

# The Relationship of Mental Health and Motivation among Secondary School Students Pasca Covid-19 Pandemic

Marhamah Mohamed Yusof & Ku Suhaila Ku Johari

Faculty of Education, National University of Malaysia

Email: kusuhaila@ukm.edu.my

To Link this Article: <http://dx.doi.org/10.6007/IJARBSS/v13-i12/20275> DOI:10.6007/IJARBSS/v13-i12/20275

**Published Date:** 29 December 2023

## Abstract

This study aims to identify the relationship between the level of mental health and motivation among secondary students from a secondary school in Bandar Baru Bangi during offline learning after Movement Control Order (MCO) post Covid-19 pandemic. This study uses a quantitative case study approach with a descriptive survey method. A systematic random sampling method was used to obtain a sample of 175 secondary students for the study. Students' mental health was measured using the General Health Questionnaire (GHQ-12) and their motivation was assessed using the Motivated Strategies for Learning Questionnaire (MSLQ). The data gathered was analysed using Statistical Package for Social Sciences (SPSS) in a descriptive and inferential statistics. Findings of the study show that the students have low level of mental health and high level of motivation during offline learning after the Covid19 pandemic. The results of the study also indicated a significant and positive relationship between mental health and motivation. These findings may contribute to students', teachers' and the stake holders in the understanding of the importance of maintaining good mental health after MCO and post pandemic. The findings have implications on the need for broader and effective communication to keep and sustain healthy students' mental health and motivation.

**Keyword:** Mental Health, Motivation, Secondary Students, Pasca Pandemic Covid-19.

## Introduction

The issue of mental health is increasing and seems to explode like a time bomb especially during the phase of the Covid-19 pandemic. A person's mental health greatly affects the well-being of everyday life because it is interconnected with various emotions such as sad, disappointed, angry, happy, cheerful, and it greatly impacts a person's motivation and spirit. When mentally disturbed, it will affect the emotions and motivation particularly among students.

Based on previous studies, (Holmes et al., 2020) found that the Covid-19 pandemic has had a great impact on an individual's mental health such as stress, trauma, anxiety and depression. Mental health can influence the way of individuals make decisions in life, solve problems and interact with others (Aziz et al., 2020). If an individual has a positive level of mental health, they can face and deal with issues and stress well. Therefore, mental health is an important factor that affects a person's performance, interaction and motivation. If a person has low mental health issues, it can interfere with his primary focus on students during the learning process (Samsudin et al., 2016). In addition, (Mat et al., 2018) also stated that failure to manage and adapt in a different environment can cause stress, anxiety and depression in students.

The studies conducted by (Mustafa et al., 2020) and (Kamsani et al., 2021) for students in Malaysia during the Covid-19 pandemic, show that the pandemic has had negative implications on the mental health and psychological aspects of students in terms of emotions, feelings, thoughts, stress and anxiety. In addition, low mental health also has an impact on students' motivation levels during online learning. Yusof (2021) also stated that a high level of mental health has caused the occurrence of emotional disturbances because it is interconnected and the impact, resilience also becomes low and lethargic. Therefore, students do not have the motivation and enthusiasm to have effective learning during the online learning process.

### **Problem Statement**

Studies on mental health issues among students in higher education institutions (HEIs) have been done a lot but have limited research on mental health and motivation among students at secondary schools. Therefore, the study on mental health is important to pay attention to and mutually influence a student's motivation, behaviour and interaction patterns during learning, especially in the post pandemic phase of Covid-19. This study specifically, aims to identify the relationship between the level of mental health and the level of motivation among students in secondary schools after the end of the Movement Control Order (MCO) phase due to the Covid-19 pandemic, which is the face-to-face learning phase.

The three study objectives are as follows

- i. Identifying the level of mental health among secondary schools' students in the post Covid-19 pandemic.
- ii. Identifying the level of student motivation among secondary schools' students in the post Covid-19 pandemic.
- iii. Identifying the relationship between the level of mental health and the level of motivation among secondary schools' students in the post Covid-19 pandemic.

### **Literature Review**

#### **Mental Health**

The World Health Organization (WHO) defines mental health as a state of well-being in which individuals are aware of their own abilities, can function normally and rationally and can overcome life's stress well, can work productively and are able to contribute to their society (World Health Organization, 2004). This definition is in line with the definition by (Manwell et al., 2015) that mental health includes biological, psychological and social factors that contribute to a person's mental state and the ability to function well in various environments. According to a study by Galderisi et al (2015), the element of mental health

can be divided into three domains which are self-awareness, (individuals can make the most of their potential), control the environment and autonomy (the ability to identify, face and solve problems with self-sufficiency). This means that mental health is the basis of individual well-being and the ability of society to function effectively. Mental health is an expression of emotions and symbolizes the ability to adapt in the various pressures and demands of life. Mental well-being, emotional stability, strength of character and personality, physical fitness, and positive social relationships are very important to live a truly healthy and prosperous life.

According to Wikipedia, mental health is the level of psychological well-being or the absence of mental illness which a person can function emotionally and able to make behavioural adjustment. From the perspective of positive psychology or holism, mental health may include an individual's ability to enjoy life. It is also seen as a way to create a balance between life activities and efforts to achieve psychological resilience. The World Health Organization (WHO) further states that individual well-being is integrated in the realization of their capabilities, coping with the normal pressures of life, productive work and contribution to their community. Cultural differences, subjective evaluations, and competing professional theories all influence how one defines mental health.

### **Rational Emotive Behaviour Therapy (REBT)**

Rational Emotive Behaviour Therapy (REBT) is one of the theories used in counselling psychology, founded by Albert Ellis. This approach is also known as A-B-C therapy. This approach assumes that humans are evaluators, negotiators and self-guardians. According to this theory, emotional disturbances are caused by irrational thoughts. Humans are born with a potential to think rationally and irrationally. Humans themselves are the ones who cause themselves to feel disturbed and the disturbance is not caused by various external sources but originates from the individual himself (Ellis, 2019). Ellis states that humans can evoke dysfunctional thoughts, emotions and behaviours. Examples of dysfunctional thinking are obsessions, delusions, panic, depression, anxiety, self-criticism and self-hatred (Ellis, 2019). In this theory, it is mentioned that a person needs to change the concept of destructive thinking to a rational thinking concept in order to be able to change or add positive emotions and finally be able to change a person's destructive behaviour to positive and constructive behaviour. The basic principle of this theory, firstly the client is responsible for his own emotions and actions, secondly, the emotions that disturb a client and the client's dysfunctional behaviour are the product of his irrational thinking. Third, a client can learn a more realistic view, and through practice can make it more positive.

REBT therapy is also a teaching approach that helps individuals achieve a change in thinking to allow them how they control their emotions whether healthy or unhealthy. The role of the counsellor or facilitator is to focus on eliminating emotional responses and irrational thoughts. Therefore, by rationally challenging beliefs and giving clients a more realistic assessment to change dysfunctional thoughts, emotions and behaviours. According to Ellis (2019) REBT theory was found to have been widely used in counselling or therapy sessions among diverse clients including the elderly, children, students, disabled people, LGBT and so on. This therapy has also been found to help clients with anxiety and restlessness issues. A study conducted by Turner et al (2022) found that REBT can reduce students' emotional disturbance towards the subject of Mathematics by disproving their irrational thinking that mathematics is difficult to understand and complicated. This theory is clearly able to be used in mental health intervention processes such as counselling sessions where

counsellors can re-rationalize the thoughts and emotions of clients who are facing mental health issues such as extreme anxiety, stress and depression.

### **Motivation**

Motivation comes from the word 'motive' which means need, desire, desire or drive in an individual. According to (Yahaya et al., 2012), motivation is a driving force that involves the process of generating, maintaining and controlling an individual's interest towards achieving a goal or success. In short, motivation is a process within an individual that creates a purpose and provides enthusiasm as if it were an energy for a person's behavior change (Kimble, 1984).

### **Self-Determination Theory**

Ryan and Deci (2000) classify motivation into two types, namely intrinsic motivation and extrinsic motivation. Intrinsic motivation is motivation that stems from a person's internal influence through learning or experience. Whereas extrinsic motivation means the motivation that exists within the individual to do something due to external factors because it will bring results that can be separated such as praise, rewards, high scores and grades, prizes, appreciation and competition. Intrinsic and extrinsic motivation produce different intentions and behaviour and subsequently affect learning experience and performance (Ryan & Deci, 2000). In the specific context of learning activities, (Pintrich et al., 1991) have defined intrinsic motivation as the result of efforts and belief patterns in maintaining goal-oriented behaviour in an effort to learn new things, curiosity about something difficult to learn, understanding the content of lessons thoroughly and choosing course assignments that can be learned even if they do not guarantee a good grade. Meanwhile, extrinsic motivation is the ability and self-esteem of an individual based on the desire to get good grades in subject achievement, in class, improve overall grades and test scores and the desire to do the best to show one's abilities to teachers, family, friends, lecturers, supervisors and others (Pintrich et al., 1991).

### **Online Learning**

Online learning is defined as learning that uses various Information and Communication Technology (ICT) applications involving two types of environments, namely 'synchronous' or 'asynchronous' and using various types of devices such as computers, laptops and mobile phones equipped internet facilities (Dhawan, 2020). There are various online teaching and learning platforms so that students do not miss out on the learning process such as Zoom Cloud Meeting, Microsoft Team, Google Meet, Google Classroom, Webex, Telegram, Whatsapp and so on (Abidin et al., 2021). The use of ICT and technological and innovative educational strategies like this has changed the teaching and learning process from face-to-face to online. Online learning allows students to be anywhere to learn and interact with instructors and other students (Dhawan, 2020).

Learning that applies technological developments has made online learning easier and more enjoyable. However, there are still significant weaknesses because online learning presents a challenge to students with disabilities, less able and marginalized students to access the internet during the pandemic (Ganasan et al., 2021). Studies according to Salleh et al (2021); Dhawan (2020), online learning requires ability in the self-learning process which is lifelong learning skills. This skill involves a student's ability to determine what needs to be learned, search for resources and materials or information to learn, self-motivation,

skill in self-learning and can also reflect on learning by doing self-assessment or various other ways. Thus, online learning requires commitment, discipline, cooperation (Vahedian-Azimi et al., 2020 & Ganasan et al., 2021), ability, behaviour or attitude, desire and understanding (Aziz et al., 2020) from all parties especially students. Therefore, online learning needs to be planned, implemented and evaluated for its effectiveness to reduce the problems faced by students so that the results can be seen to the maximum and excel.

Based on a literature review, fun learning through online applications was found to have a positive effect on student motivation (Duncan et al., 2016; Giesbers et al., 2014; Fitriyani et al., 2020; Hairia'an et al., 2020; Abou El-Seoud et al., 2014; Mokhtar et al., 2021 & Salleh et al., 2021). In other words, motivation is the main driving factor for students to actively engage in learning activities through online platforms (Shanmugam et al., 2019). Students who are highly motivated have the determination to continue learning without fail because they have a strong drive to continue to be interested in what they learn as a result of strong stimulation that is through incentives and motives and are more innovative in using digital technology during learning (Nasir et al., 2014).

Previous studies have also proven that student motivation during learning whether face-to-face or online is influenced by environmental factors, namely, technology and attitude or behavior (Bandura, 1971; Ryan et al., 2000; Dhawan, 2020; Aziz et al., 2020; Mokhtar et al., 2021; Salleh et al., 2021). Conclusions from related studies found that attitude, level of readiness, environment and motivation are closely related to each other. This clearly shows that students are driven by internal motivation and external motivation throughout online learning during the pandemic. Therefore, it is important to continue the next study to identify whether the level of motivation of students is interrelated with their level of mental health, especially when the Covid-19 pandemic has ended, and learning is carried out face-to-face again.

### **Face-to-face Learning**

Face-to-face learning is a teaching and learning process that is carried out directly and directly between the teacher or lecturer and the students. This learning is also known as the conventional method. According to (Driscoll, 2002), traditional teaching is a teaching method where teachers and students can meet face to face and be in the same place. Learning can also be done through two-way communication and can see each other physically and realistically. This is because meetings are held at a limited time and place such as in a specific class or space. The form of communication is two-way, and student or teacher centred. Through this method, students can interact directly and allow students to ask directly about any question they do not understand. However, the face-to-face learning method also sometimes causes students to interact less with the teacher, especially those who are quiet and introverted due to a high sense of embarrassment when other friends see their faces compared to online discussions. According to (Shroff et al., 2009), students are more involved in discussions and communicate more actively online than when face-to-face.

### **Post Pandemic Covid19**

Post Covid-19 pandemic refers to the period of reduction of the Covid-19 virus pandemic which has become an epidemic around the world. The Malaysian government has declared the phased period of the Movement Control Order (MCO) in phases which are the Conditional Movement Control Order (MCO), the Recovery Movement Control Order

(MCO), and the Enhanced Control Order (MCO). The end of the MCO, PKPB, PKPP and PKPD phases saw some relaxation in the life of the world community in general and in Malaysia in particular when the Malaysian government agreed to reopen school institutions in stages and conditionally in July 2020. The opening of schools has given space to face-to-face learning and children schools are back to physical learning with priority given to form 5 students who will sit for the SPM exam in 2020. Face-to-face learning is a teaching and learning process in the classroom as usual, while synchronous is done directly (live) for students in primary and secondary schools 1, 2, 3 and 4 through applications such as Google Meet, Zoom, Skype and video calls. The asynchronous and offline method is the teaching and learning model which is made by video recording and giving certain tasks to students without the students having to come to school. This pedagogical choice will directly help the government control the spread of Covid-19 in the country. The approach through blended learning can also be done during post Covid-19. Blended learning is a method of teaching and learning that combines conventional methods that are face-to-face and also uses virtual learning through online anywhere at leisure and can be consulted at any time. It is one of the innovations that make learning more interesting and effective (Driscoll, 2002).

## **Research Methodology**

### **Research Design**

This study is a case study using a descriptive survey method to obtain quantitative data using a questionnaire. Questionnaires are frequently used instruments in descriptive studies because it is easy to obtain data from respondents (Splan et al., 2011). According to (Creswell et al., 2017), quantitative methods are an approach to test hypotheses and answer research questions by examining the relationship between variables.

### **Study Location**

This study was conducted at a private secondary school in Bangi district, Selangor. This school was selected based on the private school system that uses the same syllabus and is recognized by the Malaysian Ministry of Education and implements the teaching and learning process completely online during the Covid-19 pandemic. But now it has switched to full face-to-face mode which is very coincidental and compatible with the purpose of this study.

### **Study Population and Sample**

The population of this study is students in High School aged from 14 to 19 years old. The number of student population is 320 students. A systematic random sampling method was used to obtain 175 students from grades 2 to 5 as a study sample. The determination of this sample size is in reference to the table of (Krejcie and Morgan, 1970). Based on the following sampling, the researcher distributes the questionnaire online so that students can fill out the questionnaire by opening the link for the given 'Google Form'. This method is used to simplify the study because the students can access and answer the questionnaire at home in their spare time in a relaxed manner as the school has determined that they cannot be disturbed during the face-to-face learning and teaching process at school.

### Instrument

The questionnaire used in this study consists of three parts. Part A aims to obtain demographic information of the respondents, Part B is the General Health Questionnaire (GHQ-12) developed by Goldberg (1972) and (Goldberg et al., 1988) and Part C is the Motivated Strategies for Learning Questionnaire (MSLQ) by (Pintrich et al., 1991). The General Health Questionnaire (GHQ-12) is used to measure the level of mental health and has been translated and adapted by M (Ganasan et al., 2021). Through various reliability tests of the Malay version of the questionnaire and the score is high (Ganasan et al., 2021; Samsudin et al., 2016) which is around the value of  $\alpha = 0.85 - 0.87$ . This questionnaire contains 12 items that measure three dimensions namely 1) Anxiety and Depression, 2) Social Dysfunction and 3) Loss of Confidence. In addition, the GHQ-12 also uses a likert scale from 0 to 3, which is 0 - not at all, 1 - no more than usual, 2 - more than usual and 3 - very much more than usual. Based on the total score of the GHQ-12 instrument, the total score of 0 to 12 is in the normal category, the total score for the high-risk category is 13 to 24 and the total score for the critical or severe case category is in the range of 25 to 36.

The lower the overall score for the GHQ-12 instrument, the better the student's mental health level while the higher the overall score, the more worrying the student's mental health level after the end of the MCO period and post-Covid19 pandemic. Table 1 shows the dimensions and number of items for the GHQ-12.

Table 1

*Dimensions and number of items for the GHQ-12*

<u>Dimension</u>	<u>items</u>	<u>total</u>
Anxiety and depression	B1, B2, B7, B10	4
Social Dysfunction	B3, B4, B5, B6, B8, B9	6
Loss of confidence	B11, B12	2
<b>Total</b>		<b>12</b>

Motivated Strategies for Learning Questionnaire (MSLQ) in section C has two sections namely Motivation (31 items) and Student Learning Strategies (50 items). This instrument has high reliability which is a value between  $\alpha = 0.81 - 0.90$  (Khosim et al., 2020; Day et al., 2020). This shows that the MSLQ is suitable for students in Malaysia. However, in this study, the researcher only used 31 items covering six dimensions, namely, 1) Intrinsic Motivation (Intrinsic Goal Orientation), 2) Extrinsic Motivation (Extrinsic Goal Orientation), 3) Task Value, 4) Learning Belief Control (Control of Learning Beliefs), 5) Self-Efficacy for Learning and Performance and 6) Test Anxiety.

This questionnaire uses a seven-point likert scale from 1 (very untrue) to 7 (very true). The score for each motivation item is divided into two, i.e. the total score between 31 to 124 is low while the total score 125 to 217 is high. A low total score indicates that the level of student motivation during face-to-face learning is low while a high total score means that the level of student motivation during face-to-face learning after the PKP phase is high. Table 2 shows the dimensions and number of items for the MSLQ instrument.

Table 2

*Dimensions and number of items of the MSLQ instrument*

Dimension	No.of Items	Total
Intrinsic motivation	C1, C16, C22, C24	4
Extrinsic motivation	C7, C11, C13, C30	4
Task value	C4, C10, C17, C23, C26, C27	6
Learning belief control	C2, C9, C18, C25	4
Self-efficacy for learning and performance	C5, C6, C12, C15, C20, C21, C29, C31	8
Test anxiety	C3,C8,C14, C19, C28	5
Total		31

Next, Cronbach's Alpha was used to measure the overall reliability of the instrument. According to Hair et al (2010) Cronbach's alpha is a measure of reliability that has a value ranging from zero to one and the reliability value must be greater than 0.6.

The following is an analysis of the reliability of the General Health Questionnaire (GHQ-12) and Motivated Strategies for Learning Questionnaire (MSLQ) instruments for this study. Based on table 3, the reliability value for the GHQ-12 instrument which is the independent variable (mental health) shows a = 0.79 while the reliability value for the MSLQ instrument which is the dependent variable (motivation) shows a value of a = 0.91. Overall, the analysis shows that all items have high reliability values and have achieved the internal consistency set (Sekaran et al., 2013).

Table 3

*Reliability values for the GHQ-12 and MSLQ instruments*

Variable	No. of Item	Total of Items	Alpha Cronbach Values
Mental Health (GHQ-12)	B1-B12	12	0.79
Motivation (MSLQ)	C1 - C31	31	0.91

**Data Analysis**

The research data obtained was analyzed using the Statistical Package For Social Sciences Version IBM (SPSS) software, version 26 (2020). Descriptive statistics (mean and standard deviation) and inference (Pearson Correlation) were used to analyze the data obtained. Data analysis for this study includes the entire questionnaire which consists of part A (respondent demographics), part B (GHQ-12) and part C (MSLQ). Descriptive statistics is the collection, merging and presentation of data including standard deviation, minimum and maximum values calculated to calculate information related to the demographics of respondents (Ganasan et al., 2021). Frequency analysis or frequencies and percentages are used to describe the profile of the respondents. In addition, mean and standard deviation analysis was used to determine the mean of low scores and the mean of high scores for each dimension of mental health and motivation. The mean score is also divided into three levels, namely low, medium and high levels as recommended by (Yusoff, 2004).



## Schedule 4

*Interpretation of min values*

Mean Score	Interpretation
5.01 - 7.00	high
3.01 - 5.00	medium
1.00 - 3.00	low

Resource: Yusoff (2004)

Inferential statistics are used to analyze the data to test the research hypothesis. (Cohen et al., 1982) stated that the correlation coefficient (r) obtained allows researchers to explain the relationship between two variables, namely the independent variable and the dependent variable. Therefore, Pearson Correlation was used to study the relationship between the level of mental health and the level of motivation of students in face-to-face learning after the end of the PKP phase and post-pandemic Covid-19. The strength of the relationship between variables is interpreted based on the value of the correlation coefficient ( r ) as shown in table 5

Table 5

*Correlation Interpretation*

Correlation coefficient (r)	Interpretation
0.00	No Correlation
Less Than 0.19	Very Low
0.20 - 0.39	Low
0.40 - 0.69	Medium
0.70 - 0.89	High
0.90 - 1.00	Very High

Resource : Cohen &amp; Holliday ( 1982 )

**Results****Respondent Demographics**

This study has involved 175 students in a school as a study sample. From the sample there are more female students which are 113 people (64.6%) compared to male students which are 62 people (35.4%). The majority of the study respondents were between 14 and 17 years old (n=143,81.8%). Only less than 20 percent of respondents were aged 18 and above (n=32, 18.2%). In addition, the distribution according to race shows that the majority of respondents are Malay, which is a total of 174 students (99.4%) and 1 non-Malay student (0.6%). The findings of the study according to the number of siblings show that the majority of respondents have between 4 and 6 siblings (n=93,53.1%). The majority of respondents' parents in this study work in the private sector (n= 133, 76%) and earn T20 (n=85, 48.6%). The findings also show that the majority of respondents live in the city (n=138,78.9%) and occupy their own homes (n=159, 90.9%). The majority of respondents also have internet facilities at their homes (n=174,99.4%) and use WiFi as an internet source (n=139, 79.4%) while only a small number use mobile data (n=13, 7.4%). Research findings according to internet access speed, the majority of respondents received coverage between good and very good (n=151, 86.3%). The majority of respondents also own their own devices (n=172, 98.2%) and use smartphone-type devices (n=117, 66.9%).

Table 6

*Demographic Distribution of Respondents*

Demographic Distribution of Respondents (n=175)

Demography	Sub-Profile	Total	%
Gen	Male	62	35.4
	Female	113	64.6
Age	14 – 15 years old	89	50.9
	16 – 17 years old	54	30.9
	18 – 20 years old	32	18.3
Ethnicity	Malay	174	99.4
	Chinese	0	0
	Indian	0	0
	Others	1	0.6
Number of siblings	1-3	69	39.4
	4-6	93	53.1
	7-9	13	7.4
	10 and above	0	0
Father's occupation	Government	62	35.4
	Private	73	41.7
	Self employee	30	17.1
	Pentioner	6	3.4
	Not working	4	2.3
Mother's occupation	Government	69	39.4
	Private	60	34.3%
	Self employee	21	12%
	Pentioner	4	2.3%
	Not working	21	12%
Parents' income	T20	85	48.6
	M40	71	40.6
	B40	19	10.9
Property location	City	138	78.9
	Rural	12	6.9
	Sub-urban area	25	14.3
Ownership of residential units	Owner	159	90.9
	Rental	14	8
	Others	2	1.1
Internet home facility	Yes	174	99.4
	No	1	0.6
Internet resource	Mobile data	13	7.4
	Monthly payment	23	13.1
	Wifi	139	79.4
Internet speed coverage	Very good	64	36.6
	Good	87	49.7
	Medium	21	12
	Weak	3	1.7
	No coverage	0	0
Have own gadgets	Yes	172	98.3

	No	3	1.7
Type of gadgets	Computer (desktop)	9	5.1
	Laptop	37	21.1
	Tablet	10	5.7
	Smart phone	117	66.9
	No at all	2	1.1

### The Level of Mental Health of Students

Table 7 shows that the overall mean of mental health for respondents in secondary school is low which is 1.43. The findings of the study show that among the three dimensions that are at a low level, the dimension of Loss of Confidence (mean = 2.00) has the highest mean followed by Anxiety and Depression (mean = 1.20) and finally Social Dysfunction (mean = 1.10).

Table 7

#### *The level of mental health of students*

Mental Health Dimension	Mean	Standard Distribution	Level
Anxiety and depression	1.20	0.31	low
Social dysfunction	1.10	0.12	low
Loss of confidence	2.00	0.60	low
<b>Mental health</b>	<b>1.43</b>	<b>0.343</b>	<b>low</b>

### The level of motivation of students in high school

Table 8 shows that the mean overall motivation of the respondents is high which is 5.64. The highest motivational construct is the Task Value dimension (mean = 5.97) followed by the Learning Belief Control dimension (mean = 5.93), Extrinsic Motivation (mean = 5.81), Learning Self-Efficacy and Performance (mean = 5.70), Intrinsic Motivation (mean = 5.57) and the lowest is the Test Anxiety dimension (mean = 4.83).

Table 8

#### *The level of motivation of students in high school*

Motivational Dimension	Mean	SD	Level
Intrinsic motivation	5.57	0.80	high
Extrinsic motivation	5.81	0.96	high
Task value	5.97	0.75	high
Learning belief control	5.93	0.75	high
Self-efficacy and performance	5.70	0.81	high
Test anxiety	4.83	1.15	medium
<b>Motivation</b>	<b>5.64</b>	<b>0.62</b>	<b>high</b>

### The Relationship between the Level of Mental Health and the Level of Student Motivation

In order to determine the significance of the level of mental health and the level of motivation of undergraduate students, a null hypothesis was formed and tested as follows:  
Null Hypothesis 1: There is no significant relationship between the level of mental health and the level of motivation among students in high school after the postCovid19 pandemic.

Table 9 shows the results of the Pearson Correlation test to see the relationship between the level of mental health and the level of motivation of students in high school after the post-Covid19 pandemic. Based on correlation analysis, the findings show that there is a significant relationship between the level of mental health and the level of student motivation with the value of  $r = 0.224$  and  $\text{sig} = 0.001$  ( $p < 0.05$ ). A value of  $p < 0.05$  indicates that there is a significant relationship between two related variables. The strength of the relationship between the level of mental health and the level of student motivation after the post Covid19 pandemic is at a low level. Therefore, the null hypothesis ( $H_0$ ) failed to be accepted.

Table 9

*The relationship between the level of mental health and the level of student motivation*

Motivation

	r	Sig.P
<b>Mental Health</b>	<b>0.224</b>	<b>0.001</b>

\* Significant correlation coefficient at the 0.01 level (one tail)

Based on the descriptive analysis conducted, the findings of the study found that students in this secondary school have a low level of mental health during face-to-face learning after the Covid19 pandemic. The dimensions of anxiety and depression, social dysfunction and loss of confidence have low mean scores. The low level of mental health proves that the students in this school are in a normal, good and controlled state. This proves that the students are able to adapt and are happy with face-to-face learning after the end of the MCO period and no more online learning platforms. They are also able to overcome problems, can concentrate, are able to make decisions, play a useful role in many things and have high self-confidence during face-to-face learning.

Next, the findings of the study found that students in this secondary school have a high level of motivation during face-to-face learning after the post Covid-19 pandemic. The five dimensions of motivation, namely intrinsic motivation, extrinsic motivation, task value, learning belief control, as well as learning self-efficacy and performance have high mean values. Meanwhile, only one dimension of motivation, which is the dimension of test anxiety, is at a moderate level. This is a positive finding on the level of student motivation because students are also motivated to get good grades in tests and exams to improve the overall average grade by using the right and appropriate learning methods. In the meantime, students are also motivated in understanding the subject content taught by teachers and they are able to apply what they learn in life (Pintrich et al., 1991). A high level of motivation shows that students are happier to learn physically at school than online.

In addition, based on the Pearson Correlation inference analysis that has been carried out, the findings of the study show that there is a significant and positive relationship between the level of mental health and the level of motivation among students in this school in the post-Covid19 pandemic. This shows that the better and normal the level of mental health of a student, the higher their level of motivation while learning at school. The findings of this study found that there is a significant and positive relationship between mental health and student motivation after the end of the MCO period and online learning. Mental health with high motivation among students is two very important things during post-pandemic face-to-face learning. This is because good mental health can increase student motivation during the learning process either face-to-face or online (Kotera et al., 2021). Overall, the findings of this

study clearly prove that mental health is important to increase students' motivation so that they are happier and more enthusiastic to learn face-to-face at school after the post-Covid-19 pandemic. Thus, this study illustrates the importance of maintaining a good level of mental health so that students remain healthy and highly motivated after facing the crisis of the Covid-19 pandemic.

### **Conclusion**

This study has identified the level of mental health and motivation of students in secondary school. This study also examines the relationship between the level of mental health and the level of student motivation in a school during face-to-face learning after the Covid-19 pandemic. The findings of this study clearly show that students in the study school have a good level of mental health and a high level of motivation during physical and face-to-face learning in post-Covid-19 pandemic schools. There is a significant and positive relationship between the level of mental health and the level of student motivation. However, in the effort to carry out this study, the researcher faced several constraints such as difficulty in making comparisons in terms of research findings in the context of other secondary schools because the researcher only focused on one school only.

While from the data collection point of view, the researcher had to use an alternative approach which is by using the survey method by distributing questionnaires online and this has limited the data collection process because the students are busy adapting to the conditional opening of the school and the school has set conditions so that the students are not disturbed during the school session. Next, this study is only focused on form 2 to 5 students and cannot be generalized to all students in the school because some of them are from the Tahfiz school and students in Form 1 are not allowed to participate in the study and answer this questionnaire. Therefore, future research needs to involve all students so that research findings from a larger sample can be generalized to make decisions that can influence the teaching and learning policies or strategies for teacher education training, especially in this school. In addition, the researcher suggests that further studies can examine the dimensions of mental health and motivation more deeply by using different instruments so that the study becomes more effective and extensive. This study to some extent can contribute to students, teachers and stakeholders in this school, especially as a private school and in general to all school institutions in understanding the importance of taking good care of mental health for students in post-Covid-19 pandemic schools. Therefore, this study provides important information about the need for students at school to always be aware of mental health and self-motivation so that they can carry out their duties as students at school well. As students, they need to always be happy and enjoy their school journey with various fun activities so that they can excel in academics. Therefore, they need to have high motivation as well as a good level of mental health. School administrators also play a role in providing psychological or counseling services and are adapted to post pandemic support or needs to reduce mental health problems and increase student motivation during online learning. The findings of this study also give implications to the need for wider and effective communication to reduce mental health problems among students at school because they are also faced with possible family issues at home. The implications of the study also encourage the school management to continue to plan and control the mental health of students with several coping mechanisms such as changes in lifestyle, resilient thinking patterns and positive mindsets (Aziz et al., 2020) to ensure the stable emotions of school

students and controlled and there is a guarantee of well-being throughout the learning session after the Covid-19 pandemic.

### References

- Abidin, P. S. M. Z. (2021). The Use Of Google Meet In The Teaching Process And Learning At Polytechnic Sultan Mizan Zainal Abidin. *International Journal Of Modern Education*, 3(8), 104-113.
- Abou El-Seoud, M. S., Taj-Eddin, I. A., Seddiek, N., El-Khouly, M. M., & Nosseir, A. (2014). E-learning and students' motivation: A research study on the effect of e-learning on higher education. *International Journal of Emerging Technologies in Learning (Online)*, 9(4), 20.
- Aguilera-Hermida, A., P. (2020). College Students' Use And Acceptance Of Emergency Online Learning Due To Covid-19. *International Journal Of Educational Research Open*, 1-8.
- Aziz, A. R. A., Sukor, N. M., & Ab Razak, N. H. (2020). The Covid-19 Outbreak: Management Of Mental Health Aspects During The New Norm. *International Journal Of Social Science Research*, 2(4), 156-174.
- Azman, N., & Abdullah, D. (2021). A Critical Analysis Of Malaysian Higher Education Institutions' Response Towards Covid-19: Sustaining Academic Program Delivery. *Journal Of Sustainability Science And Management*, 16(1), 70-96.
- Bandura, A. (1971). *Social Learning Theory*. New York: General Learning Press.
- Cohen, L., & Holliday, M. (1982). *Statistics For Social Sciences*. Harper & Row: London.
- Corey, G. (2020), *Theory And Practice Of Counseling And Psychotherapy (10th.Ed.)*, Brooks / Cole Publishing Company, California.
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.
- Day, M. C., Kelley, H. M., Browne, B. L., & Kohn, S. J. (2020). Assessing Motivation And Learning Strategy Usage By Dually Enrolled Students. *Smart Learning Environments*, 7(1), 1-19.
- Dhawan, S. (2020). Online Learning: A Panacea In The Time Of Covid-19 Crisis. *Journal Of Educational Technology Systems*, 49(1), 5-22.
- Driscoll, M. (2002). Blended Learning: Let's Get Beyond The Hype. *E-Learning*, 1(4), 1-4.
- Duncan, K., Kenworthy, A., & Mcnamara, R. (2016). The Effect Of Synchronous And Asynchronous Participation On Students' Performance In Online Accounting Courses. In *Researching Accounting Education (Pp. 111-129)*. Routledge.
- Ellis, A. (2019). *Anger: How to live with and without it*. Hachette UK.
- Fitriyani, Y., Fauzi, I., & Sari, M. Z. (2020). Student Learning Motivation On Online Learning During The Covid-19 Pandemic. *Education Journal: Journal Of Research Results And Literature Review In The Field Of Education, Teaching And Learning*, 6(2), 165-175.
- Fraenkel, J. R., & Wallen, N. E. (1993). *How To Design And Evaluate Research In Education (2nd Ed.)*. Boston, Ma: Mcgraw Hill.
- Galderisi, S., Heinz, A., Kastrup, M., Beezhold, J., & Sartorius, N. (2015). Toward a New Definition Of Mental Health. *World Psychiatry*, 14(2), 231.
- Ganasan, H. M., & Azman, N. (2021). Mental Health And Student Motivation During Online Learning During The Covid-19 Pandemic. *Malaysian Journal Of Social Sciences And Humanities (Mjssh)*, 6(10), 25-40.
- Gao, J., Zheng, P., Jia, Y., Chen, H., Mao, Y., Chen, S., & Dai, J. (2020). Mental Health Problems And Social Media Exposure During The Covid-19 Outbreak. *Plos One*, 215, e0231924.

- Giesbers, B., Rienties, B., Tempelaar, D., & Gijssels, W. (2014). A dynamic analysis of the interplay between asynchronous and synchronous communication in online learning: The impact of motivation. *Journal of computer assisted learning*, 30(1), 30-50.
- Goldberg, D. P. (1972). *The Detection Of Psychiatric Illness By Questionnaire*. New York: Oxford Univ Press
- Goldberg, D., & Williams, P. (1988). *A User's Guide To The General Health Questionnaire*. Windsor, UK: Nfer-Nelson.
- Gredler, M. E., Broussard, S. C., & Garrison, M. E. B. (2004). The Relationship Between Classrooms Motivation And Academic Achievement In Elementary School Aged Children. *Family And Consumer Sciences Research Journal*, 33, 106-120.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis*. Seventh Edition. New York: Pearson.
- Hairia'An, N. H., & Dzainudin, M. (2020). Online Teaching And Facilitation During The Period Of Movement Control Order: Online Teaching And Learning For The Period Of Movement Control Order. *National Journal Of Early Childhood Education*, 9, 18-28.
- Hamzah, R., Salehan, H., Muhaimin, A., Jusoh, M. S. M., & Latada, F. (2021). Mental Health And Spiritual Intelligence Of University Students; A Comparison Between Years Of Study And Religion: Mental Health And Spiritual Fitness Among University Students: A Comparison Between Years Of Study And Religion. *International Journal Of Humanities Technology And Civilization*, 11-21.
- Holmes, E. A., O'Connor, R. C., Perry, V. H., Tracey, I., Wessely, S., Arseneault, L., ... & Bullmore, E. (2020). Multidisciplinary research priorities for the COVID-19 pandemic: a call for action for mental health science. *The Lancet Psychiatry*, 7(6), 547-560.
- Irawan, A. W., Dwisona, D., & Lestari, M. (2020). Psychological Impacts Of Students On Online Learning During The Covid-19 Pandemic. *Journal Of Guidance And Counseling*, 7(1), 53-60.
- Ishak, A. A., & Talaat, A. Z. M. A. (2020). Online Learning: An Overview On The Readines And Motivation Among Logistics And Management Diploma Students Supply Chain, Seberang Perai Polytechnic, Penang. *World Journal Of Education*, 2(4), 68-82.
- Kamsani, I. I., & Mahat, A. (2021). Covid 19: The Impact Of e-Learning On The Health Of University Students. *World Journal Of Education*, 3(3), 53-60.
- Khosim, F., & Awang, M. I. (2020). Validity And Reliability Of The Mslq Malay Version In Measuring The Level Of Motivation And Self-Regulated Learning. *International Journal Of Scientific & Technology Research*, 9(02), 903-905.
- Kimble, G. A. (1984). Psychology's Two Cultures. *American Psychologist*, 39(8), 833.
- Kotera, Y., & Ting, S. H. (2021). Positive Psychology Of Malaysian University Students: Impacts Of Engagement, Motivation, Self-Compassion, And Well-Being On Mental Health. *International Journal Of Mental Health And Addiction*, 19, 227-239.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining Sample Size For Research Activities. *Educational And Psychological Measurement*, 30, 607-610.
- Mahdavi, P., Valibeygi, A., Moradi, M., & Sadeghi, S. (2023). Relationship Between Achievement Motivation, Mental Health And Academic Success In University Students. *Community Health Equity Research & Policy*, 43(3), 311-317.
- Manwell, L. A., Barbic, S. P., Roberts, K., Durisko, Z., Lee, C., Ware, E., & McKenzie, K. (2015). What Mental Health? Evidence Towards a New Definition From a Mixed Methods Multidisciplinary International Survey. *Bmj Open*, 5, 1-11.

- Mat, N., Idris, N., Abdullah, N. A., Yazid, Z., & Alias, J. (2018). The Relationship Between Workload, Personal Factors, And e-Learning On The Level Of Stress Among Gen-Y. *Journal Of Student Personality*, 21(2).
- Mokhtar, Z. A., & Lakman, N. A. (2021). Peralihan dari pembelajaran bersemuka ke pembelajaran secara atas talian untuk subjek Mechanics of Civil Engineering Structures semasa pandemik COVID-19. *ANP Journal of Social Science and Humanities*, 2(2), 11-18.
- Mustaffa, N. B. (2020). Overcoming Anxiety During The Covid-19 Pandemic With a Rational Emotive Behavior Therapy (Rebt) Theory Approach. *Malaysian Journal Of Social Sciences And Humanities (Mjssh)*, 5(11), 10-16.
- Nasir, Z. M., & Hamzah, Z. A. Z. (2014). Student's Attitude And Motivation Towards Learning Malay. *Procedia-Social And Behavioral Sciences*, 134, 408-415.
- Pallant, J. (2020). *Spss Survival Manual: A Step By Step Guide To Data Analysis Using Ibm Spss*. Mcgraw-Hill Education (Uk).
- Pintrich, P. R. (1991). *A Manual For The Use Of The Motivated Strategies For Learning Questionnaire (Mslq)*.
- Rahim, A. F. A., Yaacob, M. J., & Yusoff, M. S. B. (2010). The Sensitivity, Specificity And Reliability Of The Malay Version 12-Items General Health Questionnaire (Ghq-12) In Detecting Distressed Medical Students. *Asean Journal Of Psychiatry*, 11(1).
- Reeve, J., & Deci, E. L. (1996). Elements Of The Competitive Situation That Affect Intrinsic Motivation. *Personality And Social Psychology Bulletin*, 22(1), 24–33.
- Ryan, R. M., & Deci, E. L. (2000). Intrinsic And Extrinsic Motivations: Classic Definitions And New Directions. *Contemporary Educational Psychology*, 25(1), 54–67.
- Sahu, P. (2020). Closure Of Universities Due To Coronavirus Disease 2019 (Covid-19): Impact On Education And Mental Health Of Students And Academic Staff. *Cureus*, 12(4), e7541.
- Salleh, M., Jamaludin, M. F., Safie, N. S. M., & Yusof, J. M. (2021). A Survey Of The Effectiveness Of Online Learning During The Covid-19 Pandemic: The Perspective Of Ibrahim Sultan Polytechnic Engineering Science Students. *World Journal Of Education*, 3(1), 374-384.
- Samsudin, S., & Hong, K. T. C. (2016). The Relationship Between The Level Of Mental Health And The Performance Of Undergraduate Students: A Study At Universiti Utara Malaysia. *Malaysian Journal Of Health Sciences*, 14(1), 11-16.
- Sekaran, U. & Bougie, R. (2013). *Research Methods For Business*. (6th Ed.). West Sussex: John Wiley & Sons.
- Shanmugam, L., Yassin, S. F., & Khalid, F. (2019). Enhancing Students' Motivation To Learn Computational Thinking Through Mobile Application Development Module (M-Ct). *International Journal Of Engineering And Advanced Technology*, 8(5), 1293-1303.
- Shroff, R. H., & Vogel, D. R. (2009). Assessing The Factors Deemed To Support Individual Student Intrinsic Motivation In Technology Supported Online And Face-To-Face Discussions. *Journal Of Information Technology Education: Research*, 8(1), 59-85.
- Splan, R. K., Porr, C. S., & Broyles, T. W. (2011). Undergraduate research in agriculture: Constructivism and the scholarship of discovery. *Journal of Agricultural Education*, 52(4), 56-54.
- Sundarasan, S., Chinna, K., Kamaludin, K., Nurunnabi, M., Baloch, G. M., Khoshaim, H. B., ... & Sukayt, A. (2020). Psychological Impact Of Covid-19 And Lockdown Among University Students In Malaysia: Implications And Policy Recommendations. *International Journal Of Environmental Research And Public Health*, 17(17), 6206.



- Turner, M. J., Miller, A., Youngs, H., Barber, N., Brick, N. E., Chadha, N. J., ... & Rossato, C. J. L. (2022). "I Must Do This!": A Latent Profile Analysis Approach To Understanding The Role Of Irrational Beliefs And Motivation Regulation In Mental And Physical Health. *Journal Of Sports Sciences*, 40(8), 934-949.
- Vahedian-Azimi, A., Moayed, M. S., Rahimibashar, F., Shojaei, S., Ashtari, S., & Pourhoseingholi, M. A. (2020). Comparison of the severity of psychological distress among four groups of an Iranian population regarding COVID-19 pandemic. *BMC psychiatry*, 20(1), 1-7.
- Wajar, M. S. A. B. M., & Hamzah, R. (2020). University Student Life Happiness Model Based on Mental Health, Spiritual Intelligence and Demographic Factors. *Malaysian Journal Of Social Sciences And Humanities (Mjssh)*, 5(11), 17-32.
- World Health Organization. (2004). *Promoting Mental Health: Concepts, Emerging Evidence, Practice: Summary Report*. World Health Organization.
- World Health Organization. (2004). *Prevention Of Mental Disorders: Effective Interventions And Policy Options: Summary Report*.
- Yahaya, A., Bachok, N. S. E., Yahaya, N., Boon, Y., Hashim, S., & Goh, M. L. (2012). The Impact Of Emotional Intelligence Element On Academic Achievement. *Archives Des Sciences*, 65(4), 2-17.
- Yusof, M. (2021). Exploring Mental And Emotional Wellbeing Among Secondary Students During The Pandemic Covid-19 Through Psychoeducation Group Counselling, 126-144.
- Yusoff, N. M. R. N. (2004). *Arabic Listening Skills: A Study In a State Government Secondary School*. Unpublished Ph. D, National University Of Malaysia, Bangi.