



RELATIONSHIP BETWEEN HAPPINESS AND PROBLEM-SOLVING SKILLS
TOWARD RESILIENCE AMONG UNDERGRADUATE STUDENTS

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Relationship between Happiness and Problem-Solving Skills toward Resilience among
Undergraduate Students

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Preface

It is a great opportunity for us to study for a Bachelor of Social Science (Hons) Psychology at UTAR Kampar, Malaysia. In the requirement of this degree study, we are submitting our final year research project titled “Relationship between Happiness and Problem-Solving Skills toward Resilience among Undergraduate Students”.

As the society nowadays having the issue in mental health and it affects those undergraduates in term of their life and academic aspects. Therefore, it has arisen our passion for doing this research project which may bring awareness towards society about the importance of problem-solving skills and happiness impacts on resilience among those undergraduates. The overall data used for this research project was collected through self-administered questionnaires. Besides, this research project has been divided into 5 chapters which includes Introduction, Literature Review, Methodology, Result, Discussion and Conclusion.

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Abstract

Society nowadays has the issue in mental health especially those undergraduates in term of their life and academic aspects. While past research has shown that happiness and problem-solving skills may affect the resilience level of an individual. This study aims to identify the relationship between happiness and resilience; problem-solving skills and resilience among undergraduate students. The instrument used in this study included the Subjective Happiness Scale (SHS), Problem Solving Inventory (PSI), and Brief Resilience Scale (BRS). There is a total of 280 respondents were recruited from Universiti Tunku Abdul Rahman (UTAR) by the cluster sampling method. Data were collected through a self-administered questionnaire. This current study identified that happiness is considered one of the elements which positively predict the resilience level of an individual. Other than happiness, problem-solving skills also have a positive relationship toward the resilience level of an individual. Increasing the happiness and problem-solving skills of undergraduate students may affect and increase their resilience level.

Keywords: happiness, problem-solving skills, resilience, undergraduates.

Chapter I

Introduction

Introduction

This chapter will deliver a briefing of the study which consists of research background, operational and conceptual definition of the study, the significance of the study, problem statements, research objectives, research questions, and hypotheses.

Research background

In today's world, there are more and more university students encountering stress and mental health problems (Bernama, 2016). The Malaysia Health Ministry reported the statistics of Malaysian students who involved in mental health problems, they stated that in the year of 2011, students who involved in mental health was from 1 in 10 individuals, while the statistic had increased in the year 2016 which found out that there was a number from 1 in 5 individuals involved in mental health problems (Bernama, 2016). There is a large amount of the matters and problems in the majority of the country are involved with the university students. Some of the aspects may lead to negative effects on their health in terms of psychology (Tabbodi et al., 2015). There are a large number of university students who are suffering from well-being issues (Cheah, 2014). Well-being is considered one of the aspects of happiness as it can be a substitute for happiness (Veenhoven, 2012). Happiness plays a vital role in an individual's perception of his or her ability as the previous study showed there is a significant and positive relationship between happiness and the belief of people on their ability (Tahmasbipour, 2017). The cases that are related to happiness include the satisfaction of life, low level of depression and anxiety. (Hashemiannejad et al., 2016). According to Everly (2009), it has been stated that an individual's happiness and regrets will influence

one's ability to have high or low resilience. To increase one's resilience, individuals should have high self-confidence through belief, action, and principles. The component of belief, which requires that individuals should stay happy and always maintain a sense of hopefulness in their life. Moreover, the researcher also stated that to accomplish happiness, individuals can overview their past achievements and ways of solving their experience, this process which could also lead to resilience. Besides, there are lots of challenges faced by university students in higher academic life. To solve the problem in their academic or personal life, problem-solving skills are required for university students (Santos & Soares, 2017). Problem-solving skills in higher education are useful for university students which can encourage their psychological well-being and strengthen resilience (Asgharpour et al., 2016). Problem-solving is also a process where individuals apply possible solutions to solve their daily difficulties (Santos & Soares, 2018). According to Asgharpour et al. (2016), the research results showed that there was a positive relationship between problem-solving skills and resilience of female students. An individual need to learn problem-solving skills, problem-solving skills can help individuals to improve their adjustment on the emotional reaction when encountered problems, individuals will also learn how to face their problems by themselves with possible solutions. Furthermore, problem-solving skills can help individuals to increase their self-worthiness, self-esteem, and self-confidence. All these factors could lead to an improvement in resilience and psychological emotions (Asgharpour et al., 2016). Moreover, resilience is important among university students, it will bring effects on their personalities and the process of socio-cognitive development. Individuals with a high level of resilience have a better strength to recover from the obstacles and challenges that they faced (Coşkun et al., 2014). According to Consten (2016), high resilience individuals have a lower chance to engage in negative psychological well-being such as depression, anxiety, and emotional distress. Another research also mentions that resilience is correlated with effective

coping strategies, psychological therapy and less negative thoughts (Portzky et al., 2010). Therefore, there is a need to investigate whether happiness and problem-solving skills are aspects that may lead to an impact on students' resilience.

Operational Definition

Happiness

The conceptual definition of Happiness is an individual perception throughout his or her life (Veenhoven, 1997) specifically assessing the pleasure in an individual's life (Veenhoven, 2012). From the subjective viewpoint, happiness is described as emotional well-being that can be used to determine a person's well-being in the subjective condition (Diener, et al., 2003). Happiness is also defined as a type of assessment. It is used to evaluate people on doing themselves and the way they do in their life (Hashemiannejad et al., 2016). One of the earliest thinkers on the happiness's subject explained that happiness is not due to what happiness an individual possesses, but is due to how happy an individual respond to his or her life situations (Tatarkiewicz, 1976).

The operational definition of Happiness can be defined through the Subjective Happiness Scale (SHS). This scale is used to assess happiness variables. This is an instrument with self-report questionnaires that can measure personal happiness as a wider unidimensional construct. This scale consists of 4-items. Two items of this scale are to measure the characteristics of the individuals and the correlative with peers. Moreover, the other two items are about the level of an individual's happiness which is based on their characteristics themselves. It is rated using the 7-point Likert scale. The higher the score, the greater the happiness of an individual (Lyubomirsky & Lepper, 1999).

Problem Solving

The conceptual definition of Problem-solving is defined as the ability to investigate the nature of the problem, having problem-solving skills individuals can analyze the causes of

the problem and develop possible solutions that can solve the problem (Abazov, 2016). Effective problem-solving includes maximizing the positive outcomes and minimizing the negative outcomes which could lead to an achievement towards problem-solving goals (D’Zurilla et al., 2004). While the main factors that affect one's problem-solving are personal characteristics, individuals who acquire good problem-solving skills are more successful and have more advantageous in their life, they have the competence to examine the most effective solutions and the best ways to perform when encountered in problematic situations (Coşkun et al., 2014).

While the operational definition of Problem-solving can be defined through Problem-solving inventory, it can be used as an instrument to examine the problem-solving skills of an individual. This questionnaire is used to measure the individual’s perceptions of problem-solving attitudes and behaviors (Kourmoussi et al., 2016). The questionnaire consists of 32-items. The type of scale for this questionnaire is a six-point Likert-point. From 1 to 6 is from strongly disagreeing to strongly agreeing. The higher the respondents’ score in the questionnaire, the lower the respondents’ score in problem-solving skills. The lower the score in the questionnaire, the higher the respondents’ score in the problem-solving skills (Behjoo, 2013).

Resilience

The conceptual definition of Resilience can be explained in various ways. Resilience is the competence to overcome the stressful events accompanied by adequate psychological and physical functioning (Aboalshamat et al., 2018). According to the American Psychological Association (2020), resilience is the ability to confront trauma, high levels of stress, tragedy or disaster. For example, involving severe health problems, environmental stressor or social relationship problems. This means that individuals who have resilience can

encounter through their hardship. Besides, Martz and Livneh (2015) stated that individuals with high resilience undergo less pain which is because they have a higher coping strategy.

While the operational definition of it is the Brief Resilience Scale (BRS). This scale is used as a measurement for the resilience variable. BRS is used to measure an individual's resilience. There are 6 items on this scale, items 1, 3 and 5 are non-reversed while items 2,4 and 6 are reversed items (Smith et al., 2008). This scale is a 6-point Likert scale. The scale was ranged from 1 (strongly disagree) to 5 (strongly agree). Individuals who get higher scores represent they have greater resilience (Consten, 2016).

Significance of the study

There is a limited research study on the relationship between happiness, problem-solving towards resilience. Therefore, this finding can contribute and benefit society considering that happiness and problem-solving play important roles in undergraduate students' resilience. The biggest challenges that undergraduates' students face are academic success, financial and relationship problems (Brougham et al., 2009). According to Helliwell et al. (2020), happiness has brought a big impact on individuals' personal life which under multiple domains such as family, friends, marriage, health, self, education, income and freedom. In the research of Burns and Anstey (2010), there was a positive relationship between resilience and subjective well-being in the category of young and middle-aged students. In the study of Lightsey (1994), positive operating thoughts which can produce happiness and generate growth in resilience. Most of the research between happiness and resilience is conducted among university students. One of the past researches reported that they had done a measurement in the positive aspect of individuals. The positive aspect includes life satisfaction, ego-resilience and daily feelings and emotions (Cohn et al., 2009). The researchers advise that to establish intervention plans which aim at positive emotions

predicted towards resilience, there was a need to examine the relationship between happiness and resilience (Cohn et al., 2009). They had found out that happiness and religion were the best variables that could foster resilience.

Based on the past study of Amat et al. (2018) have mentioned that individuals with a high level of resilience will have the ability to manage the stressor and problems in their life. They also reported that most of the individuals with high resilience will be accompanied by good health which compared with those individuals that undergo low levels of resilience. The reason is resilience can bring effects towards different aspects of individuals' health such as in the aspects of psychological and physical health. Individuals with resilience will always maintain their thoughts in a positive way which could lead them to be involved in a positive emotional state and minimize the chances to be involved in mental health problems.

In the research of Li et al. (2017), they show that there was a significant relationship between problem-solving and resilience. According to Deater-Deckard et al. (2005), individuals have a cognitive capability found to correspond with resilience. Cognitive ability includes intelligent quotient, interpretation skills, and problem-solving skills. Individuals who have high cognitive capability show better resilience. This shows that there was a positive relationship between problem-solving and resilience. Therefore, through conducting this research, the society will have a better understanding of the importance of happiness and problem-solving towards resilience, the probability of undergraduate students involved in mental health will be reduced.

Problem statements

The level of stress that university students encounter has increased, which perceive from the aspect of the high expectations from family, lack of family and peer support, lack of

skills to confront their problems, financial problems, academic stressor and environment factor (Sani, 2018). According to Rafidi (2019), he mentioned that the Malaysia Health Ministry reported the National Health and Morbidity Survey 2015. Malaysia Health Ministry stated that the number of students who were involved in mental health problems had simultaneously increased from 10.7 percent in 1996 to 29.2 percent in 2015 which among the range of 16 years olds students and the statistics above were also included, university students. From the statistics above, results show that mental health will be a serious problem.

The reasons were because university students lack resilience skills to deal with their life stressors, having dysfunctional families, or had been experienced through traumatic life events (Rafidi, 2019). Therefore, through the above statement and justification, resilience is an important aspect for undergraduate students. Resilience is an important life skill that every individual will need to apply through their life, resilience which can assure, assist, and enhance individual life (Sharma, 2015). Based on Maslow's theory, individuals would like to solve the basic needs before moving towards higher needs (Maslow, 1954). When the basic needs are accomplished, it will be more effortless for individuals to achieve higher needs. If basic needs are not accomplished, it is not possible to proceed into advanced needs. However, individuals who are successful in their life without fulfilling the basic needs, which is because of having a high level of resilience to control their inner mental health and able to overcome hardship in their life (Everly, 2009). Individuals who have resilience shows associated with positive psychological health and physical health, which can deal with life stressors, while having a high autonomy, good socializing skills, develop high self-esteem, and being happy (Burns et al., 2011).

While one of the main factors which can foster resilience is happiness (Short et al., 2018). In the aspects of positive psychology, which is beneficial in stimulating and strengthening positive factors such as positive emotions, features and reduce the impact of

unpleasant events that happen in daily life. There are several factors associated with resilience which include the surroundings, genetic, biological factors and psychological coping ability (Campbell-Sills & Stein, 2007). Besides, environmental and genetic factors will influence the levels of resilience individuals perceive when integrating with psychological factors (Deater-Deckard et al., 2005). Individuals with high well-being which had been through and recovered from the process of negative life experiences, at the same time through this process, individuals had raised their resilience skills (Wong, 2010). According to the Broaden and Build theory (Fredrickson et al, 2008), positive emotions had predicted resilience. The function of positive emotions is to create lifelong support for individuals (Short et al., 2018). Positive emotions are accumulated day by day to form resilience, it is about creative thoughts and actions which lead people towards positive mental health (Short et al., 2018).

Moreover, according to Shackle (2019), the mental health of the undergraduate students is getting worse as the research data have shown that undergraduates nowadays are involved in depression, stress, anxiety, and mental breakdowns. Rafidi (2019) mentions that academic stress was the main factor that led undergraduates' students into mental health problems. Malaysia's higher education system has restricted a certain standard of outcomes that students need to achieve through a semester. If students fail to achieve the outcomes, they will be terminated by their university or college. Through the process of achieving the standard of the outcome, it includes assessments, projects, activities and assignments that students need to accomplish (Sani & Mustafa, 2019). In the higher level of education, problem-solving and personal organization are a need for undergraduate students to accomplish in their study which is because tertiary education is more focused on the independent study (Rafidi, 2019). Besides, universities also found out that students nowadays

lack problem-solving skills, companies have also given the feedback of fresh graduates' lack of problem-solving skills which leads to unemployment (Ziinine, 2019).

In the research of Santos & Soares (2018), they found that resilience can resolve social and academic problems that university students faced. One of the studies had determined the problems that are encountered by university students in tertiary education and examined university students who apply cognitive resources will have a greater ability to deal with trouble (Oguz-Duran & Yüksel, 2010). While understanding the logical characteristics of university students, which can help to promote problem-solving skills and precautionary strategy (Santos & Soares, 2018). According to Kourmoussi et al. (2016), they stated that most of the past research had investigated the relationship between problem-solving, mental health and psychological adjustment, which found a positive relationship between these three variables. The results show that individuals with low problem-solving skills show association with mental health problems such as depression, stress, anxiety, suicide attempts and even involvement in physical health problems. Hence, to enhance an individual's satisfaction towards life and improve one's psychological well-being, it is effective to improve problem-solving skills.

Research objectives

The main objectives of this research study are to identify the relationship between happiness and resilience; the relationship between problem-solving skills and resilience among undergraduate students.

Research questions

RQ1: Is there any significant positive relationship between happiness and resilience among undergraduate students?

RQ2: Is there any significant positive relationship between problem-solving skills and resilience among undergraduate students?

RQ3: Does happiness positively predict resilience among undergraduate students?

RQ4: Does problem-solving skills positively predict resilience among undergraduate students?

Hypothesis

H1: There is a significant positive relationship between happiness and resilience among undergraduate students.

H2: There is a significant positive relationship between problem-solving skills and resilience among undergraduate students.

H3: Happiness positively predicts resilience among undergraduate students.

H4: Problem-solving skills positively predict resilience among undergraduate students.

Chapter II

Literature Review

Introduction

In this chapter, there will be a discussion about the relationship of the dependent variables (Happiness and Problem-Solving Skills) towards the independent variable (Resilience). Besides, this chapter also will discuss the theoretical background of the topic and how independent variables influence dependent variables.

Theoretical framework

Broaden and build theory states that the emotional well-being of an individual will be higher when the individual experiences positive emotions. To test this hypothesis, Cohn et al. (2009) measured the emotions of a sample of 86 students daily for 1 month and assessed life satisfaction and trait resilience at the beginning and the end of the month. Results showed that positive emotions were able to predict an individual's resilience and life satisfaction. Besides, Broaden and build theory have also explained that positive emotions and resilience work together to improve in an individual's mental health status.

According to Masten and Barnes (2018), there are several protective factors that can improve children's resilience. All of the factors were related to cognitive abilities. It includes having good problem-solving skills and cognitive abilities, parental involvement in their education, attending a good school, and how their culture promotes education (Masten & Wright, 2005). For children, who have a higher IQ is a protective factor that correlates with resilience to stressful life events (Glicksen, 2006). While another study discovered that for both children and adolescents's cognitive ability (e.g., IQ, reasoning skills, problem-solving, etc.) is the best predictor of their level of resilience (Deater-Deckard et al., 2005). Besides, it

also supports that there is a positive linkage between cognitive abilities and level of resilience.

In Maslow's hierarchy theory (Maslow, 1954) the basic needs such as food, clothing, and shelter need to be relatively fulfilled before an individual move to higher needs. Higher needs include love and belongingness, self-esteem, and self-actualization (Maslow, 1968). This means that it is easier to meet higher needs when basic human needs are mostly met, but it is not impossible to meet advanced needs without basic needs being met. When a child grows up without basic needs being met and has a successful life, this is due to unusually high resilience including the ability to be resistant to stress and rebound from adversity (Kossek & Perrigino, 2016). While according to Wong (2010), resilience is one of the pillars in positive psychology. An individual who can cope and overcome the negative experiences in life effectively and learn through it is considered to have a high level of resilience (Dunn et al., 2009).

Conceptual framework

Happiness and Resilience

According to Brown and Holt (2011), two important aspects of positive psychology are to promote and enhance positive factors such as positive emotions and traits and also to protect against and decrease the impact of undesired life events. Protective factors that can assist an individual to be resilient can be found within the individual, family, community, culture, and society (Masten & Wright, 2005). Resilience results from a combination of factors including genetics, biology, environmental factors, and psychological coping skills (Campbell-Sills & Stein, 2007). Furthermore, both genetic and environmental factors impact how resilient an individual will be when combined with psychological factors such as

temperament, personality, self-regulation skills, cognitive factors, and sociability (Deater-Deckard et al., 2005). A high level of well-being results from many factors including overcoming negative life experiences and developing resilience (Wong, 2010). Everly (2009) hypothesized that an individual's ability to have low or high resilience may be related to either being happy or regretful. To foster resilience, one must be able to deal with stress effectively because adversity is bound to happen at some point in every person's life. Being resilient promotes health and happiness. Everly argued this concept is important when relating happiness to resilience because the American culture promotes happiness as attaining materialistic objects, but true happiness should be a journey of living a life of integrity which is important in being resilient. People can achieve happiness through integrity by reflecting on what they accomplished and how they did it, which also leads to resilience (Everly, 2009). In an article exploring factors related to well-being, Lyubomirsky (2001) wrote that happy individuals are more likely to view life events more positively and be able to better cope with stressful life events than unhappy individuals. Joseph (1994) similarly stated that resilient individuals view negative life events positively and helpfully. How well a person copes with negative life experiences is positively related to their happiness (Wong, 2010). The main determinant of happiness is being able to overcome adversity quickly (Shimizu & Belic, 2011). Lyubomirsky (2013) explains that most of the people can be resilient to negative life experiences allowing them to be happy, but often people underestimate their ability to do so. However, after a significant amount of negative life events, mental health declines. Strumpfer (2003) hypothesizes that subjective well-being along with other factors contributes to resilience which helps people avoid burnout. Additionally, Graham and Oswald (2010) believe individuals higher in well-being will be more resilient. Therefore, there is an agreement in the research about negative events, happiness, and resilience all interact and impact one another. However, there is no consensus about cause and effect or about which

factors come first. Fredrickson et al. (2003) used 47 college-age students to test the Broaden and build a theory that hypothesizes that having many positive emotions often helps develop resilience.

Problem-solving and Resilience

According to Coskun et al. (2014), problem-solving skills were positively predicted on the level of resilience for an individual. In other words, the resilience level of an individual may be predicted through his or her problem-solving skills. The higher the problem-solving skills having by that individual, the higher the resiliency level of that individual. Hence, the individuals who are higher in problem-solving skills are usually able to solve the problem and difficulty faced and naturally they will be easier to bounce back while they are facing any issue. While this also parallels the finding done by Santos and Soares (2018). Individuals who can come out with the solution for the current issue that they are facing would be more willing to solve the issue and back to the “normal” life after that instead of escape from it. They can figure out the issue and determine what is the cause of the issue and come out with the exact solution to solve the root of the issue.

Furthermore, students’ resilience level can increase through the teaching of problem-solving skills (Asgharpour et al., 2016). Students who were having a higher level of resilience would be able to come out with their solution and solve the barrier that they encounter. While when the students are able to solve and overcome the barrier easier, it also means that the time that they struggle in the issue is lesser and having a higher level of resilience compared with others (Asgharpour et al., 2016). Moreover, problem-solving skills served as one of the cognitive ability components in increasing the resilience level of a child (Wright & Masten, 2005). Other than that, this research also identified that the problem-solving skills level having the child may be increased through studying in a good school, the involvement of parents through the educational program. It is also parallel with the study done by Nguyen et

al. (2020) which the higher the interaction between mother and child, the higher problem-solving skills having by that child. According to Deater-Deckard et al. (2005), the capability of an individual's cognitive ability which includes problem-solving skills, reasoning skills and intelligent quotients were the biggest component which may affect the resilience level of an individual no matter adult or child. Therefore, by increasing the problem-solving skills may affect and increase that individual's resilience level (Coskun et al., 2014).

Chapter III

Methodology

Introduction

In this chapter, there will be several aspects being discussed which include research framework, sampling techniques, data analysis, research procedure, and instrumentation.

Research Framework

The quantitative method is used for this study. A quantitative research method is a method that describes the situations or problems by collecting the information in a numerical format and exploring it by using statistical ways (Apuke, 2017). Among the various types of quantitative research methods, the survey method research design is used in this study. In this research method, the data are gathered from the samples by answering the questions. It allows using various ways in collecting the respondents, gathering information, and effectively using the different kinds of instruments' methods (Ponto, 2015). It can explain the certain facets of a population in a quantitative way, such as investigating the relationship among the variables (Glasow, 2005). The increase in the sample size and making sure to cover the intended population fairly can be done by using various approaches for the research (Ponto, 2015). The written survey is used in this study which is a questionnaire. The questionnaire are given with closed-ended selection. There will be a set of responses that are provided for the respondent to choose from (Glasow, 2005).

This is a correlational study that aims to identify the relationship between happiness and resilience; the relationship between problem-solving skills and resilience among undergraduate students. In other words, there are two independent variables which are happiness and problem-solving skills, and a dependent variable which is resilience. The

statistical method used for this study is Multiple Linear Regression (MLR). The previous research found that happiness and problem-solving skills will have a positive impact on resilience. Therefore, this study is to determine the relationship between each of the independent variables toward the dependent variable.

Sampling Techniques

Sample size

It was calculated by using G-power version 3.0.10. While the formula which applied was Cohen's effect size $f^2 = 0.83$ The R^2 is the average correlation coefficient of the sum of independent variables which are happiness and problem-solving skills toward the dependent variable which is resilience. The square of Pearson's correlation coefficient for happiness and problem-solving skills toward resilience are 0.04162 and 0.04796 respectively (Yildirim, 2019; Lovimi, 2018). Therefore, the effect size of this research study is 0.04689 which is considered as a small effect size according to the measurement on effect size and the finalized sample size that showed by G-power is 280 which indicated the minimum number of participants that should be recruited for this research study. The detail calculation of G-power is attached in Appendix D.

Sampling method

The sampling method was used in this research study is a multi-stage cluster sampling method which is categorized as one of the probability sampling techniques. Non-probability sampling technique means that the sample participants who are qualified for the research study do not gather through the participants' selection process. The reason for choosing a non-probability sampling technique is because of the availability of time and the easy accessibility to the participants.

Besides, a multi-stage cluster sampling method has chosen to apply in this study because the subjects are easily accessed on the condition of fulfilling the criteria to be a part of the sample which is an undergraduate student (Parveen & Showkat, 2017). While the survey questionnaires of this research study were distributed in the Kampar campus of University Tunku Abdul Rahman (UTAR).

Research Procedure

Sample participants

The target sample for this research study are undergraduate students in Malaysia and consist of 280 sample size in total. The undergraduate student that we selected as our sample through the cluster sampling method is Universiti Tunku Abdul Rahman in Kampar campus. The age range for the undergraduate student age range is between 18 and 35 years old.

Ethical consideration

In order to administer the research properly, there are several ethical considerations required to undergo in this study. The inform consent forms were attached to the questionnaires. Participants are all based on their free will to take part in this study. Besides, the confidentiality and privacy of the respondents are secured. While the data was collected by distributing the survey questionnaires using the traditional paper-pencil survey method.

Pilot study

Before administering an actual study, a pilot study was conducted in order to ensure the feasibility of the method in the actual study with a larger sample size. Statistical Package for Social Sciences (SPSS) is used to compute the reliability test. The result of the reliability test of this questionnaire is good reliability with a Cronbach alpha ($\alpha = 0.768$) for the Subjective Happiness Scale; Cronbach alpha ($\alpha = 0.692$) for the Problem-Solving Inventory;

while for the Brief Resilience Scale's Cronbach alpha coefficient ($\alpha = 0.685$). All of the reliability of the scales is considered as reliable as it is between the range of 0.6 and 0.8.

Table 3.1

Reliability of the Instrument in Pilot Study

Variable	Pilot Study ($N = 35$)
Subjective Happiness Scale	0.768
Problem Solving Inventory	0.692
Brief Resilience Scale	0.685

Actual Study

The questionnaires are distributed to the target sample with a 280-sample size. Table 3.2 below is the result of the reliability of actual study. It has shown actual study is having acceptable reliability. The table had shown the Cronbach alpha for Subjective Happiness scale, Problem-Solving Inventory, and Brief Resilience Scale are 0.725, 0.835, and 0.727 respectively.

Table 3.2

Reliability of the Instrument in Actual Study

Variable	Actual Study ($N = 280$)
Subjective Happiness Scale	0.725
Problem Solving Inventory	0.835
Brief Resilience Scale	0.727

Data Analysis

First of all, before starting to analyse the data collected, a screening process was done in order to check whether all of the recruited respondents were qualified and fulfilled the criteria of being the participants for this research study. Besides, the completeness of the filled questionnaires has also been checked to make sure that the respondents have filled in all of the necessary questions in the questionnaires. After that, a basic data checking had performed to check on whether there is any outlier which may affect the overall data analysis result. While the data coding had been performed in order to group or categories the respondents. The demographic information obtained through the survey questionnaires such as course studying, faculty, age, ethnicity and gender will be used. By going through this data coding process, the raw data will be simplified as it has already been categorized into smaller groups compared with the uncoding data. After that, an inferential analysis will be carried out to analyse the data which is able to identify the relationship between the variables and generalize the results. Last but not least, all of the collected data was conducted through the Statistical Package for Social Science (SPSS) version 23. The effect between the variables was analysed through Multiple Regression Analysis. It is used to describe the way two or more independent variables are predicting the single dependent variable (DeCoster, 2007). Therefore, by using Multiple Linear Regression (MLR) analysis, it is able to help in determining the effect of the independent variables, which are problem-solving skills and happiness, toward the dependent variable, which is resilience. Before conducting the multiple regression analysis, normality test and the assumptions of Multiple Linear Regression will be conducted.

Apart from that, Pearson Product Moment Correlation (PPMC) was used in order to identify the strength and direction of the correlation between two variables either ratio or interval's measurement scale. The range of the correlation value will fall between -1 and 1 .

When the value of correlation is 1 , it indicates that there is a perfect positive relationship between the variables; while when there is -1 , it indicates that it is a perfect negative relationship between the variables. The correlation coefficient is to establish the strength of the relationship (Chee, 2015). Therefore, by using this association measurement, this research study is able to analyse the correlation of each independent variable toward the independent variable.

Instrumentation

Subjective Happiness Scale (SHS)

This instrument was designed to assess an individual's global subjective happiness. It is evaluated through the statement either by rating themselves or making a comparison with others. It is developed by Lyubomirsky and Lepper. SHS is rated using the 7-point Likert scale. Each of the items is having different evaluations. Item 1 is to examine the extent of individuals who think he or she is happy which is from 1 to 7 is ranged from not very happy to a very happy person. For item 2 is to examine the extent of a person happy in making a comparison with others, which is ranged from less happy to happier. While for item 3 and 4 is to examine the extent of an individual generally happy or not happy, which ranges from not happy at all to have a great deal of happiness. The reliability of SHS is 0.86 (Sousa et al., 2017) while the validity of SHS is 0.62 . The greater score in this instrument, indicate as higher happiness' level (Lyubomirsky & Lepper, 1999).

Problem Solving Inventory (PSI)

It was designed to measure how an individual in perceiving behaviors and attitudes of problem solving. There are three aspects in this scale which are Problem Solving Confidence (PSC), Approach –Avoidance Style (AAS) and Personal Control (PC) with 11, 16 and 5

items respectively. PSI consisted of 32-items that used a 6-point Likert Scale which ranged from 1 (*strongly disagree*) to 6 (*strongly agree*) (Behjoo, 2013). There are 8 reversed items in this instrument. The reversed scores are 1, 2, 4, 11, 13, 15, 17, and 21 items (Marcu, 2015). The reliability of PSI is 0.88 while the validity of PSI is 0.86 (Say & Batigun; Kourmoussi et al., & Koutras, 2016). The higher the score indicates low in problem solving while the lower the score indicates the high level of problem-solving skills that the respondents have (Behjoo, 2013).

Brief Resilience Scale (BRS)

It consists of 6 items in this instrument. This instrument is to measure the ability of an individual to recover from stress and difficult situations. It is a 5-point Likert scale rating scale which is from 1 to 5 is from strongly disagree to strongly agree. Three of the items in Brief Resilience Scale are reversed scores. It is used to prevent desirability response bias. Cronbach's alpha of BRS is 0.93 (Rodríguez-Rey et al., 2016). The validity of each item is ranged between 0.82 to 0.91 (Amat et al., 2014). The respondent is indicated as a resilient person when he or she is having the higher mean score in Brief Resilience Scale (Kyriazos et al., 2018).

Chapter IV

Results

Introduction

In this study, we will discuss descriptive analysis, Pearson correlation analysis and multiple regression analysis of the variables which are subjective happiness scale, problem-solving inventory and resilience.

Descriptive Statistics

Demographic Information

Background of Respondent. The diagram below is the demographic of 280 participants. The age of the participant is ranged between 18 to 26 years old. The highest percentage of the participants' age is 22 years old (30.36%) and followed by 21 years old (20.71%). The lowest percentage of the participants is 26 years old (0.36 %). While for the gender of the participants, the number of female participants is higher than males. There are 151 (53.9%) of female and 129 (46.1%) of male are participating in this study. This study had involved 248 (88.57%) of Chinese participants ($N=280$), while only 7 (2.5%) Malay and 25 (8.93%) Indians were involved in this study. This is due to this study applying cluster sampling, the subset that we are choosing as our sample is Universiti of Tunku Abdul Rahman Kampar Campus. In this university, the majority of the students are Chinese, therefore the sample is made up of a large number of Chinese participants.

Based on the table, it had shown the highest number of participants are from Perak, which is 103 (33.79%) participants, due to the location of the university is located in Perak and followed by Penang, which is 44 (15.71%) participants. The number of participants from

Seremban and Negeri Sembilan is the lowest which is 2 (0.71%). The background of the participant is examined in order to have a better understanding of the study.

Table 4.1

Demographic Information for Participants

Participant Information	n	%
Ethnicity		
Malay	7	2.50
Chinese	248	88.57
Indian	25	8.93
District		
Johor	33	11.79
Perak	103	36.79
Penang	44	15.71
Selangor	22	7.86
Kuala Lumpur	18	6.43
Sabah	4	1.43
Pahang	6	2.14
Sarawak	3	1.07
Kedah	15	5.36

Seremban	2	0.71
Malacca	15	5.36
Negeri Sembilan	2	0.71
Kelantan	5	1.79
Kuala Terengganu	4	1.43
Perlis	4	1.43
Age		
18	7	2.5
19	50	17.9
20	41	14.6
21	54	19.3
22	85	30.4
23	24	8.6
24	16	5.7
25	2	0.7
26	1	0.4
Gender		
Female	151	53.9
Male	129	46.1
Faculty		

Business and Finance	127	45.36
Science	24	8.57
Art and Social Science	55	19.64
Engineering and Green Technology	18	6.43
Information and Communication Technology	10	3.57
Institutes of Chinese Studies	1	0.36
Others	45	16.07

Table 4.2

Mean, Median, Standard Deviation for Study Variables and Age of the Respondent, n=280

Variable	M	Mdn	SD
Age	21.11	21.11	1.56
Happiness	18.58	18.58	3.85
Problem Solving Skills	17.95	17.95	3.80
Resilience	99.66	99.66	13.97

M, Mdn, SD are used to represented mean, median, and standard deviation, respectively.

Inferential Analysis

Pearson Correlation Analysis

In order to analyze the relationship between happiness and problem-solving skills toward resilience. Pearson product moment correlation was conducted to analyze the relationship between the variables.

For analyzing the correlation, the assumption of normality, linearity, and homoscedasticity had been assessed.

Table 4.3

Correlation matrix of the variables

Variables	1	2	3
1. Happiness	--	-0.197**	0.170**
2. Problem solving scale	--	--	-0.318**
3. Resilience	--	--	--

Hypothesis 1.

H0: There is no significant positive relationship between happiness and resilience among undergraduate students in Malaysia.

H1: There is a significant relationship between happiness and resilience among undergraduate students in Malaysia.

Based on table 4.3, the result of the correlation between happiness and resilience is having a significant positive relationship, which is $r = 0.509$, $N = 280$, $p < .001$. It had shown that when undergraduate students' level of happiness is higher, the level of resilience

is also higher. The correlation coefficient has fallen between the ranges of 0.5 to 0.7 which is considered moderate positive correlation. This means that there is a low correlation between happiness and resilience. While the significance level is $p < 0.005$ which is considered as significant between the relationship of the variables. Therefore, the alternative hypothesis is accepted.

Hypothesis 2.

H₀: There is no significant positive relationship between problem-solving skills and resilience among undergraduate students in Malaysia.

H₁: There is a significant positive relationship between problem-solving skills and resilience among undergraduate students in Malaysia.

Based on table 4.3, the result showed that there is a significant positive relationship between problem-solving skills and resilience, which is $r = -0.126$, $N = 280$, < 0.05 . The correlation coefficient for the relationship is negative due to the scoring for the problem-solving scale which is the problem-solving inventory, indicating the high problem-solving skills of an individual when the total score for the instrument is low. Therefore, the lower the total score in problem-solving inventory, the higher the problem-solving skills of an individual has (Marcu, 2015). Hence, the result showed that problem-solving skills higher, resilience skills higher. The correlation coefficient is ranged between 0.01 and 0.30 which is considered as weak correlation. Apart from that, the significance value (0.037) is lower than the significance level ($p < 0.05$). Therefore, the null hypothesis is rejected and the alternative hypothesis is accepted.

Multiple Regression Analysis

Normality. A normality test was conducted to ensure the normal distribution for this research.

Histogram. According to the diagram in Appendix J 1 had shown that the histogram is a symmetry curve. This means that the data is normally distributed.

Skewness and Kurtosis. According to table 4.4, the skewness of the data for both independent variables are within ± 2 . For the skewness of happiness, it is considered as approximately symmetric while for the problem-solving skills, it is considered as moderately skewed. Besides, the kurtosis value is within ± 7 for both variables. Therefore, this shown that the assumption is met.

Table 4.4

Skewness and Kurtosis Table

Variables	Skewness	Kurtosis
Happiness	-0.334	-0.043
Problem Solving Skills	-0.841	2.116

Q-Q plot. In accordance with the Q-Q Plot for each of the variables in the Appendix J had shown that the points lie around the line. Therefore, the assumption of the normal distribution of the data was met.

Apart from that the assumptions of multiple linear regression fulfilled in this study.

Table 4.5

Durbin – Watson Table (Happiness, Problem Solving Skills, and Resilience)

Model	Durbin – Watson
1	1.645

Independent variables: Happiness and Problem-Solving Skills

Independence error. The statistic of Durbin - Watson in this study is *1.645* which is between 1.5 and 2.5. This shown that the data is not autocorrelated. This assumption had met.

Table 4.6

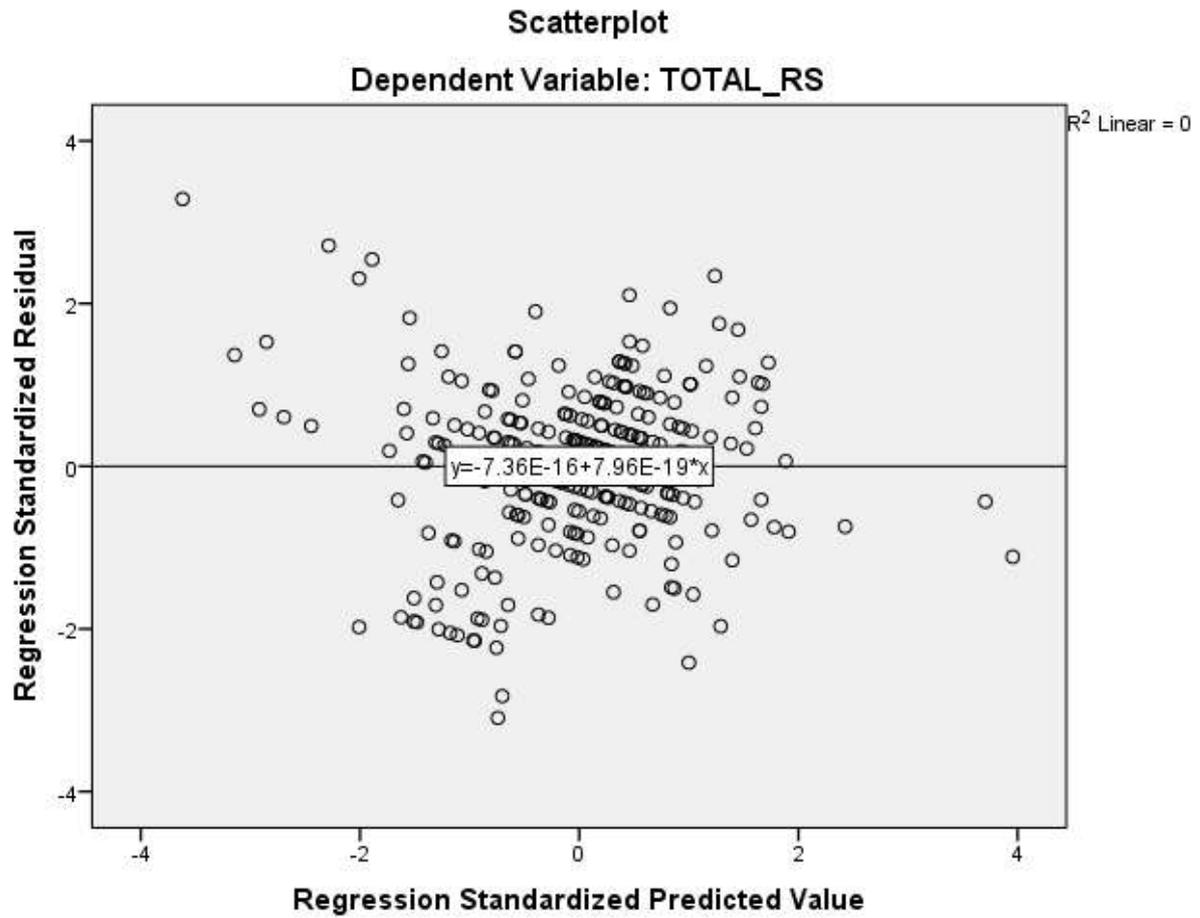
Collinearity Statistic Table

Variables	Tolerance	VIF
Happiness	0.961	1.040
Problem Solving Skills	0.961	1.040

Multicollinearity. Multicollinearity is described as when the independent variables are having a high correlation which may lead to a false conclusion (Daoud, 2017). The multicollinearity can be indicated through the Variance Inflation Factor (VIF) and Tolerance. According to table 4.6 above, the VIF value is *1.040* which is between the range of *1* and *5*, is considered as moderately correlated and for the tolerance value (*0.961*) is greater than *0.1* is not considered as multicollinearity (Lani, 2010). Therefore, it had fulfilled the assumption.

Homoscedasticity. It means errors' variance is equal across every independent variables' levels. According to diagram 4.1 below, most of the residuals fall around *0*.

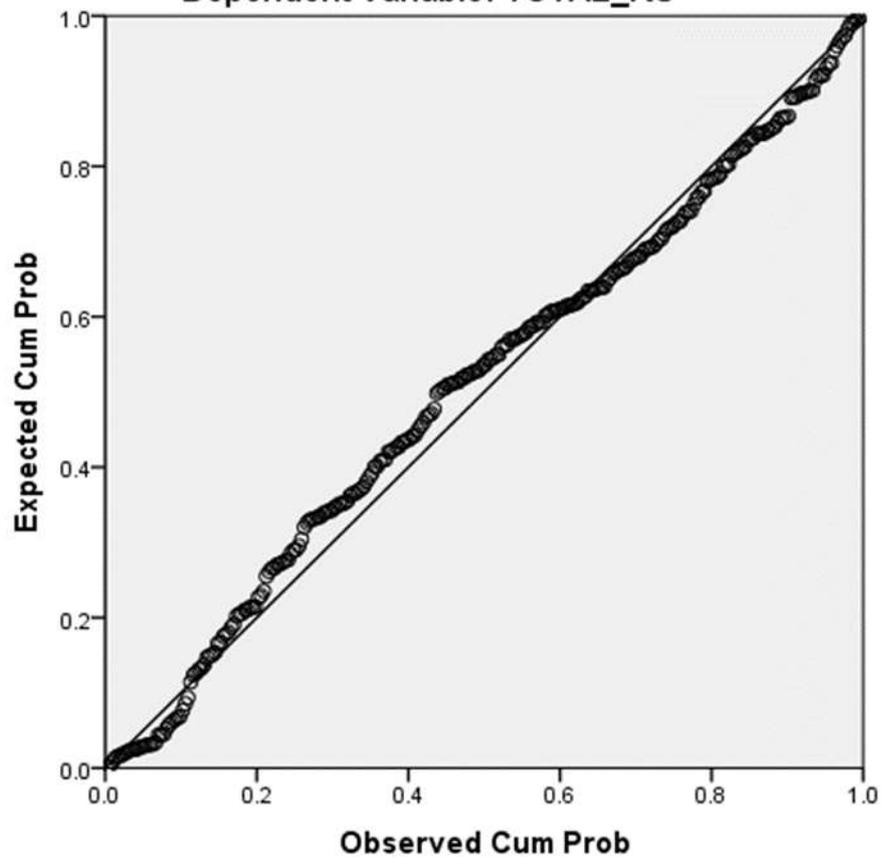
Diagram 4.1



Normality of the residual. This can be interpreted through the P-P Plot model. Based on the diagram 4.2 below, most of the residuals lie on the 0 line. Therefore, this assumption was met.

Diagram 4.2

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: TOTAL_RS



In conclusion, all of the assumptions had been met in this study which includes the linearity of residual, normality of residual, homoscedasticity, absence of multivariate outliers, independent error as well as multicollinearity assumption was not violated in this present research.

Table 4.7

Model Summary Table of Multiple Linear Regression (Happiness, Problem Solving Skills, and Resilience)

Model Summary

Model	R	R Square	Adjusted R Squared	Std. Error of the Estimate
1	0.396 ^a	0.157	0.151	3.500

Predictor: Happiness and Problem-Solving Skills

Dependent Variable: Resilience

Table 4.8

ANOVA Table of Multiple Linear Regression (Happiness, Problem Solving Skills, and Resilience)

ANOVAa

Model		Sum of Square	df	Mean Square	F	Sig.
	Regression	631.718	2	315.859	25.790	0.000b
1	Residual	3392.476	277	12.247		
	Total	4024.196	279			

Predictor: Happiness and Problem-Solving Skills

Dependent Variable: Resilience

Table 4.9

Coefficient Table of Multiple Regression (Happiness, Problem Solving Skills, and Resilience)

Coefficient ^a

	Model	Unstandardized		Standardized		
		B	Std.Error	Beta	t	Sig.
1	(Constant)	3.263	2.013		1.8	0.073
	Happiness	0.238	0.056	0.242	4.294	0.000
	Problem-Solving Skills	0.099	0.015	0.365	6.491	0.000

Dependent Variable: Resilience

Multiple Regression analysis was conducted to examine whether happiness and problem-solving skills significantly predicted resilience among undergraduate student in Malaysia. According to table 4.5, the result had showed both predictor, which are happiness and problem-solving skills, are able to predict the resilience of the undergraduate students $F(2, 277) = 51.470$ $p < 0.005$. 27.1% of the total variance is able to be explained by the predictors. Apart from that, the result also showed that happiness ($\beta = .505$, $p < .001$) has a higher effect on resilience compared with problem-solving skills ($\beta = -.307$, $p = .038$). The result is indicated both hypotheses are supported.

Table 4.9.1

Table of Summary of Result

Hypothesis	Standardized Beta – β	p – value	Decision
H3	0.242	0.000	Supported
H4	0.365	0.000	Supported

Chapter V

Discussion

Introduction

This chapter will be discussing on the relationship between variables, implication of study, limitation and recommendation for this research study.

Happiness and Resilience

The first objective of this study was to investigate the existence of happiness of an individual predicted towards resilience among undergraduates' students. The present study result had shown that there was a significant positive relationship between happiness and resilience. This result indicates that individuals who have a high level of happiness will have a higher potential in resilience, while for individuals who have a low level of happiness will have a lower potential in resilience. The present results show consistent with previous research with Short et al. (2018), the previous results had shown a positive relationship between happiness and resilience among college students. Individuals who score high in happiness tend to have a higher ability to overcome through traumatic events in their life and always maintain a positive perspective towards their daily life events which compare to those individuals who score low in happiness (Lyubomirsky, 2001). A similar explanation from the other researcher was found, the researcher states that individuals with a high level of resiliency have a positive and helpful attitude towards adversity events in our life (Joseph, 1994).

According to the Broaden and Build theory (Fredrickson, 2001), it focuses more on the positive emotions of an individual. The purpose of positive emotions is to create resources for individuals' lifelong application. This theory proposes that positive emotions are important for individuals which bring a large impact on individuals' behavior and thoughts and build up from time to time to form resilience (Short et al., 2018). There was past research

study about the Broaden and Build theory, the studies had invited 47 participants to participate in their research, to examine the hypothesis of whether individuals with numerous positive emotions can help to foster individuals' resilience. The research results show a positive relationship between numerous positive emotions and resilience, which means that individuals with positive psychological health have a higher ability to cope through their stressful life events (Fredrickson et al., 2003).

Besides, a finding shows that happiness is one of the elements that could enhance an individual's inner strengths (Seligman et al., 2009); which correlated with resilience in the population of students (Austin, 2006). Happiness served as a medicine to assist individuals to recover rapidly from traumatic events (Fredrickson, 2001). Most of the individuals can undergo negative experiences that happen in their life while they did not realize their ability and always have the mindset that they are unable to overcome through the negative experiences (Shimizu & Belic, 2011). However, some of the individuals experience negative life events which could generate the ability to be resilient, this can also lead to an increase towards happiness and decrease the chances to involve in mental health illness (Lyubomirsky, 2013).

Moreover, one of the past researches had found out to support the present findings, which shows happiness had predicted towards resilience. The research mentioned that students who had a low accomplishment in their academic performances tend to have a negative comparison towards their peers (Dijkstra et al., 2008). The reason was downward-comparisons was considered as a factor of improving individual self-belief, by having an increase in self-belief which could bring a positive influence on student's academic performance, however for those who compare themselves positively among their peers which might decrease their self-belief and cause negative effects on their academic performance (Marsh et al., 2007). The downward-comparison between students which can create self-

reported happiness and to increase resilience. This comparison could help students to gain a higher level of happiness. A high level of happiness is efficient in strengthening an individual's ability to face traumatic events in the future as well as an increase in resilience (Veenhoven, 2009). Furthermore, there were also a few research studies that supported our present study findings. (Murray & Holmes 1999; Tugade et al., 2004; Cohn et al., 2009).

Problem-Solving Skills and Resilience

In this study, the second objective was to investigate whether problem-solving skills are predicted towards resilience of an individual among undergraduates' students. The present findings showed there was a negative low-level significant relationship between problem-solving and resilience. The ability of individuals in problem-solving had shown an influence on individual's resilience. This study proposes that individuals with a high level of problem-solving skills have higher scores in resilience. This is because the scale that applies to measure problem solving skills is calculated differently, the score of this scale is computed as the lower the score that an individual score in the problem-solving scale, the higher the ability of individuals get in the problem-solving skills (Behjoo, 2013).

The past research was in line with the present findings, in the research of Pinar, Yildirim and Sayin (2018) there was a negative moderate-level significant relationship between problem-solving skills and resilience. The research results show that problem solving skills of an individual increase, the resilience of an individual will also increase. The problem-solving behavior of an individual was formed through their characteristics (Coşkun et al., 2014). Individuals who have good problem-solving abilities are more likely to bring benefits in their life such as having a better knowledge of problems that they faced and being able to investigate the best solution to deal with their negative life situations (Coşkun et al., 2014).

Furthermore, similar results of Ahmad et al. (2018) show support towards the present findings. There was a relationship between problem-solving and resilience among undergraduates' students. It was a must for individuals to apply resilience attitudes to accomplish the problem-solving tasks and negative experiences that individuals encounter in their life (Santos & Soares, 2018). Individuals with a high level of resilience are more likely to determine and develop their solution, instead of escaping from the problem. Besides, individuals with high resilience would like to investigate their own mistakes when they were not performing well in certain tasks. Individuals would like to find out the actual mistake that they made and try their best to make improvements on it such as discover life skills and learn lessons that can adapt in the future. Moreover, they will also interpret the situations and investigate any possible causes of the mistake when they discover tasks that they are unable to solve. The above feature showed a correlation in problem-solving skills (Ahmad et al., 2018).

One of the past researches had mentioned that through the teaching of problem-solving skills which was able to enhance students' resilience. This research was conducted by Asgharpour et al. (2016). Researchers stated that through learning problem-solving skills, individuals will have the ability to confront their problems and discover alternative solutions to solve their problems. When individuals can manage their problems, they will have an increase in their levels of confidence, happiness, and satisfaction. Thus, these results indicate that problem-solving skills were able to foster resilience and increase individuals' psychological health. Similar results show in the research of Oguz-Duran & Yüksel, (2010) undergraduates with high problem-solving were found to encounter a low level of stress in their life.

According to Wright and Masten (2005), several abilities in cognitive thinking can assist children to develop through resilience. The components which were maintaining good

problem-solving skills, good capabilities in cognitive thinking, participating in good schools, and parents joining together with their children through the education program. In the research of Glicken (2006), he had found that children with a high level of intelligence quotient can deal with negative life situations and foster resilience. Besides, Deater-Deckard et al. (2005) stated that the capability of cognitive thinking such as intelligence quotients, problem-solving skills, and reasoning skills was the biggest component that influenced an individual's resilience between adults and children. Therefore, this research shows that individuals who have a higher level of problem-solving skills could lead to an increase in individuals' resilience.

Conclusion

Implication

Through this study, there would be a clearer understanding of what can influence and predict the level of resilience of an individual. It may contribute to society on the basic knowledge of resilience and the society able to take action to prevent it. Besides, this current study has also reinforced the Broaden and build theory as this current study identified there is a positive relationship between happiness and resilience. The higher the happiness level of an individual, the greater the resilience level of that individual and its parallel with what the Broaden and build theory emphasized. Hence, this current study may contribute to society in terms of predicting the resilience level of a person through the level of happiness having by that person.

Furthermore, this current study also identified problem-solving skills are positively correlated with the level of resilience having by an individual. The higher the problem-solving skills, the higher the resilience level of that individual. Therefore, the resilience level of a person may also be predicted by his or her problem-solving skills. Problem-solving skills serve as one of the skills required by fresh graduates in the society, while this study also

predicts that those fresh graduates with higher problem-solving skills, they would have a lower chance to suffer in stress conditions as they are having a higher level of resilience. Besides, the Ministry of Higher Education may also organize the campaign or program which raises the importance of problem-solving skills for those pre-graduates' students. Through these programs, those pre-graduates may be aware of problem-solving skills and improve on them before they graduate. Naturally, those fresh graduates may have a higher level of problem-solving skills as well as the level of resilience. It may also increase the level of being employed by the company and decrease the rate of unemployment.

Limitations

There are a few limitations to this study. One of them was the social desirability bias. While the participants answering on the questionnaire, some of them would not fill what they feel but the ideal social answer will be filled by them. Even some of the participants may refer to the answers that are filled by their friends. As the questionnaire mostly is in the base of self-administered. This may cause and affect the consistency and accuracy of the collected data.

Furthermore, the language barrier was also considered as one of the limitations of this current study. Most of the participants' feedback that the term that was used in the scale in the questionnaire was too difficult to understand the exact meaning of it. Especially for the Problem-Solving Scale, some of the participants feedback that some of the item questions were too lengthy and they did not get what was the question asking. This may influence the reliability of measures.

Lastly, the sampling method used in our study was a cluster sampling method. The participants recruited were only from one university which the result may be over-generalize. The reason is that cluster sampling method will only focus on one group of people which may

cause the resulting reliability and inability to generate the data collected and represent the public.

Recommendations

To make the result more reliable, the future study may provide the questionnaire together with an envelope to the participants. By doing this, the questionnaire of the participant will be privacy and even the researcher unable to distinguish which questionnaire was filled by which participant. Hence, participants would be more willing to fill in the exact answer of them. Besides, researchers may also separate the participants from their peers, such as recruit per participant by participants. This may reduce the chances of letting participants discuss the answer with their peers.

Furthermore, future researchers may seek for the other language version of the problem-solving questionnaire. As long as the language is simple and easier to be understood by the participant. By this action, the participants would be able to fully understand what exactly the question is asking on rather than just simply provide an answer due to misinterpretation of the question.

Lastly, future researchers may also consider using the other sampling method rather than the cluster sampling method. The reason is that it may be more reliable and vary in different contexts. The cluster sampling method of recruitment only recruits a cluster of people from the same group. Therefore, future researchers may recruit more cluster groups if still applying cluster sampling methods.

Conclusion

As conclusion for this study, this research conducted to investigate the relationship and influence between happiness and problem-solving skills toward resilience among undergraduate students in Malaysia.

In accordance to our study, quantitative method was applied to conduct this study and cross-sectional design was used in selecting the sample participants. Besides, correlational design is used to investigate the relationship between the problem-solving skills and happiness toward the resilience. The data was collected through distribution of paper-pencil questionnaires to the target participant. The target participants for this research are undergraduate students who in study in Univerisiti Tunku Abdul Rahman Malaysia with the age ranged from 18 to 35 years old. The sample size for this study is 280 participants. Cluster sampling was used in this study in selecting the target participants. Other than that, a pilot study has also been carry out in order to examine on the feasibility of this research endeavor.

The result of the study had shown that there is a significant positive relationship between happiness toward resilience. Besides, this result also shown that happiness able to predict resilience. This is because, individual who are having high level of happiness they tend to have a better self-belief which will lead them to face the challenges or traumatic events in their life in a better way. Moreover, the result also showed a significant positive relationship between problem-solving skills and resilience as well as problem-solving skills able to predict resilience. This is because, individual who are having high ability to solve their problems and barrier that they encounter may have a better solution in resolving the negative event in their life as well. In addition, they also willing to learn from their mistake in past and it led them to perform better in future.

In summary, this finding had enriched the literature about resilience in Malaysia. This research was useful for the higher education or other related parties to implement a better intervention or program for improving the resilience of people as it is an important aspect throughout every individual's life.

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Appendix A

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To every one of you, we thank you. This thesis has been completed by having all of your efforts and contributions.

TANG SHOO CHEN

LONG XIN HUI

YAP LI MIN

Appendix B

Declaration

We declare that the materials contained in this research paper is the result of our own work and that due acknowledgement has been given in the bibliography and references to all the sources no matter being printed, electronic or personal works.

Name : TANG SHOO CHEN

Student ID : 16AAB03154

Signed : *TANG SHOO CHEN*

Date : 1 April 2020

Name : LONG XIN HUI

Student ID : 16AAB03320

Signed : *LONG XIN HUI*

Date : 1 April 2020

Name : YAP LI MIN

Student ID : 16AAB02569

Signed : *YAP LI MIN*

Date : 1 April 2020

Appendix C

Approval Form

This research paper attached hereto, entitled “Relationship between Happiness and Problem-Solving Skills towards Resilience” prepared and submitted by “Tang Shoo Chen, Long Xin Hui, Yap Li Min” in partial fulfilment of the requirements for the Bachelor of Social Science (Hons) Psychology is hereby accepted.

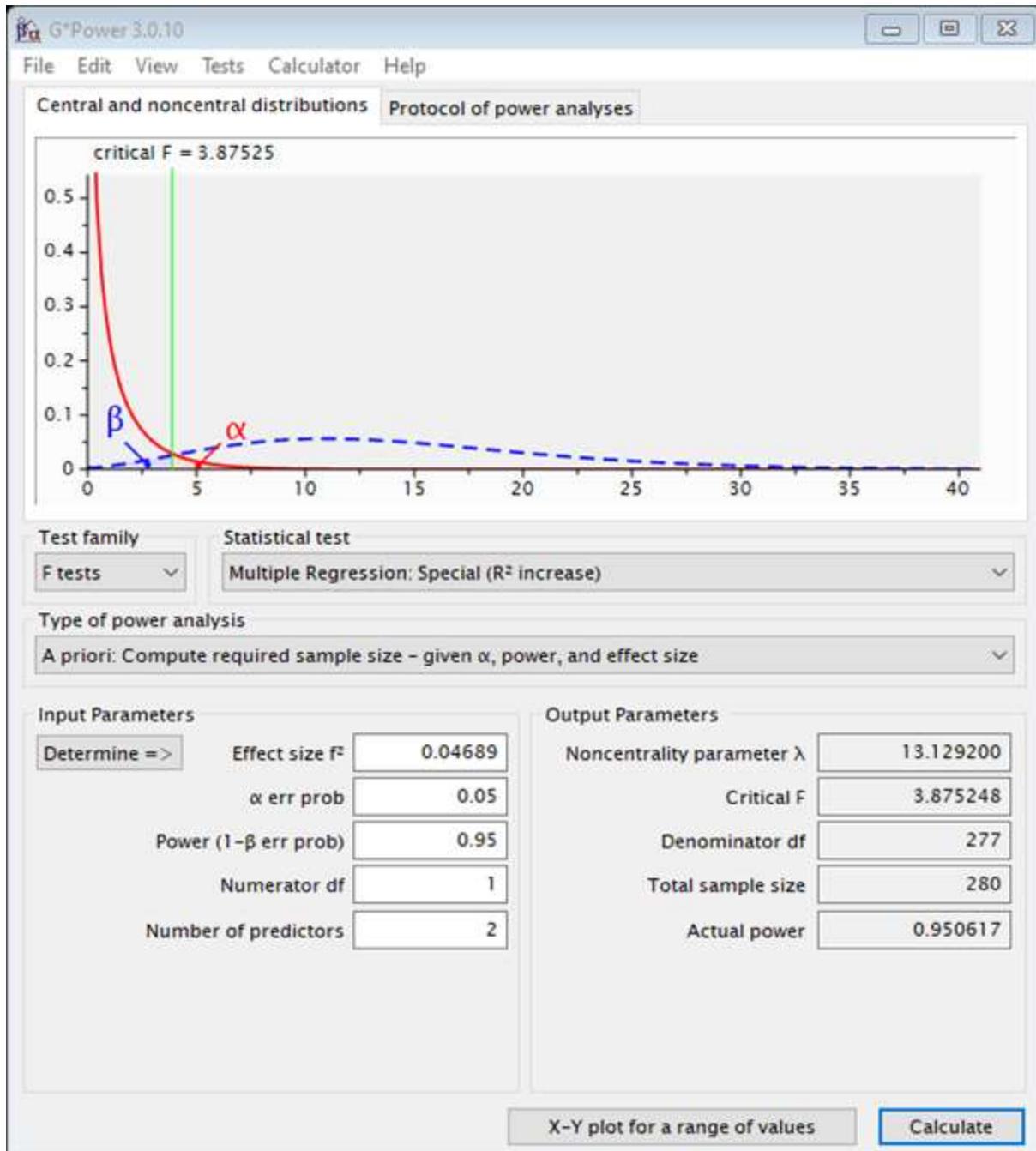
Supervisor

(Dr. Sonia Khodabakhsh)

Date

Appendix D

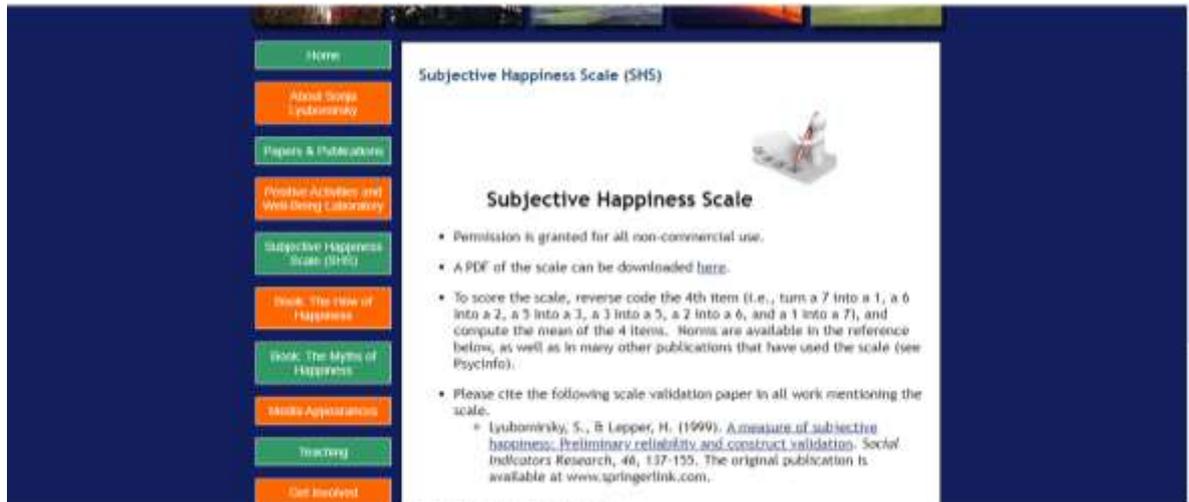
The calculation of G-power



Appendix E

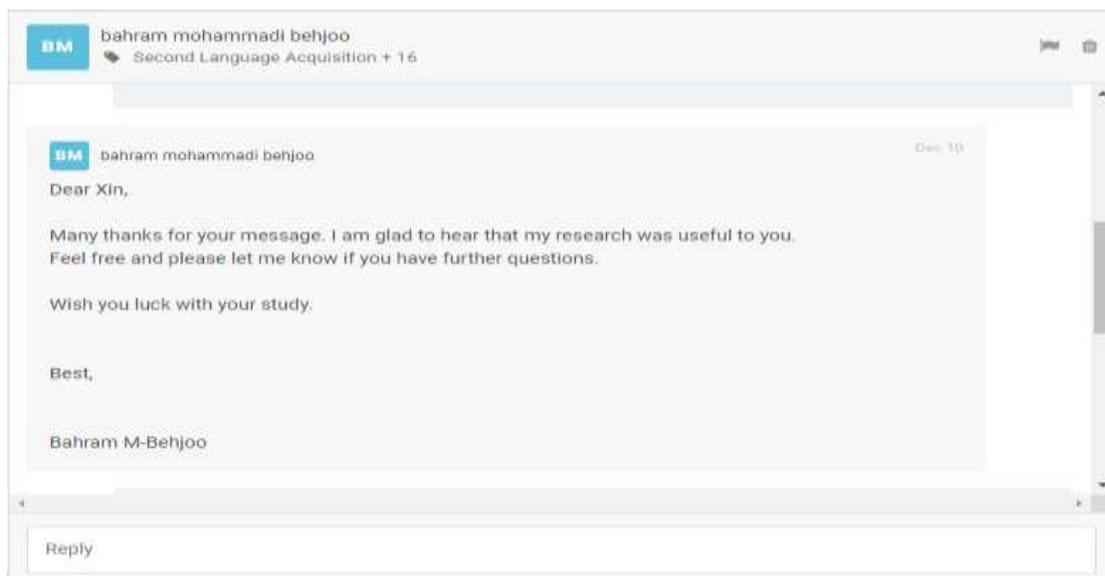
Permission of scale instruments

Subjective Happiness Scale



The screenshot shows a website page for the Subjective Happiness Scale (SHS). The page has a dark blue header and a white main content area. On the left, there is a vertical navigation menu with several buttons: Home, About George Lyubomirsky, Papers & Publications, Positive Activities and Well-Being Laboratory, Subjective Happiness Scale (SHS), Book: The How of Happiness, Book: The Myths of Happiness, Media Appearances, Teaching, and Get Involved. The main content area is titled "Subjective Happiness Scale (SHS)" and features a small illustration of a person sitting on a bench. Below the title, there is a list of bullet points providing information about the scale's permission, download availability, scoring instructions, and citation requirements. The citation provided is: Lyubomirsky, S., & Lepper, H. (1999). A measure of subjective happiness: Preliminary reliability and construct validation. *Social Indicators Research*, 46, 137-155. The original publication is available at www.springerlink.com.

Problem-Solving Skills Scale



The screenshot shows an email message from Bahram M-Behjoo. The sender's name is "bahram mohammadi behjoo" and the recipient is "Second Language Acquisition + 16". The message is dated "Dec 10". The content of the email is as follows:

Dear Xin,

Many thanks for your message. I am glad to hear that my research was useful to you. Feel free and please let me know if you have further questions.

Wish you luck with your study.

Best,

Bahram M-Behjoo

Resilience Scale

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Appendix F

Questionnaires



**Department of Psychology and Counselling
Faculty of Arts and Social Science
University Tunku Abdul Rahman**

Consent Form

Relationship between Happiness and Problem-Solving Skills toward Resilience among Undergraduate Students

Purpose of study: To identify the relationship between Happiness and Resilience; Problem-Solving Skills and Resilience among Undergraduate Students.

For further enquire, you may contact cjjun981028@utar.my or soniak@utar.edu.my.

I consent to participate in the research project and I understand that:

- the research may not be of direct benefit to me
- my participation is completely voluntary
- my right to withdraw from the study at any time if any discomfort happened
- the steps that have been taken to minimise any possible risks
- what I am expected and required to do
- whom I should contact for any complaints with the research or the conduct of the research
- I am able to request a copy of the research findings and reports
- security and confidentiality of my personal information.

I have read the information stated above and agree to participant in this research project which titled “Relationship between Happiness and Problem-Solving Skills toward Resilience among Undergraduate Students”.

Signature: _____

Date: _____

Name(*optional): _____ Gender: Male / Female Age: _____

Ethnicity: _____ District / Hometown: _____

Faculty: _____ Course: _____ (Year ___ Sem ___)

SUBJECTIVE HAPPINESS SCALE

Instructions: For each of the following statements and/or questions, please **circle** the point on the scale that you feel is **most appropriate** in describing you.

1. In general, I consider myself:
not a very happy person 1 2 3 4 5 6 7 a very happy person

2. Compared to most of my peers, I consider myself:
less happy 1 2 3 4 5 6 7 more happy

3. Some people are generally very happy. They enjoy life regardless of what is going on, getting the most out of everything. To what extent does this characterization describe you?
not at all 1 2 3 4 5 6 7 a great deal

4. Some people are generally not very happy. Although they are not depressed, they never seem as happy as they might be. To what extent does this characterization describe you?
not at all 1 2 3 4 5 6 7 a great deal

RESILIENCE SCALE

The Brief Resilience Scale. Choose the best statement that appeal to you most. Please fill the boxes with tick .	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. I tend to bounce back quickly after hard times.					
2. I have a hard time making it through stressful events.					
3. It does not take me long to recover from a stressful event.					
4. It is hard for me to snap back when something bad happens.					
5. I usually come through difficult times with little trouble.					
6. I tend to take a long time to get over set-backs in my life.					

PROBLEM-SOLVING SKILLS SCALE

<p>This form of Problem-Solving Skills Inventory is for ELT students. You will find statements about Problem Solving Confidence, Approach Avoidance Style, and Personal Control. Please think about yourself as an ELT student for each statement below. Choose the best statement that appeal to you most. Please fill the boxes with tick.</p>	1. Strongly Agree	2. Moderate Agree	3. Slightly Agree	4. Slightly Disagree	5. Moderate Disagree	6. Strongly Disagree
1. When a solution to a problem was unsuccessful, I do not examine why it didn't work.						
2. When I am confronted with a complex problem, I do not bother to develop a strategy to collect information so I can define exactly what the problem is.						
3. When my first efforts to solve a problem fail, I become uneasy about my ability to handle the situation.						
4. After I have solved a problem, I do not analyze what went right or what went wrong.						
5. I am usually able to think up creative and effective alternatives to solve a problem.						
6. After I have tried to solve a problem with a certain course of action, I take time and compare the actual outcome to what I thought should have happened.						
7. When I have a problem, I think up as many possible ways to handle it as I can until I can't come up with any more ideas.						
8. When confronted with a problem, I consistently examine my feelings to find out what is going on in a problem situation.						
9. I have the ability to solve most problems even though initially no solution is immediately apparent.						
10. Many problems I face are too complex for me to solve.						
11. I make decisions and am happy with them later.						
12. When confronted with a problem, I tend to do the first thing that I can think of to solve it.						
13. Sometimes I do not stop and take time to deal with my problems, but just kind of muddle ahead.						
14. When deciding on an idea or possible solution to a problem, I do not take time to consider the chances of each alternative being successful.						

15. When confronted with a problem, I stop and think about it before deciding on a next step.						
16. I generally go with the first good idea that comes to mind.						
17. When making a decision, I weigh the consequences of each alternative and compare them against each other.						
18. When I make plans to solve a problem, I am almost certain that I can make them work.						
19. I try to predict the overall result of carrying out a particular course of action.						
20. When I try to think up possible solutions to a problem, I do not come up with very many alternatives.						
21. Given enough time and effort, I believe I can solve most problems that confront me.						
22. When faced with a novel situation I have confidence that I can handle problems that may arise.						
23. Even though I work on a problem, sometimes I feel like I am groping or wandering, and am not getting down to the real issue.						
24. I make snap judgments and later regret them.						
25. I trust my ability to solve new and difficult problems.						
26. I have a systematic method for comparing alternatives and making decisions.						
27. When confronted with a problem, I do not usually examine what sort of external things my environment may be contributing to my problem.						
28. When I am confused by a problem, one of the first things I do is survey the situation and considers all the relevant pieces of information.						
29. Sometimes I get so charged up emotionally that I am unable to consider many ways of dealing with my problems.						
30. After making a decision, the outcome I expected usually matches the actual outcome.						
31. When confronted with a problem, I am unsure of whether I can handle the situation.						

32. When I become aware of a problem, one of the first things I do is try to find out exactly what the problem is.

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Thank You for Participate 😊

APPENDIX G

Reliability for pilot study

Problem Solving Skills

Reliability Statistics

Cronbach's Alpha	N of Items
.692	32

Happiness

Reliability Statistics

Cronbach's Alpha	N of Items
.768	4

Resilience

Reliability Statistics

Cronbach's Alpha	N of Items
.685	6

Reliability for actual study

Problem Solving Skills

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.825	.830	24

Happiness

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.725	.737	4

Resilience

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.727	.727	6

APPENDIX I

Pearson Correlation

		Correlations		
		TOTAL_SHS	TOTAL_RS	TOTAL_PSS
TOTAL_SHS	Pearson Correlation	1	.170**	-.197**
	Sig. (1-tailed)		.002	.000
	N	280	280	280
TOTAL_RS	Pearson Correlation	.170**	1	.318**
	Sig. (1-tailed)	.002		.000
	N	280	280	280
TOTAL_PSS	Pearson Correlation	-.197**	.318**	1
	Sig. (1-tailed)	.000	.000	
	N	280	280	280

** . Correlation is significant at the 0.01 level (1-tailed).

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	631.718	2	315.859	25.790	.000 ^b
	Residual	3392.479	277	12.247		
	Total	4024.196	279			

a. Dependent Variable: TOTAL_RS

b. Predictors: (Constant), TOTAL_SHS, TOTAL_PSS

Coefficients^a

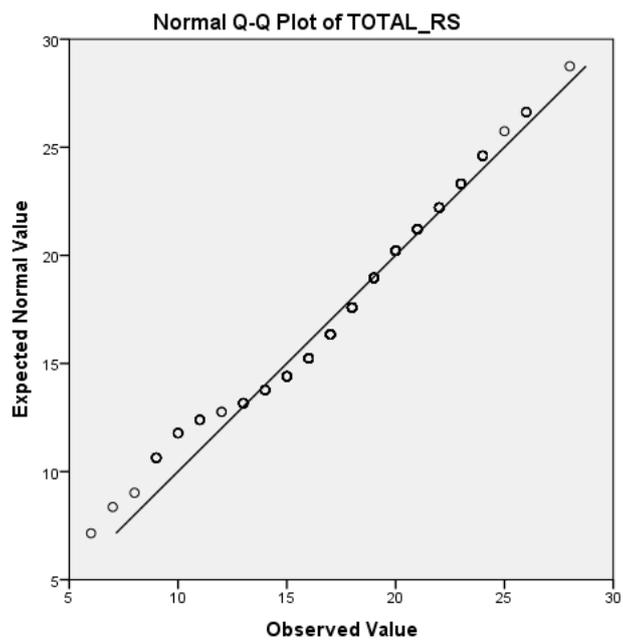
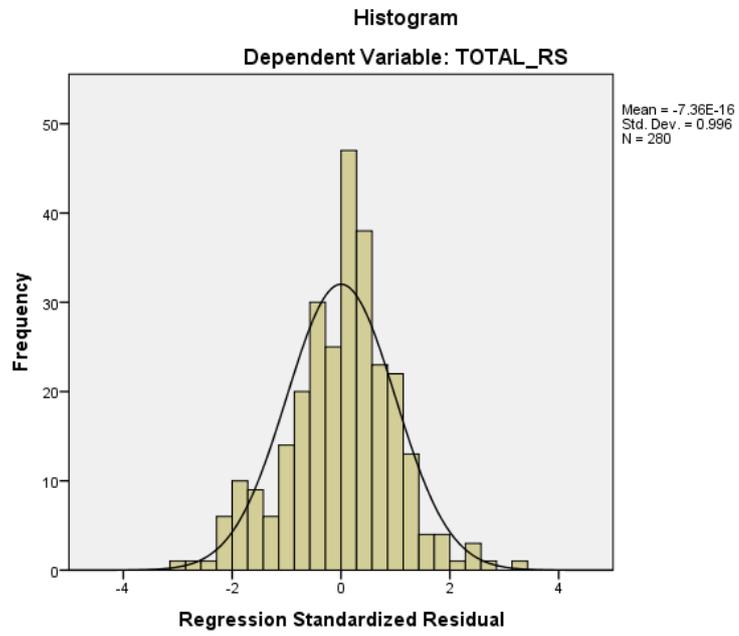
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
	B	Std. Error				Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
	1 (Constant)	3.623	2.013				1.800	.073	-.339	7.585		
TOTAL_PSS	.099	.015	.365	6.491	.000	.069	.129	.318	.363	.358	.961	1.040
TOTAL_SHS	.238	.056	.242	4.294	.000	.129	.348	.170	.250	.237	.961	1.040

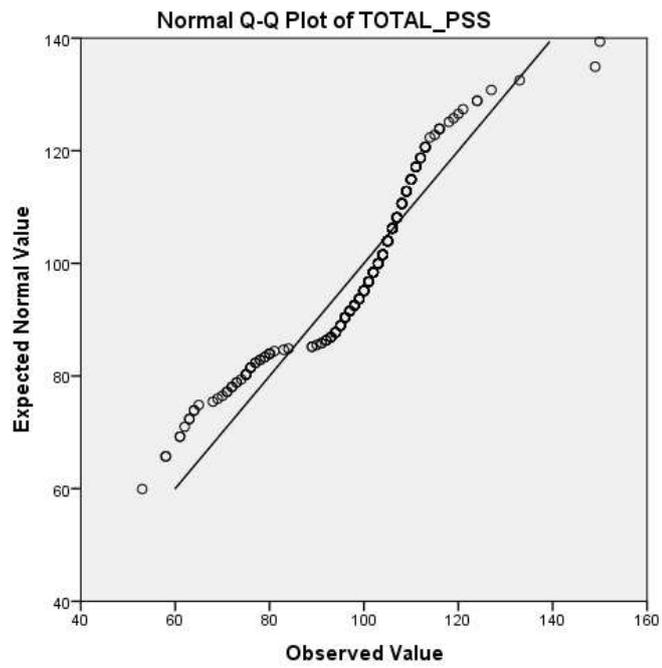
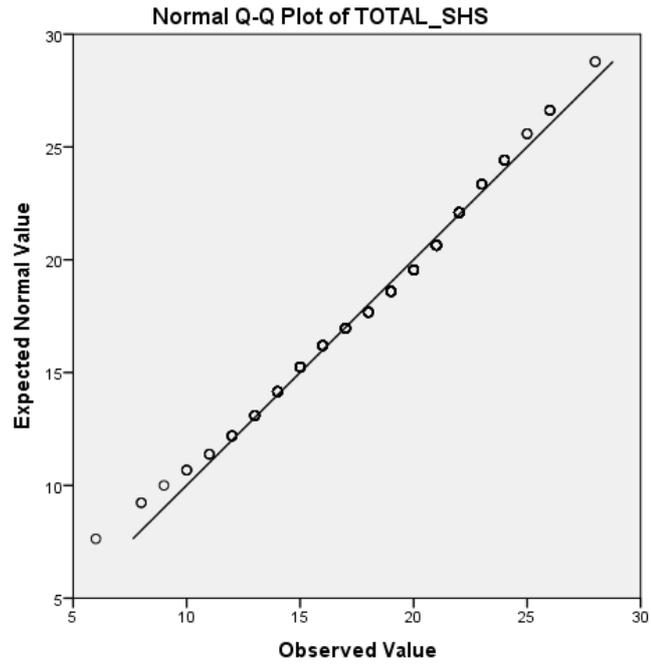
a. Dependent Variable: TOTAL_RS

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	12.5003	23.8995	17.9464	1.50473	280
Residual	-10.83042	11.49974	.00000	3.48704	280
Std. Predicted Value	-3.619	3.956	.000	1.000	280
Std. Residual	-3.095	3.286	.000	.996	280

a. Dependent Variable: TOTAL_RS





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

UAPZ 3023 Final Year Project II

Research Project Evaluation Form

TURNITIN: *'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: Relationship between Happiness and Problem-Solving Skills toward Resilience among Undergraduate Students.	
Supervisor: Dr. Sonia Khodabakhsh	
Student's Name:	Student's Id
1. Tang Shoo Chen	1. 16AAB03154
2. Long Xin Hui	2. 16AAB03320
3. Yap Li Min	3. 16AAB02569

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**".

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: _____

Notes:

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.

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

INDIVIDUAL ONLINE PRESENTATION EVALUATION FORM

UAPZ 3023 Final Year Project II

No.	Name of Student	ID	*Total (40%)	**Final score (20%)
S1				
S2				
S3				

**Final Score: () / 40 marks ÷ 2 = () / 20 marks
is to be converted into 20% as according to the syllabus

Date: _____

Time: _____

	SCORE	SCORE	SCORE	EXCELLENT 4	GOOD 3	AVERAGE 2	LACKING 1
TRAITS	VERBAL SKILLS						
Enthusiasm	S1	S2	S3	Demonstrated a strong, positive feeling about topic during entire presentation.	Occasionally showed positive feelings about topic.	Showed little positive feelings toward topic presented.	Showed absolutely no interest in topic presented.
Delivery				Used a clear voice and spoke at a good pace. Did not read off slides. Transition between video segments was flawless. Clear	Presenter's voice was clear but with overly slow or fast pace. Transition between video segments was smooth with slight interruptions (video clips were not cut at the appropriate timeframe)	Presenter's voice was soft, and the pace was overly fast or slow. Transition between video segments was constantly interrupted and with no blackout. Name of presenter	Presenter mumbled or talked very fast and spoke too softly for audience to hear and understand. Transition between video segments was constantly interrupted and with constant

				indication of the name of presenter presenting point/slide.	or hiccups. Name of presenter presenting point/slide was indicated.	presenting point/slide was not constantly indicated.	blackout (blank screen with no speech or graphic for more than 5 seconds). No indication of the name of presenter presenting point/slide.
Language				Excellent and competent use of subject-related vocabulary and correct pronunciation.	Presentation showed competent use of subject-related vocabulary and correct pronunciation.	Some parts of lapsed into colloquialism with inappropriate vocabulary and pronunciation	Mostly inappropriate vocabulary and pronunciation
SCORE TRAITS	SCORE			EXCELLENT 4	GOOD 3	AVERAGE 2	LACKING 1
NON-VERBAL SKILLS							
Body language	S1	S2	S3	Movements seemed fluid. Displays relaxed, self-confident nature about self, with no-mistakes. Video captured full body view (missing below knee is acceptable).	Made movements or gestures that enhance articulation. Made minor mistakes, displayed little or no tension. Video captured partial body view (missing below waist).	Very little movement or descriptive gestures. Displays mild tension; had trouble recovering from mistakes. Video captured face only.	No movement or descriptive gestures. Tension and nervousness were obvious; had trouble recovering from mistakes. Video captured face only.
Timing				Within 10 to 15 minutes of allotted time.	Within 17 minutes of allotted time OR too short (<10 minutes).	Within 20 minutes of allotted time OR too short (<5 minutes).	Too long (>20 minutes) or too short (<3 minutes)
PRESENTATION OF POSTER							
Organisation				Title/author(s) of paper clearly displayed. Concise presentation of introduction, methodology, findings and conclusions.	Showed title/author(s). Adequately presents introduction, methodology, findings and conclusions.	Showed title/author(s). Presents main ideas of introduction, methodology, findings and conclusions.	Title/author(s) missing. Insufficient coverage of main points of introduction, methodology, findings and conclusions.
Technical				Students were able to merge all segmented video clips into a single file. Pre-recorded video was reinforced with subtitle AND below 700MB size. Poster	Students were able to merge all segmented video clips into a single file. Pre-recorded video was not reinforced with subtitle OR exceeded 700MB size. Poster AND video were included in the submission.	Students submitted segmented video clips. Pre-recorded video was not reinforced with subtitle OR exceeded 700MB size. Poster OR video was missing in the submission.	Students submitted segmented video clips. Pre-recorded video was not reinforced with subtitle AND exceeded 700MB size. Poster AND video were missing in the submission.

			AND video were included in the submission.			
Audio			The audio component of the video was loud and clear, audience was able to hear the presentation in one attempt without replaying the video.	The audio component had minor disturbances (i.e., echo), audience was able to hear the presentation in one attempt without replaying the video.	The audio was lacking in clarity with constant disturbances (i.e., echo). Audience had difficulty hearing presentation in one attempt without replaying the video.	The audio component was out of sync with video. Audience had difficulty hearing presentation in one attempt without replaying the video.
Visual Presentation			Visually appealing. Colours and organisation enhanced reading. Appropriate and varied font size enhanced readability. Appealing content arrangement. Well-positioned and enhanced graphics for quick comprehension. The video was in at least 720p using .MP4 or .WMV format.	Overall visually appealing. Organisation of content enhanced readability. Appropriate font size enhanced readability. Easily understood content arrangement. Graphics enhanced text. The video was in at least 720p using .MP4, .WMV, .AVI, .FLV format.	Visual appeal was adequate. Colours and layout somewhat cluttered. Font size affected readability. Confusing content arrangement. Graphics helped to highlight some content. The video was lower than 720p using .MP4, .WMV, .AVI, .FLV format.	Visuals lacked appeal. Colours and layout cluttered, hindered readability. Inconsistent/distracting font sizes. Confusing content arrangement. Graphics did not enhance text. The video was lower than 720p using .MP4, .WMV, .AVI, .FLV format.
Mechanics			Linguistically correct (no grammatical and spelling errors). Adhered to the format specified.	Minimal spelling and grammar mistakes. Poster did not hinder comprehension.	Noticeable spelling and grammar mistakes. Partial comprehension.	Excessive spelling and grammar mistakes. Difficult to comprehend.
*TOTAL						

Comments:

Evaluated by:

(NAME OF EVALUATOR: _____)

Department of Psychology and Counseling
Faculty of Arts and Social Science
UTAR Perak Campus

Action Plan of UAPZ 3023 (group-based)Final Year Project II for Jan & May trimester

Supervisee's Name: _____

Supervisor's Name: _____

Task Description	Duration	Date/Time	Supervisee's Signature	Supervisor's Signature	Supervisor's Remarks	Next Appointment Date/Time
Methodoloty, Data Collection & Data Analysis	W1-W2					
Finding & Analysis Discuss Findings & Analysis with Supervisor Amending Findings & Analysis	W3-W6					
Discussion & Conclusion Discuss Discussion & Conclusion with Supervisor Amending Discussion & Conclusion	W7-W9					
Submission of first draft*	Monday of Week 10	submit the first draft to Turnitin.com to check similarity rate				
Amendment	W10					
Submission of final FYP (FYP I + FYP II)*	Monday of W11	submit hardcopy, CD, and relevant documents to supervisor				
Oral Presentation	W11-W12	Oral Presentation Schedule will be released and your supervisor will inform you via email.				

- 
- Notes:**
- 1. The listed duration is for reference only, supervisors can adjust the period according to the topics and content of the projects.**
 - 2. *Deadline for submission can not be changed, one mark will be deducted per day for late submission.**
 - 3. Supervisees are to take the active role to make appointments with their supervisors.**
 - 4. Both supervisors and supervisees should keep a copy of this record.**
 - 5. This record is to be submitted together with the submission of the FYP II.**