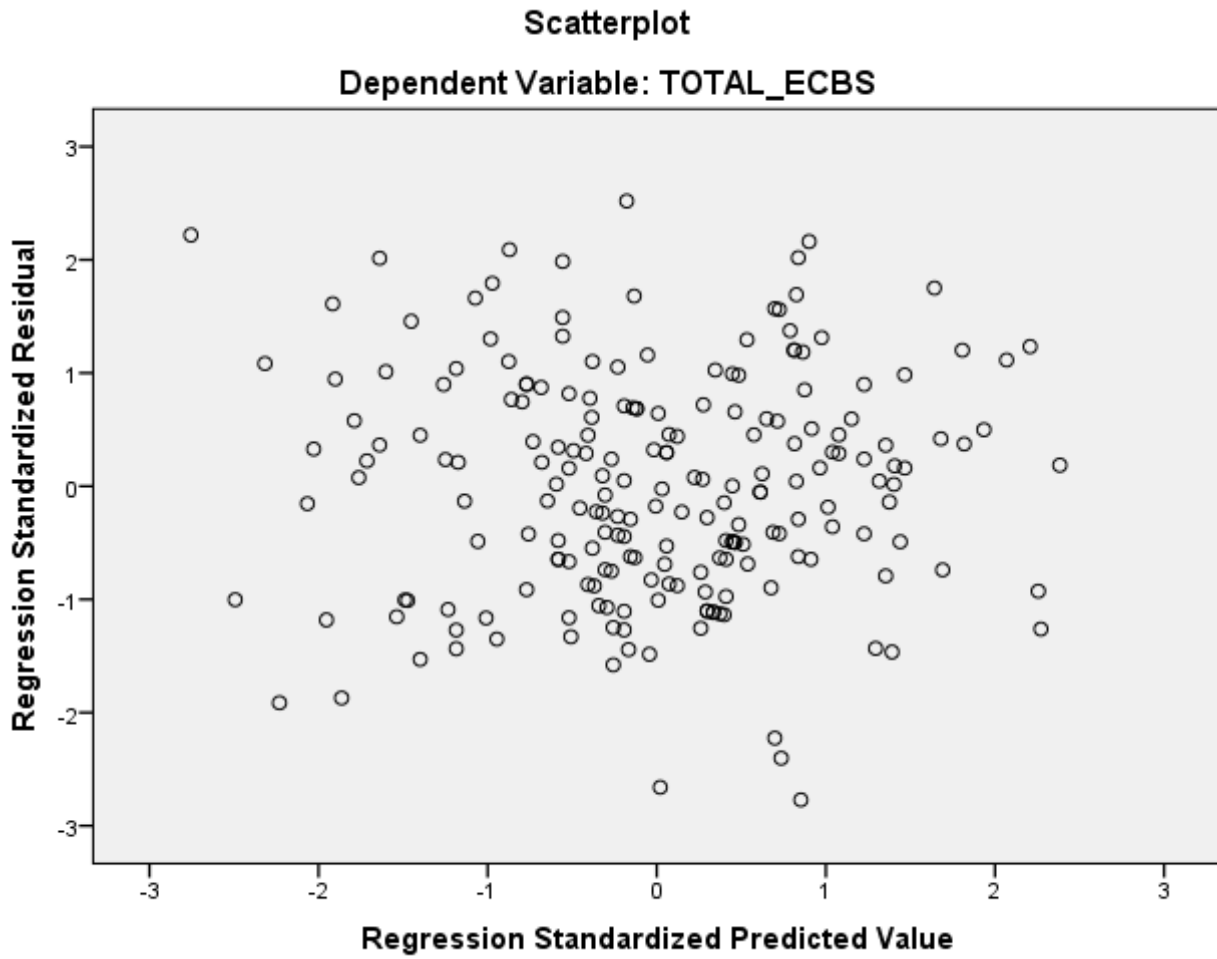
**Case Summaries**

|  |  |  | Case Number | Mahalanobis Distance | Cook's Distance | Centered Leverage Value |
|---|---|---|---|---|---|---|
| GROUP_IC | 0 | 1 | 1 | .94057 | .00698 | .00450 |
|  |  | 2 | 2 | 1.37587 | .00033 | .00658 |
|  |  | 3 | 3 | .05403 | .00032 | .00026 |
|  |  | 4 | 4 | 1.71038 | .01090 | .00818 |
|  |  | 5 | 5 | 4.31300 | .00021 | .02064 |
|  |  | 6 | 6 | .41178 | .00001 | .00197 |
|  |  | 7 | 7 | 2.72841 | .00295 | .01305 |
|  |  | 8 | 8 | .36319 | .00092 | .00174 |
|  |  | 9 | 9 | .63033 | .00001 | .00302 |
|  |  | 10 | 10 | .49319 | .00113 | .00236 |
|  |  | 11 | 11 | .24606 | .00078 | .00118 |
|  |  | 12 | 12 | .60033 | .00334 | .00287 |
|  |  | 13 | 13 | 6.22618 | .01242 | .02979 |
|  |  | 14 | 14 | 2.11819 | .00322 | .01013 |
|  |  | 15 | 15 | .87889 | .00091 | .00421 |
|  |  | 16 | 16 | .29304 | .00099 | .00140 |
|  |  | 17 | 17 | .21886 | .00078 | .00105 |

| | | | | |
|---|---|---|---|---|
| 18 | 18 | .02409 | .00032 | .00012 |
| 19 | 19 | 2.48914 | .00000 | .01191 |
| 20 | 20 | 6.31220 | .00648 | .03020 |
| 21 | 21 | .54976 | .00044 | .00263 |
| 22 | 22 | 1.53042 | .00136 | .00732 |
| 23 | 23 | 1.11270 | .00018 | .00532 |
| 24 | 24 | .09967 | .00285 | .00048 |
| 25 | 25 | 2.32219 | .00028 | .01111 |
| 26 | 26 | 2.14817 | .00128 | .01028 |
| 27 | 27 | .65636 | .00307 | .00314 |
| 28 | 28 | 2.11819 | .00067 | .01013 |
| 29 | 29 | 2.96600 | .00087 | .01419 |
| 30 | 30 | 4.78165 | .02068 | .02288 |
| 31 | 31 | .69512 | .00001 | .00333 |
| 32 | 32 | .11383 | .00014 | .00054 |
| 33 | 33 | .90150 | .00234 | .00431 |
| 34 | 34 | 2.96129 | .00093 | .01417 |
| 35 | 35 | 5.68318 | .00039 | .02719 |

| | | | | |
|---|---|---|---|---|
| 36 | 36 | 5.30858 | .00733 | .02540 |
| 37 | 37 | .94867 | .01015 | .00454 |
| 38 | 38 | 2.02571 | .01161 | .00969 |
| 39 | 39 | .17371 | .00142 | .00083 |
| 40 | 40 | .03530 | .00017 | .00017 |
| 41 | 41 | .36319 | .00092 | .00174 |
| 42 | 42 | 4.65531 | .00852 | .02227 |
| 43 | 43 | 1.04651 | .00450 | .00501 |
| 44 | 44 | .72686 | .00068 | .00348 |
| 45 | 45 | 1.85273 | .00338 | .00886 |
| 46 | 46 | 3.32686 | .00241 | .01592 |
| 47 | 47 | 1.28967 | .00821 | .00617 |
| 48 | 48 | .59774 | .00348 | .00286 |
| 49 | 49 | 4.88357 | .01511 | .02337 |
| 50 | 50 | .42249 | .00095 | .00202 |
| 51 | 51 | .09967 | .00089 | .00048 |
| 52 | 52 | .26497 | .00001 | .00127 |
| 53 | 53 | .02409 | .00127 | .00012 |

| | | | | |
|---|---|---|---|---|
| 54 | 54 | .21243 | .00113 | .00102 |
| 55 | 55 | .21243 | .00307 | .00102 |
| 56 | 56 | 1.25960 | .00216 | .00603 |
| 57 | 57 | 2.03334 | .01067 | .00973 |
| 58 | 58 | .39981 | .00063 | .00191 |
| 59 | 59 | .09967 | .00035 | .00048 |
| 60 | 60 | 1.89579 | .00018 | .00907 |
| 61 | 61 | 3.74919 | .00941 | .01794 |
| 62 | 62 | 1.95182 | .00027 | .00934 |
| 63 | 63 | .94057 | .01239 | .00450 |
| 64 | 64 | .11597 | .00223 | .00055 |
| 65 | 65 | .11383 | .00217 | .00054 |
| 66 | 66 | .05403 | .00187 | .00026 |
| 67 | 68 | .80189 | .00835 | .00384 |
| 68 | 69 | 3.12764 | .00700 | .01496 |
| 69 | 70 | 1.41641 | .00636 | .00678 |
| 70 | 71 | .82841 | .00004 | .00396 |
| 71 | 72 | 7.88239 | .00050 | .03771 |

| | | | | |
|---|---|---|---|---|
| 72 | 73 | 7.05849 | .05091 | .03377 |
| 73 | 74 | .72686 | .00275 | .00348 |
| 74 | 75 | 10.59379 | .00517 | .05069 |
| 75 | 76 | .11597 | .00223 | .00055 |
| 76 | 77 | 3.53610 | .00180 | .01692 |
| 77 | 78 | 1.01874 | .00511 | .00487 |
| 78 | 79 | .00416 | .00216 | .00002 |
| 79 | 80 | .59774 | .00115 | .00286 |
| 80 | 81 | 4.21703 | .00883 | .02018 |
| 81 | 82 | .63033 | .00001 | .00302 |
| 82 | 83 | 5.14572 | .00020 | .02462 |
| 83 | 84 | 4.80730 | .00006 | .02300 |
| 84 | 85 | .94057 | .00552 | .00450 |
| 85 | 86 | 3.00130 | .00006 | .01436 |
| 86 | 87 | 2.36563 | .00737 | .01132 |
| 87 | 88 | .57863 | .00105 | .00277 |
| 88 | 89 | 1.74383 | .00271 | .00834 |
| 89 | 90 | .94399 | .00595 | .00452 |

| | | | | |
|---|---|---|---|---|
| 90 | 91 | 5.74804 | .01922 | .02750 |
| 91 | 92 | 4.30215 | .00096 | .02058 |
| 92 | 94 | .09967 | .00215 | .00048 |
| 93 | 95 | 7.36430 | .00065 | .03524 |
| 94 | 96 | 2.43033 | .00236 | .01163 |
| 95 | 97 | 4.62170 | .01366 | .02211 |
| 96 | 98 | 2.34685 | .00032 | .01123 |
| 97 | 99 | 1.84632 | .00406 | .00883 |
| 98 | 103 | 2.69862 | .00000 | .01291 |
| 99 | 104 | 2.34685 | .00445 | .01123 |
| 100 | 105 | 1.33697 | .00032 | .00640 |
| 101 | 106 | 1.50113 | .00331 | .00718 |
| 102 | 107 | 11.24627 | .04523 | .05381 |
| 103 | 108 | .47587 | .00039 | .00228 |
| 104 | 109 | 1.18777 | .00168 | .00568 |
| 105 | 110 | .09967 | .00000 | .00048 |
| 106 | 111 | 4.98123 | .00552 | .02383 |
| 107 | 112 | .17371 | .00038 | .00083 |

| 108 | 113 | .50273 | .00086 | .00241 |
| 109 | 114 | 1.68791 | .00801 | .00808 |
| 110 | 115 | 1.13198 | .00040 | .00542 |
| 111 | 116 | .36319 | .00051 | .00174 |
| 112 | 117 | 4.42839 | .01133 | .02119 |
| 113 | 118 | .54976 | .00609 | .00263 |
| 114 | 119 | 2.14817 | .00128 | .01028 |
| 115 | 120 | .23385 | .00154 | .00112 |
| 116 | 121 | 1.37587 | .00149 | .00658 |
| 117 | 122 | 1.24092 | .00627 | .00594 |
| 118 | 123 | .72686 | .00000 | .00348 |
| 119 | 124 | .39981 | .00020 | .00191 |
| 120 | 125 | 3.00130 | .00037 | .01436 |
| 121 | 126 | 2.70073 | .01873 | .01292 |
| 122 | 128 | 4.11175 | .02996 | .01967 |
| 123 | 129 | .26497 | .00034 | .00127 |
| 124 | 130 | 4.58270 | .01310 | .02193 |
| 125 | 131 | 3.23272 | .00170 | .01547 |

| | | | | |
|---|---|---|---|---|
| 126 | 132 | .36319 | .00026 | .00174 |
| 127 | 133 | 1.55188 | .00147 | .00743 |
| 128 | 134 | 5.39665 | .01274 | .02582 |
| 129 | 136 | .42249 | .00218 | .00202 |
| 130 | 137 | 1.41641 | .00811 | .00678 |
| 131 | 138 | 1.88533 | .00381 | .00902 |
| 132 | 139 | 1.01874 | .00816 | .00487 |
| 133 | 140 | .05403 | .00012 | .00026 |
| 134 | 141 | .24606 | .00017 | .00118 |
| 135 | 142 | 2.16585 | .00013 | .01036 |
| 136 | 143 | .42249 | .00053 | .00202 |
| 137 | 145 | 1.38414 | .00000 | .00662 |
| 138 | 146 | .52156 | .00273 | .00250 |
| 139 | 147 | .21886 | .00249 | .00105 |
| 140 | 148 | .26102 | .00053 | .00125 |
| 141 | 149 | .51519 | .00509 | .00247 |
| 142 | 150 | .61322 | .00461 | .00293 |
| 143 | 151 | 1.15988 | .00029 | .00555 |

| | | | | |
|---|---|---|---|---|
| 144 | 152 | 4.92294 | .00257 | .02355 |
| 145 | 153 | .10913 | .00100 | .00052 |
| 146 | 154 | .59774 | .00006 | .00286 |
| 147 | 155 | .24410 | .00080 | .00117 |
| 148 | 156 | 2.55535 | .00058 | .01223 |
| 149 | 157 | 1.11499 | .00031 | .00533 |
| 150 | 158 | .76053 | .00400 | .00364 |
| 151 | 159 | 2.21659 | .00394 | .01061 |
| 152 | 160 | 1.83903 | .00015 | .00880 |
| 153 | 162 | 1.97476 | .00393 | .00945 |
| 154 | 163 | 1.07205 | .00052 | .00513 |
| 155 | 164 | 2.20323 | .00891 | .01054 |
| 156 | 165 | .87889 | .00369 | .00421 |
| 157 | 166 | .57863 | .00258 | .00277 |
| 158 | 167 | .26497 | .00111 | .00127 |
| 159 | 168 | .49319 | .00113 | .00236 |
| 160 | 169 | 1.13198 | .00333 | .00542 |
| 161 | 170 | 2.02571 | .00100 | .00969 |

| | 162 | 171 | .10913 | .00010 | .00052 |
| | 163 | 172 | .72686 | .00068 | .00348 |
| | 164 | 173 | 1.50113 | .00340 | .00718 |
| | 165 | 175 | 1.63510 | .00453 | .00782 |
| | 166 | 176 | .62248 | .00047 | .00298 |
| | 167 | 177 | 1.15988 | .00072 | .00555 |
| | 168 | 178 | 2.30380 | .00001 | .01102 |
| | 169 | 179 | 8.81913 | .02088 | .04220 |
| | 170 | 180 | 2.66711 | .00618 | .01276 |
| | 171 | 181 | 4.87408 | .02571 | .02332 |
| | 172 | 182 | 1.60253 | .00015 | .00767 |
| | 173 | 183 | 2.34685 | .00097 | .01123 |
| | 174 | 184 | 5.55079 | .01772 | .02656 |
| | 175 | 185 | 2.94495 | .00033 | .01409 |
| | 176 | 186 | .60033 | .00006 | .00287 |
| | 177 | 187 | 1.50113 | .00331 | .00718 |
| | 178 | 188 | 1.41641 | .00425 | .00678 |
| | 179 | 189 | .63408 | .00146 | .00303 |

| | | | | |
|---|---|---|---|---|
| 180 | 190 | 2.14817 | .00223 | .01028 |
| 181 | 191 | 3.30541 | .00099 | .01582 |
| 182 | 192 | 1.11499 | .00044 | .00533 |
| 183 | 193 | 1.32745 | .00010 | .00635 |
| 184 | 194 | 2.95421 | .00011 | .01413 |
| 185 | 195 | .80189 | .00001 | .00384 |
| 186 | 196 | .85868 | .00062 | .00411 |
| 187 | 197 | 1.46861 | .01111 | .00703 |
| 188 | 198 | 1.19213 | .00006 | .00570 |
| 189 | 199 | .59774 | .00173 | .00286 |
| 190 | 200 | 2.16585 | .00504 | .01036 |
| 191 | 201 | 7.31262 | .01235 | .03499 |
| 192 | 202 | 2.51933 | .00026 | .01205 |
| 193 | 203 | 2.90360 | .00113 | .01389 |
| 194 | 204 | .39981 | .00020 | .00191 |
| 195 | 205 | 6.04736 | .00445 | .02893 |
| 196 | 206 | 2.21659 | .00110 | .01061 |
| 197 | 207 | .11383 | .00217 | .00054 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | 198 | 208 | 3.78892 | .01155 | .01813 |
| | | 199 | 209 | 7.90796 | .04371 | .03784 |
| | | 200 | 210 | 2.96129 | .00945 | .01417 |
| | Total N | | | 200 | 200 | 200 |
| 1 | 1 | 67 | | 10.33031 | .09940 | .04943 |
| | 2 | 93 | | 1.37587 | .01576 | .00658 |
| | 3 | 100 | | .95951 | .01387 | .00459 |
| | 4 | 101 | | 3.51772 | .04772 | .01683 |
| | 5 | 102 | | 2.96600 | .02662 | .01419 |
| | 6 | 127 | | 2.40172 | .04299 | .01149 |
| | 7 | 135 | | .81992 | .01377 | .00392 |
| | 8 | 144 | | .16719 | .01327 | .00080 |
| | 9 | 161 | | 2.30248 | .03134 | .01102 |
| | 10 | 174 | | 1.71038 | .02193 | .00818 |
| | Total N | | | 10 | 10 | 10 |
| Total | N | | | 210 | 210 | 210 |

a. Limited to first 250 cases.

*Appendix H: Descriptive Statistics*

**Statistics**

| | | 1. Age | 2. Gender | 3. Nationality - Selected Choice | 3. Nationality - Non-Malaysian, please specify - Text | 4. Ethnicity - Selected Choice | 4. Ethnicity - Others, please specify - Text | 5. Current living state (e. g. Perak) | 6. Employment status - Selected Choice | 6. Employment status - Employed, occupation: - Text | 7. Relationship status | 8. Do you have any shopping experience before? | 9. How much is your income per month? |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| N | Valid | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 210 |
| | Missing | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mean | | 22.02 | 1.57 | 1.00 | | 2.02 | | | 2.76 | | 1.46 | 2.90 | 1.11 |
| Std. Error of Mean | | .110 | .034 | .000 | | .018 | | | .043 | | .058 | .030 | .024 |
| Median | | 22.00 | 2.00 | 1.00 | | 2.00 | | | 3.00 | | 1.00 | 3.00 | 1.00 |
| Mode | | 22 | 2 | 1 | | 2 | | | 3 | | 1 | 3 | 1 |
| Std. Deviation | | 1.598 | .496 | .000 | | .267 | | | .621 | | .836 | .431 | .342 |
| Variance | | 2.555 | .246 | .000 | | .071 | | | .386 | | .699 | .186 | .117 |
| Minimum | | 18 | 1 | 1 | | 1 | | | 1 | | 1 | 1 | 1 |
| Maximum | | 29 | 2 | 1 | | 4 | | | 3 | | 3 | 3 | 3 |
| Sum | | 4624 | 330 | 210 | | 425 | | | 579 | | 306 | 609 | 233 |

**1. Age**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 18 | 1 | .5 | .5 | .5 |
| | 19 | 2 | 1.0 | 1.0 | 1.4 |
| | 20 | 21 | 10.0 | 10.0 | 11.4 |
| | 21 | 42 | 20.0 | 20.0 | 31.4 |
| | 22 | 102 | 48.6 | 48.6 | 80.0 |
| | 23 | 24 | 11.4 | 11.4 | 91.4 |
| | 24 | 3 | 1.4 | 1.4 | 92.9 |
| | 25 | 6 | 2.9 | 2.9 | 95.7 |
| | 26 | 1 | .5 | .5 | 96.2 |
| | 27 | 3 | 1.4 | 1.4 | 97.6 |
| | 28 | 4 | 1.9 | 1.9 | 99.5 |

| | | | | | |
|---|---|---|---|---|---|
| | 29 | 1 | .5 | .5 | 100.0 |
| | Total | 210 | 100.0 | 100.0 | |

**2. Gender**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Male | 90 | 43.1 | 43.1 | 43.1 |
| | Female | 119 | 56.9 | 56.9 | 100.0 |
| | Total | 209 | 100.0 | 100.0 | |

**3. Nationality - Selected Choice**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Malaysian | 209 | 100.0 | 100.0 | 100.0 |

**3. Nationality - Non-Malaysian, please specify - Text**

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| Valid | 209 | 100.0 | 100.0 | 100.0 |

**4. Ethnicity - Selected Choice**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Malay | 4 | 1.9 | 1.9 | 1.9 |
| | Chinese | 197 | 94.3 | 94.3 | 96.2 |
| | Indian | 7 | 3.3 | 3.3 | 99.5 |
| | Others, please specify | 1 | .5 | .5 | 100.0 |
| | Total | 209 | 100.0 | 100.0 | |

**4. Ethnicity - Others, please specify - Text**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | | 208 | 99.5 | 99.5 | 99.5 |
| | Punjabi | 1 | .5 | .5 | 100.0 |
| | Total | 209 | 100.0 | 100.0 | |

**5. Current living state (e.g. Perak)**

|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Johor | 21 | 10.0 | 10.0 | 10.0 |
|  | Kedah | 9 | 4.3 | 4.3 | 14.4 |
|  | Kuala Lumpur | 7 | 3.3 | 3.3 | 17.7 |
|  | Melaka | 5 | 2.4 | 2.4 | 20.1 |
|  | Negeri Sembilan | 4 | 1.9 | 1.9 | 22.0 |
|  | Pahang | 4 | 1.9 | 1.9 | 23.9 |
|  | Penang | 50 | 23.9 | 23.9 | 47.8 |
|  | Perak | 62 | 29.7 | 29.7 | 77.5 |
|  | Sabah | 2 | 1.0 | 1.0 | 78.5 |
|  | Sarawak | 3 | 1.4 | 1.4 | 79.9 |
|  | Selangor | 42 | 20.1 | 20.1 | 100.0 |
|  | Total | 209 | 100.0 | 100.0 |  |

**6. Employment status - Selected Choice**

|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Employed, occupation: | 21 | 10.0 | 10.0 | 10.0 |
|  | Unemployed | 9 | 4.3 | 4.3 | 14.4 |
|  | Student | 179 | 85.6 | 85.6 | 100.0 |
|  | Total | 209 | 100.0 | 100.0 |  |

**6. Employment status - Employed, occupation: - Text**

|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid |  | 188 | 90.0 | 90.0 | 90.0 |
|  | Account assistant | 1 | .5 | .5 | 90.4 |
|  | accountant | 1 | .5 | .5 | 90.9 |
|  | Accountant | 1 | .5 | .5 | 91.4 |
|  | Admin | 1 | .5 | .5 | 91.9 |
|  | Business executive | 1 | .5 | .5 | 92.3 |
|  | Chef | 1 | .5 | .5 | 92.8 |
|  | clerk | 2 | 1.0 | 1.0 | 93.8 |
|  | Customer Services | 1 | .5 | .5 | 94.3 |
|  | Education advisor | 1 | .5 | .5 | 94.7 |

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| Executive | 1 | .5 | .5 | 95.2 |
| Financial Crime Compliance | 1 | .5 | .5 | 95.7 |
| HR executive | 1 | .5 | .5 | 96.2 |
| Internship | 1 | .5 | .5 | 96.7 |
| IT | 1 | .5 | .5 | 97.1 |
| IT man | 1 | .5 | .5 | 97.6 |
| Operator | 1 | .5 | .5 | 98.1 |
| Optician | 1 | .5 | .5 | 98.6 |
| Programmer | 1 | .5 | .5 | 99.0 |
| SELF-EMPLOYED | 1 | .5 | .5 | 99.5 |
| TEACHER | 1 | .5 | .5 | 100.0 |
| Total | 209 | 100.0 | 100.0 | |

**7. Relationship status**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Single | 161 | 77.0 | 77.0 | 77.0 |
| | Married | 2 | 1.0 | 1.0 | 78.0 |
| | In a relationship | 46 | 22.0 | 22.0 | 100.0 |
| | Total | 209 | 100.0 | 100.0 | |

**8. Do you have any shopping experience before?**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Yes, I only have online shopping experience before. | 10 | 4.8 | 4.8 | 4.8 |
| | Yes, I only have physical shopping experience before. | 1 | .5 | .5 | 5.3 |
| | Yes, I have both online and physical shopping experience before. | 198 | 94.7 | 94.7 | 100.0 |
| | Total | 209 | 100.0 | 100.0 | |

**9. How much is your income per month?**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | RM 0 - RM 1999 | 188 | 90.0 | 90.0 | 90.0 |
| | RM 2000 - RM 4999 | 19 | 9.1 | 9.1 | 99.0 |
| | RM 5000 above | 2 | 1.0 | 1.0 | 100.0 |

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| Total | 209 | 100.0 | 100.0 | |

**Mean_MVS**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Lower than mean | 102 | 48.8 | 48.8 | 48.8 |
| | Higher than mean | 107 | 51.2 | 51.2 | 100.0 |
| | Total | 209 | 100.0 | 100.0 | |

**Mean_PSS**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Lower than mean | 100 | 47.8 | 47.8 | 47.8 |
| | Higher than mean | 109 | 52.2 | 52.2 | 100.0 |
| | Total | 209 | 100.0 | 100.0 | |

**Mean_ECBS**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Lower than mean | 112 | 53.6 | 53.6 | 53.6 |
| | Higher than mean | 97 | 46.4 | 46.4 | 100.0 |
| | Total | 209 | 100.0 | 100.0 | |

**Level of Perceived Stress**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | Low perceived stress | 15 | 7.2 | 7.2 | 7.2 |
| | Moderate perceived stress | 181 | 86.6 | 86.6 | 93.8 |
| | High perceived stress | 13 | 6.2 | 6.2 | 100.0 |
| | Total | 209 | 100.0 | 100.0 | |

*Appendix I: Pearson's Product-Moment Correlation (PPMC)*

Appendix I1: PPMC between Material Values Scale and Compulsive Buying Behavior

**Correlations**

|  |  | TOTAL_MVS | TOTAL_ECBS |
|---|---|---|---|
| TOTAL_MVS | Pearson Correlation | 1 | -.332** |
|  | Sig. (2-tailed) |  | .000 |
|  | N | 209 | 209 |
| TOTAL_ECBS | Pearson Correlation | -.332** | 1 |
|  | Sig. (2-tailed) | .000 |  |
|  | N | 209 | 209 |

**. Correlation is significant at the 0.01 level (2-tailed).

Appendix I2: PPMC between Perceived Stress and Compulsive Buying Behavior

**Correlations**

|  |  | TOTAL_PSS | TOTAL_ECBS |
|---|---|---|---|
| TOTAL_PSS | Pearson Correlation | 1 | -.123 |
|  | Sig. (2-tailed) |  | .076 |
|  | N | 209 | 209 |
| TOTAL_ECBS | Pearson Correlation | -.123 | 1 |
|  | Sig. (2-tailed) | .076 |  |
|  | N | 209 | 209 |

*Appendix J: Multiple Linear Regression (MLR) Analysis between Materialism, Perceived Stress*

*and Compulsive Buying Behavior among Young Adults in Malaysia (N = 209)*

**Model Summary[b]**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|-------|------|----------|-------------------|----------------------------|---------------|
| 1 | .316[a] | .100 | .091 | 6.062 | 1.785 |

a. Predictors: (Constant), TOTAL_PSS, TOTAL_MVS

b. Dependent Variable: TOTAL_ECBS

**ANOVA[a]**

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|-----------|----------------|-----|-------------|--------|-------|
| 1 | Regression | 843.827 | 2 | 421.913 | 11.482 | .000[b] |
| | Residual | 7606.630 | 207 | 36.747 | | |
| | Total | 8450.457 | 209 | | | |

a. Dependent Variable: TOTAL_ECBS

b. Predictors: (Constant), TOTAL_PSS, TOTAL_MVS

**Coefficients[a]**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | | | Collinearity Statistics | |
|-------|-----------|------|------------|------|--------|------|-----------|-------|
| | | B | Std. Error | Beta | t | Sig. | Tolerance | VIF |
| 1 | (Constant) | 63.105 | 3.832 | | 16.467 | .000 | | |
| | TOTAL_MVS | -.354 | .078 | -.302 | -4.516 | .000 | .970 | 1.031 |
| | TOTAL_PSS | -.075 | .094 | -.053 | -.799 | .425 | .970 | 1.031 |

a. Dependent Variable: TOTAL_ECBS

*Appendix K: Independent Sample t-test in Comparing Gender Difference Compulsive Buying*

*Behavior among Young Adults in Malaysia (N = 209)*

**Group Statistics**

| | 2. Gender | N | Mean | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|---|
| TOTAL_ECBS | Male | 90 | 46.49 | 6.232 | .657 |
| | Female | 119 | 43.96 | 6.246 | .573 |

**Independent Samples Test**

| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | 95% Confidence Interval of the Difference | |
| | | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | Lower | Upper |
| TOTAL_ ECBS | Equal variances assumed | .014 | .906 | 2.904 | 207 | .004 | 2.531 | .872 | .812 | 4.249 |
| | Equal variances not assumed | | | 2.904 | 192.004 | .004 | 2.531 | .871 | .812 | 4.250 |

*Appendix L: Turnitin Originality Report*

## FYP 2