MOBILE USAGE, SHOPPING BEHAVIOUR AND
STUDY HABIT AS CONTRIBUTING FACTORS
TO DEPRESSION, ANXIETY AND STRESS

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ABSTRACT

The scenarios of students' psychological breakdown have been more prevalent nowadays. Thus, this study aimed to investigate the effect of particular factors of behavioural aspects namely mobile usage, shopping behaviour and study habit, on negative emotional states specifically depression, anxiety and stress among university students. The study employed survey design in which faculties and departments in Sultan Idris Education University were stratified and purposive sampling were employed to obtain a total of 377 students as respondents of the study. Respondents' age ranged between 18 to 27 years old and most of them are females. The research instrument consisting of a questionnaire packet of Mobile Phone Involvement Questionnaire (MPIQ), Buying Impulsiveness Scale, Study Habits Questionnaire and Depression Anxiety Stress Scales (DASS-21). Three standard multiple regression analysis were conducted to measure predicting value of dependent variables and study habit ($\beta = -.22$; $p = .01$) was found to be a significant contributing factor to depression among university students. Besides that, shopping behavior ($\beta = .34$; $p = .01$) and study habit ($\beta = -.17$; $p = .01$) were significant contributing factor to anxiety whereas, mobile usage ($\beta = .41$, $p = .01$) and study habit ($\beta = -.16$, $p = .01$) were significant contributing factors to stress among university students. All of the significant independent variables were found to bring the highest contribution to stress ($R^2 = .21$), followed by anxiety ($R^2 = .17$) and lastly depression ($R^2 = .08$). In conclusion, students who practiced high mobile usage and shopping behaviour and poor study habit are prone to experience negative emotional states such as depression, anxiety and stress. Strategies focusing on improving behaviours such as action by education authorities to emphasis on healthy lifestyle behaviours should be conducted to increase awareness how depression, anxiety and stress can affect students' quality of life.

Keywords: mobile usage, shopping behavior, study habit, depression, anxiety, stress

PENGGUNAAN TELEFON, TINGKAH LAKU MEMBELI-BELAH DAN TABIAT BELAJAR SEBAGAI FAKTOR PENYUMBANG KEPADA KEMURUNGAN, KEBIMBANGAN DAN STRES

ABSTRAK

Senario kemerosotan psikologi pelajar lebih kerap berlaku kini. Oleh itu, kajian ini bertujuan untuk meneliti pengaruh aspek tingkah laku tertentu iaitu tingkah laku penggunaan telefon mudah alih, tingkah laku membeli-belah dan tabiat belajar terhadap keadaan emosi negatif seperti kemurungan, kebimbangan dan stres dalam kalangan pelajar universiti. Kajian ini menggunakan reka bentuk tinjauan di mana fakulti dan jabatan di Universiti Pendidikan Sultan Idris telah distratifikasi dan pensampelan bertujuan digunakan bagi mendapatkan seramai 377 pelajar sebagai responden kajian. Responden berumur antara 18 hingga 27 tahun dan kebanyakan mereka ialah wanita. Instrumen kajian terdiri daripada paket soal selidik iaitu Kajiselidik Penglibatan Telefon Bimbit (MPIQ), Skala Impuls Membeli, Kajiselidik Tabiat Belajar dan *Depression Anxiety Stress Scales (DASS-21)*. Tiga analisis regresi berganda piawai dilakukan untuk mengukur nilai ramalan pemboleh ubah bersandar dan tabiat belajar (β = -.22; p = .01) didapati menjadi faktor penyumbang yang signifikan kepada kemurungan dalam kalangan pelajar universiti. Selain itu, tingkah laku membeli-belah (β = .34; p = .01) dan tabiat belajar (β = -.17; p = .01) ialah faktor penyumbang yang signifikan kepada kebimbangan, manakala penggunaan telefon mudah alih (β = .41, p = .01) dan tabiat belajar (β = -.16, p = .01) ialah faktor penyumbang yang signifikan kepada stres yang tinggi dalam kalangan pelajar universiti. Semua pemboleh ubah bebas yang signifikan didapati memberikan sumbangan tertinggi kepada stres (R^2 = .21), diikuti oleh kebimbangan (R^2 = .17) dan terakhir kemurungan (R^2 = .08). Kesimpulannya, pelajar yang mengamalkan tingkah laku penggunaan telefon mudah alih dan tingkah laku membeli-belah yang tinggi dan tabiat belajar yang lemah cenderung untuk mengalami keadaan emosi negatif seperti kemurungan, kebimbangan dan stres. Strategi yang memfokuskan pada penambahbaikan tingkah laku seperti tindakan oleh pihak berkuasa pendidikan yang menitikberatkan kepada tingkah laku gaya hidup sihat harus dijalankan untuk meningkatkan kesedaran bagaimana kemurungan, kebimbangan dan stres boleh mempengaruhi kualiti hidup pelajar.

Kata kunci: penggunaan telefon mudah alih, tingkah laku membeli-belah, tabiat belajar, kemurungan, kebimbangan, stres

TABLE OF CONTENT

CHAPTER 2   LITERATURE REVIEW

CHAPTER 3   METHOD

CHAPTER 4   RESULTS

CHAPTER 5   DISCUSSION

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

AAT   Achievement Anxiety Test

BDI   Beck Depression Inventory

CES-D   Center for Epidemiologic Studies Depression Scale

DASS II   Depression Anxiety Stress Scale II

E-PBL   E-Problem-Based Learning

IMS   Information Management System

MPIQ   Mobile Phone Involvement Questionnaire

SHI   Study Habits Inventory

SPSS   Statistical Package for Social Sciences

SSI   Study Skills Inventory

UPSI   Sultan Idris Education University

VIF   Variance Inflation Factor

WCQ   Ways of Coping Questionnaire

WHO   World Health Organization

LIST OF SYMBOLS

F	frequency
M	mean
p	probability value
SD	standard deviation
SE	standard error
N	sample size
R^2	coefficient of determination

LIST OF APPENDICES

CHAPTER 1

INTRODUCTION

1.1.   Introduction

The introductory of this study will be explained in this chapter. It will include the background of study. Then, problem statement and research question will be presented. Next, objective of study will be stated. After that, significance of the study towards the community and future research will be elaborated.

It is then followed by definition of variables. All six variables will be defined conceptually and operationally. In the next section, theoretical approach will be stated. It will then be continued by conceptual framework of the study which allows and guides the readers to apprehend the study easier as the whole research is explained in a detailed

figure. Finally, hypothesis and conclusion will be explained in last two sections of this chapter.

1.2   Background of Study

University life is one of the best years that a student may experienced. It is totally different from what a student had gone through their school life. Compared to in school, classes in university are more varies and there are a whole lot more students in the university campus. Other than that, in university, students are taught to be more independent and responsible in their action. There are no teachers or parents to monitor their behaviour.

According to Corley (2013), the process that an individual need to undergo from being a student who studies at school to one who studies at the university is interesting yet challenging and students have the propensity to experience mental health disorders. Juggling multiple things at once is common as during this period, student's life will involve studying, attending lectures and group discussion, completing assignments, engaging in club activities and programs, hanging out with friends and many more. Thus, all of these shown that student ought to fit themselves in these changes which includes managing academic and interpersonal matters (Uehara et al., 2010).

Some students may find transition to university life to be overwhelmed. Students have the propensity to encounter all sorts of anxieties, dislocation and difficulties during the transition which involves changes related to culture, social and

academics (Longwell-Grice & Longwell-Grice, 2008). However, even that so, most students would really probably guess and acknowledge the tasks, evaluation needed and process of self-studying even before they enter the university (Blair, 2016). This is because they must have had some kind of prior exposure regarding the university life from either family members, or friends that have been undergo such transition too. As being detached and away from family members and friends, university students might deal with the transition involving changes in emotion, social and even environmental with various coping strategies. Some might found ease in mingling with supporting new friends (Buote et al., 2007), some might choose to spend time shopping (Atalay & Meloy, 2011) and doing all sorts of activities.

Not only this applies to first-year university students, even senior students also which are done dealing with transition might be involved in those activities in order to reduce the level of their stress. Some students might fit in well into these daily routines and some might not. A few might fall into the trap of mental illness. Mental health issue among students does not only applies to non-developed societies, but also all developed ones as well (Bayram & Bilgel, 2008). People nowadays prioritize their physical health but often neglect their mental health. However, to their surprise, the level of importance for both aspects of health are the same as there is strong link between both of them (Ohrnberger, Fichera & Sutton, 2017). A good physical leads to good mental health and vice versa. However, there are also other factors that need to be considered as well.

According to Deputy Education Minister Teo Nie Ching, statistics in 2018 showed that one in 10 people aged 16 and over in the country experienced mental health issues. Not only that, a study found that mental illness would be the second most

common health problem after heart disease in the country by 2020. Thus, she stated that conventional counselling approaches need to have added value in line with today's technological advances and challenges (Khairul Azran Hussin, 2018). Since the area of mental health is wide and varied, most of the problems are easily recognizable. But unfortunately, some are them have very subtle symptoms thus making them hard to be detected even by the individuals which is having the symptoms himself.

A lot of people are unable to identify particular disorders or the various types of psychological distress (Jorm, 2000). In fact, lack of identification or acknowledgement of mental health symptoms, accompanied by insufficient required treatment are familiar glitches among college students and it most probably the answer to why these problems still persist in the population (Pedrelli, Nyer, Yeung, Zulauf & Wilens, 2015). They are not aware of how such symptoms could later be a source of problems that might affect their psychological well-being. Thus, they may live day by day doing their own routines such as students going to schools or adults going to offices and assuming that their on-and-off problems are just something that is common.

For instance, inability to sleep soundly is thought to be just a mere problem, and yet as these problems persists, it could definitely affect the emotion, and even the behaviour of the individual in the future (Vandekerckhove & Wang, 2018). Besides that, though the use of mobile phones has been debated over and over again, most people still assume this issue to be not important, but in fact it could lead to numerous problems physically and emotionally, especially among young people that has been one of the clusters which is very highly related to high mobile phone use compared to older people (Berenguer et al., 2016). The activity of shopping and study habit too has not

been carried out extensively on how they would affect mental health. Instead, most studies concentrated on the reverse relationship between them.

Therefore, it is crucial to provide mental health awareness towards the students. Some excellent studies have been and still are being conducted in Malaysia which are focusing on how common the problems are in the population and a few other elements that might be associated to those problems. The relationship between mental health in university students and student's behaviours has however, remained largely unexplored. Thus, this study fills the gap of exploring the impact of certain behavioural aspects namely mobile usage, shopping behaviour and study habit towards negative emotional states, specifically depression, anxiety and stress among university students.

1.3   Problem Statement

The scenarios of students' psychological breakdown have been more prevalent nowadays compared to decades ago (Twenge et al., 2010). It has come to a point where everyone realizes that dealing with this issue is not as simple as a piece of cake. According to Ministry of Health Malaysia (2015), The National Health and Morbidity Survey (NHMS) revealed that the prevalence of mental health problems among adults have increased consistently in the last few years starting from 10.7% in 1966, to 11.2% in 2006 and lastly to 29.2% in 2015.

This statement also is in line with an article by Bernama (2016) which stated that Health Ministry statistics discovered the deterioration state of mental health problems among Malaysian students, from one in 10 individuals in 2011 to one in five in 2016. Eventhough the drugs-related factor might contribute to the percentage, experts also mentioned anxiety and depression as the leading causes of mental health problems among students. Therefore, the presence of multiple factors could not be taken lightly as the rate has shown that if it is not being managed systematically and productively, it may come up to a point that a high number of students would collapse due to mental health problems.

Mental health deficiencies can lead to common social problems that often occur in Malaysia, such as nervousness or feeling afraid for no reason, inability to sleep, poor achievement in learning and the desire to be alone (Lee & Syaid, 2017). A few studies that had been updating the issues suggested that students do seek professional help available at the college to help them deal with their mental health issue and there was no significant difference based on gender seeking help from the professional services provided (Azman Othman & Mas Anom Abdul Rashid, 2018). Besides that, the perception towards the social support received from family members were found to have significant association with depression, anxiety and stress (Minhat & Alawad, 2019).

Many factors might be the source of this problem, either it is biological, social, behavioural or even psychological factor. The combination of these factors too is not surprising to lead such problem to occur. Though the studies of mental health of Malaysian students are conducted more and more each year, not much were

concentrating on the student' behaviour itself. Therefore, this study is going to uncover the relationship between certain behavioural aspects with depression, anxiety and stress among university students. In this case, the behavioural aspects analysed are mobile usage, shopping behaviour and study habit.

1.4 Objective of Study

In this research, the objectives are:

a. To measure level of mobile usage, shopping behaviour and study habit among university students.

b. To measure level of depression, anxiety and stress among university students.

c. To evaluate mobile usage, shopping behaviour and study habit as contributing factors of depression, anxiety and stress among university students.

1.5 Significance of Study

By conducting this study, it added to extend the current literature on depression, anxiety and stress by examining the underlying contributing factors to these negative emotional states. At the same time, it gives an insight of how certain behavioural aspects can affect level of depression, anxiety and stress. By acknowledging the importance of this study, community especially university students can be more aware of how the three states of emotion that are depression, anxiety and stress can significantly affect one's life. As mental health is as imperative as physical health, balance in both aspects can lead to

general well-being of students in the university. This is because it enables an individual to generate positivity and spread happiness.

The result of study provides better understanding regarding depression, anxiety and stress which can lead to better academic achievement and social life. The result also provides preventive measures against symptoms of those emotional states to change certain behaviours of the students. At the same time, this study enables the researcher to work on improving certain behaviour that might not be conducive for an individual. It is better to deal with this problem before it is too late, as prevention is better than cure. Thus, this might be beneficial for those who might think that they need a hand to deal with those issues.

On top of that, since the study have highlighted a few behavioural aspects which relates to everyday life, it might be an eye-opener to readers of how much little things that seem so trivial could lead to something so substantial, in this case our mental health. Therefore, it is crucial for one to carefully think and analyze how they have been living this far in order to live better physically and mentally. It is hoped that student can be aware of how mobile usage, shopping behaviour and study habits can affect their mental health.

Furthermore, the result of this study can affect individuals economically. This is because the decreasing rate of negative behavior factor can increase healthy behavior among students. It can reduce the act of health seeking behavior where the students are having better mental health and able to carry out their daily tasks well. Lastly, this study

is hoped that this study can act as a guidance and become a useful information source for future research.

1.6   Definition of Variable

The variables can be defined in two separate and different definitions. The first one is conceptual definition. A conceptual definition explains what the concept means and how they are linked to other constructs.

On the other hand, operational definition describes the variables used for the constructs and also the procedures to measure the variables. It refers to clear clarification of a variable in a way of how it is measured or manipulated (Adams & Lawrence, 2015).

1.6.1   Conceptual Definition of Mobile Usage

A mobile phone is a phone that is able to be carried by oneself while going to another destination, and allows the user to make and accept calls (Chatterjee, 2014). In Cambridge Advanced Learner's Dictionary 3rd edition (2008), the term 'usage' refers to the way something is treated or used. Therefore, mobile usage can be simply being explained as the way a phone is used.

An accordance to the "Uses and Gratification Theory", Leung and Wei (2000) stated that a phone that is able to be utilized without the need of electrical conductor, enables the user to move around easily and is also convenient to everyone. It acts as a facilitative element in one's life which can be very beneficial when being used with full potential. Nevertheless, if not use with caution, one might find himself or herself fully immersed and preoccupied with mobile phone. According to Bianchi and Phillips (2005), problem behaviour which is linked with smartphone is probably because of the factors that leads to its usage even though admitting to its cost.

1.6.2   Operational Definition of Mobile Usage

In this study, mobile usage is operationally defined as the total scores obtained in Mobile Phone Involvement Questionnaire (Walsh, White & McD, 2010). The questionnaire measures how much an individual is connected with mobile phone in term of behavioral and mental process as addiction components.

The questionnaire consists of 8 items and using 7-point Likert scale. The score ranges from 8 to 56. Higher scores obtained in the questionnaire indicates higher involvement in using the mobile phones.

1.6.3 Conceptual Definition of Shopping Behaviour

Shopping behaviour is the process of choosing and acquiring of items, services, designs, or involvement to fulfil what the heart wishes and wants (De Mooij, 2004). It relates to the term of 'buying behaviour' because both terms carry the same meaning. Similar to consumer behaviour too. For instance, buying behaviour can be expressed as the process of judgment and actions of individuals involved in purchasing and utilizes products (Sharma, 2014).

Consumer behaviour indicates thinking process, emotions and behaviour one acquires preceding to or at the time of purchasing an item, service or idea (Khaniwale, 2015). To be exact, it describes the procedure of choosing, obtaining and utilizes of merchandises and service, as what is wish by the consumer (Ramya & Mohamed Ali, 2016).

1.6.4 Operational Definition of Shopping Behaviour

In this study, shopping behaviour is measured in the context of impulsiveness buying. Impulsive buying can be explained as the inclination to buy a lot of thing spontaneously even without the needs of buying it. Therefore, it is operationally defined as the scores obtained in Buying Impulsiveness Scale (Rook & Fisher, 1995).

This scale consists of 9 items scored on 5-point Likert scale from strongly disagree to strongly agree. Item scores are summed to form an overall index score

ranging from 9 to 45. Higher scores indicate higher tendency of impulsive buying behaviour.

1.6.5   Conceptual Definition of Study Habit

Study habits are organized, systematic and intentional way of study which enables a student to understand things that are being studied and perform well in the examination (Bashir & Mattoo, 2012).

Furthermore, it can be described as the inclination to learn which allow a student to execute academic affairs and the technique of study of a student that is organized, effective or incompetent (Ayodele & Adebiyi, 2013). It can be further defined as buying out a dedicated scheduled and un-interrupted time to apply one's self to the task of learning (Rabia, Mubarak, Tallat & Nasir, 2017).

1.6.6   Operational Definition of Study Habit

This scale comprises of three different aspects of study habit. They are access to notes, scheduling and ability to concentrate.

All three aspects make up to 10 items and the response varied from "never", "almost never", sometimes", "fairly often" and very often". Score of each answer ranges from 1 to 5. It is a modified version of a scale developed by Nonis, Relyea, and

Hudson (2007). The scores range from 10 to 50. Higher scores indicate better study habits of the students and vice versa.

1.6.7 Conceptual Definition of Depression

Depression is a mood disorder that give impact to how an individual think and behave, and some of the symptoms include a persistent feeling of sadness, fatigue, physical aches and sleeping difficulties (Kring, Johnson, Davison & Neale, 2010). According to the World Health Organization (WHO, 2018), depression is a common mental illness which strikes women more than men. It is a serious problem which can even lead to suicide. It was one of the top causes of death among individuals in the range of 15 to 29 years old.

Nolen-Hoeksema (2014) also mentioned that one who have depression states that they are no longer concern and excited about their life, their appetite is deteriorated, and even their sleep and activity levels changed. They will also have slow reaction and might feel physically agitated, cannot stay still and fidget aimlessly. Other than that, they might feel the sense of worthlessness, guilt, hopelessness and suicide intent.

1.6.8   Operational Definition of Depression

Depression is operationally defined as the scores obtained in Depression Anxiety Stress Scales II. It is one of the constructs in the instrument. As the scale of instrument range from zero to three, total scores for each of the construct is 21. Then, the scores are multiplied by two, to enable the scores to be compared with normal DASS (DASS-42).

For depression construct, score of less than 10 is considered as normal while a score of 10 to 13 is said to be mild depression score range, a slightly higher score in the range of 14 to 20, and 21 to 27 is considered of having moderate and severe depression symptoms respectively, and lastly score of 28 and above are considered of having extremely severe depression.

1.6.9   Conceptual Definition of Anxiety

Anxiety can be referred as the condition where an individual feel agitated when confronting a frightening or intimidating circumstance (Karadağ & Sölpük, 2018). People with anxiety disorders usually have several characteristics such as having repeated unpleasant thoughts, may choose to escape from particular event due to feeling of uneasiness, and even portrays symptoms such as perspiring, light-headedness, trembling and increased blood pressure (Kazdin, 2000).

Larsen and Buss (2014) on the other hand refers anxiety as an unpleasant, high-arousal emotional state associated with perceived threat. High level of anxiety may

hinder individuals from performing at appropriate levels. This is shown in a study by Nadeem, Ali, Maqbool and Zaidi (2012) which discovered that increasing level of anxiety resulted in decreasing academic achievement both in male and female students in Pakistan.

1.6.10 Operational Definition of Anxiety

Anxiety is operationally defined as the scores obtained in the construct available in Depression Anxiety Stress Scales II.

Interpretation of anxiety is different from depression since individual who obtain the score of seven and less is already considered as being normal. A score of eight and nine reflects mild anxiety symptoms, while a score of ten to 14 is considered of having moderate anxiety symptoms. Severe anxiety symptoms are portrayed in a score of 15 to 19, whereas extremely severe anxiety is reflected in the score of 20 and more.

1.6.11 Conceptual Definition of Stress

There are numerous definitions of stress. Stress is defined as a person's psychological and physiological response to the perception of a demand or challenge (Hemamalini, Ashok, & Sasikala, 2018). Stress is also explained as the body's non-specific response to any demand placed upon it (Jayakumar & Sulthan, 2013).

It is a state that motivates us to do something, often being relate to 'fight-and-flight response'. Some stress might be detrimental towards our health. This is because we might not be able to face the pressure thus begin to respond negatively. But some can make us more alert and motivate us to prepare for upcoming tasks (Kearney & Trull, 2015).

1.6.12 Operational Definition of Stress

Stress is operationally defined as the scores obtained in one construct available in Depression Anxiety Stress Scales II. A score of 14 and less indicate a normal level of stress.

A score of 14 and less is considered to be a normal range of stress. Mild and moderate level of stress is reflected in a score of 15 to 18 and 19 to 25. On the other hand, those who experienced severe and extremely severe level of stress is ones that receive the score of 26 to 33 and 34 and above respectively.

1.7   Theoretical Approach

The general purpose of this study is to determine whether behavioural aspects will affect depression, anxiety and stress. The researcher is going to apply four theories which are relevant to the study and all of them will explain the study that is being analyzed.

They are Theory of Planned Behavior, Beck's Cognitive Theory of Depression, Cognitive Theory of Anxiety and Lazarus's Theory of Cognitive Appraisal. All of these theories linking to each other in a way that cognition cause an individual to behave the way they are not supposed to. It evokes the symptoms of depression, anxiety and stress in the individual.

1.7.1 Theory of Planned Behavior

As for independent variables involving mobile usage, shopping behaviour and study habit, it is related to Theory of Planned Behavior. The Theory of Planned Behaviour is an extension of the Theory of Reasoned Action (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975). Nevertheless, the fundamental core of the theory is individual's intention to perform a behaviour. Intentions are presumed to be the source that will motivate or trigger for a behaviour to be executed.

It is predictable that when the intention to perform a behaviour is getting stronger, there is a greater chance or more likelihood for the individual to execute such behaviour. However, there are other aspects that should be taken into consideration too, as the performance of most behaviours are also affected by the obtainability of chances and resources including expertise, money and many more. Together, all of them embody the individual's actual control over the behaviour. It is expected that when an individual has the access to all of the mentioned elements, there is a higher chance of performing well in the behaviour.

The Theory of Planned Behavior basically frames a model in order to indicate how individual's actions are guided by multiple factors. The factors are attitudes, subjective norms and perceived behavioural control. The intention stands as cursive agents of the behaviours. Thus here, this theory is used to predict factors explaining variances or factors on intention and behaviours of mobile phone usage, shopping behaviour and study habits among university students.

Attitudes toward the behaviour refers to the individual's overall evaluation of the behaviour performed or to be performed. It can be determined based on two beliefs which are belief about the consequences of the behaviour or the judgement of the behaviour. Subjective norms can be described as the individual's own estimate of the social pressure to perform or not perform the target behaviour. They are a measure of two beliefs that interacts with each other that are the beliefs about how other people who might be significant to them, would like them to behave, and the judgements about each belief.

Perceived behavioural control is the degree or magnitude to the performance of a behaviour, or the awareness of an individual whether the behaviour is accomplishable or not (Ajzen, 1991). It has two control beliefs, which are how assured an individual is regarding the behaviour, and is he able to be one to control the behaviour.

Therefore, it is dominantly regulated by control beliefs both environmental and internal factors to hinder or assist in the process of carrying out the behaviour. The framework of this theory is shown in Figure 1.1.
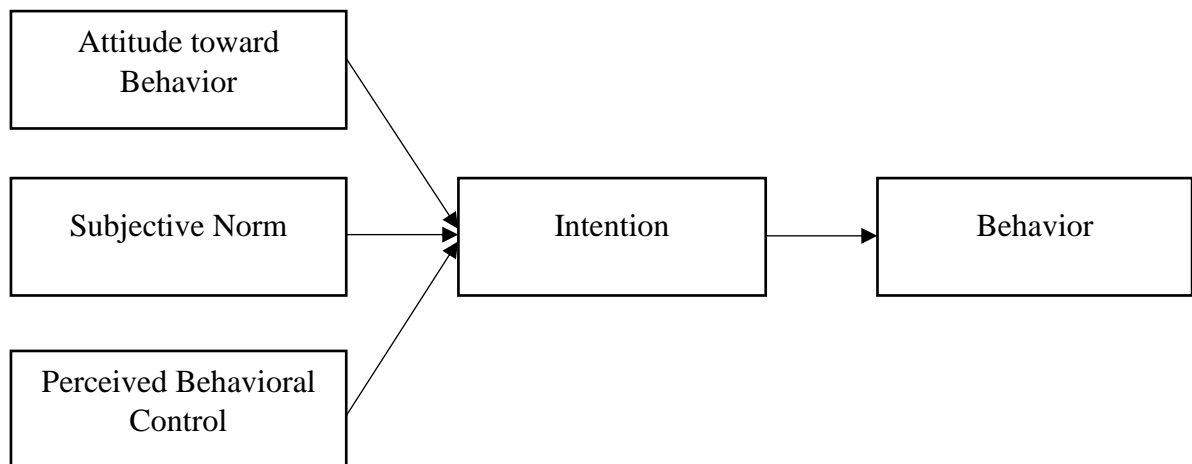
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┌──────────────────┐
│ Attitude toward  │
│    Behavior      │
└──────────────────┘                                      ┌──────────────┐
                              ┌──────────────┐            │              │
┌──────────────────┐          │              │ ─────────▶ │   Behavior   │
│  Subjective Norm │ ───────▶ │  Intention   │            │              │
│                  │          │              │            └──────────────┘
└──────────────────┘          └──────────────┘
┌──────────────────┐
│    Perceived     │
│    Behavioral    │
│     Control      │
└──────────────────┘
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Figure 1.1. Theory of Planned Behavior

1.7.2   Beck's Cognitive Theory of Depression

Beck's Cognitive Theory of Depression (Beck, 1967) expressed depression in term of

cognitive function in which an individual is suffering depression due to the way of

thinking. Thus, in this case dysfunctional belief that is negative thought or so-called

negative schemata became the main source of the emergence of depression. Negative

thoughts are often associated to the feeling of helplessness and hopelessness. When

activated under certain condition for instance stress, an individual will interpret the

situation in negative ways and this will lead to negative views of oneself, one's world

and one's future (Beck, 1991). In short, this theory proposed that negative schema

which contain dysfunctional attitudes affect how an individual analyzes, translates and

retrieves information.

Negative views on oneself, one's world and one's future are the elements that he had identified in which the combination of them form "cognitive triad" that act as fundamental of the condition. Beck also suggested that depressive people have different belief that are he or she is inadequate and therefore all the experiences will end up with disappointments, and lastly the future is hopeless. This happens as such individuals interpret information in a distorted fashion. They are paying attention at the negative aspects of their life and causing negative cognitive triad to persist.

A few examples of cognitive distortion that depressive individuals may experiences are overgeneralizing, arbitrary inferences, personalizing and catastrophizing (Beck, 1976). Overgeneralization is when an individual come to particular conclusion based on a general information and arbitrary inferences refer to a condition where an individual jump to a negative conclusion even when the evidence does not support it. Personalizing on the other hand is when someone blames himself or herself for everything that happen and catastrophizing comes from the word catastrophe in which a person thinks that the worst-case scenario will always happen. All of these cause depressive individuals to stick in negative environment and convincing them of something that is not really true.

1.7.3   Cognitive Theory of Anxiety

The role of cognitive function has significantly affect the understanding of anxiety (Rachman, 2009). Aaron Beck's approach regarding the role of cognitive and emotion on depression contributes a lot in this cognitive framework of anxiety and being

elaborated and expanded by other researchers. It basically explains how cognitive affects one's behaviour. In term of anxiety, a triggering situation will lead one to have anxious thought and after that one will feel anxious.

Clack and Beck (2010) stated that model anxiety involves three phases. The first one is registration of threat, followed by activation of a primal threat mode and lastly the subsequent evocation of secondary, elaborative checking. When an individual comes upon a situation which the mind has labeled as threat, the primal threat mode will be activated.

Primary appraisal of threat is related to interpretation of threat in term of how likely injury may occur and how bad it will lead, and all of these are usually overrated. Thus, such overestimation will lead to secondary elaborative appraisal where one will feel uneasy and tense, which will then increase the initial perception of threat.

1.7.4 Lazarus's Theory of Cognitive Appraisal

Stress is defined as the subjective reaction of an individual towards a potential stressor (Folkman & Lazarus, 1988). Lazarus further stated that it is a bi-directional process involving how the environment creates tense and stress element, and the reaction of individual upon such element. This notion then leads to a theory of cognitive appraisal. Lazarus argued that the experience of stress differs significantly between individuals depending on how they interpret and event and the outcome of a specific sequence of thinking patterns, called appraisals (Lazarus, 1991).

Cognitive appraisal refers to the personal interpretation of a situation that ultimately influences the extent to which the situation is perceived as stressful. It is the process of assessing whether a situation or event threatens our well-being, whether there are sufficient personal resources available for coping with the demand of the situation, and last but not least whether our strategy for dealing with the situation is effective (Lazarus, 1991). This process can then be further subdivided into three categories that are primary appraisal, secondary appraisal and reappraisal.

Primary appraisal is the motivational significance of the situation and can be divided into three categories. The first one is when the situation is neutral, or irrelevant in which the situation does not carry any implication towards the individual, or because the individual has nothing to gain or lose in the interaction. The second one is when the situation carries positive impact toward the individual, where it promotes and preserves one's well-being. Last but not least, when the situation is negative or carry negative impact toward the individual. Stressful appraisals are broken down into three potential assessments which are harmless, threat or challenge (Lazarus & Folkman, 1984).

Secondary appraisal is the evaluative judgement of the situation in terms of the significance of the event for their wellbeing and what can be done to alleviate and manage the situation with regards to possible coping and expected outcome. Secondary appraisal depends on how much control a person feels they have, actions likely to improve the situation, and the stakes involved (Lazarus & Folkman, 1987). Primary and secondary appraisal cannot be considered as separate processes but are interdependent and influence each other.

Therefore, if the individual has the sufficient resource or ability to overcome the stressful situation, thus the stress is reduced. However, inability to meet the demand or overcome the threat will cause the stress to be evoked. Reappraisal is the continuous reevaluation of a situation based on the availability of new information. This step of reappraisal takes place throughout the entire process and can change the way an individual perceives a situation. The framework for this theory is shown in Figure 1.2.

Stressor		Primary Appraisal
External Event	→	Is the stressor neutral, positive or negative? If negative, what is the harm, threat or challenge?

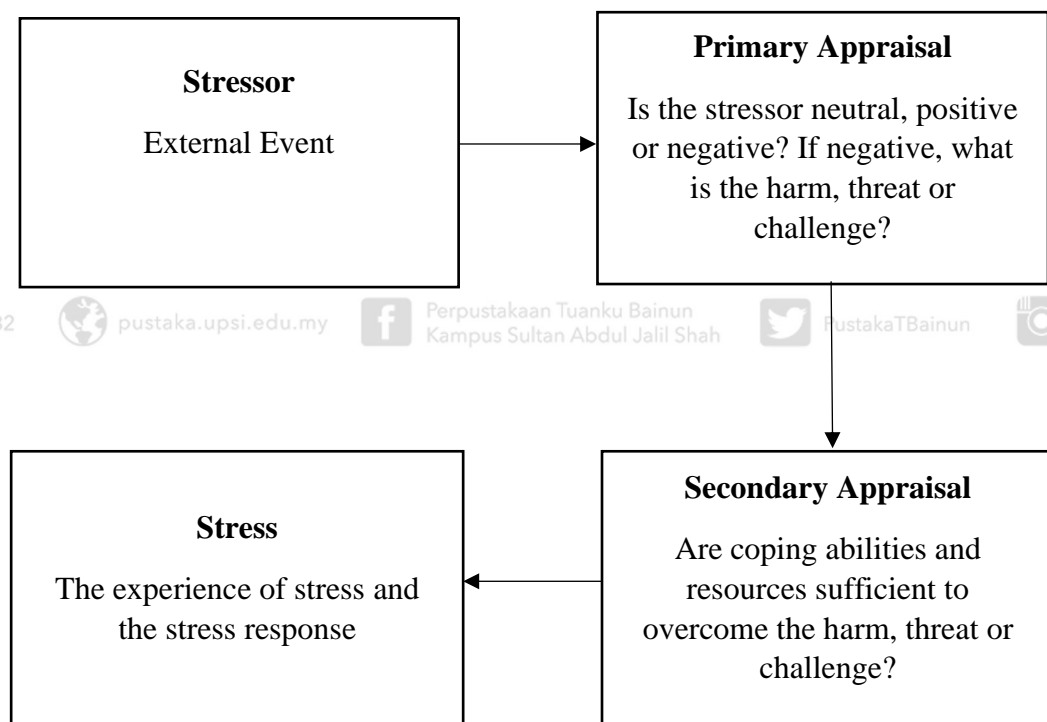| Stress		Secondary Appraisal
The experience of stress and the stress response	←	Are coping abilities and resources sufficient to overcome the harm, threat or challenge?

Figure 1.2. Lazarus's Theory of Cognitive Appraisal

1.8   Conceptual Framework

Conceptual framework is designed to give an overview on the interaction between the manipulating variable and responding variable. It also enables the reader to comprehend the study easier as the whole research is explained in a detailed figure. The objective of a conceptual framework is to classify and designate concepts significant to the study and map relationships among them (Rocco & Plakhotnik, 2009).
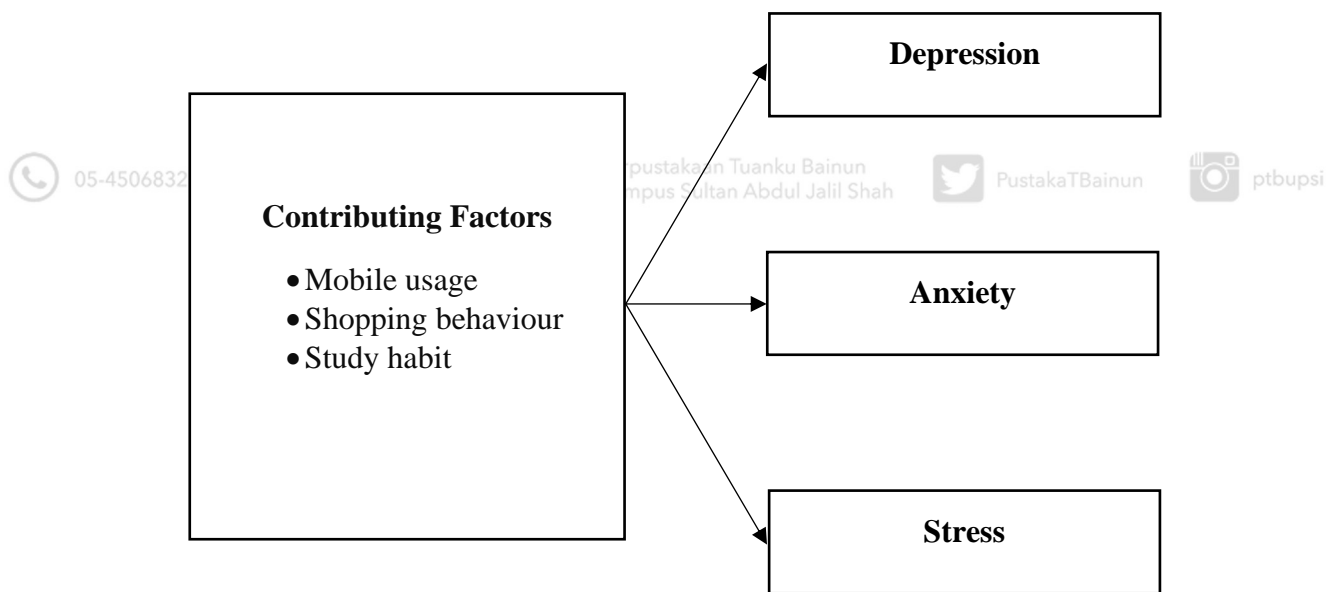

Figure 1.3. Conceptual Framework

Figure 1.3 is the conceptual framework of the study. It indicates the relationship between contributing factors as so-called independent variable with the so-called dependent variables which are depression, anxiety and stress.

It is expected that all the so-called independent variables which are mobile usage, shopping behaviour and study habit will be able to act as contributing factors to depression, anxiety and stress. For instance, individuals with higher mobile usage is expected to have higher depression, anxiety and stress.

1.9   Hypothesis

This purpose of this study is to evaluate level of mobile usage, shopping behaviour and study habit among university students. The level of depression, anxiety and stress among university students is also being analyzed. Furthermore, it intends to evaluate the ability of mobile usage, shopping behaviour and study habit as contributing factors to depression, anxiety and stress.

$H_1 1$:   Mobile usage, shopping behaviour and study habit are significant contributing factors to depression among university students.

$H_1 1_a$:   Mobile usage is a significant contributing factor to depression among university students.

$H_1 1_b$:   Shopping behaviour is a significant contributing factor to depression among university students.

$H_1 1_c$:   Study habit is a significant contributing factor to depression among university students.

H_12:   Mobile usage, shopping behaviour and study habit are significant contributing factors to anxiety among university students.

H_12_a: Mobile usage is a significant contributing factor to anxiety among university students.

H_12_b: Shopping behaviour is a significant contributing factor to anxiety among university students.

H_12_c: Study habit is a significant contributing factor to anxiety among university students.

H_13:   Mobile usage, shopping behaviour and study habit are significant contributing factors to stress among university students.

H_13_a: Mobile usage is a significant contributing factor to stress among university

students.

H_13_b: Shopping behaviour is a significant contributing factor to stress among university students.

H_13_c: Study habit is a significant contributing factor to stress among university students.

1.10   Conclusion

This chapter introduced the variables that are used in this study, which are mobile usage, shopping behaviour, study habit, depression, anxiety and stress. The background of study and problem statement explains more about the variables obtained from previous reading materials.

Significance of study elaborates the importance of this study for future research. Each of definition is clearly stated in term of conceptual and operational definition. Theoretical approach explains regarding the theories that are related to the variables. Then, conceptual framework is constructed giving a clearer picture on how the variables are relating to each other. From all of the above, hypothesis is generated.