

RESILIENCE, PERCEIVED SOCIAL SUPPORT, AND LIFE SATISFACTION AMONG MALAYSIAN COLLEGE STUDENTS

Norfaezah Md Khalid

Departmental of Educational Psychology and Counseling, Faculty of Education,
University of Malaya, 50603 Kuala Lumpur, Malaysia.
Corresponding author: norfaezah@um.edu.my

Received: 16.09.2020

Accepted: 24.02.2021

ABSTRACT

Background and Purpose: Resilience is an essential element of life satisfaction. Individuals with high resilience are normally able to cope with a problem and find its solutions. Resilience is critical in helping students to achieve life satisfaction and good mental health. In addition, social support has been found as one of the good predictors in achieving life satisfaction. However, the underlying mechanism by which resilience is associated with life satisfaction has been under examined. The current study investigates the association between resilience and life satisfaction among Malaysian college students, focusing on social support as a factor mediating this association.

Methodology: A total of 491 students participated in this study. The data were collected using a set of questionnaires. The mediation model was tested using structural equation modelling.

Findings: Results showed that the total effects of resilience on life satisfaction were significant. Furthermore, social support mediated the influence of resilience on life satisfaction. Therefore, improving resilience and enhancing social support may increase Malaysian college students' satisfaction in life.

Contributions: The present study has implications on enhancing life satisfaction among college students. Finally, the study highlights the importance of social support in the implementation of intervention programmes with the goal of enhancing life satisfaction.

Keywords: Social support, Malaysian, college students, life satisfaction, resilience.

Cite as: Md Khalid, N. (2021). Resilience, perceived social support, and life satisfaction among Malaysian college students. *Journal of Nusantara Studies*, 6(2), 21-40.
<http://dx.doi.org/10.24200/jonus.vol6iss2pp21-40>

1.0 INTRODUCTION

University years are particularly challenging for students who face various challenges. At the beginning of university life, students learn how to adapt to an unfamiliar environment. They learn to be more independent, manage time and take responsibility for themselves. Sometimes they are stressed by expectations for high academic performance, relationship issues with others and other problems. Life satisfaction is part of subjective well-being, which is a combination of satisfaction in a few domains and is a key measure of individuals' well-being. Most researchers reported that a significant association exists between life satisfaction and the presence of mental illness (eg. Bieda et al., 2019; Kumar, Shaheen, Rasool, & Shafi, 2016; Raja Mahmoud, Staten, Hall, & Lennie, 2012). The World Health Organization (WHO) defines being mentally healthy as having a peaceful condition in which individuals can realise their capabilities, manage life stress, work productively and successfully, and contribute to society. Individual life satisfaction is also one of the benchmarks of mental health.

Life satisfaction is important as a well-being indicator in dealing with modern life's challenges. Modernity in technology and society contributes to a broad range of psychological issues, such as bullying cases, substance addiction, marital and household problems, work stress, and daily life stress. Without serious action, these stressors may lead to more critical conditions, such as depression, trauma, and other psychological problems that may impact individual development and well-being. The Malaysian National Health and Morbidity Study conducted in 2017 reported that 36.6% of adolescents are depressed. This finding reported that an increasing number of people have a mental illness. In 2019, the prevalence of depression among adults aged 18 years and above in Malaysia was 2.3%. By state, the prevalence was highest in WP Putrajaya at 5.4% followed by Perlis at 4.3% (Ministry of Health, 2019). Meanwhile, the current depression prevalence in other Asian countries, such as Japan and Thailand range from 2.2% to 10.4% (Kessler & Bromet, 2013; Kongsuk, 2008). In the United States, one in five adults lives with a mental illness (46.6 million in 2017) (Eagan et al., 2016). Moreover, most of these mental disorders start at the age of 24 years (Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995; Kessler & Ustun, 2008; Merikangas, He, Burstein, Swanson, & Avenevoli, 2010). Mental health problems that are not treated early can persist into adulthood among individuals and disrupt learning (Kessler et al., 1995), negatively impact

productivity (Wang et al., 2007), lead to substance abuse (Weitzman, Nelson, & Lee, 2004) and influence college students' life.

However, a person with a high level of resilience has their own strengths when facing challenges in life. According to Smith et al. (2008), there are many definitions of resilience. For Carver (1998) and Tusaie and Dyer (2004), resilience is *'the ability to bounce back or recover from stress, to adapt to stressful circumstances, to not become ill despite significant adversity, and to function above the norm in spite of stress or adversity'*. When a person with a high level of resilience faces a problem or stressful event, they will accept the situation and rise again to find a way to overcome the problem. They can function well and deal with stressful situations. Thus, they can control the presence of mental illness symptoms at an early stage while being able to function in life better. However, how do people build strong resilience in themselves to achieve a more satisfying life? One important way is by having a good social support system. Social support can make a person feel loved, and their presence is significant in others' life. Love and social relationships are also one of the basic needs of a person (Maslow, 1943). For university students, this support system's presence may help them strengthen their resilience, especially when faced with the challenges of university life.

A college's environment plays a significant role in helping students to enhance their life satisfaction. Students spend most of their time at university or college than at home. Living in this challenging day characterised by rapid change and economic uncertainty is not an easy task. Students who recently entered a university or college also show that they suffer from mental health problems and depression (Eagan et al., 2016). Life in a university requires students to adapt to a new life and environment. At university, they will be exposed to new situations, whether positive or negative, and these resources will affect their life. For continuing life that is full of challenges, students also need a social support system. A person will obtain motivation from their social support system. It is a source of strength for them to face any challenges in life. This support system consists of family, friends and significant others.

Therefore, identifying the life satisfaction status among students is important to understand the risky aspects of mental disorder. An early assessment of any mental health status dimension can be considered a preventive action before the problem becomes worse (Clark & Sousa, 2017). In addition, knowledge about the support systems needed by this group is essential to enhance life satisfaction. Researchers should focus on aspects of student needs at the university level to achieve and maintain an individual's life satisfaction. Therefore, in this study, we focus on the role of resilience and social support that may enhance life satisfaction.

2.0 LITERATURE REVIEW

In the following section, we review the literature on the fundamental concepts of our study. We divide the discussion into three parts to describe the relationships between variables in this study. Resilience and life satisfaction is the first part, followed by social support and life satisfaction and lastly, we review resilience and social support.

2.1 Resilience and Life Satisfaction

In recent studies, resilience plays a mediating role in enhancing mental health outcomes such as life satisfaction and quality of life. Findings indicate that resilience can increase university students' life satisfaction whereby they will be happier when they can build their resources to continue living (Cohn, Fredrickson, Brown, Mikels, & Conway, 2009). These resources include the ability to continue facing any challenges. For example, in another population, Koelmel, Hughes, Alschuler, and Ehde (2017) found significant longitudinal relationships between social support, resilience, and mental health outcomes among individuals with a disability. In a job setting, employee life satisfaction was affected by their resilience and job stress, whereas employee life satisfaction was less affected by exposure to verbal and physical violence (Itzhaki et al., 2015). Resilience can be defined as an individuals' ability to navigate through life's challenges to enhance themselves with health resources for their well-being, relationships, and communities and the ability of individuals to communicate with others in a culturally appropriate way (Ungar, 2008). Resilience is the inner strength of a person that embraces many aspects of the self, including emotional, spiritual, cognitive, and physical aspects. Resilience is a person's ability to cope when they experience demanding situations in life. Individuals with high resilience are normally able to cope with a problem and find solutions to it. Resilience is critical in helping students to achieve life satisfaction and good mental health. By building resilience, a person may increase their life satisfaction (Cohn et al., 2009). Highly resilient individuals have good self-esteem, good self-efficacy, and an ability to control and resolve problems. They are also optimistic and flexible (Fredrickson, 2004) and recover quickly from stressful situations. Resilience was found to contribute to an individual's life satisfaction (Shen & Zheng, 2011), good mental health (Foster, Cuzzillo, & Furness, 2018), less anxiety (Zakin, Solomon, & Neriya, 2003), low depression (Zakin et al., 2003), and low suicide (Pietrzak, Russo, Ling, & Southwick, 2010).

In universities or colleges, life demands students to be able to adapt to the environment. During this time, they typically have left their family, begun to form their identities, and begun to differentiate themselves from their original family. At this point, they need to adjust in many

ways, including learning and assimilating new values and accommodating cultures around them. This situation requires a high degree of resilience in resisting any emerging inconveniences. In this regard, social support is crucial in maintaining an individual's well-being.

2.2 Social Support and Life Satisfaction

Perceived social support can be defined as an individual's belief in the support they receive from their relationships. These include their social contacts and the quality of that support (Dour et al., 2014). This support system may consist of family members, friends and significant others in an individual's life. Perceived social supports were found to influence life satisfaction or happiness (Davey, Bouman, & Arcelus, 2014; Shelton, Wang, & Zhu, 2017; Brannan, Biswas-Diener, & Mohr, 2013; Nabi, Prestin, & So, 2013), and quality of life (Oldfield, Stevenson, Ortiz, & Haley, 2018). At the same time, deficiencies in social relationships can lead to stress and depression as symptoms of mental illness. These, in turn, may introduce more serious mental disorders like schizophrenia or mood disorders as well as other mental illnesses like manic symptomatology (Koenders et al., 2015). A lack of social support makes a person lonely. Having limited friends to express their feelings results in more time to aggravate negative, distracting thoughts. A person who is under severe stress may worsen without immediate social support. People with low social support have lower life satisfaction levels. They are more likely to experience depression and psychiatric problems (Hansen, Fuentes, & Aranda, 2018) and take longer to recover from mental disorder (Hybels, Pieper, Blazer, & Steffens, 2016). A lack of social support also affects the relapse rate among individuals with depression (Backs-Dermott, Dobson, & Jones, 2010).

In a study conducted by Berkel and Constantine (2005), women tend to perceive themselves in terms of other individuals with whom they are close. The happier and closer the relationship is, the greater the satisfaction experienced in their life. Individuals who lack social support prefer to be alone and avoid interaction with others (Menec, Newall, Mackenzie, Shooshtri, & Nowicki, 2020). This might be one of the sources of dissatisfaction. A lack of social support and emotional exhaustion may affect work quality and adjustments in the workplace. Conversely, in any stressful situation, individuals with high social support know how to use their support systems to help them cope with pressures or problems that arise. Simply stated, having good coping strategies (Umberson, & Montez, 2010) and good social support enables individuals to have a sense of belonging, identity and more meaningful life.

Individuals with good social support can cope well in life. High social support systems can help individuals deal with internal and external pressures in life. People with depression who expect poor social support have poor outcomes in symptoms, recovery, and social functioning (Wang, Mann, Llyod-Evans, Ma, & Johnson, 2018). These people can be categorised as being lonely and receiving less social support. Greater loneliness predicts having worse depression. Like university students, as found by Akanni and Oduaran (2018), those who have good social support have higher life satisfaction and can adapt much better, especially during the initial stages of university life. Therefore, social support is an essential factor in young people's life satisfaction.

2.3 Resilience and Social Support

Most researchers reported a significant relationship exists between resilience and social support. However, social support does not uniquely contribute to enhancing resilience entirely (Scarf et al., 2017). However, the perceived support and need for support mediates the relationship between received support and stress coping or resilience (Rzeszutek, Oniszczenko, & Firląg-Burkacka, 2017). This is similar for college students; they are more adaptable and resilient to challenging environments when they have good social support. Life in a university is more challenging, especially for students. In other cases, perceived social support plays a vital role in increasing resilience to social media addiction (Bilgin & Tas, 2018). People with social media addiction can divert their attention by spending time with their personal social networks. As a result, they are more communicative and interact more frequently with people and their surroundings. In addition, the presence of a good social support system helps in controlling one's emotions (Kroenke, Kubzansky, Schernhammer, Holmes, & Kawachi, 2006). In terms of family relationships, if students have good differentiation of self, they usually can adapt and be more independent. Differentiation of self is a condition where people can differentiate themselves well from their family of origin and at the same time, maintain the familial relationship.

Malkoç and Yalçın (2015) also found that resilience has a significant relationship with social support among university students in Turkey. In this case, resilience may not directly contribute to social support, but is relevant in more unique circumstances. The relationship between resilience and social support can be seen from the perspective of how changes in social support can change the strength of the relationship between resilience and life satisfaction. In addition, Wilks and Spivey (2010) found a significant relationship between resilience and social support among university students. They found that students who have a social support

system will be more resilient. They are able to overcome pressures commonly found in academic life. Wilks and Spivey (2010) also raise appropriate suggestions that involve friends or peer support as an essence in educational programs. Peer support enables students to be more resilient.

Meanwhile, in a study by Zhang, Zhang, Zhang, Zhang, and Feng (2018) on China's university students, there is a significant relationship between resilience and perceived social support. University administrators are encouraged to take appropriate steps to increase resilience as well as find appropriate sources of social support to prevent physiological distress. In other perspectives, persons with high resilience have their own strength when facing life's challenges. Persons with high resilience will strive to find resources to help them face challenging situations or stressful events. These resources help them recover from stressful situations, and they can make new adjustments to problematic situations and avoid the symptoms of mental illness. When a person with a high level of resilience faces a problem or stressful event, they will accept the situation and then can rise again to find a way to overcome the problem (Carver, 1998; Tusaie & Dyer, 2004). These resources can be the social support systems such as family, friends and significant others.

2.4 Resilience, Social Support and Life Satisfaction

Despite the evidence discussed above, it remains unclear by what mechanisms resilience may enhance an individual's life satisfaction. One possibility is the effect of the amount of social support that is received by individuals. The three sources of social support in this study were family, friends, and significant others. Since social support is crucial in one's life and is one of the good predictors of well-being, we propose that social support may mediate between resilience and life satisfaction. A mediation relationship may explain how these effects occur. This study aims to provide specific empirical evidence on how social support affects life satisfaction and resilience. The variety of findings adds to the mixed evidence on social support and its relation to life satisfaction. Therefore, we conducted this study to get clear evidence to explain these relationships.

2.5 Hypotheses

Building on the literature reviewed above, we developed hypotheses about the interrelated relationships between resilience, social support, and life satisfaction, as presented in Figure 1. We hypothesise that:

Hypothesis 1(H1): Higher resources of resilience result in higher levels of life satisfaction, even when controlling social supports.

Hypothesis 2 (H2): Higher levels of perceived social supports result in higher levels of life satisfaction.

Hypothesis 3 (H3): Higher levels of resilience result in a higher level of social support.

Hypothesis 4 (H4): The impact of resilience on life satisfaction is partially mediated by social support.

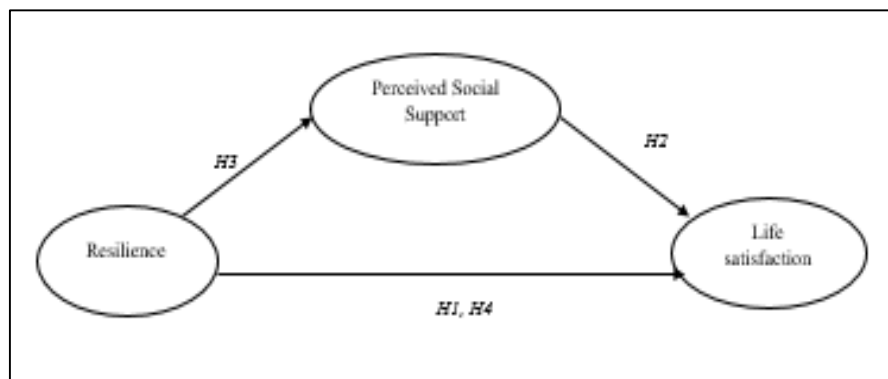


Figure 1: Conceptual model

3.0 RESEARCH DESIGN

This study employed a cross-sectional survey design to gather data on the perception of university students' life satisfaction, resilience and perceived social support. The data were analysed using parametric analysis.

3.1 Participants

A total of 491 college students (78% female, n=384; 22% male, n=107, median age=26.07, age range 18-47 years) were in the study cohort. Most of the participants were Malays (n=378), followed by Chinese (n=46), Indian (n=24), and other races (n=44). 6.4% of the participants were from a diploma level, 84% of the participants were undertaking bachelor studies, 9.4% were at a master's level, 0.2% from a doctorate level, whereas the rest did not report their level of study. The study consisted of 94.9% (n=466) unmarried participants, 4.9% (n=24) married participants, while 0.4% either did not report their relationship status or had another relationship status. Most of the participants were Muslim (n=396), followed by Christian (n=35), Buddhist (n=33), Hindu (n=18), and others (n=4), while the rest did not report their religion.

3.2 Measurement and Procedures

All scales were translated into the Malay language by using back-to-back-translation procedures. The set of questionnaires were administered individually and in group settings. A paper version of the questionnaire was administered during a university lecture to the participants who participated voluntarily. All participants sat individually in a classroom. A research assistant was present in the room to give instructions on how to complete the questionnaire. All participants were given five to 10 minutes to finish answering the questionnaire.

3.2.1 Life Satisfaction

To measure the level of life satisfaction, we adapted the Satisfaction with Life Scale (SWLS) by Diener, Emmons, Larsen, and Griffin (1985). SWLS is a five-item scale using a seven-point Likert scale specifically designed to measure global cognitive judgements of one's life satisfaction. An example of an item includes, "In most ways, my life is close to my ideal" and "The conditions of my life are excellent." Confirmatory factor analysis (CFA) was performed to measure the construct validity of this scale. We omitted low factor loads items (<0.5).

3.2.2 Resilience

The Brief Resilience Scale (BRS) by Smith et al. (2008) was used in this study. BRS contains six items with a 5-point Likert. Based on the results of confirmatory factorial analysis for BRS, we used three of the original six items to measure resilience as its construct validity has been well established. Some item examples include: "I tend to bounce back quickly after hard times" and "I have a hard time making it through stressful events." The Cronbach alpha was 0.89, indicating that the study's data has good internal consistency.

3.2.3 Perceived Social Support

The Multidimensional Scale of Perceived Social Support developed by Zimet, Dahlem, Zimet, and Farley (1988) containing 12 items were used to measure perceived social support. Sample items were: "There is a special person who is around when I am in need." and "My family really tries to help me." Cronbach's alpha for these data was 0.92, indicating good consistency and validity. In this study, we used the adapted version (11 items) of this scale.

4.0 ANALYSIS AND DISCUSSION

We used SPSS 25.0 for descriptive and correlational analysis and AMOS 24.0 for structural equation modelling. We performed confirmatory factor analyses by applying the maximum likelihood method to examine the construct validity and test the path analysis. We based guidelines in the data analysis on the criteria of goodness-of-fit, which are chi-square per degree of frequency, comparative fit index (CFI), Tucker-Lewis index (TLI), and root mean square error of approximation (RMSEA). Significant chi-square fit indices above 0.90 (Bentler & Bonett, 1980) and RMSEA at or less than 0.7 (Hu & Bentler, 1999) indicate a model is adequate.

Before testing the hypotheses, we checked the study's assumptions on statistical aspects. Firstly, we investigated the suitability of our sample size. Kline (2005) states that a minimum of 100 to 200 participants is the suggested sample size to run structural equation modelling. Furthermore, Grimm and Yarnold (1995) recommend a minimum sample size of five to 10 participants per observed variable. Our model incorporates 20 observed variables; hence, a sample size of 200 is required to perform CFA. More than 400 respondents participated in this study, which demonstrates the adequateness of the sample size. We also investigated the univariate normality over the skewness and kurtosis value (Tabachnick & Fidell, 2014). The value ranged from -2.00 to +2.00 of skewness and kurtosis, thereby showing no violation of assumptions of normality in the current study. We also checked on the multivariate kurtosis coefficient and critical ratio (Mardia, 1970, 1974). The cut off value of 5 indicates non-normal distribution (Bentler, 2005). In this data study, we found that the multivariate kurtosis coefficient and the critical ratio were a bit higher than the suggested value, but this was acceptable given the violation of normality being common in larger sample sizes (Pallant, 2013). In addition, there is a linear relationship among variables in this dataset. Taking this point, we decided to proceed with our analyses.

4.1 Confirmatory Factor Analysis

Before we tested the measurement and structural model's simultaneous estimation, we investigated the measurement model to check for construct validity. In our dataset, we found that our full measurement model has an acceptable fitness to the data, $\chi^2/df=2.49$, $p < .001$, CFI =.97, GFI= .96, TLI =.96, RMSEA =.055. Hence, we proceeded to the next process of data analysis.

4.2 Structural Equation Modelling

The structural equation model that incorporates our hypothesised paths was evaluated and revealed to be an acceptable model, $\chi^2/df = 2.49$, $p < 0.001$, CFI = 0.97, TLI = 0.96, RMSEA = 0.055. Overall, the results suggested that adequate fit indexes were achieved in this study's data. Calculation of value of average variance extracted and composite reliability convergent validity followed the guidelines of Hair, Black, Babin, Anderson, and Tatham (2006). Cronbach's alpha was good, supporting homogeneity. Table 1 reports the standardised betas of the direct, indirect, and total effects of each variable in the model in the three latent constructs. Hypotheses 1, 2, 3, and 4 were supported by the SEM analysis results, as all three causal relationships were significant. The results prove that:

1. The direct effect of resilience on life satisfaction (0.358) was positive, indicating that higher resilience leads to higher life satisfaction levels, even when controlling social support.
2. The effect of social support on life satisfaction was positive (0.211), lending support to hypothesis 2 that the stronger social support received, the higher the life satisfaction of individuals.
3. The relationship between resilience and social support was also significant (0.544), indicating that higher resilience leads to greater social support.
4. The impact of resilience on life satisfaction is partially mediated by social support. The total effect of resilience on life satisfaction (0.47) was mediated by 35.8% through social support, in which the indirect effect of resilience on life satisfaction = 0.115.

Table 1: Direct, indirect, and total effects of resilience, social supports and life satisfaction

Effects	Resilience → Social supports	Resilience → life satisfaction	Social supports → life satisfaction
Direct effect	0.544***	0.358***	0.211***
Indirect effect		0.115***	
Total effect	0.544***	0.47***	0.211***

4.3 Discussion

This study's findings prove that individuals with high resilience are more likely to achieve higher life satisfaction. Resilience is the inner strength of individuals that enables them to react rationally in difficult situations and makes individuals more competent (Li, Martin, Armstrong,

& Walker, 2011). In this study, we also found that resilience may enhance life satisfaction with good social support. The sources of social support can be parents, friends, and significant others in our life. In this perspective, resilience is proven to be related to social systems that provide positive support, and these systems enhance resilience through a variety of social support mechanisms. Resilience helps individuals to cope with the challenges of life and face extremely negative emotions. In higher education, students should learn the importance of becoming a highly resilient person. Resilience will help them to build inner strength to face any obstacle in life.

In addition, we found that social support is crucial in ensuring that individuals achieve an optimum level of life satisfaction. Individuals who prefer to be alone have more time to brood and focus on their problems in life. They allow more space for negative thoughts to control them. Contrastingly, individuals who enjoy having people surround them will fill their daily lives with various activities. Subsequently, they have little time and space to think about the adverse events that have come across their life. They usually will use the support systems they may have to motivate themselves. In a higher education setting, social support-based interventions such as support groups (Mitchell, 2000) may help students perform better in their academic studies. College students should be more involved in community programs that involve more people. In this way, students are exposed to new experiences and have better self-concepts and self-efficacy for their self-growth and development. By engaging in social groups, students can build up their identity.

Adding to the new findings, we found that family is the most significant social support source among college students in Malaysia. Therefore, we highlight the importance of social support to students' life. Cultural differences between individualist and collectivist societies may explain the different findings in Malaysia compared to the findings in most Western studies. In Malaysia, most of the population is primarily ethnic Malay and ethnic Chinese who practice a family tradition or a culture of collectivism. Collectivist societies are concerned with togetherness, mutual support, mutual respect, courtesy and living in harmony. Collectivism is a lifestyle that emphasises an interdependent self-concept whereby the sense of togetherness or belonging is more important than the feeling of "I". Individuals' ability to distance themselves from the family of origin and develop 'I feeling' may not be important, or at least not as important as it is in Western societies covered in previous research. In Malay society, if one family member suffers, another member of the family will usually share the same feeling. Lu (2009) stated that interdependence in family value might result in a better life adjustment.

Our findings are in line with past studies that reported individuals with high resilience who have more social ties are more likely to live peacefully. Sociability shows the importance of social support, especially when having a problem. Some people are more likely to be silent when having problems because they do not want to burden others and feel embarrassed to share those concerns with others because they might show their weakness. In reality, humans need love and a sense of belonging. As discussed in Maslow's Hierarchy of Needs Theory (Maslow, 1943), love or sense of belonging is a basic human need. This is also shown in a well-known theory in counselling: the Theory of Individual Psychology by Adler (1956). Adler emphasised that every individual has a series of life tasks to be achieved. One of the life tasks is the need for love and a relationship with other people. This need for love is essential for someone to understand their potential. Individuals may get love and a sense of belonging from their social support systems, such as parents, friends, and significant others.

5.0 CONCLUSION

Persons who have high satisfaction in life also have a good level of psychological well-being. They are able to live happily and be grateful for everything they have. They also have an ability to overcome any life obstacle. In order to assist university students achieve life satisfaction, various aspects need to be emphasised. University students are exposed to various challenges, such as problems with friends, distance from family, financial concerns and other issues. These problems can exacerbate if not quickly mitigated early on. In fact, if an individual has mental disorder symptoms, it is certainly difficult for a person to achieve life satisfaction. Therefore, attention should also be given to prevention and early treatment that can help get rid of any symptoms of mental disorders such as depression, high levels of anxiety, loneliness, feeling hopeless and other bad feelings or behaviour.

Based on these findings, this study has implications for counsellors in higher education. Social support can be one of the most effective preventive elements to address mental health problems among college students. Preventive counselling and related programs may play important roles in developing better well-being. Preventive counselling involves individual counselling services, group counselling, and public awareness education that considers all aspects of the person's environment, physical and spiritual-interpersonal reality (Belkin, 1984). In preventive counselling, college counsellors may seek the areas where the individual may need help. In this context, individuals learn how to avoid future problems by using their social support sources. College counsellors should provide public awareness campaigns on the need for good support systems necessary to enhance life satisfaction. For students with a low level

of life satisfaction, social support interventions may be necessary in the treatment and prevention component to enhance their life satisfaction. Mental health awareness programs need to convey to the college community the importance of community living and the importance of having close friends who can share mutual respect and support. This intervention should involve both aspects of resilience and social support. In addition, the exploration of social support systems in individuals or group counselling is beneficial. The role of social support systems has been proven in enhancing life satisfaction. Therefore, these aspects need to be emphasised in the counselling process. College counsellors may also engage a student's family members by providing family counselling or therapy.

Our study examined the role of social support in mediating the relationship between resilience and life satisfaction. Future researchers interested in this area may develop and evaluate the effectiveness of how resilience and social support interventions are implemented to ensure the findings of this study are further validated.

Despite this, the limitations of this study are noted. Due to the cross-sectional study nature, we are mindful that the variables do not have a temporal order. Due to this limitation, we suggest future research considers longitudinal study in their research design. In terms of samples, the percentage of each ethnicity in our samples may not capture the real distribution of ethnicity in college students. Therefore, we suggest that future researchers include an equal number from each ethnicity in their study. We also suggest future research to include the examination of cultural variables. This would be an important finding for college counsellors as it may give some insights into how cultural differences may impact life satisfaction, especially for international students, as found by Kilinc and Granello (2003). In addition, it would be interesting if future researchers can include students who live far from home. A clearer picture can be obtained to differentiate students' social support system, whether they stay with family or friends. Although this study includes postgraduate students, the unequal number of students in each category prevented analysing resilience according to type of study. There might be different conditions for undergraduates compared to postgraduates. For example, some postgraduate students are working, married and usually older than undergraduates. These differences can contribute to interesting findings.

In conclusion, higher resilience was found to be linked to higher life satisfaction. The impact of resilience on life satisfaction is partially mediated by social support. In other words, resilience increases life satisfaction by building good social support. College counsellors may want to consider incorporating resilience and social support aspects in their psychoeducation counselling interventions.

ACKNOWLEDGEMENT

This research was supported by the Bridging Grand Challenge Grant [RF004O-2018] under University of Malaya funding.

REFERENCES

- Adler, A. (1956). Understanding life. In H. L. Ansbacher, & R. R. Ansbacher (Eds.), *The individual psychology of Alfred Adler: A systematic presentation in selections from his writings* (pp. 327-332). Harper Torch Books.
- Akanni, A. A., & Oduaran, C. A. (2018). Perceived social support and life satisfaction among freshmen: Mediating roles of academic self-efficacy and academic adjustment. *Journal of Psychology in Africa*, 28(2), 89-93.
- Backs-Dermott, B. J., Dobson, K. S., & Jones, S. L. (2010). An evaluation of an integrated model of relapse in depression. *Journal of Affective Disorders*, 124(1), 60–67.
- Belkin, G. S. (1984). *Introduction to counselling* (2nd ed.). William C. Brown.
- Bentler, P. M. (2005). *EQS 6 structural equations program manual*. Multivariate Software, Encino.
- Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, 88(1), 588–606.
- Berkel, L. A., & Constantine, M. G. (2005). Relational variables and life satisfaction in African American and Asian American college women. *Journal of College Counseling*, 8(1), 5-13.
- Bieda, A., Hirschfeld, G., Schönfeld, P., Brailovskaia, J., Lin, M., & Margraf, J. (2019). Happiness, life satisfaction and positive mental health: Investigating reciprocal effects over four years in a Chinese student sample. *Journal of Research in Personality*, 78(1), 198-209.
- Bilgin, O., & Tas, I. (2018). Effects of perceived social support and psychological resilience on social media addiction among university students. *Universal Journal of Educational Research*, 6(4), 751-758.
- Brannan, D., Biswas-Diener, R., & Mohr, C. D. (2013). Friends and family: A cross-cultural investigation of social support and subjective well-being among college students. *The Journal of Positive Psychology*, 8(1), 65–75.
- Carver, C. S. (1998). Resilience and thriving: Issues, models, and linkages. *Journal of Social Issues*, 54(1), 245–266.

- Clark, A. M., & Sousa, B. J. (2017). The mental health of people doing qualitative research: Getting serious about risks and remedies. *International Journal of Qualitative Methods*, 17(1), 1-3.
- Cohn, M. A., Fredrickson, B. L., Brown, S. L., Mikels, J. A., & Conway, A. M. (2009). Happiness unpacked: Positive emotions increase life satisfaction by building resilience. *Emotion*, 9(3), 361–368.
- Davey, A., Bouman, W. P., & Arcelus, J. (2014). Social support and psychological well-being in gender dysphoria: A comparison of patients with matched controls. *The Journal of Sexual Medicine*, 11(12), 2976–2985.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49(1), 71-75.
- Dour, H. J., Wiley, J. F., Roy-Byrne, P., Stein, M. B., Sullivan, G., Sherbourne, C. D., ... Craske, M. G. (2014). Perceived social support mediates anxiety and depressive symptom changes following primary care intervention. *Depress Anxiety*, 31(5), 436-442.
- Eagan, M. K., Stolzenberg, E. B., Ramirez, J. J., Aragon, M. C., Suchard, M. R., & Rios-Aguilar, C. (2016). *The American freshman: Fifty-year trends 1966-2015*. Higher Education Research Institute, UCLA.
- Foster, K., Cuzzillo, C., & Furness, T. (2018). Strengthening mental health nurses' resilience through a workplace resilience programme: A qualitative inquiry. *Journal of Psychiatric and Mental Health Nursing*, 25(1), 338-348.
- Fredrickson, B. L. (2004). Gratitude, like other positive emotions, broadens and builds. In R. A. Emmons & M. E. McCullough (Eds.), *Series in affective science: The psychology of gratitude* (pp. 145–166). Oxford University Press.
- Grimm, L. G., & Yarnold, P. R. (1995). *Reading and understanding multivariate statistics*. American Psychological Association.
- Hair, Jr., J. F., Black., W. C., Babin., B. J., Anderson., R. E., & Tatham., R. (2006). *Multivariant data analysis*. Pearson International Edition.
- Hansen, M. C., Fuentes, D. F., & Aranda, M. P. (2018). Re-engagement into care: The role of social support on service use for recurrent episodes of mental health distress. *Journal of Behavioral Health Services Research*, 45(1), 90-104.
- Hu, L., & Bentler, P. M. (1999). Cut off criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1), 1–55.

- Hybels, C. F., Pieper, C. F., Blazer, D. G., & Steffens, D. C. (2016). Heterogeneity in the three-year course of major depression among older adults. *International Journal of Geriatric Psychiatry*, 31(7), 775-782.
- Itzhaki, M., Peles-Bortz, A., Kostitsky, H., Barnoy, D., Filshtinsky, V., & Bluvstein, I. (2015). Exposure of mental health nurses to violence associated with job stress, life satisfaction, staff resilience, and post-traumatic growth. *International Journal of Mental Health Nursing*, 24(5), 403-412.
- Kessler, R. C., Sonnega, A., Bromet, E., Hughes, M., & Nelson, C. B. (1995). Posttraumatic stress disorder in the national comorbidity survey replication. *Archives of General Psychiatry*, 52(12), 1048-1060.
- Kessler, R. C., & Ustun, B. (2008). *The WHO world mental health surveys: Global perspectives of mental health surveys*. Cambridge University Press.
- Kessler, R. C., & Bromet, E. J. (2013). The epidemiology of depression across cultures. *Annual Review of Public Health*, 34(10), 119-138.
- Kilinc, A., & Granello, P. (2003). Overall life satisfaction and help-seeking attitudes of Turkish college students in the United States: Implications for college counselors. *Journal of College Counseling*, 6(1), 56-68.
- Kline, R. B. (2005). *Methodology in the social sciences: Principles and practice of structural equation modeling* (2nd ed.). Guilford Press.
- Koelmel, E., Hughes, A. J., Alschuler, K. N., & Ehde, D. M. (2017). Resilience mediates the longitudinal relationships between social support and mental health outcomes in multiple sclerosis. *Archives of Physical Medicine and Rehabilitation*, 98(6), 1139-1148.
- Koenders, M. A., Giltay, E. J., Hoencamp, E., Elzinga, B. M., Spinhoven, P., & Spijker, A. T. (2015). The bidirectional impact of perceived and enacted support on mood bipolar outpatients. A two-year prospective study. *Comprehensive Psychiatry*, 60(1), 59-67.
- Kongsuk, T. (2008). The prevalence of major depressive disorders in Thailand: Results from the epidemiology of mental disorders national survey 2008. <http://www.dmh.go.th/downloadportal/Morbidity/Depress2551.pdf>
- Kroenke, C. H., Kubzansky, L. D., Schernhammer, E. S., Holmes, M. D., & Kawachi, I. (2006). Social networks, social support, and survival after breast cancer diagnosis. *Journal of Clinical Oncology*, 24(7), 1105-1111.
- Kumar, H., Shaheen, A., Rasool, I., & Shafi, M. (2016). Psychological distress and life satisfaction among university students. *Journal of Psychology & Clinical Psychiatry*, 5(3), 1-7.

- Li, H., Martin, A. J., Armstrong, D., & Walker, R. (2011). Risk, protection, and resilience in Chinese adolescents: A psycho-social study. *Asian Journal of Social Psychology*, 14(4), 269-282.
- Lu, L. (2009). 'I or we': Family socialisation values in a national probability sample in Taiwan. *Asian Journal of Social Psychology*, 12(2), 145-150.
- Malkoç, A., & Yalçın, İ. (2015). Relationships among resilience, social support, coping, and psychological well-being among university students. *Turkish Psychological Counseling and Guidance Journal*, 5(43), 35-43.
- Mardia, K. V. (1970). Measures of multivariate skewness and kurtosis with applications. *Biometrika*, 57(1), 519-530.
- Mardia, K. V. (1974). Applications of some measures of multivariate skewness and kurtosis in testing normality and robustness studies. *Sankhya, Series B*, 36(1), 115-128.
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370-396.
- Menec, V. H., Newall, N. E., Mackenzie, C. S., Shooshtari, S., & Nowicki, S. (2020). Examining social isolation and loneliness in combination in relation to social support and psychological distress using Canadian Longitudinal Study of Aging (CLSA) data. *PLOS ONE*, 15(3), 1-20.
- Merikangas, K. R., He, J. P., Burstein, M., Swanson, S. A., & Avenevoli, S. (2010). Lifetime prevalence of mental disorders in US adolescents: Results from the national comorbidity survey replication--adolescent supplement (NCS-A). *Journal of the American Academy of Child and Adolescent Psychiatry*, 49(10), 980-989.
- Ministry of Health. (2019). *The national health and morbidity survey 2019: Non-communicable diseases, healthcare demand and health literacy*. Institute for Public Health.
- Mitchell, N. A. (2000). Sister-friends: A counselling group for black female undergraduates. *Journal of College Counseling*, 3(1), 73-77.
- Nabi, R. L., Prestin, A., & So, J. (2013). Facebook friends with (health) benefits? Exploring social network site use and perceptions of social support, stress, and well-being. *Cyberpsychology, Behavior, and Social Networking*, 16(10), 721-727.
- Pallant, J. (2013). *SPSS survival manual: A step by step guide to data analysis using IBM SPSS* (4th ed.). Allen & Unwin.
- Oldfield, J., Stevenson, A., Ortiz, E., & Haley, B. (2018). Promoting or suppressing resilience to mental health outcomes in at risk young people: The role of parental and peer attachment and school connectedness. *Journal of Adolescence*, 64(1), 13-22.

- Pietrzak, R. H., Russo, A. R., Ling, Q., & Southwick, S. M. (2010). Suicidal ideation in treatment-seeking veterans of operations enduring freedom and Iraqi freedom: The role of coping strategies, resilience, and social support. *Journal of Psychiatric Research*, 45(6), 720-726.
- Raja Mahmoud, J. S., Staten, R. T., Hall, L. A., & Lennie, T. A. (2012). The relationship among young adult college students' depression, anxiety, stress, demographics, life satisfaction, and coping styles. *Issues in Mental Health Nursing*, 33(3), 149-156.
- Rzeszutek, M., Oniszczenko, W., & Firląg-Burkacka, E. (2017). Social support, stress coping strategies, resilience and posttraumatic growth in a Polish sample of HIV-infected individuals: Results of a 1-year longitudinal study. *Journal of Behavioural Medicine*, 40(6), 942-954.
- Scarf, D., Hayhurst, J. G., Riordan, B. C., Boyes, M., Ruffman, T., & Hunter, J. A. (2017). Increasing resilience in adolescents: The importance of social connectedness in adventure education programmes. *Australasian Psychiatry*, 25(2), 154-156.
- Shelton, A., Wang, D. C., & Zhu, W. (2017). Perceived social support and mental health: Cultural orientations as moderators. *Journal of College Counseling*, 20(1), 194-207.
- Shen, K., & Zeng, Y. (2011). The association between resilience and survival among Chinese elderly. *Demographic Research*, 23(5), 105-116.
- Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernand, J. (2008). The brief resilience scale: Assessing the ability to bounce back. *International Journal of Behavioral Medicine*, 15(3), 194-200.
- Tabachnick, B. G., & Fidell, L. S. (2014). *Using multivariate statistics*. Allyn & Bacon.
- Tusaie, K., & Dyer, J. (2004). Resilience: A historical review of the construct. *Holistic Nursing Practice*, 18(1), 3-8.
- Umberson, D., & Montez, J. K. (2010). Social relationships and health. *Journal of Health and Social Behavior*, 51(1), S54-S66.
- Ungar, M. (2008). Resilience across cultures. *The British Journal of Social Work*, 38(2), 218-235.
- Wang, J. M., Mann, F., Lloyd-Evans, B., Ma, R., & Johnson, S. (2018). Associations between loneliness and perceived social support and outcomes of mental health problems: A systematic review. *BMC Psychiatry*, 18(156), 1-16.
- Wang, P. S., Aguilar-Gaxiola, S., Alonso, J., Angermeyer, M. C., Borges, G., Bromet, E. J., ... de Girolamo, G. (2007). Use of mental health services for anxiety, mood, and substance

- disorders in 17 countries in the WHO world mental health surveys. *Lancet, Author Manuscript*, 370(9590), 841–850.
- Weitzman, E. R., Nelson, T. F., & Lee, H. (2004). Reducing drinking and related harms in college: Evaluation of the "A Matter of Degree" program. *American Journal of Preventive Medicine*, 27(1), 187-196.
- Wilks, S. E., & Spivey, C. A. (2010). Resilience in undergraduate social work students: Social support and adjustment to academic stress. *Social Work Education: The International Journal*, 29(3), 276-288.
- Zakin, Z., Solomon, Y., & Neriya, Y. (2003). Hardiness, attachment style, and long term psychological distress among Israeli POWs and combat veterans. *Journal of Personality and Individual Differences*, 34(1), 819-829.
- Zhang, M., Zhang, J., Zhang, F., Zhang, L., & Feng, D. (2018). Prevalence of psychological distress and the effects of resilience and perceived social support among Chinese college students: Does gender make a difference? *Psychiatry Research*, 267(1), 409-413.
- Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The multidimensional scale of perceived social support. *Journal of Personality Assessment*, 52(1), 30-41.