

Faculty of Cognitive Sciences and Human Development

THE INFLUENCE OF EMOTIONS ON SECONDARY SCHOOL STUDENTS' LEARNING AND ACADEMIC ACHIEVEMENT DURING COVID-19 PANDEMIC

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THE INFLUENCE OF EMOTIONS ON SECONDARY SCHOOL STUDENTS' LEARNING AND ACADEMIC ACHIEVEMENT DURING COVID-19 PANDEMIC

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This project is submitted in partial fulfilment of the requirements for a Bachelor of Psychology with Honours

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ABSTRACT

This study aimed to discover the extend of emotional influence towards secondary school students learning and academic achievement while the academic year took place amidst the COVID-19 pandemic. The simultaneity of the Movement Control Order (MCO) implemented by the government and exclusive online learning conducted in secondary schools in Malaysia is a key element that this research aimed to explore as it is a relatively new experience by both the educators and adolescents. This research was conducted using the mixed method research utilizing the embedded design involving 381 participants in the quantitative survey study and 5 respondents in the qualitative study. The study has indicated the level of emotions experienced by the secondary school students are anxiety, sadness, fear, and desire. From the analysis of inferential statistics using the Spearman Correlation, the study has found that there is a relationship between enjoyment, hope, pride, anxiety, and boredom towards the students' academic achievement. The factors causing the emotions experienced during online learning was found to be lack of social interaction with peers, presence of distraction such as easy access to smartphones, unpleasant class environment, overwhelming workload, and not having to meet a lot of people on daily basis. The findings from this study will enable further understanding on the degree of the role of emotional experiences in influencing learning and academic achievement among adolescents in secondary school during online learning amidst an unprecedented time due to the COVID-19 pandemic.

Keywords: emotions, online learning, adolescents, pandemic, academic achievement

ABSTRAK

Kajian ini bertujuan untuk mengetahui sejauh mana pengaruh emosi terhadap pembelajaran pelajar sekolah menengah dan pencapaian akademik semasa tahun akademik berlangsung semasa pandemik COVID-19. Keselarasan Perintah Kawalan Pergerakan (PKP) yang dilaksanakan oleh kerajaan dan pembelajaran atas talian secara eksklusif yang dijalankan di sekolah menengah di Malaysia merupakan elemen utama yang ingin diterokai oleh penyelidikan ini kerana ini merupakan pengalaman yang agak baharu oleh para pendidik dan remaja. Penyelidikan ini dijalankan menggunakan kaedah kajian campuran menggunakan reka bentuk terbenam yang melibatkan 381 peserta dalam kajian tinjauan kuantitatif dan 5 responden dalam kajian kualitatif. Kajian telah mengenalpasti tahap emosi yang dialami oleh pelajar ialah kebimbangan, kesedihan, ketakutan, dan keinginan. Daripada analisis statistik inferensi menggunakan Korelasi Spearman, kajian mendapati terdapat hubungan positif antara keseronokan, harapan, kebanggaan, kebimbangan, dan kebosanan terhadap pencapaian akademik pelajar. Faktor-faktor yang menyebabkan emosi yang dialami semasa pembelajaran atas talian adalah kekurang interaksi sosial dengan rakan sebaya, kehadiran gangguan seperti akses mudah kepada telefon pintar, persekitaran kelas yang kurang menyenangkan, jumlah kerja sekolah yang membebankan, dan ketidak perluan berjumpa ramai orang setiap hari. Penemuan daripada kajian ini akan membolehkan pemahaman lanjut tentang peranan pengalaman emosi dalam mempengaruhi pembelajaran dan pencapaian akademik dalam kalangan remaja di sekolah menengah semasa pembelajaran atas talian dalam situasi yang belum pernah berlaku akibat pandemik COVID-19.

Kata kunci: emosi, pembelajaran atas talian, remaja, pandemik, pencapaian akademik

CHAPTER ONE

INTRODUCTION

1.0 Introduction

This study aims to explore the influence of emotions towards the students' learning and achievement during the current COVID-19 pandemic considering the students is currently experiencing different learning setting compared to the pre-COVID-19 days. Given the circumstances that students and instructors are in separated locations, including the movement control order (MCO) instructed by the government, this study aims to discover the effect of the current learning situation towards students' emotions whether it will influence their studies and academic achievement. As students must adapt to the sudden change of learning environment and methods, this study is carried out in hopes to answer questions on to the extent of emotion's influence towards students' learning and academic achievement during COVID-19 pandemic. This chapter will describe the foundational components of this study such as the background of the study, problem statement, research objectives, significance of study, possible limitations of the study, and definition of terms involved. In this introductory chapter, the information regarding emotions and past similar studies related to academic achievements and the influence of emotions towards students' learning will be presented in the following sections.

1.1 Background of Study

The COVID-19 pandemic has been affecting the lives of people from all around the globe. To curb the infection rate of the COVID-19, countries all around the world has initiated lockdown to limit the movement of their citizens. Most academic institutions worldwide have been adapting new methods of teaching and learning whereby learning is depended greatly on the use of technology by utilizing online platforms, including distribution of students' learning

materials and communication. Data reported by the United Nations Educational, Scientific and Cultural Organization (UNESCO) discovers that approximately 90% of students worldwide are affected by the closure of academic institutions to help contain the infection of the virus (Commodari & Rosa, 2021). The transition from physical learning to online learning might give positive or negative impact towards students, depending on their perception towards this change. A key concern with online learning is the lack of sufficient interaction between the students and instructor (Adnan & Anwar, 2020). A study by Adnan and Anwar (2020) has discover that students believed that face-to-face interactions with instructors are crucial for learning and that distance learning student-instructor interactions is insufficient. In addition, Artino (2012) suggests that emotions are prevalent in the online education context.

According to Valiente, Swanson, and Eisenberg (2012), emotion is an individual's reaction to stimuli, which is complemented with the evaluations of the circumstances encompassing the stimuli. Learning related emotions has been studied by researchers where they compare the effect of positive and negative emotions towards academic achievement. In 2018, Putwain et al. carried out a study to discover the corresponding relationship between academic achievement, enjoyment, and boredom. The findings from this study suggests that emotions and achievement interact in a recurring pattern such that enjoyment in learning can resulted to greater achievement and lower academic achievement can resulted to boredom.

A study by D'Errico, Paciello, and Cerniglia (2016) highlighted the challenge encountered by students during online learning is emotion cues sharing. The absence of physical face-to face interaction has somehow gives an impact towards their motivation to learn in a restricting environment of the online learning where it is hard for the students to share nonverbal communication with their peers. In other words, previous studies are only focusing on the students' emotional impacts towards learning as they faced challenges due to limited interactions and emotional cue between their peers. The limiting non-verbal interaction

between peers is also identified as an obstructing factor in distance learning (Khalil et al., 2020). Nevertheless, there are a considerable number of previous studies focusing primarily on the effect of motivation or stress towards learning (Valiente, Swanson, & Eisenberg, 2012; Pascoe, Hetrick, & Parker, 2019). Although most previous studies have shown interest in similar topic of the influence of the emotions towards students' learning and achievement, most of the previous research conducted highlighted their interest in measuring the role of emotion in which it focuses on the context of social emotions (peer-to-peer, instructor-student interactions) of their subject of interest.

In the recent years, the field of educational psychology has been giving more interest in studying the association between emotions and learning towards an individual. Some of the emotion of interest that was studied in this scope of study includes enjoyment, worry, and frustrations in which was highlighted in research done by Artino (2012) where he studied the association between emotion and online learning among university students. Research conducted by Pekrun (2006) proposes the Control-Value Theory of Achievement Emotions. Achievement emotions is defined as emotions associated to the actions or outcomes that are linked to success (Pekrun, 2006). Pekrun suggested the control-value theory, which explained emotions as being strongly linked to cognitive and motivational encounters, as well as cognitive and motivational consequences. The control-value theory developed by Pekrun has been used as an integrative framework for studying diverse emotions encountered in the context of achievement (Mega, Ronconi, & Beni, 2014; Pekrun, 2006; Pekrun, et al., 2011; Putwain et al., 2012; Putwain, et al., 2018). Pekrun's control-value theory is one of the extensively described theory used by researchers in educational psychology to facilitate the discovery on association between learning and emotions that is related to achievement emotion.

The control-value theory has significantly broadened the scope of the study regarding emotions and learning not only exploring emotions as a mediating factor but also as a

moderating factor of students' learning and achievement. Self-regulation is also one of the factors that researchers have been interested withing the study to discover the influence of emotions and achievement. In this context, self-regulation refers to planned and methodically adapted self-generated ideas, feelings, and actions that affect one's learning and motivation (Schunk & Ertmer, 2000). Villavicencio and Bernardo (2012) have conducted a study to determine the effect of positive emotions as a moderating factor that aids in self-regulation and achievement in undergraduate students. The result from this study suggests that the impact of self-regulation on student learning is dependent on the student's ability to experience good emotions throughout learning activities. Researchers suggests students who are self-regulating and experience happiness and pride while learning are more likely to appreciate both the task and the outcomes, and hence are more likely to reach higher levels of learning achievement (Putwain et al., 2012; Sainio et al., 2019; Villavicencio & Bernardo, 2012).

Despite the considerable amount of interest received by the scope of study regarding the influence of emotions towards students' learning and achievement, the current situation that was influenced by the pandemic might show different results due to the sudden change of learning environment that the students had to adapt as part of the new normal. In addition, educational institutions in Malaysia standardized their teaching and learning to transition fully to online during the sudden spike in the COVID-19 infection trend nationwide. As the concurring event of the Movement Control Order (MCO) and sudden shifts towards online learning, the emotional state of the students as a learner might show different results in their academic achievements. Some of the students might encounter greater obstacles to cope with their academic syllabus due to lack of tools and sources needed for distance learning such as connectivity issues, proper learning environment, and financial restrictions.

Although it is unavoidable that there are circumstances that could make it impossible for some underprivileged students to adapt to exclusively online learning, it is evident that a

further study is needed to be carried out based on the current situation. With that being said, the emotional state experienced by the students during this period is essential to be discovered as it would be insightful to know the common emotions that is experienced by the adolescents while attending classes remotely. The lack of preparation for the transition of physical classes to online classes could be the key indicator to discover and understand whether students' emotional state plays a major role in facilitating their learning and achievement.

1.2 Problem Statement

As the worldwide population is faced with the uncertainty of the situation due to the pandemic outbreak, changes had to be made for people to continue living. The ambiguity of what to expect during the pandemic has a negative outcome towards an individual's psychological well-being as people fear the unfamiliar virus that has endangered the lives of many. According to Liu et al. (2020), COVID-19 outbreaks all around the world have a potentially high impact of emotional contagion towards people such that people will be vulnerable to the increasing risk of psychological problems including fear and anxiety.

The unexpected turn of events due to the COVID-19 outbreak has changed the teaching delivery methods of educational institutes globally. It is no doubt that the abrupt change in the current situation due to the pandemic has caused impacts towards the learning experience of students. Moreover, the emotional well-being of adolescence is at risk as they had to be adapted to an entirely unfamiliar learning experience whereby, they had to adapt to autonomous learning. In addition, adolescence well-being is a crucial resource for growth and a requirement for successful learning (Holzer et al., 2021). While online distance learning may not be a major obstacle towards university students, this sudden change may be a huge concern for adolescents in secondary schools. The unanticipated and involuntary establishment of remote learning due

to the pandemic has presented not only obstacles, but also opportunity for learning and satisfaction of basic needs of the adolescents (Holzer et al., 2021). In other words, the changes of traditional teaching and learning method could give a positive and negative impact to adolescence as the current situation could give them an opportunity to explore and developing themselves towards a greater human potential.

The unplanned transition of learning to fully online has induced a gap in the study of the influence emotions towards learning. Although there have been studies regarding the influence of emotions on online learning, past studies with similar interest majority limits towards undergraduate students (eg. Artino, 2012; D'Errico, Paciello, & Cerniglia, 2016; Khalil et al., 2020; Mega et al. 2014; Pekrun, 2017; Villavicencio & Bernardo, 2012). It is crucial to note the effect of the current situation towards adolescents as the current change is an entirely unfamiliar experience for them. According to a study conducted by Klootwijk et al. (2021), the closure of schools may have linked in increasing social isolation and alterations in mental health, which may affect the adolescents' learning motivation. In addition, the study also suggests the characteristic level of autonomous academic motivation is positively linked with everyday academic motivation.

Similarly, a discovery by Holzer et al (2021) indicate the role of self-directed freedom in learning of the adolescents during the pandemic is different whereby the freedom does not guarantee positive effect towards motivation and learning. Even though there is a flexibility in learning schedule, the role of adolescents' self-regulation plays a huge role as an autonomous learner in which it could be an opportunity for students to spend more time in committing to improving their academic excellence. Adolescence is the most crucial age in psychological development as adolescents are in the stage where they conflict with identity vs role confusion as described in Erik Erikson's theory of psychosocial development. The inability to utilize the time for self-improvement may not give a positive impact towards the basic need satisfaction

of the adolescents. Furthermore, adolescents are expected to develop a sense of self or identity that gives significance to their lives (Klimstra, 2012).

Additionally, adolescents' emotional state during the pandemic may not be the same as the pre-pandemic days. A study done by Magson et al. (2021) suggests that living with constraints and concerns about the COVID-19 is linked to higher levels of decreasing mental health well-being as well as lower levels of life satisfaction. In another similar study, it has been suggested that due to the social isolation and health risks posed by the COVID-19 condition, people may experience emotions of fear and loneliness as social media was a useful method used to cope with these sentiments (Cauberghe et al., 2021). To further understand the issue of adolescents' emotions during the pandemic, a study by Kilinçel et al. (2020) found that the presence of a positive COVID positive patient among or close to the family resulted in 3.81 times more rise in anxiety. School issues, such as anxieties about passing classes, managing schoolwork with other duties, and poor-quality online programmes, appear to be uniquely related to increases in depression symptoms, according to multivariable analyses done by Hawes et al. (2021). Therefore, it is crucial to also take into consideration the role of the emotional state experienced by adolescents as the pandemic situation and committing to their unfamiliar role as a student learning remotely amidst the pandemic has added pressure to their academic performance where it might be too overwhelming for them to cope.

Previous studies present a limited expository of the influence of emotions towards learning and achievement during the COVID-19 pandemic. Considering the fact that students are faced with the concurring event of Movement Restriction Order (MCO) and exclusively online learning environment, a further study is essential so that results from this study could contribute to the body of knowledge in the educational field such that students and instructors will be able to construct or identify efficient delivery methods of teaching and learning in online learning. Furthermore, the research of similar interest in the Asian context is inadequate as

most of the previous studies are carried out in the western country setting. It is important to note that individual differences in cross-cultural context may generate different results of similar studies.

1.3 Research Objectives

1.3.1 General Objective

To explore the effect of emotions on the learning and academic achievement of secondary school students amidst the COVID-19 pandemic in Malaysia.

1.3.2 Specific Objectives

- 1. To determine the level of emotions experienced by secondary school students during online learning.
- 2. To determine the effect of level of the emotional state towards academic achievement of secondary school students during online learning.
- 3. To identify factors that caused the emotions experienced during online learning.

1.4 Research Questions

- 1. What is the level of emotions experienced by secondary school students during online learning?
- 2. Is there any relationship between the level of emotional state and the academic achievement of secondary school students during online learning?
- 3. What are the factors that caused the emotions experienced by the secondary school students during online learning?

1.5 Research Hypotheses

Based on Research Objective 2 and Research Question 2, the hypothesis is as follows:

 H_{1_2} : There is a significant relationship between the level of emotional state and the academic achievement of secondary school students during online learning.

1.6 Conceptual Framework

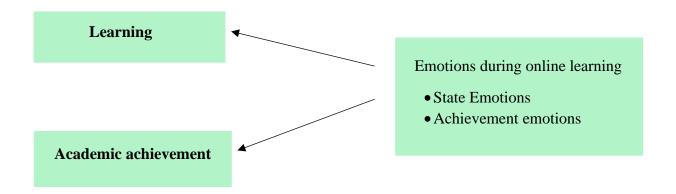


Figure 1: Conceptual framework of the current study.

1.7 Significance of Study

Through the exploration of the emotional influence on students' learning, this study will provide insights on how emotional elements have an actual effect on a person's learning and academic success. Subsequently, information that will be gained from this study will benefit the educational field where it will help educators, students, and the community to be aware of the emotional consequences towards one's learning. Since this research is being carried out during the COVID-19 pandemic, it will focus on the affective impact on learning, as the present condition may have varying effects on students' emotional well-being. This is due to the fact that the pandemic might have made a considerable effect on one's personal life such as loss of

family members due to the infection, loss of monetary source, constant fear of the risk of getting infected, anxiety, domestic violence, and more. It is also worth noting that teenagers are at the peak age of trying to build their own self-identity.

There is inadequate research that explores on the effect of emotions towards adolescents learning and academic achievement during the pandemic as most studies focuses on university students. With regards to that matter, secondary school students might have a greater impact on the emotional factors during this pandemic compared to adults as they are not used to self-directed learning compared to university students. Additionally, the discovery of the effect of adolescents' sentiments towards learning in the current pandemic is important as they are only exposed to physical class settings and instructor-directed classroom delivery methods or the traditional method. The abrupt shift in environment and method of delivery may have a substantial impact on their learning and achievements.

1.8 Definition of Terms

1.8.1 Emotions

Conceptual definition: A response to significant events that develops action readiness and many forms of alternative, potentially conflicting action tendencies, but not as a necessary cause for their action (Scherer, 2009).

Operational definition: In the present research emotions will be defined as the present state of moods that the secondary school students felt at the current time.

1.8.2 Achievement Emotions

Conceptual definition: Achievement emotions are emotions that are closely linked to achievement activity or output (Pekrun, 2006).

Operational definition: The achievement emotions in this study will be defined as the emotions experienced by the students related to their academic commitments.

1.8.3 Academic Achievement

Conceptual definition: Academic achievement refers to how well individuals do in intellectual domains taught in educational institutes. Academic accomplishment is the most significant prerequisite for individual and society prosperity as a measure of intellectual education (McCoy et al., 2005).

Operational definition: The academic achievement in this study will be measured by the range of exam scores mostly obtained by the secondary school students in their final assessments.

1.8.4 Learning

Conceptual definition: Learning is defined functionally as alterations in behaviour that occur as a result of experience, and mechanistically as changes in the organism that occur due of experience (De Houwer et al., 2013).

Operational definition: In this study, learning will be measured by students' perception of their overall level of understanding towards learning materials based on their online learning experience.