Factors That Affect Students' Mental Health: A Study at Taylor's University School of Hospitality, Tourism and Culinary Arts Final Year Students

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Abstract Undergraduates are often looked upon as the next building blocks in a country's economic growth and development. It is felt that with the growing body of knowledge and hectic pace of technology, the undergraduate student's academic workload and academic stress are increasing. This increase in workload and stress can affect the undergraduate student's mental health. There are limited studies in Malaysia focusing on academic workload and academic stress on the mental wellbeing among final year students at Taylor's University School of Hospitality, Tourism and Culinary Arts. The aim of this study is to research the relationship between academic workload and student mental health, the relationship between academic stress and student mental health and the perceived level of academic stress. Questionnaires were distributed to 201 final year students at Taylor's University School of Hospitality, Tourism and Culinary Arts. This study could support the university to review the curriculum and adjust the academic workload in order to reduce academic stress among university students. The results of this study hope to assist university management and students to recognise the relationships between academic stress caused by academic workload and student's mental health in the Hospitality, Tourism and Culinary Arts courses. Furthermore, students would realise how academic workload and stress can affect their mental health and recognise symptoms such as poor eating habits, insomnia, depression and suicidal tendencies as consequences of academic stress and encourage them to seek help from mental health professionals.

Keywords Academic workload • Academic stress • Student's mental health

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1 General Introduction

Stress is intangible; it not only affects the individual but others around them including family, friends and colleagues. Everyone has their own perception and receptivity level of stress. According to Martins et al. (2013), stress is called the 'disease of the century', and it is known to interfere with personal interactions and institutional and social activities.

The number of higher education institutions in Malaysia stands at 30 public universities and 25 private universities, as reported by the Malaysian Qualifications Agency (MQA). This has not taken into account the number of international university branch campuses, university colleges, polytechnics and community colleges. Corresponding with the number of higher education institutions is the growing number of students pursuing tertiary education. A glance at the statistics published by the Ministry of Education, from 2002 to 2012, there has been an increase from 576,439 students enrolled in higher education institutions to 976,409 students, which is a whopping increase of 69.4 % over a period of 10 years. There are a number of reasons offered as to why students pursue a bachelor's degree. As indicated by Kim et al. (2002), the top reasons are interest in the type of work, job opportunities, opportunities for self-employment, good match with student abilities and an increase in projected earnings.

In 2006, the Ministry of Health reported an overall prevalence of 11.2 % for psychiatric morbidity among Malaysian adults from The Third National Health and Morbidity Survey. The impact of stress on students is obvious from the large numbers seeking help at student counselling centres in higher education institutions (Naidoo 1999). According to Garlow et al. (2008), 84 % of the students with suicidal ideation and 85 % of the moderately severe to severely depressed students were not receiving any form of psychiatric treatment. The university management and student centres should emphasise these problems and encourage students to seek help in order to cope with the symptoms before it becomes a more serious problem. While Garlow et al.'s (2008) research focused on questions of current suicidal ideation and past suicide attempts and deliberate self-harm, strong and distressing emotional states, alcohol use, drug use, eating behaviour, global functional impairment, current pharmacotherapy and psychotherapy, this study intends to focus on the effect of academic workload and academic stress on the students' mental well-being. One of the factors that contribute towards students withdrawing from the degree programme before the completion of the course, most times at a significant financial cost to the students, is the academic workload (Bowyer 2012).

As stated in the 2014 Ranking Web of Universities, Taylor's University is the 29th of the top universities in Malaysia and an MQA Tier 5 (excellent) SETARA 2011 institution. Taylor's University School of Hospitality, Tourism and Culinary Arts was the only school to have achieved the MQA's Tier 6 (outstanding) rating based on the Discipline-Based Rating System (D-SETARA). The D-SETARA system was developed and implemented to assess by discipline the quality of teaching and learning in higher education institutions in Malaysia. It aims to ensure continuous improvement to the quality and competitiveness of higher learning institutions.

1.1 Research Objectives

The main objectives of this research are to determine the relationship between academic workload and academic stress on the mental health of final year students in the Taylor's University School of Hospitality, Tourism and Culinary Arts (SHTCA). The aim of this study is to show how variables in academic stress and academic workload can be utilised to show effect on the students' mental health. The results from the research can be a valuable data for the university in adjusting the academic workload to reduce academic stress for the students in this programme. Meanwhile, students can recognise the symptoms of academic stress on their mental health and be able to seek professional help. The following are the research questions:

- What is the relationship between academic stress and mental health on Taylor's University SHTCA final year student?
- What is the relationship between academic workload and mental health on Taylor's University SHTCA final year student?

2 Literature Review

2.1 What Is Stress?

While there is no one definition of stress, according to Sutton (2011), it is known as tension or any situation that arouses emotional strain and negative feeling from a person. Stress can come from everywhere and anytime or is the emotional and physical strain caused by the response to pressure from the outside world. Stress is also explained as the body's non-specific response to any demand placed upon it (Jayakumar and Sulthan 2013). The responses may be physical like a headache, or an emotional response such as fear or depression or a behavioural response such as anxiety or worry. A stressor is an environmental element that is perceived by the individual as menacing and mendacious to his or her well-being (Lazarus and Folkman 1984). Some think that zero stress means happy and healthy, but this is wrong. If stress is well-managed, it can make people motivated and productive. If mismanaged, stress can hurt and kill someone.

However, when stress goes beyond the amount which a person is not able to handle, then stress stops being helpful and starts causing damage to health, productivity, relationships and quality of work (Sutton 2011). According to Melvin (2014, p.193), stress can be divided into two factors which are internal and external. External stress appears when the stress comes from outside like environment or event. Melvin (2014, p.193) said that internal factors consist of nutritional status, anticipation, imagination, overall health, memory and fitness levels, emotional well-being, and the amount of rest you get. On the other hand, external factors which affect your capability include the social relationship, familial relationship, physical environment, financial problems and so on. In this study, the research will

focus on the internal stress which is academic stress on student mental health. According to American National Institute for Mental Health, there are four categories of warning signs which are cognitive signs, emotional signs, physical signs and behavioural signs. Cognitive signs are the inability to concentrate, memory problems, negative thinking, poor judgement and constant worrying. The moodiness, feeling overwhelmed, depression and short temper are the emotional signs of stress (Sutton 2011). Examples of physical sign are headaches, constipation, chest pain and dizziness. The behavioural signs include eating more or less, sleeplessness, overdoing activities such as exercising and shopping, developing nervous habits such as nail biting or pacing and using drugs or alcohol to release their stress (Sutton 2011).

2.2 Academic Stress

There have been a number of researches on academic stress. Academic stress is a mental distress with respect to frustration associated with academic failure, apprehension of such failure or even an awareness of the possibility of such failure (Gupta and Khan 1987). According to Berg and Keinan (1986), a significant stressor leading to academic stress was the high self-expectation students impose on themselves. Another study indicated that holding the student under continuous examination and coursework assignments caused academic stress (Clift and Thomas 1983). Furthermore, Kahlon (1993) found that the factors of stress were fear of examination, living up to parental expectation, attitude of the lecturer, lack of parental help and congenial examination system. In addition, Kadapatti and Vijayalaxmi (2012) said that academic stress is a combination of academic-related demands that exceed the adaptive resources available to an individual. Zeidner (1992) found that the students appeared to be under high pressure starting from academic overload and evaluation procedures.

According to Gadzella (1994), academic stress is divided into four parts which are frustration, pressure, changes and self-imposed expectations. For example, when the tuition fee is due and/or assignment or project is needed to be submitted, the student will feel stressful. Coursework overload is when assignments from various subjects, presentations and assessments are due around the same time. Gadzella (1994) mentioned that when students do not have good interpersonal relationships with friends and family, it can also affect their mental well-being.

According to Bean and Hammer (2006), 55 % students have to ignore one subject for the preparation of the other subject, 42.5 % students reported moderate level of stress, whereas in 27 %, the stress level was beyond a manageable level. Jayakumar and Sulthan (2013) have identified the following as common academic stress factors – improper teaching, lack of information to be learnt, competition for scoring marks, frequent examinations, long hours of academic work, barriers in communication, heavy workload, inadequate resources, irregular attendance, dilemma in choosing the discipline and insufficient library facilities. Khan and Ayyub (2013) had identified academic stress as being caused by academic work being too hard, fear of failing coursework, lack of preparation, fear of presentations, fear of examination, long period of lecture hours and concern regarding their academic ability.

2.3 Academic Stress and Suicidal Ideation

There are strong links between academic stress and suicidal ideation among university students. The examination periods are peak season for suicide cases each year where students perceive a high level of stress (Töero et al. 2001). In the academic world, suicide is considered as a 'pathological behaviour'. In addition to depression, suicidal ideation is a strong predictor of attempted and committed suicide (Obowale et al. 2014). Based on Juon et al. (1994) study, they found that students who have experienced a high level of academic stress were more likely to think about suicide rather than those students who did not experience academic stress. Based on Westefeld et al. (2005) study which has investigated 1,800 students at four universities, there are 24 % of college students who had seriously considered suicide when in college, and 5 % had attempted suicide when in college. The suicidal behaviour is based on psychological, social and environmental factor. In Singapore, Ho Kong Wai (1999) noted that the reasons for suicide attempts were conflicts with family members (24.5 %); conflicts in interpersonal relationships with, for example, spouse, parents, siblings and friends (23.6 %); problems at school (11.0 %); work stress (2.4 %); and financial difficulties (1.0 %). Interestingly, drug and alcohol abuse was diagnosed in only 0.5 % of the cases.

2.4 Academic Stress and Depression

Ibrahim et al. (2013) identified 24 articles that met the criteria for inclusion in their study of depression prevalence among university students. They found that university students experienced rates of depression that are substantially higher than those found in the general population. Recent reviews on depression among students have also found that depressive mood is linked with low academic achievement or academic problems (Kaslow et al. 1984). One of the most popular mental disorders is depressive disorder. Undergraduate students are at a challenging period of their lives, making life-changing decisions about their education which can affect their future. A study conducted by Mackenzie et al. (2011) found that depression and other mental health disorders are a significant public health problem on college campuses. Many students have a diagnosable mental illness (as cited by Mackenzie et al. 2011; Mowbray et al. 2006). Epidemiological studies suggest that the 15–21 age category (typical college years) has the highest past-year prevalence rate of mental illness at 39 %.

2.5 Students' Mental Health

Mental health problem has become the most common and significant problem among the student population compared with the general population. University students are thought to be prone to high-level stressors due to the transition to university life and a need for scholastic success (Bitsika et al. 2010). Some common mental health problems as explained by various literatures are lack of sleep (Hicks et al. 1990, 2001), bipolar disorder (NIMH 2010) and eating disorders (Jennings et al. 2006; Madanat et al. 2006).

2.6 Academic Workload

It is essential to understand the factors of stress level in the students' life especially the academic workload which is frequently misunderstood. In order to graduate, the student needs to take up a full load of rigorous classes. The relationships of work-load and health have been investigated by many researchers using various study designs and methodological approaches. Bowyer (2012) suggests that study work-load consists of the time needed for contact and independent study, the type and timing of assessments (see Table 1), the quantity and level of difficulty of the work, the institutional factors such as teaching and resources and student characteristics such as motivation and effort. According to Kausar (2010), an average weekly basis such as lecture hours, study hours during semester, time spent in library, doing

Туре	Level of difficulty	Reason
Open-book MC test Written assignment	1	Requires little to no immediate knowledge of materials. There is no memorisation or internalisation or it is
Take-home test		inherently easy. The most assistance is available to students. Can sometimes get assistance from others
Closed-book MC test	2	Requires knowledge of materials but only minor memorisation. Students can score by guessing correctly in MC tests even without knowledge. Assistance by materials
Open-book test/exam		and luck is available to the student
Aids allowed, e.g. some notes or charts, etc.	3	Requires immediate knowledge of materials with usually only minor assistance from the aids allowed. Requires reasonable amounts of memorisation. Some assistance is available from the aids allowed
Closed-book tests/ exams	4	Requires the highest level of immediate knowledge and memorisation, usually of a reasonable amount of information. No assistance is available

Table 1 Level of difficulty of different types of assessment

Source: Bowyer (2012). A model of student workload *MC* Multiple choice test

assignment at home, finding information and meeting academic demands has been assessed as academic workload. In this study, the researcher divides the academic work to assignment, presentation, test or quiz, examination, lecture hours, events and activities which are academically related.

The majority of the students do experience changes in the level of workload and stress over the semester with a definite link between their reported levels of stress and workload on the week of semester (Lindsay and Rogers 2010). According to the Lindsay and Rogers (2010) study, around 40 % of students studying 5 h and less report less than usual stress levels; around 20 % of students studying 10–20 h report less than usual stress level, whereas this proportion is around 10 % for the categories of students who are studying 21 h and above. The students who felt more stressful than normal are related with the hours of studied per week. About 20 % of students who studied more than 15 h per week reported being more stressed than usual (Lindsay and Rogers 2010). Based on this study, the researcher realises that the students who are studying less hours have less stress than the students who are studying more hours.

According to Ong and Cheong (2009), academic stressors topped the list at 63 %, and the overall top five reported stressors were workload, too many tests, CPGA, course difficulty and lecturer characteristic. Each course has a certain amount of credits which also is student workload. According to the Taylor's University SHTCA, there are five to six subjects in the final semester. There are at least three assignments per subject. Most of the subjects have a midterm and final examination. Besides that, in the final year, students are required to submit their 40-page dissertation in the final semester. According to Taylor's University's rules and regulations, if the students' attendance falls below 80 % per subject, he or she can be barred from the subject's final examination.

2.7 Hypotheses

There are eight hypotheses in this study which are as follows:

- H_{1a}: There is a relationship between frustration (academic stress) and mental health of Taylor's University SHTCA final year students.
- H_{1b}: There is a relationship between pressure (academic stress) and mental health of Taylor's University SHTCA final year students.
- H_{1c}: There is a relationship between changes (academic stress) and mental health of Taylor's University SHTCA final year students.
- H_{1d}: There is a relationship between self-imposed expectation (academic stress) and mental health of Taylor's University SHTCA final year students.
- H_{2a}: There is a relationship between long lecture hours (academic workload) and mental health of Taylor's University SHTCA final year students.
- H_{2b} : There is a relationship between the difficulty of task (academic workload) and mental health of Taylor's University SHTCA final year students.

- H_{2c}: There is a relationship between long self-study hours (academic workload) and mental health of Taylor's University SHTCA final year students.
- H_{2d} : There is a relationship between too many school activities (academic work-load) and student mental health of Taylor's University SHTCA final year students.

3 Methodology and Instrumentation

Based on the literature, this study is using four variables for academic stress which are frustration, pressure, changes and self-imposed expectation that affect the student mental health. In addition, there are also four variables to measure academic workload that have the most impact on students' mental health; these are long period of lecture hours, difficulty of task, long study hours and too many school activities.

In this study, the quantitative method is applied based on the positivism paradigm. During the analysis, the validity has been tested; thus, the result of findings and analyses is accurate and reliable. The eight items used to measure academic stress and academic workload on students' mental health all had high reliabilities, all Cronbach's α = .861. The close-ended and open-ended question has been utilised in the questionnaire. The purpose is to collect the information and data for this study. The questionnaire is scientific, and most of the questions are multiple choice. It is convenient for the student to fill in and encourages better responses. This study was conducted at Taylor's University Lakeside Campus. The researcher selected the respondents conveniently as long as they are final year students at Taylor's University SHTCA. The survey was distributed through email, Facebook and pen-and-paper questionnaires to the final year students. There are 263 final year students at SHTCA, and the researcher received 201 usable responses for a 76 % response rate.

3.1 Results and Discussion

In Table 2, there is a summary of the sample demographics. Most of the respondents were male (55 %), from the Hospitality bachelor's degree programme (57 %) and below the age of 26 (97 %). The respondents were mainly Malaysians (60 %), and 75 % of the total respondents had a decent CGPA score of above 2.5.

In Table 3 is the mean response for academic stress caused by frustration where the highest mean was for reasons that prevented them from reaching their academic goals. Pressure was mainly due to deadlines set for assignments and even meeting the due date for the payment of tuition fees. The respondents had high self-imposed expectations; they seemed quite competitive for academic results. The variables for changes did not seem as important as the other three variables by scoring the lowest mean.

Table 2	Profile of
responde	ents ($n = 201$)

Factors	Category	Results
Gender	Male	88 (44 %)
	Female	113 (56 %)
School	Hospitality	114 (57 %)
	Tourism	36 (18 %)
	Culinary arts	48 (24 %)
Age	≤20	118 (59 %)
	21–23	68 (34 %)
	24–26	80 (4 %)
	≥27	60 (3 %)
Nationality	Local	121 (60 %)
	International	80 (40 %)
CGPA	4	0 (0 %)
	3.5-3.999	68 (34 %)
	3.0-3.499	82 (41 %)
	2.5-2.999	44 (22 %)
	2.0-2.499	4 (2 %)
	<2.0	0 (0 %)

Table 3 Academic stress

Academic stress	Mean	SD
Frustration		
I have experienced frustrations due to delays in reaching my academic goals	3.89	0.861
I have experienced daily hassles which affected me in reaching my goals	3.89	0.907
I have experienced lack of financial resources	3.84	1.009
I feel I was denied of opportunities in spite of my qualifications	3.84	0.811
I have experienced failures in accomplishing the goals that I set	3.80	0.927
Pressure	-	
Due to deadlines (paper due, tuition due, etc.)	4.17	0.851
Due to an overload (attempting too many things at one time)	4.05	0.844
As a result of competition (on grades, work, relationships with spouse and/or friends)	4.02	1.017
Due to interpersonal relationships (family and/or friends, expectation, work responsibilities)	3.43	1.134
Changes		
Rapid unpleasant changes	3.49	1.087
Too many changes occurring at the same time	3.40	1.026
Changes which disrupted my life and/or goals	3.31	0.998
Self-imposed		
I like to compete and win	3.79	0.943
I feel I must find a perfect solution to the problems I undertake	3.77	0.926
I like to be noticed and be loved by all	3.68	0.980
I worry and get anxious about taking tests	3.60	1.068

In Table 4, the respondent's mental health was affected by poor sleeping habits and depression caused by academic stress. Respondents also reported that their tempers became worse and felt that nobody cared for them due to academic stress. Some indicated either a weight gain or weight loss or consuming more coffee, alcohol and energy drinks. Very few respondents indicated that they smoked more or had suicidal thoughts.

In Table 5, the academic workload was measured by the number of subjects, lecture hours, self-study hours and the amount time spent on practical activities. The vast majority of respondents had between five and six subjects (87 %), 11–15 h of lectures per week (93 %), 6–15 h of self-study (76 %) and about 4–6 h of events to attend in the semester (52 %). Most of the respondents felt that the academic workload was heavy and very heavy (86 %) and that the tasks set were difficult and very difficult (84 %). Despite this, it is encouraging to note that the respondents who felt that they had fair to excellent general mental health were an overwhelming 98 %. The students mainly suffered from insomnia (62 %) and depression (68 %). Looking at the combination of insomnia, eating problems, depression and bad temper, 4.5 % reported having none of these problems, one problem (21 %), a combination of two problems (35 %), three problems (28 %) and all the problems (10 %).

The questionnaire contained an optional open-ended question of how the students coped with academic stress. At a glance, music seemed to have a calming effect whether it was listening to music, enjoying a karaoke session or dancing to it. Another favourite method was light exercise (jogging, going to the gym, swimming) and playing games like badminton or team sports, followed by watching television or going to see a movie. Many also indicated socialising with friends and shopping helped to reduce academic stress.

The multiple regression analysis results for the research population (sample size n=201) using Gadzella's (1994) Student Life Stress Inventory (SLSI) measures are presented in Table 6. The three variables, pressure, changes and frustration, are predictors for students' mental health. On the other hand, the research results reject the study's prediction that self-imposed expectations are a predictor of students' mental health among the students of Taylor's University SHTCA.

The pressure score is the main factor which significantly [F (1,199)=86.58, p < .05] contributes 30.3 % of the variance ($R^2 = .300$) in the students' mental health

Students' mental health	Mean	SD
I am tired and sleeping more/less than normal due to academic stress	3.94	0.909
I feel sad/depressed due to academic stress	3.93	0.974
My temper becomes worse than usual due to academic stress	3.79	1.033
I feel nobody cares for me due to academic stress	3.59	1.202
I have gained/lost weight due to academic stress	3.54	1.237
I do drink more coffee/alcohol/energy drink due to academic stress	3.26	1.202
I do smoke more than usual due to academic stress	2.30	1.354
I attempted to kill myself due to academic stress	1.95	1.254

Table 4 Students' mental health

Factors	Categories	Results
Total number of subjects in the final semester	≤4	3 (2 %)
	≤ 4 5 6 ≥ 7 ≤ 10 $11-15$ $16-20$ ≥ 21 ≤ 5 $6-10$ $11-15$ ≤ 5 $6-10$ $11-15$ ≥ 21 ≤ 5 $6-10$ $11-15$ ≥ 16 ≤ 3 $4-6$ ≥ 7 Very light Light Normal Heavy Very heavy Very easy Easy Normal Difficult Very difficult Bad Fair Good Very good Excellent Insomnia	21 (10 %)
	6	155 (77 %)
	≥7	22 (11 %)
Total number of lecture hours per week	≤10	8 (4 %)
	11–15	44 (22 %)
	16–20	143 (71 %)
	≥21	6 (3 %)
Total number of hours for self-study per week	≤5	30 (15 %)
	6–10	47 (23 %)
	11–15	106 (53 %)
	≥16	18 (9 %)
Total number of hours spent on academic activities	≤3	84 (42 %)
per semester	4-6	104 (52 %)
	≥7	13 (6 %)
Perceived academic workload	Very light	0 (0 %)
	Light	3 (2 %)
	Normal	25 (12 %)
	Heavy	101 (50 %)
	Very heavy	72 (36 %)
Difficulty of tasks	Very easy	0 (0 %)
	Easy	1 (0.5 %)
	Normal	32 (16 %)
	Difficult	72 (36 %)
	Very difficult	96 (48 %)
Perceived general mental health	Bad	3 (2 %)
	Fair	29 (14 %)
	Good	65 (33 %)
	Very good	76 (37 %)
	Excellent	28 (14 %)
Have you had any of the following problems with your	Insomnia	125 (62 %)
academic workload as a result of your mental health?	Eating problems	90 (45 %)
(can select more than one answer)	Depressed/sad	136 (68 %)
	Bad temper	90 (45 %)
	No problems	9 (5 %)
	One problem	43 (21 %)
	Two problems	71 (35 %)
	Three problems	57 (28 %)
	Four problems	21 (10 %)

Table 5Academic workload (n=201)

	Unstanda	dised coefficients	Standardised coefficients	t	Sig.
	В	Std. error	Beta		
(Constant)	1.695	2.458		.689	.491
Pressure	.701	.153	.323	4.595	.000
Changes	.471	.142	.210	3.307	.001
Self-imposed	016	.129	007	121	.904
Frustration	.470	.143	.251	3.300	.001

Table 6 Gadzella's (1994) SLSI and students' mental health

^aDependent variable: TotalSMH

 Table 7 Academic workload and students' mental health

	Unstandardised coefficients		Standardised coefficients		
	В	Std. error	Beta	t	Sig.
(Constant)	6.433	1.345		4.784	.000
Long self-study hours	.320	.149	.168	2.152	.033
Many school activities	.391	.121	.216	3.238	.001
Difficulty of tasks	.312	.164	.164	1.902	.059
Long lecture hours	.563	.162	.299	3.473	.001

^aDependent variable: TotalSMH

score. This means that the pressure (β =.323, p<.05) the students felt from competition and pressure felt from deadlines for assignments, presentation, etc. affect students' mental health the most. The combination of pressure and frustration (β =.249, p<.05) accounts for 6.9 % change of the variance (R^2 =.372) in students' mental health [F(2,198)=58.70, p<.05). However, changes caused by too many things happening at once or due to interpersonal relationships do not contribute much to students' mental health because changes (β =.209, p<.05) only account for 3.4 % change of variance (R^2 =.406) in students' mental health [F (3,197)=44.861, p<.5)].

The multiple regression model for academic stress is as follows:

Students' mental health =
$$.323$$
 (pressure) + $.249$ (frustration) + $.209$ (changes)

Table 7 shows the results from academic workload on students' mental health. The three variables, long lecture hours, too many school activities and long self-study hours, are significant to the students' mental health. However, the research results showed the difficulty of tasks such as difficulty in completing assignments and assessment did not contribute significantly to their academic workload.

Long lecture hours is the main factor which significantly [F (1,199)=169.043, p < .05] contributes 45.9 % of the variance (R^2 =.457) of the students' mental health score. This means long lecture hours (β =.394, p < .05) is the main reason the students feel tired, sad, depressed, have poor eating habits and suicidal ideation. The combination of long lecture hours and too many school activities (β =.218, p<.05)

accounts for 5.3 % change of the variance (R2 = .510) in students' mental health [F (2,198)=105.154, p < .05). However, long study hours does not contribute much to students' mental health because long study hours ($\beta = .217$, p < .05) only accounts for 1.8 % change of variance ($R^2 = .528$) in students' mental health [F (3,197)=75.637, p < .5].

The multiple regression model for academic workload is as follows:

Students' mental health =
$$.394$$
 (long lecture hours)+ $.218$ (too many school activities)
+ $.217$ (long self – study hours)

Based on the findings and analysis above, H_{1a} , H_{1b} , H_{1c} , H_{2a} , H_{2b} and H_{2c} are not rejected. There is a significant relationship between frustration, pressure, changes, long lecture hours, long self-study and too many school activities on the mental well-being of Taylor's University SHTCA final year students. The study does not accept self-imposed expectations and difficulty of tasks as having a significant relationship on the mental health of the students.

The result that self-imposed expectations were not significant disagrees with Berg and Keinan's (1986) results where self-imposed expectations are a stressor to academic stress. Factors such as long lecture hours support findings by Khan and Ayyub (2013).

3.2 Conclusion

These results contribute to existing research on academic stress and academic workload. The respondents, who are students of SHTCA, felt a significant level of frustration, pressure and stress from changes as well as a heavy academic workload; many had successfully used their preferred coping mechanisms such as music, sports and shopping as ways to reduce the stress and achieve a fair to excellent mental health. A possible outcome of this study is to encourage university management to review the number of subjects required, the number of lecture hours and the workload resulting from various assignments, presentations and assessments and still be able to fulfil the conditions set by MQA for a degree programme. Alternative forms of teaching such as blended learning initiatives vigorously undertaken by the schools at Taylor's University could provide an alternative to long lecture hours.

3.3 Directions for Further Research

Taylor's University management can highlight what are some common symptoms of negative academic stress and heavy academic workload and encourage students to visit the Counselling and Psychological Services Centre (CPSC) on campus. The CPSC offers a friendly ear whether the student is lagging behind in studies, experiencing difficulties in adjusting to campus life or feeling lonely. The counsellors offer some coping skills such as time management, handling relationship breakups, overcoming examination anxiety and other skills to cope with a variety of issues affecting student's mental well-being.

To obtain more information, the research can be expanded to include other schools such as business, mass communication, design school, computing and law at Taylor's University or even other public universities. Lastly, future research could utilise qualitative methods with quantitative methods to get better insight of the results.

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