BRIEF MINDFULNESS PRACTICE AS AN INTERVENTION ON THE RELATIONSHIP

BETWEEN CYBERBULLYING AND DEPRESSIVE SYMPTOM AMONG YOUNG

ADULTS IN MALAYSIA.

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A RESEARCH PROJECT
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A Study of Brief Mindfulness Practice

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Young Adults in Malaysia.

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APPROVAL FORM

This research paper attached in this document, entitled "Brief Mindfulness Practice as an Intervention on the Relationship between Cyberbullying and Depressive Symptom among Young Adults in Malaysia" was prepared and submitted by "Ng Jun Quan, Benjamin Choo Bing Chee, and Lee Ziyi" in fulfilling partially the requirements for the Bachelor of Social Science (Hons) Psychology is hereby accepted.

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Abstract

This paper reviews whether the role of mindfulness practice could reduce depressive symptoms caused by cyberbullying experience. Seventy-two participant were recruited and randomly assigned into experimental group or control group. Cyberbullying victimization was manipulated through the uses of threatening, harassing, insulting and teasing sentences in the game named "Roblox". Control group did not undergo any manipulation. Cyberbullying victimization, depression, stress and anxiety score were recorded after the game. Participant in experimental group will then watch a mindfulness practice video (S.T.O.P) whereas control group will watch a TED talk video. After the video, depression, stress, anxiety and state mindfulness score were recorded. Result shows that there are significant differences in the cyberbullying victimization score of experimental group and control group after the game. Indicating that participant in the experimental group felt cyberbullied after the game. Although cyberbullying victimization was induced among experimental group, no significant differences was found in the depression, stress, anxiety and level when compared with control group. It was assumed that cyberbullying victimization manipulation was not strong enough to create a significant difference because some participant feedback that they are used to the cyberbullied message while some mentioned that attention was given in learning how to play the game. Within experimental group, there is significant decrease in the score of depression and stress before and after the mindfulness practice video (S.T.O.P). Findings in this study can be used as a possible treatment for Exposure Therapy in early cyberbullying exposure.

Keyword: Cyberbullying victimization manipulation, depressive symptoms, mindfulness

DECLARATION

We declare that the information contained in this dissertation is the outcome of our own effort and that due acknowledgement has been given in the bibliography and references to all sources regardless of them being printed, electronic or personal.

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Table of Content

List of Table

List of Figure

List of Abbreviations

DASS-21   Depression, Anxiety and Stress Scale – 21 items

TMS   Toronto Mindfulness Scale

S.T.O.P   Stop, Take a deep breath, Observe, Proceed

M   Mean

SD   Standard Deviation

Chapter I

Introduction

Background of Study

Cyberbullying is a growing concern to the world (Notar, Padgett, & Roden, 2013; Walker, 2012). Even in Malaysia, cyberbullying lurks around the corners of the World Wide Web, with Malaysian netizens reporting cases of cyberbullying (Lai et al., 2017). Cyberbullying are referred as "cyber" bullying due to its use of electronic devices to carry out the bullying and emphasizes highly on inflicting psychological harm (Balakrishnan, 2015). More and more electronic gadgets are accessible and obtainable nowadays, as well as internet access to conduct cyberbullying (Noll, 2016). Regardless, cyberbullying has its consequences and a past study has shown that cyberbullying eventually causes depressive disorders, if not, at least inflict some depressive symptoms on the victims (Chu, Fan, Liu, & Zhou, 2018). Understanding the characteristics of cyberbullying will be crucial in going deeper into the topic.

According to recent past studies, the characteristics of cyberbullying and traditional bullying were found to be similar which are imbalance of power, repetitive, and over time (Whittaker & Kowalski, 2015; Chu et al., 2018). In cyberbullying the imbalances in power of two parties still exists even though the criteria of physical power are lacking such as harassed by anonymous users, and also netizen were victimized repeatedly and over time. Over time repetition of cyberbullying would gradually increase the feelings of anxiousness (Chu et al., 2018), which will then lead to a cycle of helplessness and hopelessness, resulting in depressive thoughts; lastly, the depressive symptoms (Chu et al., 2018; Whittaker & Kowalski, 2015; Florang, 2017). An example of cyberbullying would be a person who constantly experiences online bullying such as being called ugly face or weird because of their profile picture, are more likely to experience anxious feelings about themselves and

lowering their self-esteem levels as well, leading to increased depressive thoughts and the existence of depressive symptoms.

Knowing that cyberbullying could have the potentiality to cause depressive symptoms, we look further into our second variable, depression. Depression is a global concern all around the world, and it happens to many different ages of people (Cuijpers, Beekman, & Reynolds, 2012). Depression is defined as a serious mood disorder, which we could identify through observing symptoms such as persistent feelings of unhappiness and helplessness for at least more than 2 weeks (Bhowmik, Kumar, Srivastava, Paswan, & Dutta, 2012). Many researchers agreed that there is not one specific cause that accounts for depression but rather a combination of complicated social, psychological, physiological and developmental factors (Dastan, 2016). It prohibits a person to function normally or carrying out their daily tasks properly; according to Dastan (2016), depression also affects a person's sleep quality and eating will become problematic, as well as lack of interests; where in worst cases, leads to suicidal ideation or suicides (Bhowmik et al., 2012; Dastan, 2016; Hammen & Walkins, 2018). The term depression has also become more and more prevalent as time passes, especially among students in universities (Dastan, 2016).

Operational Definition

Cyberbullying was defined using Cyberbullying Experiences Survey (CES) (Doane, Kelley, Chiang, & Padilla,2013) and Revised Cyber Bullying Inventory (RCBI) (Topcu & Erdur-Baker, 2010). Both scales measure the component for victimization of cyberbullied individuals as well as the one who did the cyberbullying, the perpetrators. Higher scores indicate that more frequent levels of victimization and cyberbullying.

Depression was measured by using the Depression Anxiety Stress Scale 21 item that was created and developed by Lovibond and Lovibond (1995). The scale has three components to measure over the past week; namely Depression, Anxiety and Stress levels

(Osman et al., 2012). Depression was defined by the scores of the depression aspect that can be clearly calculated into normal, mild, moderate, severe, or extremely severe. Higher scores are a prove that the individual has higher levels of depression (Nur azma, Rusli, Quek, & Noah, 2014).

Mindfulness was defined by using the Toronto Mindfulness Scale (TMS) that was developed by Lau (2006). According to the past study, mindfulness can be measured by two components from the Toronto Mindfulness Scale, which are "Curiosity" and "Decentering" (Lau et al., 2006; Chung & Zhang, 2014). Curiosity refers to the awareness of an individual's experiences on the present moment that has the quality of curiosity; whereas decentering refers to the individual's awareness on his or her experiences that comes with some distance and loss of identification as compared to thoughts and feelings of an individual (Medvedev, Christian, Narayanan & Siegert, 2017; Chung & Zhang, 2014; Lau et al., 2006). Higher scores in TMS indicates or shows that an individual has higher state mindfulness at the moment.

Problem Statement

Having a calm, clear and rational-thinking mind could contribute in an individual's ability to deal with life stressors. It can be referred as mindfulness, which is commonly defined as the awareness and non-judgemental acceptance of one self's moment-to-moment inner or outer experience (Keng, Smoski, & Robins, 2011). Mindfulness could be linked with few positive outcomes in an individual such as life satisfaction, self-esteem, resilience and positive affect (Pepping, O'Donovan, & Davis, 2013; Bajaj & Pande, 2016; Bajaj, Robins, & Pande, 2016). Mindfulness not only can be referred as a psychological trait, it can also be a state of awareness, which can be cultivated through meditation practices or mindfulness-based interventions (Keng et al., 2011). Past studies have shown that mindfulness-based intervention such as Mindfulness Based Stress Reduction (MBSR), is associated with greater

improvements in state mindfulness level, emotional well-being and quality of life (Anderson, Lau, Segal, & Bishop, 2007; Nyklíček & Kuijpers, 2008).

In addition, mindfulness could also act as a buffer against negative outcomes. The negative effects caused by risk factors on a person's physical and mental health could be reduced by mindfulness (Daubenmier, Hayden, Chang, & Epel, 2014). There are past studies which demonstrated that mindfulness helps in reducing depression (Brown & Ryan, 2003; Cash & Whittingham, 2010). Another study also showed that mindfulness could buffer the risk of insecure attachment on symptoms of depression, anxiety and stress (Davis, Morris, & Drake, 2016).

In this modern era, people are more prone to experience cyberbully in this technology-driven society and this will lead them to have a higher chance of developing depression symptoms. Despite having studies showing the usefulness of mindfulness intervention as treatment among depressed individuals, there are limited studies done on whether brief mindfulness practice could help individual in reducing the depressive symptoms caused by their cyberbully experience. Secondly, even though there is a study that show that bully-victimized people with higher trait mindfulness are more capable of buffering the negative effects of depression (Zhou, Liu, Niu, Sun, & Fan, 2017), there is no study done on whether the promotion of state mindfulness level could also provide the same buffering effect, so that people can not only just rely on their inborn mindfulness trait.

Significance of Study

The present study can to understanding whether brief mindfulness practice can help in reducing the negative effect between cyberbullying and depressive symptoms. Most of the studies on mindfulness tend of focus more on mindfulness as a trait rather than state mindfulness. It was found that high trait mindfulness can help in lowering mental health problem such as anxiety, stress and depression (Davis et al., 2016). However not everyone is

born with high mindfulness, thus brief mindfulness practice might be beneficial in increasing mindfulness level. Through brief mindfulness practice, cyberbullying victims can be more mindful of their surrounding and decreasing the effect of both cyberbullying and depressive symptoms.

Besides, this finding can allow people to act towards cyberbullying victims by providing mindfulness practice. With mindfulness practice, victims of cyberbullying can reduce the chances of developing depressive symptoms. Intervention can be taken towards the issues of cyberbullying and depression especially in educational setting where people are prone to be victims of cyberbullying and result in the feeling of isolated, helplessness and fear which can then further develop into depression (Cantone et al., 2015).

Research Objective

1. To examine whether there is a relationship between cyberbullying victimization and depressive symptoms.

2. To examine whether brief mindfulness practice can increase the state mindfulness level among young adults.

3. To examine whether brief mindfulness practice can buffer the negative effects of bullying victimization by reducing the levels of depressive symptoms among young adults.

Research Question

1. What is the relationship between bullying victimization and depressive symptoms?

2. Can brief mindfulness practice increase the state mindfulness level among young adults?

3. Can brief mindfulness practice buffer the negative effects of bullying victimization by reducing the levels of depressive symptoms among young adults?

Research Hypothesis

Hypothesis 1.

H_0: There is no relationship between bullying victimization and depressive symptoms.

H_1: There is a positive relationship between bullying victimization and depressive symptoms.

Hypothesis 2.

H_0: Young adults exposed to brief mindfulness practice has no significant increase in state mindfulness level.

H_1: Young adults exposed to brief mindfulness practice has a significant increase in state mindfulness level.

Hypothesis 3.

H_0: Young adults exposed to brief mindfulness practice has no significant decrease in depressive symptoms.

H_1: Young adults exposed to brief mindfulness practice has significant decrease in depressive symptoms.

Chapter II

Literature Review

Theoretical Framework

Diathesis-stress model is used to explain the cause of a pathological disorder as a result from the interaction between environment factor and the vulnerability to the cause of disorder (Jones & Fernyhough, 2007). This model proposes that an individual's predisposition to a certain disorder can be activated by a stressful environment or event (Goforth, Pham, & Carlson, 2011). It would take a very high stress level to develop the symptoms of a specific disorder for an individual with a low biological vulnerability or vice versa, less stress is required in the trigger of a specific disorder for an individual with low level vulnerability.

Diathesis is the vulnerability that makes an individual to develop a mental illness or pathological disorder and this is mainly cause by the biological and genetic factor of the individual (Ingram & Luxton, 2005). Some individuals carry the genes that increase the chances of them having depression whereas some individual carries the genes of increasing their chances of having anxiety. The genetic factor does not contribute fully to the development of a psychological disorder as it only increases the vulnerability of the individual (Nolen-Hoeksema, 2008).

Provoking factor, also known as stress factor will bring individual closer to the development of a certain psychological disorder. Stressor is defined as the experience of important life event that the individual perceives as undesirable and stressful (Ingram & Luxton, 2005). One stress life event is normally not enough to activate the pathological disorder (Goforth, Pham, & Carlson, 2011). Usually a few life stressors are needed in order to achieve enough stressor to manifest the pathological disorder.

In the last part of diathesis-stress model would be the protective factors that can protect an

individual from developing pathological disorder (Salomon & Jin, 2013). Protective factors

can be neither within internally or externally. Some example of protective factor would be

high self-esteem and social support. Protective factors can slow down or stop the progressing

of stressor in pushing the individual towards the manifestation of pathological disorder.

Conceptual Framework
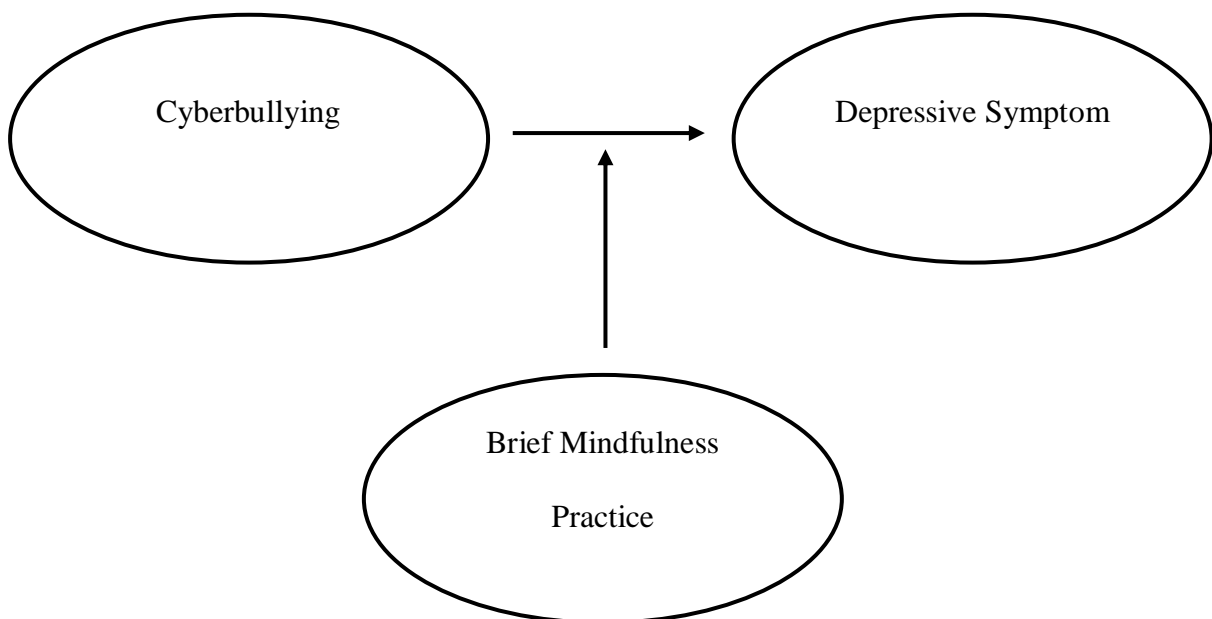
Figure 1. Proposed conceptual framework of brief mindfulness practice as an intervention on
the relationship between cyberbullying and depressive symptoms.

Cyberbullying will act as a stressor in pushing the individual closer to the

manifestation of diathesis which in this case, depressive symptoms. At one point, with

enough accumulation and exposure to cyberbullied feelings, the individual will be at risk of

developing depressive symptom. In order to buffer the effect of cyberbullying, mindfulness

can act as a protective factor in stopping or slowing down the effect of cyberbullying in

increasing the vulnerability of an individual to develop depressive symptoms.

Cyberbullying

Cyberbullying does not have a specific definition according to past studies (Notar et al., 2013; Whittaker & Kowalski, 2015). In Malaysian context, cyberbullying is defined as bullying through the use of advanced electronic technologies over the world. Another study stated that cyberbullying is the repetitive and permanent pattern of behaviour via electronic environments such as undesired images and text messages (Sari & Camadan, 2016). These past studies have different specific definitions for the term "Cyberbullying". However, when the definitions were looked into it individually, they shared a similarity in defining cyberbullying; which is the use of electronic devices or digital realm to conduct acts or behavior of bullying and inflicting psychological harm by sending undesirable and harassing text messages, images and videos to victims or of victims to the internet for the public to see (Chu et al., 2018; Noll, 2016; Balakrishnan, 2015; Sari & Camadan, 2016; Walker, 2012).

According to a past study done by Schnek, Fremouw and Keelan (2013), it was found out that cyberbullying tends to be closely associated with suicidal tendencies or ideation. Coincidentally, depression, our second variable is also closely related to suicidal ideation too, as proven by few past studies such as the one done by Bhowmik et al. (2012), and another by Dastan (2016). We assume that cyberbullying and depression could have a high possibility of causal effects. Balakrishnan (2015), proven the fact the cyberbullying does indeed play a role in one of the causes of depression. Besides that, cyberbullying was also found to play a role in several other aspects too such as aggressive tendencies, and higher tendencies of illegal behaviors that happened during offline hours (Schenk et al., 2013).

Undeniably, the world is getting more and more advanced as days passed, and many has acquired access to the internet as well as communication technologies such as a smartphone or laptop (Notar et al., 2013). This naturally leads to the possibility of more cyberbullying cases globally (Noll, 2016). Cyberbullying has become a growing issue, even

in Malaysia (Lai et al., 2017). The study done by Lai and others have shown a prevalence rate of 60% among college and university students from a total of 712 respondents. Aligned with the study, news from the UK has further proven that social media is one of the most used weapon that cyberbullies used to tackle the victims, harassing them, especially using Facebook, from a study that conducted the research on a sample of at least 2000 respondents (Gayle, 2013). These studies allowed us to assume that it is very likely that the prevalence of cyberbullying will also contribute to the prevalence of depression among these individuals regardless of perpetrators or victims. Thus, it is essentially important to look into depression (Schenk et al., 2013; Noll, 2016; Wang, Nansel, & Iannotti, 2011; Lai et al., 2017; Walker, 2012; & Notar et al., 2013).

Depression

Depression is a mental disorder that is also widely known as an affective disorder through the world and it is also one of the most popular mental health issues to be studied (Bhowmik et al., 2012; Hammen & Walkins, 2018). According to the World Health Organization (2017), depression is the leading cause of disability and the numbers of clinically diagnosed individuals with depression has had a sharp increase of 18% from 2005 to 2015, making it a devastating issue than ever since the beginning of this epidemic. Individuals who have experienced depressive symptoms for at least a duration of 2 weeks are clinically diagnosed with depression (Bhowmik et al., 2012). Depending on the symptoms, a person could suffer from mild to chronic levels of depression (Bhowmik et al., 2012). Even though it is known as an affective disorder that disrupts the mood of an individual, studies have shown that depression will affect a person's physical, cognitive, and behavioural aspects as well (Hammen & Walkins, 2018; Dastan, 2016; Bhowmik et al., 2012).

Depressive symptoms are signs that tells us who might suffer or suffers from depression disorder. Individuals are diagnosed with depression for those who has experience

depressive symptoms for at least a duration of 2 weeks (Bhowmik et al., 2012). Depressive symptoms can be separated into different aspects namely affective, cognitive, behavioural, and physical symptoms, these four aspects are the general domains of depression. Affective symptoms are signs where the person develops abnormal mood or negative emotions such as being down or moody, or even being sad but that is not always the case. Some might report themselves being irritated easily and losing interest or pleasure, or even feel empty. Individuals might even find their peers or social circle unappealing or develop a sense of hate towards them. Whereas from the cognitive aspect, the individual manifests negative thoughts more frequently, and mostly about themselves, their upcoming days and about the world. For instance, sufferers might think about certain matters that was once a joyful event now rendered as pointless or simply a waste of time. Besides that, individuals might also find it harder to focus, to concentrate or memorize things compared to the past. As for behavioural symptoms, people that has a more chronic level of depression might not participate in social activities and might display psychomotor agitation such as fidgeting. They tend to walk slower than most people and showed signs of agitation and slouching. It is also studied that their speech is affected too, in signs such as more pauses and flat tones or fewer choice of words when conversing with others. Lastly for physical symptoms, depressed individuals reported that they suffer from lack of energy and that they do not have the energy and stamina to carry out tasks of their daily lives. Most individuals will suffer from sleep deprivation and their sleep quality is highly affected as well, such as either slept too little, or too long, or even when one's has woken up, but stayed in the bed for quite some time before doing anything. Their food consuming behaviours might be affected as well, with individuals reporting that they either eat too little to nothing, or some would eat a lot when they feel depressed (Hammen & Walkins, 2018). The consequences of depression are chronic and

worse come to worst, depression could even cause death by suiciding (Dastan, 2016; Hammen & Walkins, 2018; Bhowmik et al., 2012).

Mindfulness

The word mindfulness can be referred to a few dimensions. It can be the state of awareness of one's current physical, cognitive and psychological experience in a non-judgmental, accepting, and self-empathetic manner. (Zhou et al., 2017). Mindfulness can also be categorized as a psychological trait, where it refers to the tendency of an individual to be mindful in daily life. Besides, it can also be a practice of cultivating mindfulness, such as mindfulness meditation (Keng, et al, 2011). Trait mindfulness is negatively related with maladaptive outcomes or behaviours such as absentmindedness (Herndon, 2008), rumination (Raes & Williams, 2010), difficulties in emotion regulation (Baer, Smith, Hopkins, Krietemever, & Toney, 2006), experiential avoidance (Baer, Smith, & Allen, 2004), and general psychological symptoms (Baer et al., 2006). Besides, regular meditation practice is related with positive cognitive outcomes such as improved cognitive flexibility and attentional functioning (Hodgins & Adair, 2010; Moore & Malinowski, 2009). In general, people with high trait mindfulness and mindfulness meditation habits will have fewer mental health issues and better cognitive functioning.

Mindfulness was further studied as an intervention with the aim of improving psychological well-being (Keng et al., 2011). Mindfulness Based Stress-Reduction (MBSR) is a well-known intervention that uses repeated training in mindfulness meditation, to train individuals to be less reactive and judgmental toward their experiences, and more able to recognize, and break free from, habitual and maladaptive patterns of thinking and behaviour (Keng et al, 2011). Most MBSR studies have been conducted is found to be helpful in reducing self-reported negative outcomes such as depression and anxiety (Anderson et al. 2007), rumination (Jain et al, 2007) and post-traumatic avoidance symptoms (Bränström,

Kvillemo, Brandberg, & Moskowitz, 2010), while also able to promote more positive

outcomes such as empathy (Shapiro, Schwartz, & Bonner, 1998), mindfulness (Nyklíček &

Kujipers, 2008), self-compassion (Shapiro, Astin, Bishop, & Cordova, 2005), satisfaction and

quality life (Grossman et al., 2010).

Another mindfulness-based intervention has been developed based on adaptation from

the MBSR model, which is Mindfulness-Based Cognitive Therapy (MBCT). MBCT was

introduced as a coping intervention to prevent relapse in remitted depression. It is a

combination of mindfulness training and elements of cognitive therapy (CT), which is

helping participants to identify how their negative automatic thoughts are affecting them

undesirably and learn to step out from it. MBCT is reported effective in reducing relapse rates

among patients with three or more episodes of depression (Ma & Teasdale, 2004), and

improve several outcomes among remitted depressed patients such as quality of life etc.

(Kuyken et al., 2008). In short, these interventions found to bring benefits such as improved

life satisfaction, empathy, forgiveness, and self-compassion while reduce stress, anxiety,

depression, and suicidality in different populations (Chiesa & Serretti, 2011; Keng et al.,

2011).

Despite the benefits of these mindfulness-based interventions, they are considered

time-consuming as they require at least few weeks of sessions, which require long time of

commitment from the participants and might lead to participants losing interest or even

dropping out half way during the intervention. Fortunately, there are brief mindfulness

interventions being introduced and studies have discovered their effects in controlled and

manipulated settings on different kinds of emotional responses such as recovery from

dysphoric mood, better adaptive responding to negative stimuli and decrease in maladaptive

behaviours (Broderick, 2005; Arch & Craske, 2006; Bowen & Marlatt, 2009). In short, these

brief mindfulness interventions are less time-consuming and can be practiced by individuals whenever they feel they need to.

S.T.O.P is also considered a brief mindfulness intervention which is capable to help an individual 'log in" into the present moment and foster mindfulness at any time or anywhere in a short amount of time. This practice or activity is part of a Brief Mindfulness-based Cognitive Therapy programme (b-MBCT) which is a shorter version and mixture of both MBSR and MBCT interventions. This simple practice encourages participants to stop on whatever they're doing or thinking and to focus on the present moment. It helps in prevent themselves from rumination of past mistakes or unhappy experience, or worrying about future challenges (Phang et al., 2014). S.T.O.P is a four-step process where each alphabet represents a step. Firstly, S stands for stop, T stands for take a breath, O stands for Observe thoughts, emotions or sensations and finally P stands for proceed and respond more effectively. Further explanation of the S.T.O.P approach will be clarified in Chapter 3. One of the main advantages of S.T.O.P is that it only takes a very short amount of time which is few minutes compared to normal mindfulness exercises which takes up to around 45 minutes (Phang, Keng, & Chiang, 2014). Besides, the four steps are also easy to remember as it is in the form of an acronym, it can be recalled easily whenever in need.

So far there is limited study done on the effectiveness of S.T.O.P alone as a brief intervention. Lim & Loke (2016) reported that participants that undergo S.T.O.P showed no significant difference in state mindfulness level, despite decrease in distress level both subjectively and objectively. The insignificant difference in mindfulness level may be explained by the duration of the practice which is only 5 minutes, where it may not be enough for the participants to maintain their attention on their breaths, thoughts, affections and sensations, or even recognize and dispute their negative thoughts (Lim & Loke, 2016).

Therefore, the extended practice of the S.T.O.P which will take up to 10 minutes will be used in this study hoping to address this limitation.

In summary, both structured mindfulness-based interventions (e.g. MBCT) and brief mindfulness interventions (e.g. S.T.O.P) are effective in promoting mindfulness and countering negative health outcomes such as depression, stress and anxiety. Brief mindfulness intervention will have an advantage over structured mindfulness-based intervention as in it can be practiced in a short amount of time whenever needed, for example in face of a stressful situation. In this study, S.T.O.P will be used as brief mindfulness intervention and it is hypothesized that it could be useful in promoting state mindfulness level and reduce the risks of developing depressive symptoms through the momentary induction of cyberbullied feelings.

Cyberbullying and Depression

Cyberbullying is known as an aggressive and intentional act that is carried out frequently and continues over time, neither in groups or individual with the use of electronical means (Smith et al., 2008). Under such situation, victims are not able to defend themselves easily from the attacks of cyberbullies (Smith et al., 2008). It can lead to a range of psychological problem such as suicidal intention, anxiety, sleeping problem, loneliness and depression (Balakrishnan, 2018; Zhou et al., 2017). One of the main unfavourable consequences of bullying would be depression (Zhou et al., 2017). Victims who are attacked respectively over time can develop a negative perception on themselves as someone who is not good enough for one self and others (Calvete, Orue, & Gámez-Guadix, 2015). These thoughts can manifest the feelings of loneliness, where victims have difficulty in building up close relationship with others (Olenik-Shemesh, Heiman, & Eden, 2012). The feeling of loneliness can affect the way victims interact with others such as being low risk taking, conscious of self in public and low perceive likability when such interaction is important in

the period of life (Olenik-Shemesh et al., 2012). Which then also contributes to the feelings of helplessness that is often experienced by victims. This is due to the anonymous characteristic of the internet which result in victims not knowing who is targeting them and how they can protect themselves from such attack (Balakrishnan, 2015). All these factors contribute to the development of depression. Depression mainly happened because of the disturbance in the cognitive, environmental functioning, interpersonal and critical emotional regulation skills (Uba, Yaacob, & Juhari, 2010). Victims who cannot cope and manage with the effect of cyberbullying will have a higher chance of developing depression.

The relationship between cyberbullying and depression can be further supported by Spear, Slee, Owen and Johnson's (2009) study which demonstrated that participants who self-report being bullied in social network reported the feelings of bewildering, powerless and unsafe. The harm and impact cause by cyberbullying contributes to the disruptive relationship of victims and their peers, decrease in self-esteem and helplessness is not simply an act of aggression between two parties (Spear et al., 2009). In addition, Bonanno and Hymel (2013) mentioned that cyberbullying induced hopelessness because victims do not know who the bullies is and the continuous nature of cyberbullying result in the feeling of inescapable. All these can subsequently give rise to depression (Bonanno & Hymel, 2013). Furthermore, cyberbullied victims are less likely to report and look for help as compared to traditional victimization (Dooley, Gradinger, Strohmeier, Cross, & Spiel, 2010). Furthermore, Agatston, Kowalski and Limber (2007) found that students are hesitant to report cases of cyberbullying to their families due to the fear of having their online privileges taken away. The topic of cyberbullying is also rarely being discussed in school and participant reported that school related personnel might not be helpful in overcoming the issue of cyberbullying (Agatston et al., 2007). Without anyone to turn into for help, victims must deal with the issue of cyberbullying by themselves and this can cause the feeling or sorrow, sadness and loneliness.

The combination of loneliness and internet creates an ideal environment for victims to be further cyberbullied (Sahin, 2012). People who are cyberbullied has problem creating intimate relationship and build up loneliness which then lead to more time spend on internet and cell phone and further cybervictimization (Sahin, 2012).

In a study conducted among Finnish adolescent, it was found that cybervictimization can cause fear to one's safety, sleep quality issues and affect victims emotionally (Selkie, Kota, Chan & Moreno, 2015) These symptoms can further foster the development of depressive symptoms. Depressive symptoms are not just only caused by stressful events but also the emergence of new stress that is caused by bullying (Brendgen & Poulin, 2017). Result of one study showed that those who have past cyberbullying experience has a three times higher chance of having clinical condition for depression. One of the most common cyberbullying behaviour that has a higher chance of developing depression are among those victims who had experience unwanted sexual advancement through electronical means like internet or mobile gadget. (Selkie et al., 2015) Cyberbullied victims may feel lonely because they are not accepted and treated badly by people around them building up the feeling that they are not important. These are commonly known as the lacking in one's personal and social relationship. As a result, it can increase the chances of developing depressive symptoms such as having lower self-esteem because they felt like they are not important, have fewer social skills and isolation makes victim to be less attractive and wanted among peer. (Gámez-Guadix, Orue, Smith, & Calvete, 2013).

In short, the relationship of cyberbullying and depression can be explained by victim's feelings of loneliness, worthlessness, helplessness, failure to seek help, and poor self-image. Through manipulation of cyberbullying, this study seeks to induce these mentioned feelings on participants to see their effects on depression level.

Mindfulness and Depression

Mindfulness as a trait could help to reduce negative health outcomes such as depressive symptoms in an individual. A study done on undergraduate students found that the relationship between mindfulness and depression could be mediated by self-esteem. Mindfulness encourages an individual to maintain their attention on present experiences, keeping themselves away from negative beliefs, feelings and critical thoughts (Bajaj et al., 2016). Even if they notice any self-critical thoughts, they will evaluate on the truthfulness of those thoughts about themselves. Moreover, Cash & Whittingham (2010) reported that among the five facets of mindfulness, non-judgemental aspect of one's own thoughts, emotions, and bodily sensations and act with awareness of present moment aspect of mindfulness are most significant in predicting lower levels of depression. In this study, awareness of present moment and non-judgemental reflection are main elements of the brief mindfulness practice S.T.O.P., supporting the research hypothesis that it will be helpful in increasing state mindfulness and reducing depressive symptoms.

Moving on, a study done on Chinese children found that mindfulness as a trait weakened the effect of bullying victimization on depressive symptoms (Zhou et al., 2017). This can be explained by when the children are aware and face their ongoing bullying experience in an accepting, non-judgemental and self-emphatic manner, they are less likely being preoccupied by the fact that they're being bullied, as well as more capable of getting rid their depressive rumination (Williams, 2008). Besides, mindfulness enhances their self-esteem which counters the feeling of worthlessness caused by their bully experience (Bajaj et al., 2016). Mindfulness also improves coping competence which allows the children to cope with their bullying experience successfully (Akin & Akin, 2015). Similar with this study, it is hypothesized that individuals who are induced with cyberbullying experience, their state mindfulness promoted through brief mindfulness practice S.T.O.P, could act as an buffer and

keep the individual from dwelling in the negativity of the cyberbully experience and feelings

of worthlessness which in turn reduce the risks of developing depressive symptoms.

Chapter III

Methodology

Research Design

Overall this is a quantitative study, which is an experimental research that contained

mix methods of between subject and within subject design. First of all, experimental research

design was used in this study, intending to manipulate feelings of being cyberbullied on

participants and to test the effectiveness of a mindfulness practice in decreasing symptoms of

depression among participants at the current moment. Between-subject research design was

used to answer the first research question that whether there are differences in feelings and

symptoms of depression between participants under experimental group who were exposed to

cyberbullied experience, and participants who were exposed to normal gaming experience. It

was also used to answer the second research question on whether there is difference in state

mindfulness level, between participants who were assigned to watched mindfulness video

under experimental group, and participants who watch neutral video under control group.

Within subject design was used to answer the third research question, where it also involves a

pretest-posttest research design to see the changes in symptoms of depression, anxiety and

stress of participants under the experimental group after doing a mindfulness practice. In

addition, survey method was used in this study to collect the responses of participants, in

which Qualtrics online survey software was used.

Participants

Initially, there are 138 participation slots prepared by researchers over the course of

three weeks. After approaching students studying in Universiti Tunku Abdul Rahman

(UTAR) from different faculties, only ninety-four participants agreed to participate and were

recruited in this study. However, only eighty-two showed up at the study according to their

chosen timeslots as some of the them couldn't make it due to various reasons such as

replacement class or busy. After data collection, ten participant's data were excluded due to incomplete responses. Among the seventy-two participants left, there is a total of thirty-two males (44.5%) and forty females (55.6%), where the age range were from age 19 to 28 years old. A total of sixty-seven participants are Chinese (93.1%), 4 Indian (5.6%) and 1 Kadazan (1.4%). Participants of this age range was chosen mainly because computer games, especially online multiplayer games are no longer focused on adolescent (Griffiths, Davies & Chappell, 2004). Young adults are becoming larger users of online gaming.

The sampling method used in this study was convenience sampling method. Participants recruited were being approached in different blocks in UTAR Kampar campus. Approached individuals were briefly told about the covered purpose and procedures of the experimental study. Participants who agreed to participate in this study selected their preferred timeslot provided by the researchers. Participant were then randomly distributed to either experimental group or control group.

Instrument

Manipulation of cyberbullying. Cyberbullying was induced with the use of an online multiplayer game called "Roblox". In the game, researchers carried out a series of cyberbullying behaviour on the participant. The cyberbullying message code was used as the basis on how cyberbullying feeling can be induced. The original cyberbullying message code consist of twenty-two item in five dimensions which are covert bullying, overt bullying, compliance gaining, miscellaneous and group or interpersonal process (Mabry and Kulovitz, as cited in Kulovitz, 2013). However, certain items are modified and removed in order to fit into this study as some actions might not be applicable in the context of Roblox. At the end, only four items from overt bullying and covert bullying are remained because other dimension of bullying is unable to be carried out. Some example of items that are remained are harassment, threatening, insult and teasing. These actions are categorised under

cyberbullying behaviour. Participants received these bullying behaviours from the researcher to induce the feelings of being cyberbullied.

Cyberbullying victimization scale. Participants cyberbullied feeling was measured by using a cyberbullying victimization scale which is self-developed by the researchers for the purpose of this study. Cyberbullying victimization scale consist of 4 items on the feeling of cyberbullying and 4 neutral items which is not related to feelings of cyberbullying. The cyberbullying victimization scale was rated on a 5-point Linkert scale and score and each item has a scoring from 1 to 5. Cyberbullying victimization scale was develop based on the items from Cyberbullying victimization and perpetration survey and Revised Cyber Bullying Inventory (RCBI). Three items were taken from cyberbullying victimization and perpetration survey which are "Has someone been mean to you electronically?", "Has someone cursed at you electronically?" and "Has someone teased you electronically?" (Brack & Caltabiano, 2014). The items were then further modified to fit into the study. One item from Revised Cyber Bullying Inventory (RCBI), "Threatening in online forums (like chat rooms, facebook or twitter)" was also used and modified (Doane et al., 2013).

Brief mindfulness practice (S.T.O.P). Participants in intervention group were given Brief Mindfulness Practice S.T.O.P. as their video-watching task. S.T.O.P. is a brief mindfulness intervention or practice that can be done at anytime and anywhere (Phang et al., 2014). The video was chosen from one of the MBCT course videos available on Youtube, containing instructions of how to conduct this practice will be presented to the participants in the video. The video practice started off by asking participants to sit comfortably according to their preference. Other guided instructions throughout the video included asking participants to gently guide their attention along with the movement of their breath for a few minutes. Participants were also asked to focus on their sensations to the surrounding, with an attitude of curiosity, and also pay attention to their experience with a non-judgemental and self-

accepting attitude, and returning their attention to movement of breathing whenever the mind wanders away to different thoughts

Toronto mindfulness scale (TMS). The Toronto Mindfulness Scale is a self-report questionnaire that was used to measure state or momentary mindfulness level (Lau et al., 2006). It consists of 13 items, which is rated on a 5-point Likert-type scale, ranging from 0 (not at all) to 4 (very much). The TMS has two sub constructs or factors, which are curiosity and decentering. The curiosity factors measure one's reflected willingness to gain more knowledge on their present moment experiences (Lau et al., 2006). On the other hand, the decentering factor measures the ability of an individual to be aware of his or her thoughts and feelings with some distance and disidentification instead of being carried away by them (Teasdale et al., 2002). The scoring method of the TMS is by summing up the scores of each item, where higher scores represents higher state mindfulness at the moment. The TMS display good reliability with both curiosity and decentering factors having a high internal consistency with Cronbach' alpha coefficients of 0.86 and 0.87 respectively (Lau et al.,2006). For construct validity, both factors reported a significant positive association with awareness of surrounding, reflective self-awareness and psychological mindedness (Lau et al., 2006).

Depressive, anxiety and stress scales (DASS-21). The 21-item version of the Depressive, Anxiety and Stress scale (DASS) was used to measure depressive, anxiety and stress levels concurrently, while each construct can be measured separately, with each subscale containing 7 items. This scale was supposed to assess participant's symptoms over the past week, however due to contemplate the nature of this study, the instructions of the scale were modified, asking participants to rate the items based on their feelings at the current moment. The full DASS-21 will be administered to the participants; however, depression subscale will be focused to address the objectives of this study. The other two subscales were also analysed separately. The items in the depression scale assesses dysphoric mood states

such as lack of interest, anhedonia, hopelessness and self-depreciation (Norton, 2007). The items are rated on a 4-point likert type scale which ranges from 0 (did not apply to me at all) to 3 (applied to me very much). For the scoring, the overall score of the scale could be calculated by summing all the item scores. Scores for each subscale could also be obtained by summing the respective subscale items. Higher scores indicate higher severity of the symptoms. Past studies reported good psychometric properties of DASS-21 depression subscale with a Cronbach alpha coefficient ranging from .88 to .94, while anxiety and stress subscale also reported high values of .80 to .87 and .84 to .91 respectively (Sinclair et al., 2011). All subscales also showed good convergent validity with the Mental Component Summary and the Rosenberg Self-Esteem Scale.

Research Procedure

Other than the basic approvals that we get, the most important approval is the ethical approval that we obtained from the authorities of UTAR, especially from the head of Department of Psychology, the faculty office, and our supervisor. After the commencement of our project, the study will follow a fix step of procedures to ensure consistency and reliability in our method of assessment. The venue has 3 separated rooms, first in which the participants were greeted by Researcher A, the second room is where the laptops and envelops have been set-up by Researcher B and C before participant's entry, and the third room which Researcher B and C will "anonymously" interact with the participants on their own servers. To ensure minimal bias, we applied the double blind technique. The recruited participants that came would be greeted by Researcher A, and be responsible for briefing the instructions, inform consent and be ready for any inquiries that the participants might have. Researcher B and C will be responsible for the manipulation of cyberbully in experimental group, and neutral gameplay in the control group. Messages to interact were fixed on a paper as a guideline for researcher B and C to standardize the replies when responding to the

participants. After setting up the files and envelopes, they would situate themselves in the third room without seeing the participants. Researcher A will not know who gets cyberbullied or non-cyberbullied, while researcher B and C will not know which participants seated the laptops for experimental group or control group.

Figure 2. Flow of research procedure.

At the start of the experimental study, Researcher A would brief the participants on the procedures and consent of the participants, he or she will sign the informed consent as agreement of participation. Researcher A would then guide the participants to the random seats with laptops and envelopes in the second room, which researcher A would teach the participants the basic controls of the online game. Beside the laptop there were 3 envelopes that contains instructions, the participants would only open them after the game. The gameplay was fixed at 10 minutes as soon as Researcher A leaves the second room.

Researcher A would notify participants to stop playing the game and move on to the first envelope (the envelopes have marked numbers on it). The first envelope will guide the participant to a new activity and then proceed onto opening the second envelope upon finishing the activity given. The second envelope will provide another activity which will lead the participants to open the last envelope after finishing the respective activity.

The first envelope contains the instruction to a survey link which contains the instrument of Cyberbullying scale and DASS for pre. The second envelope guides the participants to open the Mindfulness video for the experimental group, or a TED talk video for the control group. The last envelope contains another survey link which contains DASS and Toronto State Mindfulness Scale. The pretest-posttest of DASS was used to determine if there were any changes in depressive symptoms, anxiety and stress. Upon finishing, the assessment ends and the participants would approach researcher A for their token of appreciation and also debriefing the participants. Participants were also asked to give a brief verbal feedback about their gaming and video-watching experience. If the participants reported being uncomfortable, he or she will be referred to the Counselling Guidance Unit in the UTAR Kampar campus. The experimental group and control group would undergo the same procedure and experience except the gameplay for experimental group would be harsh and harassing while the control group gameplay would be neutral and plain; as well as the video watched, which the experimental group would watch a Mindfulness practice video while the control group watches a TED Talk video on "How to speak so that people want to listen".

Data Analysis

Data analysis was done using independent T-test and paired sample T-test which will be calculated using SPSS version 21 to calculate the mean differences.

Chapter VI

Results

Frequency Distribution of Variables

The mean values (*M*) and standard deviations (*SD*) of all scales used in this study were computed. For participants under experimental group, their cyberbullying scale have the mean score of 10.63 (*SD* = 3.40) while the mean score for state mindfulness was 42.11 (*SD* = 9.26). As for the subscales of DASS, pre-test scores for depression, stress, and anxiety were 22.57 (*SD* = 5.15), 26.46 (*SD* = 6.40), and 24.06 (*SD* = 5.48) respectively. Post-test mean score for depression was found to be 20.69 (*SD* = 5.04), stress has a mean of 23.09 (*SD* = 6.10) and anxiety with a mean score of 22.69 (*SD* = 6.36).

Moving on to participants under control group, their mean score for cyberbully scale was found to be 7.46 (*SD* = 2.94), while the mean score for state mindfulness was 43.81 (*SD* = 7.91). As for the subscales of DASS, pre-test mean score for depression was 25.03 (*SD* = 6.08), followed by stress with 26.81 (*SD* = 6.08) and anxiety with 25.24 (*SD* = 5.91). For post-test, depression has a mean score of 22.54 (*SD* = 6.18), stress mean score was found to be 24.65 (*SD* = 6.29) and lastly anxiety with a mean score of 23.84 (*SD* = 6.31). The results for each variable are summarised in Table 1.

Inferential Statistic

To test the effectiveness of cyberbullying victimization manipulation, independent T-test was used to compare the cyberbullying victimization in experimental group and control group. Result shows that there is a significant difference in the cyberbullying victimization score for experimental group (*M* = 10.63, *SD* = 3.40) and control group (*M* = 7.46, *SD* = 2.94) conditions; $t(70) = 4.23$, $p < .001$, $d = 1.00$.

The independent T-test result for experimental group and control group on depressive symptoms before video was not significant for both experimental group (*M* = 22.57, *SD* =

5.15) and control group ($M = 25.03$, $SD = 6.08$) conditions; $t(70) = -1.84$, $p = .069$, $d = -0.44$. Stress level was also not significant for both experimental group ($M = 26.46$, $SD = 6.40$) and control group ($M = 26.81$, $SD = 6.08$) conditions; $t(70) = -0.24$, $p = .811$, $d = -0.06$. Anxiety level was not significant for both experimental group ($M = 24.06$, $SD = 6.40$) and control group ($M = 25.24$, $SD = 5.91$) conditions; $t(70) = -0.88$, $p = .381$, $d = -0.21$. Cyberbullying did not show any significant mean differences in DASS-21 score between experimental group and control group.

Independent T-test was conducted to determine whether mindfulness video, S.T.O.P in experimental group was able to increase the state mindfulness when compared with control group. Upon analysis, it was found that experimental group mindfulness video, S.T.O.P ($M = 42.11$, $SD = 9.26$) did not show any significant mean differences with the control group video ($M = 43.81$, $SD = 7.91$) conditions; $t(70) = -0.84$, $p = .405$, $d = -0.20$. This finding showed that when compared with control group video S.T.O.P was not able to significantly increase the mindfulness level of participants. No significant differences were seen between mindfulness level after watching neither S.T.O.P or control video.

Pair sample T-test was used to compare the DASS-21 score for before and after the video. There was a significant difference in the score of depression level before ($M = 22.57$, $SD = 5.15$) and after the video ($M = 20.69$, $SD = 5.04$) condition; $t(34) = 2.13$, $p = .041$, $d = 0.37$. Result suggested that after mindfulness practice video, S.T.O.P, depression level was reduced. A significant difference was also found for the score of stress level before ($M = 26.46$, $SD = 6.40$) and after the video ($M = 23.09$, $SD = 6.10$) condition; $t(34) = 3.47$, $p = .001$, $d = 0.54$. No significant result was found for the score of anxiety level before ($M = 24.06$, $SD = 5.48$) and after the video ($M = 22.69$, $SD = 6.36$) condition; $t(34) = 1.76$, $p = .088$, $d = 0.23$.

In summary, not all finding of this study match with what is found in the literature review. Although the cyberbullying victimization feeling was induced among participant in experimental group, no significant difference was found in the mindfulness level and depression level. However, significant result was found between the pre-test and post-test result for depression level in experimental group.

Table 1

Summary of Experimental Design

	Experimental group (n = 35)		Control group (n = 37)		
	M	*SD*	*M*	*SD*	Cohen's *d*
Before video					
Cyberbullying	10.63[a]	3.40	7.46[a]	2.94	1.00
Depression	22.57[b]	5.15	25.03	6.08	-0.44
Stress	26.46[c]	6.40	26.81	6.08	-0.06
Anxiety	24.06	5.48	25.24	5.91	-0.21
After video					
Depression	20.69[b]	5.04	22.54	6.18	-0.33
Stress	23.09[c]	6.10	24.65	6.29	-0.25
Anxiety	22.69	6.36	23.84	6.31	-0.18
Mindfulness	42.11	9.26	43.81	7.91	-0.20

[a]Significant differences was found using independent T-test. [b]Significant differences for depression was found using paired sample T-test. [c]Significant differences for stress was found using paired sample T-test.

Chapter V

Discussion and Conclusion

The present study examined state mindfulness as a variable to buffer the effects of cyberbullying victimization and depressive symptoms. The cyberbullying victimization manipulation was effective evidenced from the significance in results. Some of the feedbacks that the participants have given are that the participants were attacked very suddenly in terms of verbal content. They mentioned that their opponent was violent and disrespectful. Regardless, the outcome showed that the cyberbullying victimization effect on depressive symptoms is not significant when comparing the symptoms levels between experimental and control group. The possible explanations could be referred to the feedbacks that were collected from the participants from the experimental group. Some of the similar feedbacks that the participants have provided are that the cyberbullying victimization manipulation is effective, but not impactful enough to the level that they would feel depressed or experience some of the depressive symptoms. Other reasons that were mentioned by the participants are that they were quite used to it, especially those that frequently involve themselves in online multiplayer games such as Dota, King of Glory, League of Legends and more. Some of the participants think that the cyberbullying victimization manipulation is not extreme enough in the use of harsh and insulting words.

Moving on for mindfulness level, results shows that there is no significant difference after comparing the means scores between experimental and control group. In addition, the average state mindfulness level of control group was actually slightly higher compared to experimental group. This might be explained by some feedbacks mentioned by the control group participants, where they felt good and positive feelings such as confident and comfortable as they learned some new information through the TED talk video. This might elicit some calming effect on the participants which may help improve their state mindfulness

level. As for the experimental group, some participants' feedback mentioned that they might find the S.T.O.P practice video a little lengthy and boring, although at the beginning they felt mindful, but they will start to lose their attention and wander their mind away, which in turn affects their current mindfulness level. According to Phang's et al. study (2014), the duration and frequency of the S.T.O.P practice could be depending on the individual's familiarity to the practice or based on their need in a given situation. In this study, most of the participants might only experience mindfulness practice, S.T.O.P for the first time and most likely not familiarized with it, which might explain why they feel bored watching a 10-minute mindfulness practice video. Initially in this study, mindfulness practice video duration was extended to 10 minutes because of recommendation by Lim & Loke's (2016) study that suggest that the 5-minute S.T.O.P practice might not be long enough to induce state mindfulness levels. However, researchers of this study might overlook the point that longer duration for participants with unfamiliarised experience could not be appropriate. Moreover, according to the results the cyberbullying victimization manipulation does not significantly increase depressive symptoms, which is also supported by some feedback by participants that their experience of gaming which intend to induce cyberbullied feelings also did not affect them much. Therefore, participants might find the S.T.O.P practice helpful to calm and organize their thoughts, but may not feel the need to conduct it for as long as 10 minutes. In short, the little difference between the mean scores of state mindfulness level could be explained by participants from both experimental group and control group also benefitted from the video they watched.

In this part of the discussion, the role of state mindfulness in buffering the effect of cyberbullying victimization and depressive symptoms will be focused. As reported by the result, there is a significant difference in the depression level of pre-test and post-test. There is a decrease in the means score of depression level. This indicates that mindfulness can

reduce depression level although being exposed to cyberbullying victimization. Such finding is similar with the literature review of past study. Mindfulness practice can help a person to stay away from negative beliefs, thoughts and feelings (Bajaj et al., 2016). When watching mindfulness video, S.T.O.P, participants in experimental group will re-evaluate the truthfulness of the thoughts. One of the activities of S.T.O.P is to perceive the thoughts as sounds of the brain, the thoughts are not necessarily true (Phang et al., 2014). Through mindfulness, participant can stay away from the negative thoughts and belief that is induced during the manipulation of cyberbullying and helps in reducing the depressive level.

In addition, the decrease in symptoms could also be related to the fact that participants felt more relieved as they realised that the study is ending soon, which could cause changes in their symptoms while answering the post-video DASS-21 scale. Some of the item responses from the DASS-21 depression subscale which could be affected include "I couldn't seem to experience any positive feelings at all", "I found it difficult to work up the initiative to do things", and "I felt I had nothing to look forward to". Participants might be looking forward that the study is ending, while experiencing positive feelings like relieve, and have the initiative or motivation to complete the last section of the study.

Practical Implication

Through this experimental design of using cyberbullying victimization manipulation to induce instant and similar effects of cyberbullying, this study could be one of the first of many experimental research to use the manipulation method in conducting the study. This study provides a new direction for future researches to improve and refine on the cyberbullying victimization manipulation in different ways. This is due to the possibilities of this manipulation method to be used as a platform of treatment for counsellors or other professionals using the Exposure Therapy for specific phobia. This is because Exposure therapy was found to be quite effective and useful in treatment (Goncalves, Pedrozo,

Coutinho, Figueira, & Ventura, 2012). In short, the manipulation method of cyberbullying can be possibly used as a "vaccine" to produce some immunity to cyberbullying and thus in hope of reducing the rate of cyberbullying victimizations. Besides, this study also shows how a brief mindfulness practice which is S.T.O.P, could help reduce depressive symptoms when faced with cyberbullying victimization. This finding contributed that individuals can use a brief mindfulness practice as a protective or coping method whenever they faced situations of being cyberbullied.

Theoretical Implications

Our theoretical model to explain our variables' relationship is the Diathesis Stress Model. The stress factor or stressor of this study was cyberbullying, which was applied using the manipulation of cyberbullying, where the depressive symptoms which was reported differently from different participants represented the diathesis or genetic vulnerability. Mindfulness was used as a protective factor to buffer the negative effects of cyberbullying victimization manipulation on depressive symptoms. The findings of this study have shown that cyberbullying victimization manipulation is effective yet it could not effectively manifest the depressive symptoms. This could be one of the limitations of the Diathesis Stress Model, which lacks psychological perception as a variable, because perceptions could be one of the affecting factors that changes the outcome or the view of psychological thoughts (Sobba, Paez, & Bensel, 2017). When this psychological perception of variables is added into the theoretical model, it provides a much more sensible understanding of our results. Due to the psychological perceptions, participants might have a different outlook on the impact of the cyberbullying victimization manipulation (stressor), depressive symptoms (diathesis manifestation) and mindfulness (protective factor). Therefore, explaining why some of the participants do not feel depressive symptoms to a significant extent but has significance in cyberbullying victimization manipulation. It can also explain why some participants feel that

the mindfulness video is not as effective as it should for the experimental group, and that the control group felt more mindful. They perceive that the video is not as mindful as it should be, and that it does not need that long to go through it. Through this finding and implication, future researchers could consider the addition of psychological perception into the Diathesis Stress Model.

Limitations

Firstly, this study only examined affective symptoms that were manifested at the current moment due to trigger of cyberbullying victimization experience. The cyberbullying victimization manipulation of this study was limited to only 10 minutes. Due to insufficient time, this study was unable to prolonged the duration of cyberbullying victimization manipulation as participants' involvement in the experimental study were only around 45 minutes. Participants also had limited time in developing their attachment to the game. Another concern was that the cyberbullying victimization manipulation might actually worked, however the depressive symptoms might not be obvious since the diagnostic criteria for depression were that the symptoms were present for at least two weeks (Bhowmik et al.,2012), so it might take time for the depressive symptoms to show. In short, the effectiveness of the brief mindfulness practice can only be generalized to symptoms that occur at the current moment, but uncertain for the symptoms that developed in long run by repeated cyberbullying victimization.

Secondly, the sample size of this study was only limited to UTAR students because of inconvenience to reach out to students from other universities or states. As this study's experimental venue is only located in UTAR, it is inconvenient for students or young adults from outside the university to come over and participate.

Thirdly, the state mindfulness level was only measured during post-test, also due to the limitation time duration for each participant's timeslots that a pre-test measure was unable

to be conducted. Therefore, the effectiveness of the brief mindfulness practice in this study can only be tested by comparing the average scores between experimental and control group.

Recommendation for Future Study

Firstly, researchers could consider study cyberbullying victimization manipulation through a longitudinal study where participants were given more time to develop their attachment towards a particular game and the cyberbullied feelings can be induced more effectively through a longer period of time. As mentioned by past studies, some core characteristics of cyberbullying includes repetitive and persistent overtime (Whittaker & Kowalski, 2015; Chu et al., 2018). The long-term effects of cyberbullying victimization on depressive symptoms could also be observed through a longer period of time. In this case, future studies could also focus on daily mindfulness practice as a protector or coping method against the negative effects of cyberbullying victimization on depressive symptoms.

Secondly, future studies could target a larger sample size that include young adults from other states besides Perak, as well as comparing gender or ethnicity difference in their response to cyberbully effects.

Thirdly, future studies that were convenient in conducting the experimental design in a longer duration could consider including a pretest-posttest design for assessing participants state mindfulness level before and after exposure to the mindfulness practice, to better observe the effectiveness of the practice.

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Appendix A1

Informed Consent

UNIVERSITI TUNKU ABDUL RAHMAN

FACULTY OF ARTS AND SOCIAL SCIENCE

INFORMED CONSENT

Wholly owned by UTAR Education Foundation
(Co. No. 578227-M)

Purpose of Study

We are Year 3 Trimester 3 undergraduate students from Bachelor of Social Science (Hons) Psychology at UTAR Kampar campus. The course that we are currently taking is UAPZ 3023 Final Year Project II. We are working on a research project which is divided into two parts, "the experience of online gaming" and "well-being promoting techniques". Therefore, we are asking if you would agree to participate in this research project.

Procedures

In this research project, you will be asked to play a game called "Roblox" for 10 minutes and provide a feedback on the overall gaming experience by answering a set of questionnaires. You will then watch a well-being promoting video and answer a set of questionnaires.

Confidentiality

Your information and responses will be handled in a private and confidential manner, reported as group data, and only be used for academic purpose which only the researcher and supervisor have access to it.

Participation

The participation in this study is voluntary in nature. You have the rights to withdraw from this research any time with no penalty.

Risk and discomfort

During the process of research, we anticipate that the risk or discomfort that you experience will not be greater than what you will normally experience throughout your daily life.

Contact information

If you have any further question or concern about this study, please feel free to contact our group leader, Ng Jun Quan (ng.junquan97@1utar.my).

Appendix A2

Agreement to Participate
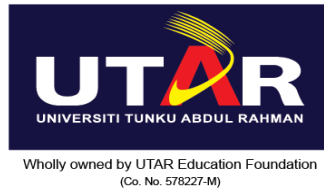
Written Consent Form

Agreement to Participate

This is to acknowledge that you understand and have been told about your rights as a

participant in this study.

"I have fully understood the statement that is stated above, and I have also been given the

opportunity to ask any questions. The signature below signifies that I have agreed to the

information given. I also understands that I have the right to withdraw from this study

without any form of penalty. I am aware that there will be a certain risk involve in this study.

The information that I have provided will also be kept confidential."

Signature: _____   Date: _____

Appendix B1

Ethical Approval for Research Project (First page)

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

Re: U/SERC/26/2019

25 February 2019

Dr Chie Qiu Ting
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 Chie,

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. We are pleased to inform you that the application has been approved under <u>expedited review</u>.

The details of the research projects are as follows:

	Research Title	Student's Name	Supervisor's Name	Approval Validity
1.	Brief Mindfulness Practice as an Intervention on the Relationship between Cyberbullying and Depressive Symptoms Among Young Adult in Malaysia	1. Benjamin Choo Bing Chee 2. Lee Ziyi 3. Ng Jun Quan	Dr Tan Chee Seng	25 February 2019 – 24 February 2020

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.

Appendix B2

Ethical Approval for Research Project (Second page)

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 C

Cyberbullying Message Codes

These codes are based on the content of scale items from the cyberbullying Scale Mabry & Kulovitz 2011). Codes assume behaviour flows from bully to target unless otherwise defined. All bullying codes must be unambiguously ascribed to a player. Content codes do not have to reference a player.

Overt Bullying

1. Harassment – Persistent or continuous, aggressive criticism of and/or demands for acting in a particular manner.

a. Your character is just disgusting! People would throw eggs at you if they could.

b. Never have I ever seen this level of gameplay! Are you a god? Coz you would be the worst one.

c. Hey trash. Get into a recycling center, where you are actually "USEFUL".

2. Threatening – Expression of intention to cause harm or pain (physical or psychosocial).

a. Wow, just seeing your character makes me wanna rape you and your family for good.

b. I'll make sure you learn your lesson well… Or else.

c. I'm going to make you regret that you ever play this game.

3. Insults – Offend or demean someone's activities, skills, or self-system(s), personality, attitudes, beliefs, or habits.

a. Sohai, you play like trash!

b. Be a good dog and run around, bitch.

c. You're so bad at this your mom regrets having you.

Covert Bullying

4. Teasing – Deliberately annoying or irritating another player.

a. Sorry that I can't teach you about the game, because you wouldn't understand it anyway ahaha you bitch.

b. Generally the game is pretty simple, but maybe you're simple too.

c. Come on even my AH MA can play better than you.

Appendix D

Control Group Message Codes

1. Hi, nice to meet you.

2. How was your day?

3. You have great skills.

4. Oh we can run around.

5. I'm getting the hang of this.

6. I will play better.

7. Want to play again?

8. Good game.

9. Let's play tag.

10. That was fun.

11. What do you think about the game?

12. What a freaking big map.

Appendix E1

Instructions for Participants in Experimental Group (First Envelope)

<u>Welcome!</u>

Please follow the instructions below after the game.

1. There will be a WordPad document named "Answer Me" on the top left of your desktop with an URL link in it.

2. Copy and paste the link from the WordPad onto Google Chrome.

3. You will be required to finish the questions that the link provides. (You may ask for assistance if needed)

4. After finishing the question, please proceed onto the second envelope to discover your next task!

Appendix E2

Instructions for Participants in Experimental Group (Second Envelope)

please follow the instructions below carefully.

1. Please open the file named "Calming Technique" on the top right of your desktop screen.

2. Please open the video named "Open Me" inside the file.

3. Watch and follow the instructions of the video. (You may ask for assistance if needed)

4. Upon finishing the task, please proceed onto the last envelope.

Appendix E3

Instructions for Participants in Experimental Group (Third Envelope)

You are moving towards the end of the activity of the session!

1. One more file of WordPad named "Answer Me 2!" at the bottom right of your screen.

2. Pleas open the link through google chrome by copy & paste and complete the questions that were given.

3. You may now leave and collect your token of appreciation from the researcher that registered you.

If you have any questions or inquiries, please do not hesitate to ask the researchers/helpers.

In case of assistance needed for after the session, please contact one of the numbers below:
  a) 017-5212505 (Lee Ziyi)
  b) 012-5115668 (Benjamin Choo)
  c) 016-3035237 (Ng Jun Quan)
  Or, Contact Counselling Guidance Unit through the Department of Student Affairs. (605468-8888 ext 2283)
  Thank you for your participation!

Appendix F1

Instructions for Participants in Control Group (First Envelope)

Welcome!

Please follow the instructions below after the game.

1. There will be a Wordpad document named "Answer Me" on the top left of your desktop with an URL link in it.

2. Copy and paste the link from the WordPad onto Google Chrome.

3. You will be required to finish the questions that the link provides. (You may ask for assistance if needed)

After finishing the question, please proceed onto the second envelope to discover your next task!

Appendix F2

Instructions for Participants in Control Group (Second Envelope)

Please follow the instructions below carefully.

1. Please open the file name "TED" on the top right side

   of your desktop.

2. Click on the video named "Open Me" inside the file,

   watch and listen to it.

3. After finishing the video, you may proceed onto the last

   envelope.

Appendix F3

Instructions for Participants in Control Group (Third Envelope)

You are moving towards the end of the activity of the session!

1. One more file of WordPad named "Answer Me 2!" on the right bottom of your screen, open it.

2. Please open the link through google chrome by copy & paste and complete the questions that were given.

3. You may now leave and collect your token of appreciation from the researcher that registered you.

If you have any questions or inquiries, please do not hesitate to ask the researchers/helpers.

In case of assistance needed for after the session, please contact one of the numbers below:
   d) 017-5212505 (Lee Ziyi)
   e) 012-5115668 (Benjamin Choo)
   f) 016-3035237 (Ng Jun Quan)

Thank you for your participation!

Appendix G

Briefing Guideline

PARTICIPANT BRIEFING GUIDELINE

Welcome to our FYP research on online gaming experience and well-being promoting techniques! This study is to acquire the feedback on your gaming experience and also well-being!

1. First of all, when you go in, there will be an online multiplayer game readied for you to play on the computer. I will teach you the basic controls of the game.

2. Enjoy the game and try to experience the fun to the fullest!

3. You will also notice that there are 3 envelopes by the side of the computer, please open them according to the instructions that were given starting from envelope 1, and moving on to the 2nd envelope after completing the activities mentioned in envelope 1. Repeat this step for envelope number 2 and 3.

4. You will see instructions to further guide you throughout the whole activity. During the activity you might need to watch a video, please wear the headphones provided.

5. However, if you encounter certain issues, or discomfort that you might find unbearable, please do not hesitate to call me for my assistance.

6. After the whole session has been done, you may notify the researcher that registered you.

7. Lastly, if you agree to participate in this study, please kindly look through the inform consent and sign the form as a prove of agreement if there are no further issues or questions needed to ask.

Appendix H

Before Video Online Survey

Section A: Demographic information
1. Age

_____

2. Gender

☐ Male

☐ Female

3. Race

☐ Malay

☐ Chinese

☐ Indian

☐ Others _____

4. Religion

☐ Islam

☐ Buddhism

☐ Hinduism

☐ Christianity

☐ Others

5. State of birth (E.g. Perak)

_____

6. Education level (e.g. SPM, STPM, undergraduate)

_____

7. Course of study (e.g. Psychology, Food Science)

_____

8. Are you a regular online gamer?

☐ Yes

☐ No

9. Student ID: _____

Section B: Cyberbully victimization scale

Instructions: On a scale of 1 (Not at all) to 5 (Very great) rate to what extend you feel that the statement below represents your online gaming experience.

1. To what extend you feel enjoyable while playing the game?

☐ Not at all

☐ Very little

☐ Little

☐ Great

☐ Very great

2. To what extend that you feel being teased?

☐ Not at all

☐ Very little

☐ Little

☐ Great

☐ Very great

3. To what extend that you will want to play this game again?

☐ Not at all

☐ Very little

☐ Little

☐ Great

☐ Very great

4. To what extend that someone has been mean to you?

☐ Not at all

☐ Very little

☐ Little

☐ Great

☐ Very great

5. To what extend that you will feel energized?

☐ Not at all

☐ Very little

☐ Little

☐ Great

☐ Very great

6. To what extend you feel that someone has curse on you?

☐ Not at all

☐ Very little

☐ Little

☐ Great

☐ Very great

7. To what extend that this game suits your preference?

☐ Not at all

☐ Very little

☐ Little

☐ Great

☐ Very great

8. To what extend you feel threaten in the game?

☐ Not at all

☐ Very little

☐ Little

☐ Great

☐ Very great

Section C: Depression, anxiety and stress scale (DASS-21)

Instruction: Please read each statement and circle a number 0, 1, 2 or 3 which indicates how much the statement applied to you at the current moment. There are no right or wrong answers. Do not spend too much time on any statement. The rating scale is as follows:

0 = Did not apply to me at all - NEVER

1 = Applied to me to some degree – SOMETIMES

2 = Applied to me to a considerable degree - OFTEN

3 = Applied to me very much - ALMOST ALWAYS

1. I found it hard to wind down.

☐ Never

☐ Sometimes

☐ Often

☐ Almost always

2. I was aware of dryness of my mouth.

☐ Never

☐ Sometimes

☐ Often

☐ Almost always

3. I couldn't seem to experience any positive feeling at all.

☐ Never

☐ Sometimes

☐ Often

☐ Almost always

4. I experienced breathing difficulty (eg, excessively rapid breathing, breathlessness in the absence of physical exertion).

☐ Never

☐ Sometimes

☐ Often

☐ Almost always

5. I found it difficult to work up the initiative to do things.

☐ Never

☐ Sometimes

☐ Often

☐ Almost always

6. I tended to over-react to situations.

☐ Never

☐ Sometimes

☐ Often

☐ Almost always

7. I experienced trembling (eg, in the hands).

☐ Never

☐ Sometimes

☐ Often

☐ Almost always

8. I felt that I was using a lot of nervous energy.

☐ Never

☐ Sometimes

☐ Often

☐ Almost always

9. I was worried about situations in which I might panic and make a fool of myself.

☐ Never

☐ Sometimes

☐ Often

☐ Almost always

10. I felt that I had nothing to look forward to.

☐ Never

☐ Sometimes

☐ Often

☐ Almost always

11. I found myself getting agitated.

☐ Never

☐ Sometimes

☐ Often

☐ Almost always

12. I found it difficult to relax.

☐ Never

☐ Sometimes

☐ Often

☐ Almost always

13. I felt down-hearted and blue.

☐ Never

☐ Sometimes

☐ Often

☐ Almost always

14. I was intolerant of anything that kept me from getting on with what I was doing.

☐ Never

☐ Sometimes

☐ Often

☐ Almost always

15. I felt I was close to panic.

☐ Never

☐ Sometimes

☐ Often

☐ Almost always

16. I was unable to become enthusiastic about anything.

☐ Never

☐ Sometimes

☐ Often

☐ Almost always

17. I felt I wasn't worth much as a person.

☐ Never

☐ Sometimes

☐ Often

☐ Almost always

18. I felt that I was rather touchy.

☐ Never

☐ Sometimes

☐ Often

☐ Almost always

19. I was aware of the action of my heart in the absence of physical exertion (eg, sense of heart rate increase, heart missing a beat).

☐ Never

☐ Sometimes

☐ Often

☐ Almost always

20. I felt scared without any good reason.

☐ Never

☐ Sometimes

☐ Often

☐ Almost always

21. I felt that life was meaningless.

☐ Never

☐ Sometimes

☐ Often

☐ Almost always

Appendix I

Online Survey After Video

Student ID: _____

Section A: DASS-21

Instruction: Please read each statement and circle a number 0, 1, 2 or 3 which indicates how much the statement applied to you at the current moment. There are no right or wrong answers. Do not spend too much time on any statement. The rating scale is as follows:

0 = Did not apply to me at all - NEVER
1 = Applied to me to some degree - SOMETIMES
2 = Applied to me to a considerable degree - OFTEN
3 = Applied to me very much - ALMOST ALWAYS

1. I found it hard to wind down.

☐ Never

☐ Sometimes

☐ Often

☐ Almost always

2. I was aware of dryness of my mouth.

☐ Never

☐ Sometimes

☐ Often

☐ Almost always

3. I couldn't seem to experience any positive feeling at all.

☐ Never

☐ Sometimes

☐ Often

☐ Almost always

4. I experienced breathing difficulty (eg, excessively rapid breathing, breathlessness in the absence of physical exertion).

☐ Never

☐ Sometimes

☐ Often

☐ Almost always

5. I found it difficult to work up the initiative to do things.

☐ Never

☐ Sometimes

☐ Often

☐ Almost always

6. I tended to over-react to situations.

☐ Never

☐ Sometimes

☐ Often

☐ Almost always

7. I experienced trembling (eg, in the hands).

☐ Never

☐ Sometimes

☐ Often

☐ Almost always

8. I felt that I was using a lot of nervous energy.

☐ Never

☐ Sometimes

☐ Often

☐ Almost always

9. I was worried about situations in which I might panic and make a fool of myself.

☐ Never

☐ Sometimes

☐ Often

☐ Almost always

10. I felt that I had nothing to look forward to.

☐ Never

☐ Sometimes

☐ Often

☐ Almost always

11. I found myself getting agitated.

☐ Never

☐ Sometimes

☐ Often

☐ Almost always

12. I found it difficult to relax.

☐ Never

☐ Sometimes

☐ Often

☐ Almost always

13. I felt down-hearted and blue.

☐ Never

☐ Sometimes

☐ Often

☐ Almost always

14. I was intolerant of anything that kept me from getting on with what I was doing.

☐ Never

☐ Sometimes

☐ Often

☐ Almost always

15. I felt I was close to panic.

☐ Never

☐ Sometimes

☐ Often

☐ Almost always

16. I was unable to become enthusiastic about anything.

☐ Never

☐ Sometimes

☐ Often

☐ Almost always

17. I felt I wasn't worth much as a person.

☐ Never

☐ Sometimes

☐ Often

☐ Almost always

18. I felt that I was rather touchy.

☐ Never

☐ Sometimes

☐ Often

☐ Almost always

19. I was aware of the action of my heart in the absence of physical exertion (eg, sense of heart rate increase, heart missing a beat).

☐ Never

☐ Sometimes

☐ Often

☐ Almost always

20. I felt scared without any good reason.

☐ Never

☐ Sometimes

☐ Often

☐ Almost always

21. I felt that life was meaningless.

☐ Never

☐ Sometimes

☐ Often

☐ Almost always

Section B: Toronto mindfulness scale (TMS)

Instructions: We are interested in what you just experienced. Below is a list of things that people sometimes experience. Please read each statement. Next to each statement are five choices: "not at all", "a little", "moderately", "quite a bit", and "very much". Please indicate the extent to which you agree with each statement. In other words, how well does the statement describe what you experienced just now.

1. I experienced myself as separate from my changing thoughts and feelings.

☐ Not at all

☐ A little

☐ Moderately

☐ Quite a bit

☐ Very much

2. I was more concerned with being open to my experiences than controlling or changing them.

☐ Not at all

☐ A little

☐ Moderately

☐ Quite a bit

☐ Very much

3. I was curious about what I might learn about myself by taking notice of how I react to certain thoughts, feelings or sensations.

☐ Not at all

☐ A little

☐ Moderately

☐ Quite a bit

☐ Very much

4. I experienced my thoughts more as events in my mind than as a necessarily accurate reflection of the way things 'really' are.

☐ Not at all

☐ A little

☐ Moderately

☐ Quite a bit

☐ Very much

5. I was curious to see what my mind was up to from moment to moment.

☐ Not at all

☐ A little

☐ Moderately

☐ Quite a bit

☐ Very much

6. I was curious about each of the thoughts and feelings that I was having.

☐ Not at all

☐ A little

☐ Moderately

☐ Quite a bit

☐ Very much

7. I was receptive to observing unpleasant thoughts and feelings without interfering with them.

☐ Not at all

☐ A little

☐ Moderately

☐ Quite a bit

☐ Very much

8. I was more invested in just watching my experiences as they arose, than in figuring out what   they could mean.

☐ Not at all

☐ A little

☐ Moderately

☐ Quite a bit

☐ Very much

9. I approached each experience by trying to accept it, no matter whether it was pleasant or unpleasant.

☐ Not at all

☐ A little

☐ Moderately

☐ Quite a bit

☐ Very much

10. I remained curious about the nature of each experience as it is arose.

☐ Not at all

☐ A little

☐ Moderately

☐ Quite a bit

☐ Very much

11. I was aware of my thoughts and feelings without overidentifying with them.

☐ Not at all

☐ A little

☐ Moderately

☐ Quite a bit

☐ Very much

12. I was curious about my reactions to things.

☐ Not at all

☐ A little

☐ Moderately

☐ Quite a bit

☐ Very much

13. I was curious about what I might learn about myself by just taking notice of what my attention gets drawn to.

☐ Not at all

☐ A little

☐ Moderately

☐ Quite a bit

☐ Very much

Appendix J

Debriefing Guideline

UNIVERSITI TUNKU ABDUL RAHMAN

FACULTY OF ARTS AND SOCIAL SCIENCE

DEBRIEFING

Purpose of Study

Our actual study topic is the effect of mindfulness practice video on depressive feelings caused by cyberbullying victimization manipulation. The purpose is to experiment on the use of the mindfulness practice in buffering the depressive feelings possibly caused by the manipulation.

Procedure

There will be an experimental group and a control group. If you are in the experimental group, you will be "cyberbullied" through Roblox gameplay and given the S.T.O.P mindfulness video to buffer the effects of cyberbullying. If you are in the control group, you will experience a neutral gameplay without any cyberbullying intentions and also given the TED talk video to watch. This is so we could compare the effectiveness of the S.T.O.P mindfulness video.

Risk, Discomfort, and Countermeasures

The cyberbullying victimization manipulation might have caused uncomfortable feelings. Through this debriefing, we hope to relief your discomfort, however if your discomfort remains please do contact us or the counselling guidance unit (CGU), the numbers are on the brochure that we provided. Lastly, please keep everything that you experienced and went through a secret as we hope to provide the same and fair experience to other possible participants that we might encounter.

Appendix K1

S.T.O.P Mindfulness Practice Brochure (Front page)

Stressing Out? S.T.O.P.

Time: 1 to 3 minutes

Two-thirds of Americans say they need help for stress. But stress itself is not the problem. It's how we relate to stress.

The stress response is critical to our survival. It can save our lives or enable a firefighter to carry a 300-pound man down 20 flights of stairs. Of course, most of us don't encounter a life-or-death threat all that often. We usually experience stress reactions in response to thoughts, emotions, or physical sensations. If we're actively worried about whether we can put food on the table or get the perfect exam score, presto: the stress reaction activates. And if the bodily systems involved in stress don't slow down and normalize, the effects can be severe. Over time, we can succumb to, among other things, high blood pressure, muscle tension, anxiety, insomnia, gastro-digestive complaints, and a suppressed immune system.

Creating space in the day to stop, come down from the worried mind, and get back into the present moment has been shown to be enormously helpful in mitigating the negative effects of our stress response. When we drop into the present, we're more likely to gain perspective and see that we have the power to regulate our response to pressure.

Here's a short practice you can weave into your day to step into that space between stimulus and response.

Elisha Goldstein, Ph.D., is a clinical psychologist and the author of *The Now Effect* and coauthor of *A Mindfulness-Based Stress Reduction Workbook*.

S **Stop** what you're doing; put things down for a minute.

T **Take a few deep breaths**. If you'd like to extend this, you can take a minute to breathe normally and naturally and follow your breath coming in and out of your nose. You can even say to yourself "in" as you're breathing in and "out" as you're breathing out if that helps with concentration.

For more on mindfulness practice, go to mindful.org/inpractice. To submit questions about techniques, the workplace, or relationships and home life, email inpractice@mindful.org

O **Observe** your experience just as it is—including thoughts, feelings, and emotions. You can reflect about what is on your mind and also notice that **thoughts** are not facts, and they are not permanent. Notice any **emotions** present and how they're being expressed in the body. Research shows that just naming your emotions can turn the volume down on the fear circuit in the brain and have a calming effect. Then notice your **body**. Are you standing or sitting? How is your posture? Any aches or pains?

P **Proceed** with something that will support you in the moment: talk to a friend, rub your shoulders, have a cup of tea.

Treat this whole exercise as an experiment: Get curious about where there are opportunities in the day for you to just STOP—waking up in the morning, taking a shower, before eating a meal, at a stop light, before sitting down at work and checking email.

You can even use your smartphone's message indicator as a reminder to STOP, cultivating more mindfulness with technology.

What would it be like in the days, weeks, and months ahead if you started stopping more often?

—Elisha Goldstein

66 **mindful** August 2013

Appendix K2

S.T.O.P Mindfulness Practice Brochure (Back page)

Attached below is the video link of one of the way this mindful S.T.O.P can be practiced:

https://www.youtube.com/watch?v=iR_aZOie3Z0&index=5&list=PLvcthjJ9FO7nOBgTxKS1GnYLtQ4pRQ3vY

If you have any questions or inquiries, do feel free to contact one of the researchers:

a) 017-5212505 (Lee Ziyi)
b) 012-5115668 (Benjamin Choo)
c) 016-3035237 (Ng Jun Quan)

Or, in case you're not feeling well mentally, please do not hesitate to contact UTAR Counselling Guidance Unit through the Department of Student Affairs. (605468-8888 ext 2283)

Thank you for your participation!

Appendix L

S.T.O.P Mindfulness Practice Video
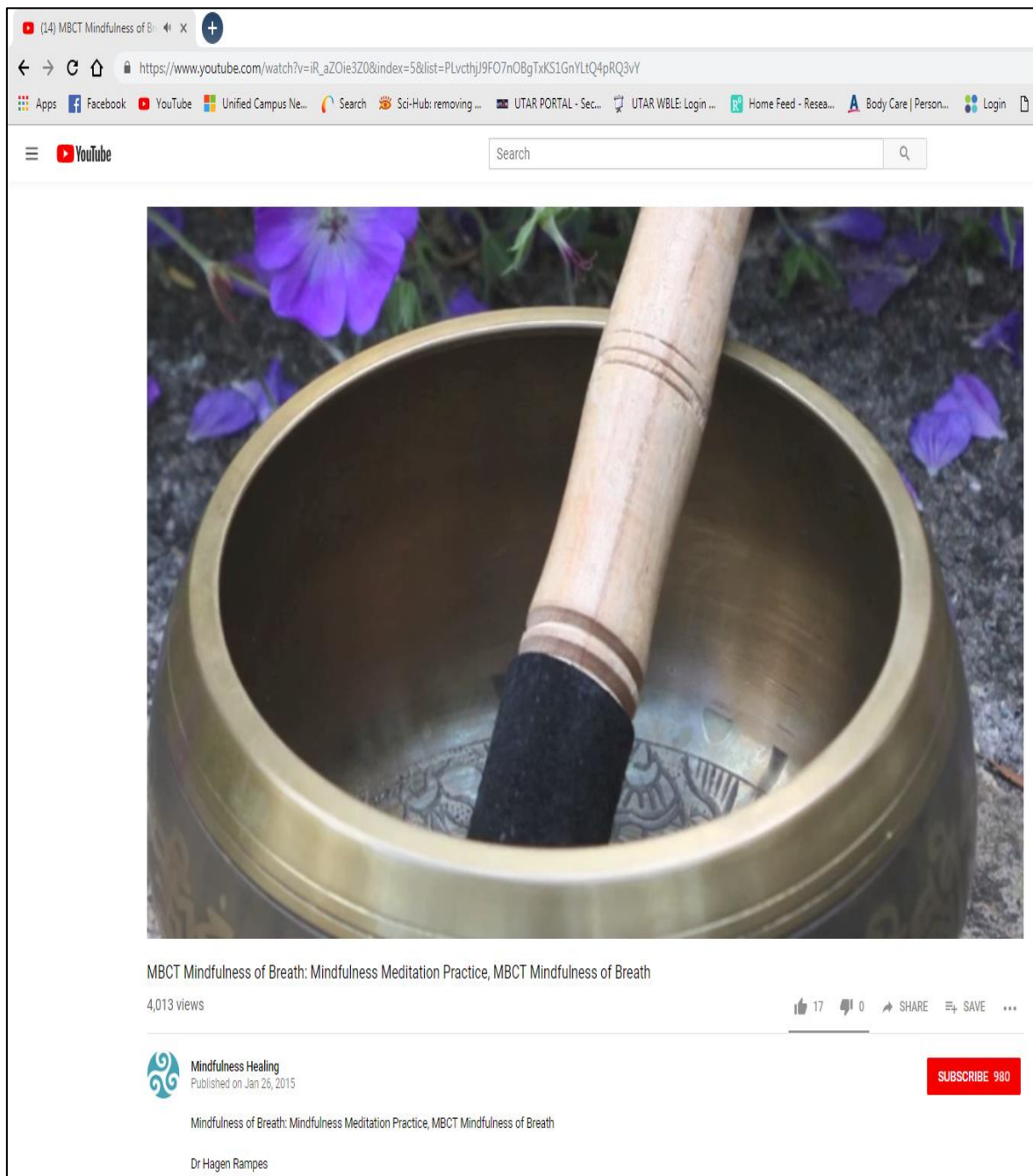
Figure 3.1: Youtube link for mindfulness practice video. https://youtu.be/iR_aZOie3Z0

Appendix M

Control Group TED talk video
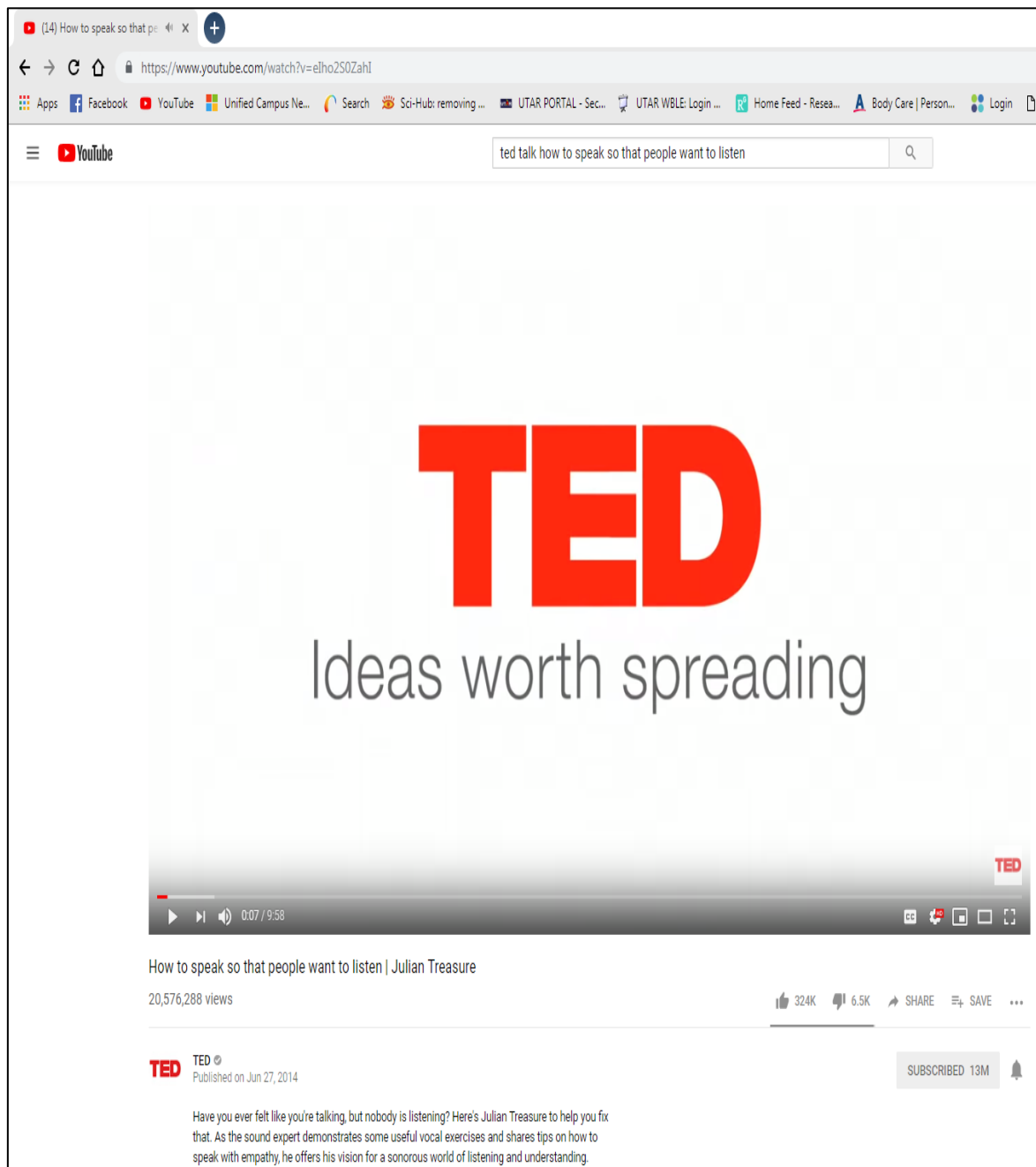
Figure 3.2: Youtube link for TED talk video. https://youtu.be/iR_aZOie3Z0

DEPARTMENT OF PSYCHOLOGY AND COUNSELLING
FACULTY OF ARTS AND SOCIAL SCIENCE
UNIVERSITI TUNKU ABDUL RAHMAN

UAPZ 3023 Final Year Project II

<u>Research Project Evaluation Form</u>

<u>TURNITIN:</u> *'In assessing this work you are agreeing that it has been submitted to the University-recognized originality checking service which is Turnitin. The report generated by Turnitin is used as evidence to show that the students' final report contains the similarity level below 20%.'*

Project Title: Brief Mindfulness Practice as an Intervention on the Relationship between Cyberbullying and Depressive Symptom among Young Adults in Malaysia.	
Supervisor: Dr Tan Chee Seng	

Student's Name:	Student's Id
1. Benjamin Choo Bing Chee	1. 1505828
2. Lee Ziyi	2. 1503188
3. Ng Jun Quan	3. 1502355

INSTRUCTIONS:
Please score each descriptor based on the scale provided below:
1. For criteria **1, 2, 3,4, 5, 6**:
   0 = no attempt, 1 = very poor, 2 = poor, 3 = average, 4 = good, 5 = very good

2. For criteria **3,4**:
   0 = no attempt, 1 = very poor, 3 = poor, 5 = average, 7 = good, 10 = very good

3. For criteria **7**:
   Please retrieve the mark from "**Oral Presentation Evaluation Form**".

1. ABSTRACT (5%)	Score
1. States clearly the research objectives. (5%)	
2. Describe briefly and clearly the approach/methodology of the study. (5%)	
3. Highlights the outcomes of the study. (5%)	
4. Highlights the significance of the study. (5%)	
5. Three relevant keywords mentioned. (5%)	
Sum	
Subtotal (*Sum* /5)	**/ 5%**

Remark:

2. METHODOLOGY (20%)	
1. Appropriate research design/framework (5%)	
2. Appropriate sampling techniques (5%) - Sample size is justified. - Sampling method correctly mentioned - Location of how the subjects are selected	
3. Clear explanation of procedure (5%) - How is consent obtained - Description of how data was collected	
4. Explanation on the instruments/questionnaires used (5%) - Description of instrument measures, scoring system, meaning of scores, reliability and validity information.	
Subtotal	**/ 20%**

Remark:

3. RESULTS (20%)	
1. Analyses used are appropriate for each hypothesis. (10%)	
2. Interpretations and explanations of the statistical analyses are accurate. (10%)	
Subtotal	**/ 20%**

Remark:

4. DISCUSSION & CONCLUSION (25%)	
1. Constructive discussion of findings. - Explanation and critical analysis. Results were critically	

analyzed with similar and/or dissimilar results. (10%)				
2. Implication of the study. (5%)				
3. Limitations mentioned relevant and constructive to the study. (5%)				
4. Recommendations for future research. (5%)				
Subtotal		**/ 25%**		
Remark:				

5. LANGUAGE & ORGANIZATION (5%)

1. Comprehensiveness: Content Organization + Language	
Subtotal	**/ 5%**
Remark:	

6. APA STYLE AND REFERENCING (5%)

1. APA format is followed	
Subtotal	**/ 5%**
Remark:	

7. *ORAL PRESENTATION (20%)

	Score		
	Student 1	**Student 2**	**Student 3**
Subtotal			
Remark:			

PENALTY: **Maximum 10 marks for LATE SUBMISSION, MISSING FORM or POOR ATTENDANCE for consultation with supervisor**			
	Student 1	**Student 2**	**Student 3**
**FINAL MARK/TOTAL			

***Overall Comments:

_____

_____

_____

_____

_____

Signature: _____   **Date:** _____

<u>**Notes:**</u>
1. **Subtotal**:   The sum of scores for each assessment criteria
2. **FINAL MARK/TOTAL**:   The summation of all subtotal score
3. Plagiarism is UNACCEPTABLE. Parameters of originality required and limits approved by UTAR are as follows:
    (i) **Overall similarity index is 20% and below**, and
    (ii) Matching of individual sources listed must be less than 3% each, and
    (iii) Matching texts in continuous block must not exceed 8 words
    Note: Parameters (i) – (ii) shall exclude quotes, references and text matches which are less than 8 words. Any works violate the above originality requirements will NOT be accepted. Students have to redo the report and meet the requirements in **SEVEN(7)** days.

*The marks of "Oral Presentation" are to be retrieved from **"Oral Presentation Evaluation Form".**
**It's compulsory for the supervisor/reviewer to give the overall comments for the research projects with A- and above or F grading.

Brief Mindfulness Practice

by Ng Jun Quan

Abstract

This paper reviews whether the role of mindfulness practice could reduce depressive symptoms caused by cyberbullying experience. Seventy-two participant were recruited and randomly assigned into experimental group or control group. Cyberbullying victimization was manipulated through the uses of threatening, harassing, insulting and teasing sentences in the game named "Roblox". Control group did not undergo any manipulation. Cyberbullying victimization, depression, stress and anxiety score were recorded after the game. Participant in experimental group will then watch a mindfulness practice video (S.T.O.P) whereas control group will watch a TED talk video. After the video, depression, stress, anxiety and state mindfulness score were recorded. Result shows that there are significant differences in the cyberbullying victimization score of experimental group and control group after the game. Indicating that participant in the experimental group felt cyberbullied after the game. Although cyberbullying victimization was induced among experimental group, no significant differences was found in the depression, stress, anxiety and level when compared with control group. It was assumed that cyberbullying victimization manipulation was not strong enough to create a significant difference because some participant feedback that they are used to the cyberbullied message while some mentioned that attention was given in learning how to play the game. Within experimental group, there is significant decrease in the score of depression and stress before and after the mindfulness practice video (S.T.O.P). Findings in this study can be used as a possible treatment for Exposure Therapy in early cyberbullying exposure.

Keyword: Cyberbullying victimization manipulation, depressive symptoms, mindfulness

Chapter III

Methodology

Research Design

Overall this is a quantitative study, which is an experimental research that contained mix methods of between subject and within subject design. First of all, experimental research design was used in this study, intending to manipulate feelings of being cyberbullied on participants and to test the effectiveness of a mindfulness practice in decreasing symptoms of depression among participants at the current moment. Between-subject research design was used to answer the first research question that whether there are differences in feelings and symptoms of depression between participants under experimental group who were exposed to cyberbullied experience, and participants who were exposed to normal gaming experience. It was also used to answer the second research question on whether there is difference in state mindfulness level, between participants who were assigned to watched mindfulness video under experimental group, and participants who watch neutral video under control group. Within subject design was used to answer the third research question, where it also involves a pretest-posttest research design to see the changes in symptoms of depression, anxiety and stress of participants under the experimental group after doing a mindfulness practice. In addition, survey method was used in this study to collect the responses of participants, in which Qualtrics online survey software was used.

Participants

Initially, there are 138 participation slots prepared by researchers over the course of three weeks. After approaching students studying in Universiti Tunku Abdul Rahman (UTAR) from different faculties, only ninety-four participants agreed to participate and were recruited in this study. However, only eighty-two showed up at the study according to their chosen timeslots as some of the them couldn't make it due to various reasons such as

replacement class or busy. After data collection, ten participant's data were excluded due to incomplete responses. Among the seventy-two participants left, there is a total of thirty-two males (44.5%) and forty females (55.6%), where the age range were from age 19 to 28 years old. A total of sixty-seven participants are Chinese (93.1%), 4 Indian (5.6%) and 1 Kadazan (1.4%). Participants of this age range was chosen mainly because computer games, especially online multiplayer games are no longer focused on adolescent (Griffiths, Davies & Chappell, 2004). Young adults are becoming larger users of online gaming.

The sampling method used in this study was convenience sampling method. Participants recruited were being approached in different blocks in UTAR Kampar campus. Approached individuals were briefly told about the covered purpose and procedures of the experimental study. Participants who agreed to participate in this study selected their preferred timeslot provided by the researchers. Participant were then randomly distributed to either experimental group or control group.

Instrument

Manipulation of cyberbullying. Cyberbullying was induced with the use of an online multiplayer game called "Roblox". In the game, researchers carried out a series of cyberbullying behaviour on the participant. The cyberbullying message code was used as the basis on how cyberbullying feeling can be induced. The original cyberbullying message code consist of twenty-two item in five dimensions which are covert bullying, overt bullying, compliance gaining, miscellaneous and group or interpersonal process (Mabry and Kulovitz, as cited in Kulovitz, 2013). However, certain items are modified and removed in order to fit into this study as some actions might not be applicable in the context of Roblox. At the end, only four items from overt bullying and covert bullying are remained because other dimension of bullying is unable to be carried out. Some example of items that are remained are harassment, threatening, insult and teasing. These actions are categorised under

cyberbullying behaviour. Participants received these bullying behaviours from the researcher to induce the feelings of being cyberbullied.

 Cyberbullying scale. Participants cyberbullied feeling was measured by using a cyberbullying scale which is self-developed by the researchers for the purpose of this study. Cyberbullying scale consist of 4 items on the feeling of cyberbullying and 4 neutral items which is not related to feelings of cyberbullying. The cyberbullying scale was rated on a 5-point Linkert scale and score and each item has a scoring from 1 to 5. Cyberbullying scale was develop based on the items from Cyberbullying victimization and perpetration survey and Revised Cyber Bullying Inventory (RCBI). Three items were taken from cyberbullying victimization and perpetration survey which are "Has someone been mean to you electronically?", "Has someone cursed at you electronically?" and "Has someone teased you electronically?" (Brack & Caltabiano, 2014). The items were then further modified to fit into the study. One item from Revised Cyber Bullying Inventory (RCBI), "Threatening in online forums (like chat rooms, facebook or twitter)" was also used and modified (Doane, Kelley, Chiang, & Padilla, 2013).

 Brief mindfulness practice (S.T.O.P.). Participants in intervention group were given Brief Mindfulness Practice S.T.O.P. as their video-watching task. S.T.O.P. is a brief mindfulness intervention or practice that can be done at anytime and anywhere (Phang, Keng, & Chiang, 2014). The video was chosen from one of the MBCT course videos available on Youtube, containing instructions of how to conduct this practice will be presented to the participants in the video. The video practice started off by asking participants to sit comfortably according to their preference. Other guided instructions throughout the video included asking participants to gently guide their attention along with the movement of their breath for a few minutes. Participants were also asked to focus on their sensations to the surrounding, with an attitude of curiosity, and also pay attention to their experience with a

non-judgemental and self-accepting attitude, and returning their attention to movement of

breathing whenever the mind wanders away to different thoughts and dreams.

Toronto mindfulness scale (TMS). The Toronto Mindfulness Scale is a self-report

questionnaire that was used to measure state or momentary mindfulness level (Lau et al.,

2006). It consists of 13 items, which is rated on a 5-point Likert-type scale, ranging from 0

(not at all) to 4 (very much). The TMS has two sub constructs or factors, which are curiosity

and decentering. The curiosity factors measure one's reflected willingness to gain more

knowledge on their present moment experiences (Lau et al., 2006). On the other hand, the

decentering factor measures the ability of an individual to be aware of his or her thoughts and

feelings with some distance and disidentification instead of being carried away by them

(Teasdale et al., 2002). The scoring method of the TMS is by summing up the scores of each

item, where higher scores represents higher state mindfulness at the moment. The TMS

display good reliability with both Curiosity and Decentering factors having a high internal

consistency with Cronbach' alpha coefficients of 0.86 and 0.87 respectively (Lau et al.,2006).

For construct validity, both factors reported a significant positive association with awareness

of surrounding, reflective self-awareness and psychological mindedness (Lau et al., 2006).

Depressive, anxiety and stress scales (DASS-21). The 21-item version of the

Depressive, Anxiety and Stress scale (DASS) was used to measure depressive, anxiety and

stress levels concurrently, while each construct can be measured separately, with each

subscale containing 7 items. This scale was supposed to assess participant's symptoms over

the past week, however due to contemplate the nature of this study, the instructions of the

scale were modified, asking participants to rate the items based on their feelings at the current

moment. The full DASS-21 will be administered to the participants; however, depression

subscale will be focused to address the objectives of this study. The other two subscales were

also analysed separately. The items in the depression scale assesses dysphoric mood states

such as lack of interest, anhedonia, hopelessness and self-depreciation (Norton, 2007). The items are rated on a 4-point likert type scale which ranges from 0 (did not apply to me at all) to 3 (applied to me very much). For the scoring, the overall score of the scale could be calculated by summing all the item scores. Scores for each subscale could also be obtained by summing the respective subscale items. Higher scores indicate higher severity of the symptoms. Past studies reported good psychometric properties of DASS-21 depression subscale with a Cronbach alpha coefficient ranging from .88 to .94, while anxiety and stress subscale also reported high values of .80 to .87 and .84 to .91 respectively (Sinclair et al., 2011). All subscales also showed good convergent validity with the Mental Component Summary and the Rosenberg Self-Esteem Scale.

Research Procedure

Other than the basic approvals that we get, the most important approval is the ethical approval that we obtained from the authorities of UTAR, especially from the head of Department of Psychology, the faculty office, and our supervisor. After the commencement of our project, the study will follow a fix step of procedures to ensure consistency and reliability in our method of assessment. The venue has 3 separated rooms, first in which the participants were greeted by Researcher A, the second room is where the laptops and envelops have been set-up by Researcher B and C before participant's entry, and the third room which Researcher B and C will "anonymously" interact with the participants on their own servers. To ensure minimal bias, we applied the double blind technique. The recruited participants that came would be greeted by Researcher A, and be responsible for briefing the instructions, inform consent and be ready for any inquiries that the participants might have. Researcher B and C will be responsible for the manipulation of cyberbully in experimental group, and neutral gameplay in the control group. Messages to interact were fixed on a paper as a guideline for researcher B and C to standardize the replies when responding to the

participants. After setting up the files and envelopes, they would situate themselves in the

third room without seeing the participants. Researcher A will not know who gets cyberbullied

or non-cyberbullied, while researcher B and C will not know which participants seated the

laptops for experimental group or control group.

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                        │  Briefing and Consent │
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          ┌─────────────│    Roblox Gaming     │─────────────┐
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│  Experimental Group  │                          │    Control Group     │
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│ Victimization        │                          │ Victimization        │
│   Manipulation)      │                          │    Manipulation)     │
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│      10-minute       │                          │      10-minute       │
│ Mindfulness Practice │                          │    TED Talk Video    │
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Figure 2. Flow of research procedure.

At the start of the experimental study, Researcher A would brief the participants on

the procedures and consent of the participants, he or she will sign the informed consent as

agreement of participation. Researcher A would then guide the participants to the random

seats with laptops and envelopes in the second room, which researcher A would teach the

participants the basic controls of the online game. Beside the laptop there were 3 envelopes

that contains instructions, the participants would only open them after the game. The

gameplay was fixed at 10 minutes as soon as Researcher A leaves the second room.

Researcher A would notify participants to stop playing the game and move on to the first

envelope (the envelopes have marked numbers on it). The first envelope will guide the

participant to a new activity and then proceed onto opening the second envelope upon

finishing the activity given. The second envelope will provide another activity which will

lead the participants to open the last envelope after finishing the respective activity.

The first envelope contains the instruction to a survey link which contains the

instrument of Cyberbullying scale and DASS for pre. The second envelope guides the

participants to open the Mindfulness video for the experimental group, or a TED talk video

for the control group. The last envelope contains another survey link which contains DASS

and Toronto State Mindfulness Scale. The pretest-posttest of DASS was used to determine if

there were any changes in depressive symptoms, anxiety and stress. Upon finishing, the

assessment ends and the participants would approach researcher A for their token of

appreciation and also debriefing the participants. Participants were also asked to give a brief

verbal feedback about their gaming and video-watching experience. If the participants

reported being uncomfortable, he or she will be referred to the Counselling Guidance Unit in

the UTAR Kampar campus. The experimental group and control group would undergo the

same procedure and experience except the gameplay for experimental group would be harsh

and harassing while the control group gameplay would be neutral and plain; as well as the

video watched, which the experimental group would watch a Mindfulness practice video

while the control group watches a TED Talk video on "How to speak so that people want to

listen".

Data Analysis

Data analysis was done using independent T-test and paired sample T-test which will

be calculated using SPSS version 21 to calculate the mean differences.

Chapter VI

Results

Frequency Distribution of Variables

The mean values (*M*) and standard deviations (*SD*) of all scales used in this study were computed. For participants under experimental group, their cyberbullying scale have the mean score of 10.63 (*SD* = 3.40) while the mean score for state mindfulness was 42.11 (*SD* = 9.26). As for the subscales of DASS, pre-test scores for depression, stress, and anxiety were 22.57 (*SD* = 5.15), 26.46 (*SD* = 6.40), and 24.06 (*SD* = 5.48) respectively. Post-test mean score for depression was found to be 20.69 (*SD* = 5.04), stress has a mean of 23.09 (*SD* = 6.10) and anxiety with a mean score of 22.69 (*SD* = 6.36).

Moving on to participants under control group, their mean score for cyberbully scale was found to be 7.46 (*SD* = 2.94), while the mean score for state mindfulness was 43.81 (*SD* = 7.91). As for the subscales of DASS, pre-test mean score for depression was 25.03 (*SD* = 6.08), followed by stress with 26.81 (*SD* = 6.08) and anxiety with 25.24 (*SD* = 5.91). For post-test, depression has a mean score of 22.54 (*SD* = 6.18), stress mean score was found to be 24.65 (*SD* = 6.29) and lastly anxiety with a mean score of 23.84 (*SD* = 6.31). The results for each variable are summarised in Table 1.

Inferential Statistic

To test the effectiveness of cyberbullying victimization manipulation, independent T-test was used to compare the cyberbullying victimization in experimental group and control group. Result shows that there is a significant difference in the cyberbullying victimization score for experimental group (*M* = 10.63, *SD* = 3.40) and control group (*M* = 7.46, *SD* = 2.94) conditions; *t*(70) = 4.23, *p* < .001, *d* = 1.00.

The independent T-test result for experimental group and control group on depressive symptoms before video was not significant for both experimental group (*M* = 22.57, *SD* =

5.15) and control group ($M = 25.03$, $SD = 6.08$) conditions; $t(70) = -1.84$, $p = .069$, $d = -0.44$. Stress level was also not significant for both experimental group ($M = 26.46$, $SD = 6.40$) and control group ($M = 26.81$, $SD = 6.08$) conditions; $t(70) = -0.24$, $p = .811$, $d = -0.06$. Anxiety level was not significant for both experimental group ($M = 24.06$, $SD = 6.40$) and control group ($M = 25.24$, $SD = 5.91$) conditions; $t(70) = -0.88$, $p = .381$, $d = -0.21$. Cyberbullying did not show any significant mean differences in DASS-21 score between experimental group and control group.

Independent T-test was conducted to determine whether mindfulness video, S.T.O.P in experimental group was able to increase the state mindfulness when compared with control group. Upon analysis, it was found that experimental group mindfulness video, S.T.O.P ($M = 42.11$, $SD = 9.26$) did not show any significant mean differences with the control group video ($M = 43.81$, $SD = 7.91$) conditions; $t(70) = -0.84$, $p = .405$, $d = -0.20$. This finding showed that when compared with control group video S.T.O.P was not able to significantly increase the mindfulness level of participants. No significant differences were seen between mindfulness level after watching neither S.T.O.P or control video.

Pair sample T-test was used to compare the DASS-21 score for before and after the video. There was a significant difference in the score of depression level before ($M = 22.57$, $SD = 5.15$) and after the video ($M = 20.69$, $SD = 5.04$) condition; $t(34) = 2.13$, $p = .041$, $d = 0.37$. Result suggested that after mindfulness practice video, S.T.O.P, depression level was reduced. A significant difference was also found for the score of stress level before ($M = 26.46$, $SD = 6.40$) and after the video ($M = 23.09$, $SD = 6.10$) condition; $t(34) = 3.47$, $p = .001$, $d = 0.54$. No significant result was found for the score of anxiety level before ($M = 24.06$, $SD = 5.48$) and after the video ($M = 22.69$, $SD = 6.36$) condition; $t(34) = 1.76$, $p = .088$, $d = 0.23$.

In summary, not all finding of this study match with what is found in the literature review. Although the cyberbullying victimization feeling was induced among participant in experimental group, no significant difference was found in the mindfulness level and depression level. However, significant result was found between the pre-test and post-test result for depression level in experimental group.

Table 1

Summary of experimental design

	Experimental group (n = 35)		Control group (n = 37)		Cohen's d
	M	*SD*	*M*	*SD*	
Before video					
Cyberbullying	10.63[a]	3.40	7.46[a]	2.94	1.00
Depression	22.57[b]	5.15	25.03	6.08	-0.44
Stress	26.46[c]	6.40	26.81	6.08	-0.06
Anxiety	24.06	5.48	25.24	5.91	-0.21
After video					
Depression	20.69[b]	5.04	22.54	6.18	-0.33
Stress	23.09[c]	6.10	24.65	6.29	-0.25
Anxiety	22.69	6.36	23.84	6.31	-0.18
Mindfulness	42.11	9.26	43.81	7.91	-0.20

[a]Significant differences was found using independent T-test. [b]Significant differences for depression was found using paired sample T-test. [c]Significant differences for stress was found using paired sample T-test.

Chapter V

Discussion and Conclusion

The present study examined state mindfulness as a variable to buffer the effects of cyberbullying victimization and depressive symptoms. The cyberbullying victimization manipulation was effective evidenced from the significance in results. Some of the feedbacks that the participants have given are that the participants were attacked very suddenly in terms of verbal content. They mentioned that their opponent was violent and disrespectful. Regardless, the outcome showed that the cyberbullying victimization effect on depressive symptoms is not significant when comparing the symptoms levels between experimental and control group. The possible explanations could be referred to the feedbacks that were collected from the participants from the experimental group. Some of the similar feedbacks that the participants have provided are that the cyberbullying victimization manipulation is effective, but not impactful enough to the level that they would feel depressed or experience some of the depressive symptoms. Other reasons that were mentioned by the participants are that they were quite used to it, especially those that frequently involve themselves in online multiplayer games such as Dota, King of Glory, League of Legends and more. Some of the participants think that the cyberbullying victimization manipulation is not extreme enough in the use of harsh and insulting words.

Moving on for mindfulness level, results shows that there is no significant difference after comparing the means scores between experimental and control group. In addition, the average state mindfulness level of control group was actually slightly higher compared to experimental group. This might be explained by some feedbacks mentioned by the control group participants, where they felt good and positive feelings such as confident and comfortable as they learned some new information through the TED talk video. This might elicit some calming effect on the participants which may help improve their state mindfulness

level. As for the experimental group, some participants' feedback mentioned that they might find the S.T.O.P practice video a little lengthy and boring, although at the beginning they felt mindful, but they will start to lose their attention and wander their mind away, which in turn affects their current mindfulness level. According to Phang et al.'s study (2014), the duration and frequency of the S.T.O.P practice could be depending on the individual's familiarity to the practice or based on their need in a given situation. In this study, most of the participants might only experience mindfulness practice, S.T.O.P for the first time and most likely not familiarized with it, which might explain why they feel bored watching a 10-minute mindfulness practice video. Initially in this study, mindfulness practice video duration was extended to 10 minutes because of recommendation by Lim & Loke's study (2016) that suggest that the 5-minute S.T.O.P practice might not be long enough to induce state mindfulness levels. However, researchers of this study might overlook the point that longer duration for participants with unfamiliarised experience could not be appropriate. Moreover, according to the results the cyberbullying victimization manipulation does not significantly increase depressive symptoms, which is also supported by some feedback by participants that their experience of gaming which intend to induce cyberbullied feelings also did not affect them much. Therefore, participants might find the S.T.O.P practice helpful to calm and organize their thoughts, but may not feel the need to conduct it for as long as 10 minutes. In short, the little difference between the mean scores of state mindfulness level could be explained by participants from both experimental group and control group also benefitted from the video they watched.

In this part of the discussion, the role of state mindfulness in buffering the effect of cyberbullying victimization and depressive symptoms will be focused. As reported by the result, there is a significant difference in the depression level of pre-test and post-test. There is a decrease in the means score of depression level. This indicates that mindfulness can

reduce depression level although being exposed to cyberbullying victimization. Such finding is similar with the literature review of past study. Mindfulness practice can help a person to stay away from negative beliefs, thoughts and feelings (Bajaj, Robins & Pande, 2016). When watching mindfulness video, S.T.O.P, participants in experimental group will re-evaluate the truthfulness of the thoughts. One of the activities of S.T.O.P is to perceive the thoughts as sounds of the brain, the thoughts are not necessarily true (Phang, Keng & Chiang, 2014). Through mindfulness, participant can stay away from the negative thoughts and belief that is induced during the manipulation of cyberbullying and helps in reducing the depressive level. In addition, the decrease in symptoms could also be related to the fact that participants felt more relieved as they realised that the study is ending soon, which could cause changes in their symptoms while answering the post-video DASS-21 scale. Some of the item responses from the DASS-21 depression subscale which could be affected include "I couldn't seem to experience any positive feelings at all", "I found it difficult to work up the initiative to do things", and "I felt I had nothing to look forward to". Participants might be looking forward that the study is ending, while experiencing positive feelings like relieve, and have the initiative or motivation to complete the last section of the study.

Practical Implication

Through this experimental design of using cyberbullying victimization manipulation to induce instant and similar effects of cyberbullying, this study could be one of the first of many experimental research to use the manipulation method in conducting the study. This study provides a new direction for future researches to improve and refine on the cyberbullying victimization manipulation in different ways. This is due to the possibilities of this manipulation method to be used as a platform of treatment for counsellors or other professionals using the Exposure Therapy for specific phobia. This is because Exposure

therapy was found to be quite effective and useful in treatment (Goncalves, Pedrozo, Coutinho, Figueira, & Ventura, 2012). In short, the manipulation method of cyberbullying can be possibly used as a "vaccine" to produce some immunity to cyberbullying and thus in hope of reducing the rate of cyberbullying victimizations. Besides, this study also shows how a brief mindfulness practice which is S.T.O.P, could help reduce depressive symptoms when faced with cyberbullying victimization. This finding contributed that individuals can use a brief mindfulness practice as a protective or coping method whenever they faced situations of being cyberbullied.

Theoretical Implications

Our theoretical model to explain our variables' relationship is the Diathesis Stress Model. The stress factor or stressor of this study was cyberbullying, which was applied using the manipulation of cyberbullying, where the depressive symptoms which was reported differently from different participants represented the diathesis or genetic vulnerability. Mindfulness was used as a protective factor to buffer the negative effects of cyberbullying victimization manipulation on depressive symptoms. The findings of this study have shown that cyberbullying victimization manipulation is effective yet it could not effectively manifest the depressive symptoms. This could be one of the limitations of the Diathesis Stress Model, which lacks psychological perception as a variable, because perceptions could be one of the affecting factors that changes the outcome or the view of psychological thoughts (Sobba, Paez, & Bensel, 2017). When this psychological perception of variables is added into the theoretical model, it provides a much more sensible understanding of our results. Due to the psychological perceptions, participants might have a different outlook on the impact of the cyberbullying victimization manipulation (stressor), depressive symptoms (diathesis manifestation) and mindfulness (protective factor). Therefore, explaining why some of the participants do not feel depressive symptoms to a significant extent but has significance in

cyberbullying victimization manipulation. It can also explain why some participants feel that the mindfulness video is not as effective as it should for the experimental group, and that the control group felt more mindful. They perceive that the video is not as mindful as it should be, and that it does not need that long to go through it. Through this finding and implication, future researchers could consider the addition of psychological perception into the Diathesis Stress Model.

Limitations

Firstly, this study only examined affective symptoms that were manifested at the current moment due to trigger of cyberbullying victimization experience. The cyberbullying victimization manipulation of this study was limited to only 10 minutes. Due to insufficient time, this study was unable to prolonged the duration of cyberbullying victimization manipulation as participants' involvement in the experimental study were only around 45 minutes. Participants also had limited time in developing their attachment to the game. Another concern was that the cyberbullying victimization manipulation might actually worked, however the depressive symptoms might not be obvious since the diagnostic criteria for depression were that the symptoms were present for at least two weeks (Bhowmik, Kumar, Srivastava, Paswan & Dutta, 2012), so it might take time for the depressive symptoms to show. In short, the effectiveness of the brief mindfulness practice can only be generalized to symptoms that occur at the current moment, but uncertain for the symptoms that developed in long run by repeated cyberbullying victimization.

Secondly, the sample size of this study was only limited to UTAR students because of inconvenience to reach out to students from other universities or states. As this study's experimental venue is only located in UTAR, it is inconvenient for students or young adults from outside the university to come over and participate.

Thirdly, the state mindfulness level was only measured during post-test, also due to the limitation time duration for each participant's timeslots that a pre-test measure was unable to be conducted. Therefore, the effectiveness of the brief mindfulness practice in this study can only be tested by comparing the average scores between experimental and control group.

Recommendation for Future Study

Firstly, researchers could consider study cyberbullying victimization manipulation through a longitudinal study where participants were given more time to develop their attachment towards a particular game and the cyberbullied feelings can be induced more effectively through a longer period of time. As mentioned by past studies, some core characteristics of cyberbullying includes repetitive and persistent overtime (Kowalski, 2015; Chu et al., 2018). The long-term effects of cyberbullying victimization on depressive symptoms could also be observed through a longer period of time. In this case, future studies could also focus on daily mindfulness practice as a protector or coping method against the negative effects of cyberbullying victimization on depressive symptoms.

Secondly, future studies could target a larger sample size that include young adults from other states besides Perak, as well as comparing gender or ethnicity difference in their response to cyberbully effects.

Thirdly, future studies that were convenient in conducting the experimental design in a longer duration could consider including a pretest-posttest design for assessing participants state mindfulness level before and after exposure to the mindfulness practice, to better observe the effectiveness of the practice.

Brief Mindfulness Practice

Brief Mindfulness Practice

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FACULTY OF ARTS AND SOCIAL SCIENCE

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ID Number(s)	15AAB02355 15AAB03188 15AAB05828
Programme / Course	Bachelor of Social Science (HONS) Psychology
Title of Final Year Project	Brief Mindfulness Practice as an Intervention on the Relationship between Cyberbullying and Depressive Symptom among Young Adults in Malaysia

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Number of individual sources listed of more than 3% similarity: _____	

Parameters of originality required and limits approved by UTAR are as follows:
  (i)   Overall similarity index is 20% and below, and
  (ii) Matching of individual sources listed must be less than 3% each, and
  (iii) Matching texts in continuous block must not exceed 8 words
Note: Parameters (i) – (ii) shall exclude quotes, bibliography and text matches which are less than 8 words.

Note Supervisor/Candidate(s) is/are required to provide softcopy of full set of the originality report to
      Faculty/Institute

Based on the above results, I hereby declare that I am satisfied with the originality of the Final Year Project Report submitted by my student(s) as named above.

_____   _____
Signature of Supervisor   Signature of Co-Supervisor

Name:_____   Name: _____

Date:_____   Date: _____

FACULTY OF ARTS AND SOCIAL SCIENCE
UNIVERSITI TUNKU ABUDUL RAHMAN

Date: 25/3/2019

SUBMISSION OF FINAL YEAR PROJECT

It is hereby certified that Lee Ziyi (ID No: 1503188) has completed this final year project entitled "Brief Mindfulness Practice as an Intervention on the Relationship between Cyberbullying and Depressive Symptom among Young Adult in Malaysia" under the supervision of Dr. Tan Chee Seng (Supervisor) from the Department of Psychology and Counselling, Faculty of Arts and Social Science.

I understand that University will upload softcopy of my final year project in pdf format into UTAR Institutional Repository, which may be accessible to UTAR community and public

Yours truly,

_____

Name: Lee Ziyi

FACULTY OF ARTS AND SOCIAL SCIENCE
UNIVERSITI TUNKU ABUDUL RAHMAN

Date: 25/3/2019

SUBMISSION OF FINAL YEAR PROJECT

It is hereby certified that Benjamin Choo Bing Chee (ID No: 1505828) has completed this final year project entitled "Brief Mindfulness Practice as an Intervention on the Relationship between Cyberbullying and Depressive Symptom among Young Adult in Malaysia" under the supervision of Dr. Tan Chee Seng (Supervisor) from the Department of Psychology and Counselling, Faculty of Arts and Social Science.

I understand that University will upload softcopy of my final year project in pdf format into UTAR Institutional Repository, which may be accessible to UTAR community and public

Yours truly,

_____

Name: Benjamin Choo Bing Chee

FACULTY OF ARTS AND SOCIAL SCIENCE
UNIVERSITI TUNKU ABUDUL RAHMAN

Date: 25/3/2019

SUBMISSION OF FINAL YEAR PROJECT

It is hereby certified that Ng Jun Quan (ID No: 1502355) has completed this final year project entitled "Brief Mindfulness Practice as an Intervention on the Relationship between Cyberbullying and Depressive Symptom among Young Adult in Malaysia" under the supervision of Dr. Tan Chee Seng (Supervisor) from the Department of Psychology and Counselling, Faculty of Arts and Social Science.

I understand that University will upload softcopy of my final year project in pdf format into UTAR Institutional Repository, which may be accessible to UTAR community and public

Yours truly,

_____

Name: Ng Jun Quan