

## A Review of Academic Stress among Hong Kong Undergraduate Students

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**Abstract:** The prevalence of academic stress among the undergraduate students in Hong Kong is serious. The objective of this study is to discuss the causes and effects of academic stress among undergraduate students. It is found that the high expectation on their study, academic overload and friendship network are the major causes of academic stress. High academic stress has a negative impact on academic performance, and will also result in internet addiction, insufficient sleeping time, change in dietary behaviour and mental health problems. After reviewing the causes and effects of academic stress, and some relevant studies and reports of the situations in Hong Kong, recommendations to develop the strategies in dealing with academic stress are suggested.

**Key words:** academic overload, academic stress, undergraduate students

### 1. Introduction

Stress is an invisible thing in life and it is good for motivating people to keep performing well. However, stress may trigger physical and mental illnesses that harm the body and affect oneself (Centre for Studies on Human Stress, 2007). Since stress can cause illnesses, attitude towards stress is the most important in handling the outcomes arising from stress. In university life, students easily feel stressed because of an array of reasons, such as academic performance, parental expectation, career development and so on. In 2012, the Commission on Youth Secretariat conducted a survey on youths aged between 15 and 24 years, and they found more than 30% of the respondents had felt stressed.

Hong Kong college students have a higher level of stress than students from different countries (Chan, 2009). It is found that the rate of anxiety among the first-year undergraduate students is high because of new social and intellectual challenges (Wong et al., 2006). This reflects that the situation of increasing pressure on students in Hong Kong needs to be aware of. Moreover, there have been three suicides in six months from secondary and university students, and the main reason for their suicide is stress in their academic life (The Hong Kong Economic Journal, 2015). Thus, academic stress among undergraduate students is serious and really alarming.

The aim of this paper is to figure out the causes of academic stress among undergraduate students. The

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effects of academic stress will be discussed. Since the pressure on the undergraduate students is showing a rising trend, teaching methods, and programmes in dealing with academic stress and its causation will be optimized by using the data in other countries, and recommendations will then be formulated.

## **2. Literature Review**

Stress is commonly found among students because of the academic “overload” and group projects. This stress, caused by the academic environment, is generally described as academic stress. A cross-sectional study conducted by Teh et al. (2015) has found that the prevalence of stress among undergraduate students in Malaysia is severe. They have discovered that studying an enormous syllabus in limited time, and the thoughts of failing in the examinations are the reasons for the students to have pressure. Furthermore, according to Pozos-Radillo et al. (2014), academic stress is positively related to loads of homework, tests, and attending lectures. Therefore, these stressors will affect the students’ academic performance, and even their health conditions. Likewise, stressful life will lead to some negative outcomes to the students, such as suicidal tendency. Academic life is a predictor of suicide ideation because students are highly concerned about the expectations of their parents (Lee et al., 2006).

Undergraduate students have a moderate level of stress. The reasons can be parental expectations and pressure. Freshmen are prone to having a higher level of stress due to the change of study pattern, while students in medical and health related programmes have the greatest level of stress comparing to other programmes. If the students cannot manage the stress well, it will affect their academic performance and increase the chance of psychological distress, which can result in some infectious diseases (Elias, Ping & Abdullah, 2011). Academic stress can cause negative impact on undergraduate students, such as mental health illnesses (Kaur, 2012). Over time, it may affect their daily life and well-being (Chan, 2009).

On the other hand, students in Korea are under the strong pressure of examinations (Hong et al., 2011). Stressful university life puts the students in a risk of unhealthy behaviour by using alcohol, tobacco and drugs. The students may also have a habit of not eating three meals a day because of studying. This habit can, in turn, affect the academic performance (So & Park, 2016). Moreover, once the students are in the intense environment, some of them may have academic underachievement, which means they feel the failure in their academic work. The academic underachievement will not only cause depression and anxiety, but also academic stress to the students. Therefore, pressure on students to get the greatest performance in academic studies may have a negative impact on them.

Academic stress is harmful to the undergraduate students, not only in their academic studies but also the psychological well-being. The issue is particularly critical nowadays, and should not be overlooked.

## **3. Causes of Academic Stress**

### **3.1 High Expectation of Academic Performance**

Students are concerned about their future, on which academic results have an impact. Undergraduate students desire to obtain first honours for their degrees, and so they have the highest expectation for the academic results. Male students often assume that academic performance is important (Moksnes et al., 2010). They compete with other colleagues to get the highest results in the examinations. Therefore, students are more likely to have academic stress as they are afraid of not meeting their own expectations. Moreover, the students fear failure

because they do not want to get low grades in the subjects and get ridiculed by their friends (Bataineh, 2013). Mulyadi, Rahardjo & Basuki (2016) have found that students with high academic stress will have low self-esteem. Positive self-esteem can lead students to feel positive and self-motivated, especially in completing individual assignments, thus resulting in low academic stress. Likewise, students with positive self-esteem have the ability to deal with any challenge and heavy workloads from the school.

### **3.2 Academic Overload**

Apart from not meeting one's own expectations, academic overload also causes academic stress (Bataineh, 2013). 65% of the first year students in Vietnam have responded that increased school workload is the reason for their stress (Do, 2007). The amount of workload of undergraduate study is great since the students must take about four to five subjects in each semester and they need to work on the assignments, group projects and examinations for each subject. As a result, they need to handle loads of work within a short duration of time. Such test and examination overloads, as well as too many assignments, are causing academic stress (Shkulaku, 2015). The great academic demands on undergraduate students are the deadlines of coursework and assignments, and the high pressure from tests and examinations (Nandamuri & Gowthami, 2011). First year undergraduate students are always found to have the most academic stress since they need to adapt to the new syllabus of their study. Also, they may not be familiar with the new study pattern and environment. They need to use most of the time to work on their assessments and projects as well as revision. Thus they have less leisure time to relax while the stress keeps increasing. Socialization can decrease the stress of the students but heavy class workload leads to less time for meeting with friends. Therefore, huge amount of academic workload causes academic stress.

### **3.3 Lack of Friendship Network**

Friendship network is also one of the academic stressors among undergraduate students. According to Pedersen and Jodin (2016), the correlation of academic stressors and friend-related stresses is significantly high since undergraduate students are experiencing separating from "old" friends and feel difficult to fit in the new friendship network. It is vital for students to develop a friend zone in their university life because friends are not only the groupmates of group projects, but also a support to the students under stress. Sharing their own feelings with friends is important in reducing stress (Pfeiffer, 2001). Likewise, academic stress of students is significantly dependent on the social support from friends and family (Glozah, 2013). Friends can provide solutions and suggestions to handle problems. So it is important for students to develop the friendship network in their undergraduate life. Besides, it is hard for undergraduate students to find the true friendship because they are always competing among them for academic results for a better future. All the classmates are competitors. Meanwhile, quarrels and even conflicts are common between groupmates of students. In addition, students also experience frustration and pressure when they are grouped with irresponsible students. As a result, undergraduate students have academic stress arising from the problems with friendship network.

## **4. Effects of Academic Stress**

Academic stress can lead to various impacts to undergraduate students, such as internet addiction, health problems and even suicide.

### **4.1 Poor Academic Performance**

According to Khan, Altaf and Kausar (2013), academic stress can have a negative impact on the academic

performance. Although little academic stress can motivate students to do better, too much academic stress will have an opposite effect. When students cannot manage their time well, their studying effectiveness will be affected. Moreover, failure will hinder a person in achieving their goals and the person feels hopeless. Academic stress, which is a chronic condition, leads to the release of cortisol at high level (Khanehkeshi, 2011). This adversely affects the hippocampus, which is vital for memory and learning, and will lead to poor academic performance.

#### **4.2 Internet Addiction**

Internet is widely used nowadays and students can retrieve lots of information and play online games. The usage rate of personal computer among the individuals aged 15 to 24 is 99.8% in Hong Kong (Census and Statistics Department, 2016). It shows that almost all of the undergraduate students use the internet. A local study has shown that more than 60% of the university students use the internet one to four hours per day and about 14% of them use the internet more than four hours. It has been found that academic stress may cause negative emotions and some problematic behaviours, such as internet addiction (Jun & Choi, 2015). Heavy internet usage also leads to unhealthy eating style and sleeping pattern (Kim et al., 2010). According to Kim, J. H. et al. (2013), university students have a greater risk of pathological internet use because they want to cope with their psychological distress by seeking happiness in playing online games. The use increases more than three times after the university life. Therefore, academic stress contributes to internet addiction of students, and pathological internet use is associated with the adverse effects on physical and mental health.

#### **4.3 Insufficient Sleeping Time**

Sleeping is important for everyone because a rest can help to restore body energy. According to the National Sleep Foundation (2016), the recommended hours of sleep for aged 18 to 25 years are about 7 to 9. Nevertheless, the study conducted by Chung and Cheung (2008) has found that students in Hong Kong has less sleeping time, compared with students from other countries. About 30% of the students have 7 or fewer hours of sleep on school days, and cannot meet the recommended sleeping time. Therefore, the sleeping time for students is inadequate, arising from the increased demand of academic life. It is also found that academic stress is associated with poor sleeping quality, and is highly related to sleeping disorders (Lemma et al., 2012; Waqas et al., 2015). Some students report that they have experienced insomnia and daytime sleepiness. Thus, academic stress has contributed to insufficient sleeping time and poor sleeping quality.

#### **4.4 Change in Dietary Behaviour**

It is vital for students to consume adequate nutrients for growth and maintenance of the body. So it is better to consume nutrient-rich food. However, students with academic stress are inclined to select and consume unhealthy and energy-dense food. Female students are more likely to choose and eat unhealthy food, such as fast food, snacks and drinks, which are high-energy food with the risk of overweight and obesity (Ahmed et al., 2014; Mistry & Puthussery, 2015). They are found to lose control of their eating patterns and eat fewer vegetables and fruits. More than 50% of the students under persistent academic stress increase the frequency of food intake, and hence total calories, because of the increase in appetite. Apart from eating fast food, students with great academic stress have a high rate of consuming sweet food (Kim Y. et al., 2013). These students always have negative emotions, and sweet food is associated with elevated happiness (Kampov-Polevoy et al., 2006). However, sweet foods, including chocolates and candies, contain lots of energy. On the other hand, eating less is also a

consequence of academic stress (Emond et al., 2016). Students have been found to consume fewer calories and carbohydrates under academic stress because they may work too hard for a better academic performance and want to use all the time on revision and assignments. Therefore, students with high academic stress have changes in dietary behaviour, and are more likely to eat unhealthily.

#### **4.5 Mental Health Problems**

Academic stress also contributes to mental problems, such as anxiety, tension and hopelessness (Kaur, 2012). Students with academic stress are prone to having negative attitudes because of various reasons, such as career development and high expectation on academic results (Ray, Halder & Goswami, 2012). They are found to have low self-esteem and depression because they got lower grades in their programmes. They feel highly pressured and think they may be laughed at by their classmates (Adlaf et al., 2001). Furthermore, the difficulty of adapting to the new academic environment is a factor for mental problems because some of the university students experience anxiety when they are in the first year of undergraduate study. Besides, pressure of seeking higher performance and heavy workload have led students to anxiety (Verger et al., 2008). Therefore, academic stress can cause mental health problems to students.

### **5. Situation in Hong Kong**

In Hong Kong, it has been found that 20% of the first year undergraduate students are in high depression, anxiety and stress level. They feel the high pressure from handling the new challenges (The University of Hong Kong Li Ka Shing Faculty of Medicine & The Hong Kong Tertiary Institutions Health Care Working Group, 2005). In addition, an online survey, aiming to discover the psychological condition of almost 15,000 full-time undergraduate students, has shown that half of the undergraduate students are high in depression, anxiety and stress level (The University of Hong Kong Li Ka Shing Faculty of Medicine & the Hong Kong Tertiary Institutions Health Care Working Group, 2007).

### **6. Recommendations**

Interventions and strategies are important and necessary for the improvement in dealing with academic stress and alleviating its related negative effects. Involvement of and contribution by different parties, together with positive supports and good communication, are essential in order to reduce the causes and effects of academic stress.

#### **6.1 Family and Social Supports**

There are few studies on parents' pressure being the major cause of academic stress. Nonetheless, parents should not give too much pressure to their children, but should support them and do so with communication (Tso, 2006). It is possible that parents do not understand the study of the children but effective communication skills can help students and their parents to overcome the obstacles. At the same time, students will feel someone being close to them and standing by them. Parents play an important role in building positive self-esteem among the students (Mulyadi, Rahardjo & Basuki, 2016). Therefore, parents should find out more from their children because by listening to their children, they can help to alleviate the academic stress. According to Berger, Hasking, and Martin (2013), youths may not seek help from parents or teachers. Instead, friends play an important role in supporting the students to relieve academic stress. They think friends can give them some parallel suggestions.

Overall, it is important that parents and friends should provide more caring and are willing to listen.

### **6.2 Campus-based Programmes**

Universities, through the Student Affairs Office, can indeed do a lot to help the students to avoid and relieve their academic stress. Although universities have counseling teams to provide a means for students to actively seek help, the effectiveness of the counseling teams is not clear. This is because counseling teams are always “passive”. Mahmoud et al. (2012) have suggested that the universities can do better to raise students’ awareness of the need to use counseling service. The counseling teams should develop programmes that actively help to define whether students may have academic stress or not. For example, a questionnaire in the middle of a semester may enable a counseling team to evaluate the academic stress of students and then the team can provide adequate, effective and useful supports to them accordingly.

Developing relaxation activities for students is also an effective way to reduce and prevent academic stress. These activities should help students to re-gain and enhance their self-esteem. For example, music combines sound and words, and it can trigger people’s feelings and mind. Thus, listening to music can help students to avoid academic stress. According to Sharma and Jagdev (2012), music therapy is a medical art for treating the disequilibrium of physiological and psychological conditions of the body. It can enhance the self-esteem of people by expressing their own personality. It is found that students’ interpersonal communication, self-esteem and self-expression are improved after music therapy.

Proper time management is not only fundamental in the university life but also in the students’ future works. College students with better time management are more likely to have better grades (Nadinloyi et al., 2013). Colleges should provide more programmes other than lectures about time management for students to learn how to manage their time and schedules efficiently. Providing suggestions to better arrange their works can facilitate time management, although this cannot guarantee a greater grade point average (GPA). Appropriate time management programmes should be provided with the aim to assist students in the management of their academic stress.

### **6.3 Changing Teaching Methods**

Most teachers are delivering teaching materials during the lectures. Students only listen to the lecturers without much motivations. Undergraduate students are concerned about their academic performance, and there exists a strong feeling of academic overload. Altering the teaching methods, assessment criteria, and syllabus of the subjects are ways to alleviate academic stress. Courses emphasizing the participation of students have effectively motivated students to learn (Pereira & Barbosa, 2013). Lecturers should provide incentives and games related to the syllabus in order to facilitate students’ learning and interaction in the classes. For example, it has been reported that educational computer games can stimulate the learning interests of students (Ebner & Holzinger, 2007) and promote their learning motivation (Burguillo, 2010; Jong et al., 2008). It can also increase students’ self-esteem by providing incentives for them to answer questions. Giving different opportunities to students to form groups for some tasks can also help them to expand their friendship network, which is one of the causes of academic stress. Overall, different teaching strategies can reduce academic stress.

### **6.4 Promoting the Importance of Exercises**

Regular exercise is one of the options for university students to moderate the stressful college life. Physical activities can not only reduce the risks of some diseases, but also promote relaxation. Unfortunately, intense

university life does not allow undergraduate students enough time to exercise. Although they may have interest in sports, there are only few undergraduate students participating in the exercise programmes provided by the university (Lee & Loke, 2005). A local study has found that about 40% of the college students rarely exercise regularly, and that students are lack of exercise in their college life (Fong et al., 2015). Therefore, it is better to promote the importance of exercises to undergraduate students. By taking reference from the “Healthy Schools Programme”, the training of teachers is also necessary as they play an important role in health education and promotion (Lee et al., 2003). To promote exercises, the university should provide incentives to students, such as refunds to student participants for full-course completion, because it can attract more students to join the physical activity courses during college life. In addition, the university can provide compulsory courses in physical activities that bear credit units for students to take. For example, the Chinese University of Hong Kong provides physical education for the students to enhance their fitness. In short, giving more opportunities for students to join the physical activity courses can promote the importance of exercises, thus helping to reduce the problems arising from academic stress.

## **7. Conclusion**

Academic stress is a serious and prevalent problem in Hong Kong. It can lead to mental problems and even suicides of undergraduate students. The major causes and effects of academic stress are well established by numerous studies. Students strive to seek higher grades for graduation with a higher class honour, which may lead to a better future career. However, it is better to balance academic and leisure time because too much time on academic works will result in high academic stress, while leisure time can help to relax. Once students cannot manage the time well, it is possible that they will develop intense academic stress. Therefore, good time management is essential for all students.

Apart from time management, social supports and campus-based programmes are also necessary in helping students to avoid and to deal with academic stress. In addition, different educational strategies can effectively reduce the academic stress of undergraduate students. Therefore, the Hong Kong government, educational authorities and colleges should be more concerned about academic stress and its effects to university students, in order to reduce the number of suicides. Likewise, cultural change in the teaching methods, with more involvement of and interaction from the students, can effectively increase their motivation to study. Furthermore, vivid teaching is more preferred by students and they can enjoy more in their studies. Such inspiration can truly teach students in critical thinking, which is important in future career development. Lastly, more studies about academic stress among undergraduate students should be conducted, particularly in Hong Kong, for a better understanding of the situation, so that enhanced strategies and recommendations for improvement and interventions can be formulated.

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