Factors Affecting the Perceived Level of Stress Among Students Taking Entrepreneurship Program in a Public University in Malaysia

Mohd Zulkifli Muhammad, Ahmad Ridhuwan Abdullah, Mahathir Muhammad, Muhammad Naqib Mat Yunoh, Zul Karami Che Musa, Abd Aziz Mat Hassan, and Siti Fariha Muhamad

Faculty of Entrepreneurship and Business, Universiti Malaysia Kelantan, Jalan Pengkalan Chepa, 16100 Kota Bharu, Kelantan, Malaysia
{zulkifli.m,ridhuwan.a,mahathir.m,naqib,zul,abdaziz.mh,fariha}@umk.edu.my

Abstract. This study aims to investigate the effects of academic stress and family support toward the perceived level of stress among students in an entrepreneurial-focused university. This study utilizes a quantitative approach to investigate the causal effects between the variables. The data was collected through an online survey to get the information from a sample of 205 students using a 5-point Likert-Scale question. The findings revealed that all the three independent variables, namely the academic stress and family support are positively associated with the risk of having stress among students. The findings suggest that a continuous stress awareness education among students in coping the stress they experience in taking entrepreneurship program.

Keywords: Perceived level of stress · Academic stress · Family support

1 Introduction

The meaning of stress in medical or biological is a factor from physical, mental, or emotional that cause tension of mental or bodily. Stress also can be defined as a feeling or situation experienced by individuals which see the requests set on them over their abilities (Heinen et al. 2017). The primary factors of infection rates worldwide are depression, anxiety and stress. This is the most common of emotional health issue in the USA.

The person’s life will have a bit of discomfort when there are more uncertainty and the high probability for a person to encounter stress (Yang et al. 2017). The mental health level of university students in the country is still under control and not reached a serious level yet. It does not mean that all parties can take the factor of stress lightly. There are various methods need to be taken to prevent mental health problems among university students through the involvement of all parties starting from prevention, rehabilitation and development aspects. It’s can help in avoiding stress to spread in the life of the
Malaysian society thus contributing to the improvement of world mental health statistics. The mental health problem refers to stress, depression and anxiety that if not prevent immediately can contribute to even worse effects including suicide attempts.

The range number of age for a youthful grown-up is around 17 and 25 years old. It has been reported as the most serious risk in the development of serious mental illness than people in the other age. Every student definitely feels the change in their life starting from the first day of their admission to the university and it will always grow over time. Developments that occur in every life of students will directly involve changes, which apply to psychological and social processes for them. During college years, students need to figure out an important action that they need to learn to adapt academic pressure in college. On the formative stage, the students recently discovered as a stressor, which can advance the beginning of emotional health problems.

The students who rise from a low socioeconomic background such as financial problem expose into worse depression, anxiety and stress in China and elsewhere in the world (Yang et al. 2017). This situation usually occurs because of their parents are having financial problems such as low-income sources. The lack of money can make students depressed. Parents of low-income backgrounds would have an effect on children who are still studying. Richardson et al. (2017) point out financial issue could affect students’ psychology, by emphasizing that it could lead them to an irregular state of anxiety and deterioration in mental health over time.

University students usually have a lot of assignment that needs to be submitted in one semester. Therefore, indirectly this load contributes to a higher pressure by completing the task. There are students who face with academic stress when they are concentrates for their tests and outcomes as a result of rivalry and a large amount of knowledge that assimilate in a very short time (Gupta et al. 2017). The study found that students were a force to spend 10 to 40 h working to finance campus spending. The causes of stress among students is mainly by two factors: academic duty and non-academic duty factors (Gupta et al. 2017). The main power source of academic pressure for some students: their fear of falling behind, to find the motivation for them to learn, the pressure of time, the pressure on financial and their concern regarding the academic skills they owned (Gupta et al. 2017).

This paper is organized as follows. Section 2 reviews the related literature and proposed relationships in the conceptual model. Section 3 describes the design of the study and data collection procedure. Section 4 presents and discuss the results. Finally, Sect. 5 concludes the paper, states the limitations of the study, and recommendations for future research.

2 Literature Review

2.1 Perceived Level of Stress

Stress arises when individuals’ demands cannot be satisfied with their current set of resources. Demir et al. (2014) highlight that stress is a major psychosocial factor that affects the academic performance and wellbeing of students, especially for students enrolling in nursing program as they face more difficulty than those enrolled in other health departments. Despite of stress is likely to occur more in nursing or other health
science students, business schools’ students also may experience stress. Stress can occur regardless of age, gender, level of study, social and socioeconomic status. Frazier et al. (2016) stated that experience in university life could be a very unpleasant time. This is especially valid as the time of change from school into university life requires students to figure out on how to quickly adapt, thus exposing them to academic stress.

2.2 Academic Stress

Sources of stress among students include their perception of the substantial knowledge base and the sense of insufficient time to achieve it (Misra and Castillo 2004). They further noted that students report unsurprisingly feeling of academic stress, with the main sources of academic stress to be found in taking and preparing for tests and in relation to grade competition and the vast amount of material to be learned in a limited period of time. Furthermore, students may develop psychological distress when they fail to succeed in their academic and might lead them to suicidal ideation (Ang and Huan 2006).

The amount of workload and learning needs are common factors causing anxiety and eventually lead to stress among students (Aherne et al. 2016). Almojali et al. (2017) have reported that to adjust and cope with their workload and depressing environment, medical students tend to reduce their sleep, hence may reduce their quality of life. Furthermore, Ayala et al. (2018) studied the relationship between perceived stress and quality of life in medical students and found that they are highly and inversely related. Therefore, the study hypothesizes that:

H1: The academic stress will positively affect the perceived level of stress.

2.3 Family Support

Fatoba and Bzdzikot (2015) have reported that family support and stress are related. In their study, final year medical students were invited to take part in the interviews and to complete self-administered survey. There are about 35 medical students which equal to 76% of response rate that responded. There is 54% male in mirroring class demographics. The majority of the participants were more than 25 years old and about 89 percent were unmarried. Based on the results, it shows that most of the students needed support and relied on their family, friends and classmates when stressed.

One of the support types provided by the family is financial support. According to Richardson et al. (2017) there is a relationship between the financial problems of the family with stress in the United Kingdom. This investigation used information from a planned accomplice consider on educational cost charges sum and mental health in students. This same informational index has likewise been inspected in connection to dietary problem chance and financial difficulties. In their study, a longitudinal model was used to determine whether improvements in mental health over time in college students are influenced by financial factors. Financial related difficulties seem to prompt poor mental health among students with the likelihood of an endless loop happening. Therefore, the study hypothesizes that:

H2: The family support will positively affect the perceived level of stress.
3 Methodology

3.1 Research Design

This study was conducted using the causal research approach in which the researcher examines the relationship of cause and effect between variables in the sample where it is presumed that one variable influences another. The questionnaire will be used as the main instrument to get the data variables information from the respondents.

3.2 Sampling

The respondents for this research are students of a public university in Malaysia, the Universiti Malaysia Kelatan. Students from two faculties were selected, namely the Faculty of Entrepreneurship & Business (FEB) and Faculty of Hospitality, Tourism and Wellness (FHTW).

Target Population and Sample Size

The target population in this study is among the first, second and third-year students from both faculties. There are 1535 students of the first year, 1220 students of the second year and 1090 students of the third year from FEB and FHTW. Thus, the total numbers of the target population in this study are 3845 students. This study involves the first year until third-year students of FEB and FHTW from all the courses in UMK City Campus this is because of their same learning pattern. They are required to attend classes, quizzes, group work and sit for the final exam. For FEB students for Bachelor of Entrepreneurship (SAE) course, the researcher did not include them in this study because of their learning requirement is different from the other students. SAE students are structured using the 2U2I programme (2-year University 2-year Industry). Their stress levels may differ because their learning patterns are also different compared to other FEB students. For final year students for FEB is not included in this study as it is involved with industrial training. Different task scopes make it difficult for the researcher to analyse the data at the end of this study. A total of 205 students have answered the online survey and used as the sample of the study.

4 Results and Discussion

The finding is analysed through from the objects that need to be achieved. Our research objectives in measuring the extent to which academic stress and family support influence the perceived level of risk among students. There were 349 respondents that participated in this study.

Overall, in terms of accuracy of the three independent and dependent variables or the Cronbach’s Alpha reliability coefficients, the results show a good level of reliability. The results are showed as below (Table 1):

The results indicate that the Cronbach’s Alpha for the seven items academic stress measure is 0.838. Next, the results show that the Cronbach’s Alpha for the seven items of family support measure is 0.851. The results indicate that the Cronbach’s Alpha for
Table 1. Cronbach’s alpha

|                      | Cronbach’s Alpha | Number of items |
|----------------------|------------------|-----------------|
| Academic stress      | 0.838            | 7               |
| Family support       | 0.794            | 7               |

Table 2. Overall data and normality test of shapiro-wilk for independent and dependant variable

| Variable                  | Academic stress | Family support |
|---------------------------|-----------------|----------------|
| Mean                      | 35.0634         | 25.1561        |
| Median                    | 34.0000         | 26.0000        |
| Std. Deviation            | 7.16958         | 5.31138        |
| Skewness                  | −0.186          | −0.671         |
| Normality Saphiro wilk Test | 0.035       | 0.000          |
| Remarks                   | Not normal because P < 0.05 | Not normal because P < 0.05 |

the seven items family support measure is 0.794. Therefore, the internal reliability of the measure used in this study can be considered strong for internal consistency. It also means that the questionnaire about the academic stress and family support is acceptable.

Table 2 above shows that, the data for the independent variable and dependent variables based on Shapiro-Wilk is not normally distributed. This occurs probably because of lack of respondent and we only focusing on University Malaysia Kelantan’s student. From the table, descriptive statistic shows that mean of perceived level of stress among UMK graduated student (DV) is 35.0634 which mean that most the respondents agree with the perceived level of stress among UMK graduated students. The standard deviation result for the dependent variable (Stress) is 7.016958. Meanwhile, the mean of the academic stress is figured at 24.7854 which are shows that respondent agrees that the academic stress influence the perceived level of stress among UMK graduated students. The standard deviation result for academic stress is 5.45236. Lastly, the mean of family support is 25.1561 which means most of the respondents agree that family support influence the perceived level of stress among UMK graduated students while the result for standard deviation is 5.31138. The normality for this research are not normal because the result is lower 0.05. Maybe this happens because we only focus only on Student in Universiti Malaysia Kelantan (UMK) and lack of respondents. This normality is referring to the Shapiro-Wilk test.

Table 3 has shown the mean for the independent variable which is the academic stress and family support. The lowest mean score is 24.79 which mean most of the students are less agree with the factor academic stress will cause perceived level of stress among UMK students, while the mean score of 25.16 for family support suggest that half of the respondents agree that family support causes the perceived level of stress among them.
Table 3. Descriptive statistic for total independent variables and dependent variables

| Variables                  | Mean   | Std. Deviation | N  |
|----------------------------|--------|----------------|----|
| Perceived level of stress (DV) | 35.0634 | 7.16958        | 205|
| Academic stress (IV)        | 24.7854 | 5.45236        | 205|
| Family support (IV)         | 25.1561 | 5.31138        | 205|

Spearman’s Rho Correlation Analysis

The correlation coefficient varies from $-1.0$ to $1.0$. There is a perfect negative relationship if the value of coefficient is $-1.0$. Then, if the value of coefficient is $0$, no relationship between the variables is indicated. In this analysis, one of the important tests to calculate the linear relationship between two variables is the Spearman Rho correlation test. The purpose of this test is to decide if the coefficient of correlation is statistically significant and to classify the hypothesis to be accepted and rejected. The researcher must determine, if the relationship is relevant, what intensity of the connection is appropriate.

Table 4. Correlation coefficient for the academic stress and the perceived level of stress among UMK students

| DV                      | IV (Academic stress) | DV (Perceived level of stress) |
|-------------------------|----------------------|--------------------------------|
| Correlation Coefficient | 1                    | .731**                         |
| Sig. (2-tailed)         | .000                 |                                |
| N                       | 205                  | 205                            |
| Correlation Coefficient | .731**               | 1                              |
| Sig. (2-tailed)         | .000                 |                                |
| N                       | 205                  | 205                            |

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

Table 4 shows Spearman’s rho correlation coefficients, significance value and the number of cases which is 205. The correlation coefficient for the academic stress towards perceived level of stress among UMK students is 0.731 is relatively close to 0.71 to 0.90. Based on the result in Table 4, the correlation of academic stress and stress obtained are $r = 0.731$ and $p < 0.01$. This show high positive relationship was correlated. Referring to the r-value, the academic stress and perceived level of stress had a high positive relationship with only 1% chances that this relationship did not exist. The positive value of 0.731 shows that the relationship between the academic stress and the perceived level of stress among UMK students is at a positive level. Its shows that 73% dependent variable (perceived level of stress) is influenced by the independent variable (academic stress). In conclusion, it shows that the significant levels of the academic stress and perceived level of stress are 0.000 that show highly significant.
Table 5. Correlation coefficient for family support and the perceived level of stress among UMK students

|     | IV (Family support) | DV (Perceived level of stress) |
|-----|---------------------|--------------------------------|
| IV  | Correlation Coefficient | 1 | .626** |
|     | Sig. (2-tailed) | .000 |
|     | N | 205 | 205 |
| DV  | Correlation Coefficient | .626** | 1 |
|     | Sig. (2-tailed) | .000 |
|     | N | 205 | 205 |

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

Table 5 shows Spearman’s rho correlation coefficients, significance value and the number of cases which is 205. The correlation coefficient for family support towards perceived level of stress among UMK students is 0.626 is relatively close to 0.41 to 0.70. Based on the result in Table 5, the correlation of family support and stress obtained are \( r = 0.626 \) and \( p < 0.01 \). This shows a moderate positive relationship correlated. Referring to the \( r \) value, family support and stress had a moderate positive relationship with only 1% chances that this relationship did not exist. The positive value of 0.626 shows that the relationship between family support and the perceived level of stress among UMK students is at a positive level. It shows that 63% dependent variable (perceived level of stress) is influenced by the independent variable (family support). In conclusion, it shows that the significant levels of family support and stress are 0.000 that show highly significant.

5 Conclusion and Recommendations

This present study explores the determinants of stress among Year 1 to Year 3 students from an entrepreneurship focus university. In this study, there are independent variables namely academic stress and family support that was included to examine the relationship with the stress.

Based on the result in this study, the researchers found that independent variable which is the academic stress and family support has a relationship with dependent variable stress. The result from the questionnaires answered by respondents showed that all the independent variable is the contributing factors to the perceived level of risk among students. These results indicate that the stress problem among university students is not focalize among nursing or other science-based students. Stress problem is universal which may happen to any student, regardless of their academic track they enrolled in. Therefore, universities should have an action plan on how to deal with the problem.

The findings of this research can be used for universities or other higher learning institutions to improve their learning system, particularly on the entrepreneurship education in order to mitigate the risk of stress among students. Besides that, they also need to be aware of the stress impact because it relates to the risk of health problems, which
would be costly to the university and students. Any programme related to awareness of stress risk should be done by universities to improve students’ productivity and academic performance, as well as to get them more engaged in the entrepreneurial agenda of the university.

This study has several limitations. First, the data was only collected from two business-related faculties. Future research can include sample from science-based faculties. This will make the results more interesting as comparison can be made between science and non-science students. Another limitation is the study uses the linear regression to examine the relationship between the variables. It would be interesting if future research could use path analysis or structural equation modelling in investigating the effects of academic stress and family support on perceived level of stress.

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