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RELATIONSHIP BETWEEN PSYCHOLOGICAL, ADJUSTMENT, ANXIETY, STRESS, AND DEPRESSION ON SUICIDAL IDEATION AND THE MODERATING ROLE OF SOCIAL SUPPORT AMONG UNIVERSITY STUDENTS IN MALAYSIA



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NUR AMANINA BINTI MUHAMMAD TAMIZI

SULTAN IDRIS EDUCATION UNIVERSITY

2024



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ABSTRACT

The purpose of the current research is to study on how social support can have a moderated effect towards psychological adjustments, anxiety, stress and depression and if it has a consequential relationship on suicidality rate among university students after the COVID-19 pandemic in Malaysia, by using online computer administration surveys. A total of 415 university students participated. The psychological instruments used for this current study are International Adjustment Disorder Questionnaire (IADQ), Coronavirus Anxiety Scale (CAS), Perceived Stress Scale (PSS), Beck Depression Inventory (BDI), Multidimensional Scale of Perceived Social Support (MSPSS) and Scale for Suicide Ideation (SSI). By using correlation in Statistical Package for Social Sciences version 22 (SPSS 22), the results indicated that psychological adjustment, stress, anxiety, depression, and social support have a statistically significant relationship ($p < .001$), with negative correlations. There is also evidence of significant relationship between the variables with suicidal ideation. Overall social support can moderate the level and intensity of suicidal ideation ($r = -.579, p < .001$). A significant simple linear regression equation was found ($F(1,413) = 208.144, p < .000$) with R^2 of .335 when testing the predictability of social support as a moderator against suicidal ideation using regression analysis. Moderation analysis, using SPSS Analysis of Momentum Structures version 28 (SPSS AMOS 28), also predicted that social support can act as moderator (enhancer/buffer) against suicidal ideation. The highest attribute to social support comes from family, followed by friends and significant others ($r = -.435, -.416, -.406, p < .001$). The researcher concluded that this research has contributed to the theoretical understanding of these complex dynamics of the interrelationships of the variables. This research highlighted the need to explore a broader array of variables to help enhance the understanding of mental health of university students post-pandemic.





HUBUNGAN ANTARA PENYESUAIAN PSIKOLOGI, KEBIMBANGAN, TEKANAN, DAN KEMURUNGAN TERHADAP PEMIKIRAN BUNUH DIRI, SERTA PERANAN MODERASI SOKONGAN SOSIAL DALAM KALANGAN PELAJAR UNIVERSITI DI MALAYSIA

ABSTRAK

Tujuan penyelidikan ini adalah untuk mengkaji bagaimana sokongan sosial dapat memberikan kesan moderasi terhadap penyesuaian psikologi, kebimbangan, tekanan, dan kemurungan, serta jika ia mempunyai hubungan kesan terhadap kadar pemikiran bunuh diri dalam kalangan pelajar universiti selepas pandemik COVID-19 di Malaysia, dengan menggunakan tinjauan secara pentadbiran komputer dalam talian. Seramai 415 pelajar universiti telah mengambil bahagian. Instrumen psikologi yang digunakan dalam kajian ini termasuk; *International Adjustment Disorder Questionnaire* (IADQ), *Coronavirus Anxiety Scale* (CAS), *Perceived Stress Scale* (PSS), *Beck Depression Inventory* (BDI), *Multidimensional Scale of Perceived Social Support* (MSPSS) dan *Scale for Suicide Ideation* (SSI). Dengan menggunakan korelasi dalam *Statistical Package for Social Sciences version 22* (SPSS 22), dapatkan menunjukkan bahawa penyesuaian psikologi, tekanan, kebimbangan, kemurungan, dan sokongan sosial mempunyai hubungan yang signifikan dari segi statistik ($p < .001$), dengan korelasi negatif. Terdapat juga bukti hubungan yang signifikan antara pemboleh ubah dengan pemikiran bunuh diri. Secara keseluruhan, sokongan sosial dapat memoderasi tahap intensiti pemikiran bunuh diri ($r = -.579$, $p < .001$). Persamaan regresi linear mudah yang signifikan ditemui ($F(1,413) = 208.144$, $p < .000$) dengan R^2 sebanyak .335 ketika menguji kebolehraman sokongan sosial sebagai moderator terhadap pemikiran bunuh diri menggunakan analisis regresi. Analisis moderasi, menggunakan SPSS Analysis of Momentum Structures versi 28 (SPSS AMOS 28), juga meramalkan bahawa sokongan sosial boleh bertindak sebagai moderator (penggalak/pelengkap) terhadap pemikiran bunuh diri. Sumbangan tertinggi kepada sokongan sosial datang dari pada keluarga, diikuti oleh rakan-rakan dan individu signifikan yang lain ($r = -.435$, $-.416$, $-.406$, $p < .001$). Penyelidik menyimpulkan bahawa penyelidikan ini telah menyumbang kepada pemahaman teori mengenai dinamik kompleks interaksi antara pemboleh ubah ini. Penyelidikan ini menekankan keperluan untuk meneroka pelbagai pemboleh ubah yang lebih luas bagi membantu meningkatkan pemahaman tentang kesihatan mental pelajar universiti pasca pandemik.



CONTENTS

DECLARATION OF ORIGINAL WORK	ii
DECLARATION OF DISSERTATION	iii
ACKNOWLEDGEMENT	iv
ABSTRACT	v
ABSTRAK	vi
CONTENTS	vii
LIST OF TABLES	xii
LIST OF FIGURES	xiv
LIST OF ABBREVIATION	xv
LIST OF SYMBOLS	xix

CHAPTER 1 INTRODUCTION

1.1	Introduction	1
1.2	Background of the study	2
1.3	Problem statement	14
1.4	Research question(s)	22
1.5	Research objective(s)	23
1.6	Significance of the study	25
1.7	Definition of variables	28
1.7.1	Conceptual definition of social support	29
1.7.2	Operational definition of social support	31
1.7.3	Conceptual definition of psychological adjustment	32
1.7.4	Operational definition of psychological adjustments	35

1.7.5	Conceptual definition of anxiety	35
1.7.6	Operational definition of anxiety	38
1.7.7	Conceptual definition of stress	38
1.7.8	Operational definition of stress	40
1.7.9	Conceptual definition of depression	41
1.7.10	Operational definition of depression	43
1.7.11	Conceptual definition of suicidal ideation	43
1.7.12	Operational definition of suicidal ideation	46
1.7.13	Conceptual framework	46
1.8	Theoretical approach	47
1.8.1	Theory of social support: Cassel's Theory of Social Support on Health and Lakey & Cohen's Social Support Theory	47
1.8.2	Theory of psychological adjustment: Theory of Psychological Adjustments Needs	49
1.8.3	Theory of anxiety: Cognitive Theories of Anxiety	51
1.8.4	Theory of stress: Lazarus' Theory of Stress Appraisal	52
1.8.5	Theory of depression: Beck's Cognitive Theory of Depression	54
1.8.6	Theory of suicidal ideation: Joiner's Interpersonal – Psychological Theory of Suicidal Behaviour and Three-Step Theory	55
1.8.7	Summary of theories used	56
1.9	Hypotheses of the research	58
1.10	Conclusion	60

CHAPTER 2 LITERATURE REVIEW

2.1	Introduction	62
2.2	Relationship between social support, psychological adjustment, anxiety, stress, and depression	63

2.3	Relationship between psychological adjustments, anxiety, stress, depression, and suicidal ideation	74
2.4	Correlation of outbreak and post-outbreak of pandemic and suicidal ideation	85
2.5	Role of gender on social support, psychological adjustment, anxiety, stress, depression, and suicidal ideation	93
2.6	Correlation of social support and suicidal ideation	99
2.7	Social support as moderator	104
2.8	Conclusion	110

CHAPTER 3 METHODOLOGY

3.1	Introduction	111
3.2	Research study	112
3.3	Population and sample	115
3.4	Sample eligibility criteria	118

3.5	Instrument(s)	119
3.5.1	Multidimensional Scale of Perceived Social Support (MSPSS)	120
3.5.2	International Adjustment Disorder Questionnaire (IADQ-19)	120
3.5.3	Coronavirus Anxiety Scale (CAS)	121
3.5.4	Perceived Stress Scale (PSS-14)	122
3.5.5	Beck's Depression Inventory (BDI-21)	123
3.5.6	Scale of Suicidal Ideation (SSI)	124
3.6	Procedure(s)	125
3.7	Data analysis	128
3.8	Ethical consideration(s)	129
3.9	Reliability and validity of instrument(s)	132
3.9.1	Reliability and validity of Multidimensional Scale of Perceived Social Support	133



3.9.2	Reliability and validity of International Adjustment Disorder Questionnaire	134
3.9.3	Reliability and validity of Coronavirus Anxiety Scale	134
3.9.4	Reliability and validity of Perceived Stress Scale	134
3.9.5	Reliability and validity of Beck Depression Inventory	135
3.9.6	Reliability and validity of Scale for Suicidal Ideation	136
3.10	Conclusion	135

CHAPTER 4 RESULTS

4.1	Introduction	137
4.2	Pilot study	138
4.3	Descriptive analyses	141
4.4	Preliminary analyses	148
4.5	Normality test	149
4.6	Reliability test	152
4.7	Validity test	155
4.8	Inferential analyses	156
4.9	Conclusion	188

CHAPTER 5 DISCUSSION

5.1	Introduction	189
5.2	Relationship between psychological adjustment, anxiety, stress, and depression on suicidal ideation	194
5.3	Relationship of psychological adjustment, anxiety, stress, depression, and suicidal ideation on social support	198
5.4	Gender difference between the psychological adjustment, anxiety, stress, and depression on suicidal ideation	202
5.5	Relationship between social support and suicidal ideation	202





5.6	Types of social support that can act as protective factor against suicidal ideation	209
5.7	Depression has a higher tendency that leads to suicidal ideation than stress	212
5.8	Psychological adjustment causes mental health issues	212
5.9	Moderating role of social support on mental health issues and suicidal ideation	217
5.10	Implications	217
5.10.1	Tailored mental health interventions	217
5.10.2	Comprehensive social support programs	218
5.10.3	Early detection systems by academic institution(s)	218
5.10.4	Development of policies by policymaker(s)	219
5.10.5	Mental health support services accessibility	219
5.10.6	Future research recommendation(s)	220
5.11	Limitation(s)	222
5.12	Recommendations	225
5.13	Conclusion	228
REFERENCES		233
APPENDIX		250



LIST OF TABLES

Table No.		Page
3.1	Confidence level and corresponding z-scores	116
4.1	Descriptive of demographic variables	140
4.1a	Summary of Cronbach's Alpha Coefficients of Variables for Pilot Test	140
4.2	Descriptive of demographic variables	142
4.3	Descriptive of Dependent and Independent Variables	146
4.3a	Preliminary analyses	149
4.4	SEM model fit indices	151
4.5	Summary of Cronbach's Alpha Coefficients of Variables for Pilot Test and Final Test	155
4.6	Summary of Cronbach's Alpha Coefficients of Variables	154
4.7	Convergent Validity Values (Correlations Coefficient)	155
4.8a	Guideline of strength for the correlations (Cohen, 1988)	157
4.8b	Summary of Correlations Coefficient	157
4.9	Correlations of psychological adjustment, anxiety, stress, and depression on social support	161
4.10	Correlations of psychological adjustment and social support	160
4.11	Correlations of anxiety and social support	160
4.12	Correlations of stress and social support	161
4.13	Correlations of depression and social support	162
4.14	Correlations of psychological adjustment, anxiety, stress, and depression on suicidal ideations	166
4.15	Correlations of suicidal ideation and psychological adjustment	164
4.16	Correlations of suicidal ideation and stress	165
4.17	Correlations of suicidal ideation and anxiety	166

4.18	Correlations of suicidal ideation and depression	167
4.19	Group statistics of psychological adjustment, anxiety, stress, depression, and suicidal ideation against gender	171
4.20	Group statistics of psychological adjustment against gender	169
4.21	T-test between psychological adjustment against gender	169
4.22	Group statistics of anxiety against gender	170
4.23	T-test between anxiety and gender	170
4.24	Group statistics of stress against gender	171
4.25	T-test between stress against gender	171
4.26	Group statistics of depression against gender	172
4.27	T-test between depression against gender	172
4.28	Group statistics of suicidal ideation against gender	173
4.29	T-test between suicidal ideation against gender	173
4.30	Correlations of social support and suicidal ideation	174
4.31	Correlations of suicidal ideation with different type of social support	175
4.32	Summary of social support and suicidal ideation	177
4.33	Moderation analysis summary psychological adjustment against suicidal ideation	182
4.34	Moderation analysis summary anxiety against suicidal ideation	181
4.35	Moderation analysis summary stress against suicidal ideation	183
4.36	Moderation analysis summary depression against suicidal ideation	185
4.37	Summary of hypotheses status	187

LIST OF FIGURES

Figure No.	Page
1.1. Conceptual Framework of Research Design	46
3.2. Research Procedure	127
4.1. Respondents' age range distribution	144
4.2. Respondents' age distribution	145
4.3. Respondents' level of education	146
4.4. Moderation path using AMOS for psychological adjustment and suicidal ideation	182
4.5. Simple slope analysis of psychological adjustment and suicidal ideation	183
4.6. Moderation path using AMOS for anxiety and suicidal ideation	181
4.7. Simple slope analysis of anxiety and suicidal ideation	182
4.8. Moderation path using AMOS for stress and suicidal ideation	183
4.9. Simple slope analysis of stress and suicidal ideation	184
4.10. Moderation path using AMOS for depression and suicidal ideation	185
4.11. Simple slope analysis of depression and suicidal ideation	186

LIST OF ABBREVIATION

3ST	Three-Step Theory
AAS	American Association of Suicidology
ACHA-NCHA	American College Health Association-National College Health Assessment
ADAA	Anxiety & Depression Association of America
AMOS	Analysis of Moment Structures
APA	American Psychological Association
BAME	Black, Asian and minority ethnic
BASE	Brief Adjustment Scale
BDI	Beck Depression Inventory
BDI-13	Beck Depression Inventory – 13 items
BDI-21	Beck Depression Inventory – 21 items
BPSSQ	Brief Perceived Social Support Questionnaire
BRCS	Brief Resilience Coping Scale
BRS	Brief Resilience Scale
BSMAS	Bergen Social Media Addiction Scale
CAS	Coronavirus Anxiety Scale
CASSS	Child and Adolescent Social Support Scale
CBQ	College Belongingness Questionnaire
CDC	Centers for Disease Control and Prevention
CDI	Children's Depression Inventory
CD-RISC	Connor-Davidson Resilience Scale
CES-D	Center for Epidemiologic Study Depression Scale
CFI	Comparative fit index

CMCO	Conditional Movement Control Order
CMIN/DF	Chi-square/degree of freedom
CNA	Channel News Asia
COVID-19	Coronavirus disease 2019
CTQ-SF	Childhood Trauma Questionnaire – Short Form
CVC	Content validity coefficient
CYRBS	Chinese Youth Risk Behaviour Surveillance
DASS-21	Depression, Anxiety, Stress Scale – 21 items
DSM-IV-TR	Revised version of Fourth Edition DSM
DSM-V	Fifth Edition of Diagnostics and Statistical Manual of Mental Disorders
ERTL	Emergency Remote Learning and Teaching
EWB	Existential well-being
Fam	Family
FCV-19S	Fear of COVID-19 scale
Fri	Friends
GAD	Generalized Anxiety Disorder
GF	Google Form
HADS	Hospital Anxiety and Depression Scale
HDRS/Ham-D	Hamilton Depression Rating Scale
IADQ	International Adjustment Disorder Questionnaire
ICD-11	11 th edition of the International Classification of Disease
IES-R	Impact of Event Scale – revised
IPT	Interpersonal trauma
LGBT	Lesbian, gay, bisexual and transgender
LGBTQIA+	Lesbian, gay, bisexual, transgender, queer, intersex and asexual

MCO	Movement Control Order
MERS-CoV)	Middle East Respiratory Syndrome
MHI-5	Mental Health Inventory
MOH	Ministry of Health Malaysia
MSPSS	Multidimensional Scale of Perceived Social Support
NHMS	National Health and Morbidity Survey
OCD	Obsessive-compulsive disorder
ODL	Open and Distance Learning
PANSI	Positive and Negative Suicide Ideation Inventory
PCS	Post-COVID syndrome
PHQ-9	Patient Health Questionnaire
PID-5-BF	Personality Inventory for DSM-5 brief form
PRISMA	Preferred Reporting Items for Systematic Reviews and Meta-Analyses
PSS	Perceived Stress Scale
PTSD	Post-traumatic stress disorder
RMIC	Research Management Innovation Center
RMSEA	Root mean squared error of approximation
RSES	Rosenberg Self-Esteem Scale
RWB	Religious well-being
SARS-CoV-2	Severe acute respiratory syndrome coronavirus 2
SBD	Suicidal Behaviour Disorders
SBQ-R	Suicide Behaviours Questionnaire – Revised
SCL-90	Symptom Checklist 90
SCORE	Systemic Clinical Outcome and Routine Evaluation
SEM	Structural equation model

SIOSS	Self-rating Idea of Suicide Scale
SIQ-JR	Suicidal Ideation Questionnaire-Junior Version
SO	Significant others
SOPs	Standard operating procedures
SPS	Suicide Probability Scale
SPSS	Statistical Package for Social Sciences
SRMR	Standardized root mean square residual
SSI	Scale for Suicide Ideation
SSQ	Social Support Questionnaire-Short Form
SSQ-6	Social Support Questionnaire
SSRS	Social Support Rating Scale
STAI	State-trait Anxiety Inventory
SWB	Spiritual well-being
SWBS	Spiritual Wellbeing Scale
SWLS	Satisfaction with Life Scale
TLI	Tucker Lewis index
TPAN	Theory of Psychological Adjustments Needs
UCLA	University of California, Los Angeles
UK	United Kingdom
UMMS	University of Maryland Medical System
UNESCO	United Nations Educational, Scientific, and Cultural Organisation
UPSI	Universiti Pendidikan Sultan Idris
USA	United States of America
WHO	World Health Organisation
WSCI	Ways of Coping with Stress Inventory



LIST OF SYMBOLS

df	Degree of freedom
$H_{(1,2,3,\dots)}$	Alternative hypothesis
H_0	Null hypothesis
E^2	Margin of error
Z^2	Square of confidence interval in standard error units
\sim	Approximately
$<$	Less than
$>$	More than
\geq	More or equal to
CI	Confidence interval
F	Variance
M	Mean
N	Number of data points
p	Probability
r	Pearson correlation coefficient
R	Regression
SD	Standard deviation
SE	Standard error
T	Calculated difference represented in units of standard error
p	Estimated proportion of success
q	Estimated proportion of failures
β	Beta





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XX

F

Fisher-Snedecor distribution

%

Percentage

t

The size of the difference relative



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LIST OF APPENDICES

- A Ethical approval
- B Google Form
- C SPSS Output
- D AMOS Data Output
- E Simple Slope Analysis





CHAPTER 1

INTRODUCTION



This chapter introduced the research studying the relationship between psychological adjustment, anxiety, stress and depression on suicidal ideation and the moderating role of social support among university students in Malaysia in the aftermath of the pandemic. This chapter comprises of nine sections. The first section introduced the background of the research. The second and third section presented the problem of statement and research of questions of this research. The objectives of this research were further discussed in the fourth section.

The fifth section explained the significance of the current research. The conceptual and operational definition of social support, psychological adjustment, anxiety, stress, depression, and suicidal ideation were explained in section six.



Theoretical approach and conceptual framework were described in the seventh and eighth section respectively. Finally, the hypotheses of the research were stated in the last section.

1.2 Background of the study

In Malaysia, the transition of COVID-19 from a pandemic to an endemic phase signified stabilization in infection rates and a shift in public health strategies. Epidemiological data indicate that, following initial surges, the country has experienced a plateau in new cases and hospitalizations. This stabilization has been supported by comprehensive vaccination campaigns and ongoing public health measures, including social distancing and mask-wearing. Surveillance systems have played a crucial role in monitoring the emergence of new variants, which has informed Malaysia's adaptive public health responses. As Malaysia navigates the endemic phase, government policies have increasingly focused on balancing public health with socio-economic needs. Efforts to promote economic recovery have been coupled with enhanced mental support services, recognizing the long-term impact of the pandemic on individuals and businesses. Adjustments to public health guidelines based on the current epidemiological data, reflect the new normal where COVID-19 remains a regular, manageable part of life. These strategies aim to mitigate the virus' impact while fostering a return to routine economic and social activities.

But when and how did it started? An emerging, rapidly evolving situation had struck worldwide in 2020, which was the coronavirus pandemic. It was a significant

threat to public health as we were left to fight a deadly infectious sickness caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), commonly known as coronavirus disease 2019 (COVID – 19). Malaysia, too, became a part of this ongoing global pandemic and the virus was reported, and later confirmed to have reached the country in January 2020. The transmission was linked back to tourists from China who had entered Johor via Singapore, having been in close contact with an infected individual in Singapore. The first recorded positive case in Malaysia was identified in Johor, with a total of eight identifiable patients (Abdullah, 2020).

On February 3, 2020, Malaysia recorded its initial positive case involving a Malaysian individual with a history of business travel to a neighbouring country, an event attended by a delegation from China (Ahmad, 2020). The 41-year old man exhibited symptoms indicative of COVID-19 including fever and cough. Concurrently, a 4-year old Chinese-national girl, previously isolated at Sultanah Maliha Hospital in Langkawi and confirmed positive for COVID-19 but had since January 29th 2020, been successfully discharged. Subsequently, she was permitted to return to China after recovering and tested negative for COVID-19. Notably, this marked the first instance of a patient recovering from COVID-19 in Malaysia since the onset of the pandemic (Chen, 2020).

Malaysia reported its first COVID-19 patient who caught the virus through local transmission on February 6, 2020. The 40-year old woman had no travel history to infected areas, but was blood relative of the confirmed positive 41-year old man on February 4, 2020. On February 1, she reported having developed a fever and sore throat, which then progressed into a cough the following day. Until March 12th, 2020, instances

of COVID-19 were less frequently reported in Malaysia. It was at this juncture that the country officially documented its initial sporadic case. Notably, the confirmed positive patient in this case had not engaged in travel to areas directly impacted by the virus nor had close contact with individuals known to be infected (TheStar, 2020).

Reported new cases were relatively slow and were largely contributed by foreigners travelling into Malaysia, until localised cluster from a religious event in Sri Petaling, Kuala Lumpur took place from late February and early March. This led to a massive spike in the number of reported cases and Malaysia, at the time, recorded the highest cumulative number of positive COVID-19 cases in South East Asia. The mass gathering spanning four days involved adherents of Tabligh Jama'at, who resided in densely populated tents outside the Sri Petaling Mosque. Participants would rise before

dawn to engage in prayer within the golden-domed mosque's hall. Taking place from

February 27th to March 1st, 2020, the event attracted a congregation of 16 000 worshippers, inclusive of 1 500 foreign attendees. On March 17, 2020 a 34-year-old Muslim man, who was one of the dozens worshippers, was pronounced dead by the Malaysia's Minister of Health, Datuk Seri Dr. Adham Baba, and linked to the religious event (TheStar, 2020). The substantial risk of COVID-19 in Malaysia became evident as over 50% of daily reported cases were linked to individuals who either attended or had close contact with the cluster originating from the religious event.

The unpreparedness of Malaysians to confront the pandemic was notably influenced by the concurrent political turmoil and a prevailing confidence that the virus would not readily impact Malaysia. However, with a rapid surge in the number of confirmed positive cases within less than a week, coupled with the recording of the first

two deaths in mid-March attributed to the virus, anxiety began to pervade among the Malaysian population (Majid, 2020). Consequently, measures to mitigate the outbreak were later announced through live nationwide telecast by Malaysia's Prime Minister, Tan Sri Muhyiddin Yassin on March 13, 2020. A nationwide 'Movement Control Order' (MCO) was announced on March 16, intended to alleviate the spread of the virus through physical and social distancing effective between March 18 until March 31, 2020. Since then, the government imposed limits on people to travel to another states or coronavirus- affected areas. The Malaysia's Ministry of Education had also announced that all extracurricular activity in schools will be suspended starting from March until further notice (Rozaidi, 2020). Within the timeframe of MCO, Malaysia recorded another two confirmed COVID-19 related deaths, and the number of positive cases persisted relatively high; thus on the 25th March 2020, extending another 14 days of MCO to April 14th. The Movement Control Order was further extended until April 28th on April 10th, and subsequently extended again until May 12th on April 23rd.

A gradual relaxation of restrictions commenced with Phase One (Safe Reopening) following the conclusion of the lockdown in the Conditional Movement Control Order (CMCO) on May 1st, 2020. This phase permitted the reopening of most businesses on May 4th, subject to stringent adherence to standard operating procedures (SOPs). Subsequently, Phase Two (Safe Transition) was implemented in June. However, as the government wants to proceed to Phase Three (Safe Nation), a third-wave of coronavirus contagion causes the backtracking of measures. This third-wave of COVID-19 indisposition occurred after Sabah state election in September 2020, and causes turnabout measures by the government from November 9th to December 6th. All schools nationwide were eventually shut down on November 9 as cases upsurge. This

indicated that Malaysian students attended school physically for about five to six months only in 2020.

As of January 21, 2021, Malaysia has recorded another 3 170 new positive cases, with 12 more deaths. According to the current Malaysia's Minister of Health, Tan Sri Dr. Noor Hisham, these figures accumulate the COVID-19 spread in the country to 172 549, while fatality rate soared to 642. This pandemic and the measures taken by the government designed to avert or contain the virus had caused a toll to Malaysians. The virus has brought emphasis about the mental health of numerous affected populations. According to a study by the United States Centers for Disease Control and Prevention (CDC), one out of four people aged between 18 to 24 years had thought about committing suicide in June 2020. They collected the data reporting increasing number of anxiety, depression and suicidal ideation since the pandemic started (Amour, 2020).

As per the United Nations Educational, Scientific, and Cultural Organisation (UNESCO), the ongoing epidemic has disrupted the education of over one billion students across 129 countries globally. A majority of universities worldwide have transitioned to Open and Distance Learning (ODL) facilitated by online platforms, thereby mitigating concerns and apprehensions among scholars. Several studies have demonstrated that the occurrence of epidemics amplifies or introduces new stressors, such as heightened fear and anxiety regarding one's health or the well-being of loved ones. These stressors further manifest through restrictions on physical movement and social activities imposed by quarantine measures, as well as unforeseen and substantial alterations to individuals' lifestyles. To support the government initiatives on curbing

the spread of coronavirus, universities and colleges quickly devised a strategy to protect their biggest stakeholders – the students. Although some students managed to go home, some had to stay in campuses because of several reasons, causing panic and fear among parents and/or guardians. According to a study conducted between March and April 2020, Malaysia's Minister of Education at the time, Mohd Radzi Md Jidin, reported in July that 36.9% of students lacked access to devices enabling their participation in online classes. Only 5.8% owned tablet computers, while 46.5% relied on smartphones. A written reply to Channel News Asia (CNA) stated that the Malaysia Minister of Education was aware of the constraints of online learning, and challenges present in families that does not own any electronic devices. Moreover, data connectivity was also, and still, a problem for individual living in rural areas, areas that are out of coverage because of geography and cost hindering online learning.

Although universities have responded well to these drastic changes; by providing students with continuous education, students are not so lucky with adapting emotionally, spiritually, mentally and psychologically with this Emergency Remote Learning and Teaching (ERTL). Besides that, the unprecedented measures imposed by the government had significantly change the lifestyle and social relationships between individuals affected and undoubtedly generate high levels of anxiety along with fear of contracting coronavirus (Islam et al., 2020). A survey conducted among university students residing in Malaysia found that 20.4% of the students reported minimal anxiety, 6.6% moderate anxiety and 2.8% severe anxiety (Sundarason et al., 2020). The study also found that students residing in campus reported the highest level of anxiety as compared to those who stayed home with family or those who stayed with friends. These students are found to be often alone and did not know how to cope with their

anxiety. Another research by Islam et al. (2020) found that students living with families strongly create reassurance among individuals, thus, reduces depression and anxiety. Contrary to the research, a study exploring the role of college belongingness in college students reported that college belongingness causes a decrease in negative impacts of coronavirus anxiety. The study indicated that students who experience elevated levels of belongingness within the college environment demonstrate more favourable outcomes in terms of adaptive psychological adjustment.

Husky, Kovess-Masfety & Swendsen (2021) asserted that university students represent a potentially vulnerable demographic for mental health issues, given the inherent challenges associated with the transitional phase to adulthood. The stringent spatial isolation and widespread home-quarantining measures may have enduring implications for the emotional and psychological well-being of students (Tasnim et al., 2020). Confinement comprises of separating and restricting the movement of individual who have been exposed to the contagion to check whether symptoms occur. There have been several new researches investigating the mental health burden of the COVID-19 pandemic on quarantined university students. Lockdown triggers a sense of uncertainty about academic and professional career among the scholars and boosts persistent mental health challenges. Some students reported that lockdown and COVID-19 related fear are stressors, as well as the increase in interfamily violence associated with the quarantined. Previous research also remarked that heightened uncertainty and its relevance on scholar's academic progress could alter students' psychological well-being.

A spike in suicidal thoughts and attempts, anxiety, and depression are among the key mental health consequences of the coronavirus epidemic in youth, showed in new studies. Malaysia has reported a rise in suicide cases or suicide attempts cases amidst the pandemic as prolonged uncertainties have put many under severe distress. A total of 465 attempted suicide cases have been recorded since January 2020 to June 2020, as revealed by Datuk Seri Dr. Adham Baba, the 2020 Health Minister of Malaysia. A survey conducted among university students in Bangladesh disclosed that 12.8% experienced suicidal ideation amid the pandemic, with 18% reporting previous instances such thoughts and 6.6% indicating past suicide attempts. Tan Sri Lee Lam Thye stated that half of all the mental health issues were experienced as young as 14 years old, and three-quarters by individual in their mid-20s. According to the 2019 National Health and Morbidity Survey (NHMS 2019), almost half a million Malaysians faced with symptoms of depression. This is an alarming number; especially since 424 000 children experience mental health problems.

Many people have started thinking and dreaming about life after COVID as the vaccinations against COVID-19 begin to roll out across Malaysia and states begin eliminating different restrictions. And while the prospect of getting together with family and friends, travelling, and returning to activities that were formerly enjoyed can bring about feelings of delight, many people are astonished to find that they are also experiencing feelings of stress and anxiety around the "return to normal." On March 8th, 2022, the then-Prime Minister of Malaysia, Ismail Sabri Yaakob, declared that Malaysia would initiate its transition to the endemic phase on April 1st, 2022. This transition was accomplished through the implementation of a national strategy known as #ReopeningSafely, also known as Peralihan ke Endemik. Then-Health Minister

Khairy Jamaluddin predicted Malaysia might conclude its transition to COVID-19 endemicity by 2022 and implement a voluntary annual vaccination campaign (The Strait Times, 2022).

Post-COVID syndrome (PCS), also known as long-COVID, is a relatively new condition that was just recently found. One of the longer-term symptoms of PCS is anxiety. According to research, between 23 and 26 percent of people who have recovered from the COVID-19, experience difficulties with their mental health (including anxiety) especially for women (PsychCentral, 2022). A decline in mental health over post-outbreak of COVID-19 pandemic highlights the significance of implementing targeted health promotions to prevent a further escalation in symptoms, particularly among vulnerable groups. The increasing rates of depression that have been linked to the COVID-19 pandemic continue to be a significant obstacle to overcome in the primary care sector.

For several years, suicidal ideation has become a controversial issue. In addition to a various number of mental health issues, COVID-19 pandemic has impacted the emergence of suicidal cases in the period of MCO. The Fifth Edition of Diagnostic and Statistical Manual of Mental Disorders (DSM-V) suggested the inclusion of Suicidal Behaviour Disorder (SBD) in which it is applicable to individuals that had attempted suicide within the past two years. According to American Psychological Association (APA), suicidality denotes the propensity for suicide, typically evidenced by the presence of suicidal thoughts or intentions, often substantiated by a well-defined suicidal plan. Based on past literatures, students who reported higher levels of psychological distress were more likely to exhibit suicidal behaviors (including ideation

and/or attempts). An additional investigation conducted among university students residing in France documented elevated rates of suicidal thoughts and pronounced symptoms of distress, depression, perceived stress, and anxiety during the quarantine period of the COVID-19 pandemic (Wathelet, Duhem & Vaiva et al., 2020). According to Garcia-Williams, Moffitt and Kaslow (2014) suicidal ideation is a prevalent concern among young individuals with a history of persistent mental health issues like depression, substance abuse, and violent suicide attempts. Individuals experiencing uncertainty are inclined to engage in higher-risk behaviours, which may, to a certain extent, contribute to the manifestation of suicidality.

Addressing the emotional well-being needs of students within university communities is more crucial than ever. The COVID-19 pandemic has intensified the stress and trauma experienced by numerous scholars, presenting new challenges such as social isolation resulting from quarantine measures, unforeseen health and social crises, loss of social support, and heightened uncertainty. The cumulative impact of stressors during the pandemic is likely to have significant repercussions on this vulnerable population in the post-pandemic period. Even before the pandemic, it was recognized that university graduates were grappling with an escalating prevalence of stress and mental health issues. For example, information gathered in the spring of 2019 demonstrated that more than 50% of students felt so discouraged that it was hard to function, right around 70% felt overpowering anxiety and around 16% had genuinely thought about suicide in the previous year.

Numerous studies have reported a surge in psychological distress among students post-pandemic (Wang et al., 2021; Czeisler et al., 2020). The abrupt shift to

online learning, hybrid learning and finally back to physical learning, uncertainty about academic futures, and the pervasive atmosphere of fear have collectively contributed to heightened anxiety and depression levels. The sudden disruption of academic routines, coupled with the uncertainty about future career prospects, has added an additional layer of stress for students (Xie et al., 2020). Academic concerns, combined with the lack of clear guidance, contribute significantly to the deterioration of mental well-being. Despite the escalating mental health crisis among students, there are notable barriers to accessing mental health services (Auerbach et al., 2018). Long wait times, limited availability of resources, and the stigma surrounding seeking help impede students from receiving timely support.

The enduring effects of the pandemic on public health and societal structures

are subjects of ongoing exploration. Research published in the International Journal of Public Health (Ho et al., 2022) focuses on the mental health impact of the pandemic on Malaysians. The research reveals increased levels of anxiety and depression, emphasizing the need for sustained mental health support in the post-pandemic period. Discussions on the transformation of work structures and education systems are prevalent in blogs and opinion pieces. An article on The Edge Markets (The Edge Markets, 2023) explores the emergence of hybrid work models and their potential to reshape the future of work in Malaysia. Similarly, news blogs like New Straits Times (NST, 2022) discuss the transformation of education delivery, advocating integration of digital technologies and signalling a potential shift in traditional learning paradigm.

Suicide prevention is a collective responsibility, and individuals from all walks

of life can play a role in recognizing and remaining vigilant about warning signs,

thereby preventing unnecessary and avoidable instances of suicide. It is imperative to conduct further research on preventive strategies and treatments for mental health issues and suicidality, with a particular emphasis on enhancing mental health awareness, especially in the post-pandemic context. This current epidemic has caused extensive morbidity and mortality as well as interference on people's lives and livelihood across the globe; this has happened as a consequence of both indisposition of coronavirus and the measures taken to prevent the spread in order to protect the health of people (John, Eyles, Gunnell & Higgins, 2020). Stigmas on mental health problems among society, even before COVID-19, may had cause procrastination of individuals from seeking help when they need it and may had also delay the recognition of mental health issues.

In order to curb these stigmas from preventing individuals from receiving the

right kind of help they need, alterable factors that can improve existing prevention programs or initiatives globally should be considered. The number of people showing depression, anxiety and/or thoughts of ending life is alarming, especially in this crucial change of phase from pandemic to endemic. University students, during self-isolation amidst the COVID-19 pandemic, are exhibiting alarming levels of suicidal thoughts and severe symptoms of distress, anxiety, depression, and perceived stress, as indicated by Wathel et, Duham & Vaiva et al. (2020). Suicide stands as the second leading cause of death among individuals aged 15 to 25 years. Previous literature has established significant associations between pandemic-related stressors among students – including economic crises, female gender, academic delays, disruptions in daily life, and diminished social support – and the manifestation of suicidality. While suicidal ideation has been strongly linked with depression, integrating general health promotion

alongside mental health promotion in suicide prevention programs at universities may mitigate the impact of prevention initiatives for certain individuals.

1.3 Problem statement

The COVID-19 pandemic had caused significant fatigue among the communities as containment measures, including closure of schools and universities, limitation of gatherings with general suggestion to stay at home whenever possible, next to arranging the health services for a high number of COVID-19 infected patients in need of intensive medical care, have been implemented. University students are already complaining that the pandemic has negatively affected their mental health and causing interruptions on their studies. With the MCO, university closures had bigger impact on students' academic progression and access to mental health services provided in their various campuses as they were restricted. According to UNESCO (2020), mental health issues and disorders due to coronavirus and its preventative measures were a serious public health problem in students with a fifth of students afflicted globally. Malaysia's transition to endemic in 2022 had affected university students as they embarked in another transitional phase after the pandemic.

This study was pursued because of the lack in research regarding social support as moderator of psychological impacts, anxiety, stress and depression and its effect on suicidal ideation of university and college students, specifically in Malaysia, after the COVID-19 pandemic. The pandemic's immediate focus on health concerns, such as infection rates and vaccine development, overshadowed nuanced mental health issues.

Research priorities and funding were primarily directed towards urgent health responses, limiting resources for studies on mental health and social support. Additionally, the complexity of investigating these relationships, combined with cultural attitudes towards mental health and the stigma surrounding it, has likely impacted research focus. Challenges in accessing reliable data and shifts in university priorities towards academic continuity during pandemic further compounded these gaps. Recently, a startling statistic emerged, indicating that a total of 266 individuals took their own lives from the commencement of the Movement Control Order (MCO) on March 18th, 2020, until October 30th, 2020. The statistic comprised of 53% individuals that committed suicide was between the age of 19 to 40 years and 23% between the aged of 15 to 18 years. It also shows that 78% of the reported cases involved men. Suicide by hanging was the most significant with a total of 189 cases, while 37 cases committed suicide by jumping off buildings, 14 self-injury cases as well as 13 cases involving overdose on sleeping pills and another 13 cases involved the inhalation or exhaust fumes or burnt charcoal smoke (Ministry of Health Malaysia; MOH, 2021).

While students value and tend to their physical health and fitness during this transitional phase of pandemic, stigmas were still prevalent among them that may be standing in their way to recognize and treating various mental health conditions, thus creating an increase in risk-taking behaviours that may lead to suicidality. Hence, to enhance the effectiveness of targeted prevention initiatives, it is imperative to explore the influence of social support on the psychological adjustments, stress, anxiety, and depression experienced by university students in Malaysia post-pandemic. A study by Oyekcin, Sahin & Aldemir (2020) resulted in more than 10% of Turkey students

reported having thoughts of suicide. Their findings align with prior research indicating a positive correlation between negative mental state like hopelessness, depression, anxiety and suicidal thoughts. This study also identified hopelessness as a pertinent factor in the emergence of symptoms associated with anxiety, depression and suicidal tendencies. A separate study documented the substantial influence of depression in forecasting suicidality among the youth in the Malaysian context (Norhayati Ibrahim, Noh Amit & Melia Wong Yuin Suen, 2014).

According to Wathel et, Duham & Vaiva et al., (2020) in their research of 69 054 students residing in France during COVID-19 lockdown, they found that there is a rise in self-reported suicidal thoughts and extreme self-reported depression, anxiety, distress and stress among quarantined students. Their research found that 11.4% students had reported suicidal thoughts and severe distress, while 22.4% reported perceived stress, anxiety (27.5%), depression (16.1%) and 42.8% of the students reported at least one outcome. Arslan, Yildrim and Zangeneh (2021) conducted a study suggesting that college students grappling with COVID-19 anxiety are prone to encountering challenges in psychological adjustment. Conversely, students with elevated levels of college belongingness demonstrated superior adaptive psychological adjustment within the academic setting. Those reporting lower levels of college belongingness experiences heightened stress levels and lower life satisfaction. Furthermore, the study indicated that the sense of college belongingness correlated with depression, interpersonal conflicts, loneliness, and academic and social adjustment among the student population (Arslan, Yildrim & Zangeneh, 2021).

In a study conducted by Tasnim et al. (2020) among university students in Bangladesh, more than one in eight scholars reported experiencing suicidal thoughts during the pandemic. The findings underscored a substantial and statistically significant association between students' mental health concerns and suicidal ideation. Suicidality was higher among male students and students who experienced stress, anxiety and depression. 12.8% of the students reported having contemplated suicide during COVID-19 pandemic, while 18% reported previous instances of suicidal thoughts, and 6.6% had attempted suicide. A considerable proportion of students have adopted or heightened engagement in unhealthy behaviours as coping mechanisms for psychological distress and experiences that may predispose them to suicidality. This may involve the initiation of risk-taking and addictive behaviours, which have also been linked to an increased likelihood of suicidality, with the risk of a successful suicide attempt being 10 to 14 times higher in individuals using substances or with substance use disorders. More than a fifth of students have considered suicide at some point in their lives, and one-tenth have made suicide attempts (Ashrafioun, Bonar & Conner, 2015).

The COVID-19 pandemic represents a traumatic event that has the potential to contribute to the development of mental health issues, including post-traumatic stress disorder (PTSD). The definition of trauma in the recently updated Fifth Edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-V) has been revised to encompass experiences involving actual or threatened death, serious injury, or sexual violence. Events that induce stress but lack an immediate threat to life or physical well-being, such as psychological stressors, are not categorized as trauma (North et al., 2009). The term 'threat to physical integrity' in the revised version of Fourth Edition DSM (DSM-IV-TR) was removed in the new definition. As per the DSM-V, there are

eight proposed criteria for trauma, accompanied by two specifiers; 1) stressor, 2) intrusion symptoms, 3) avoidance, 4) negative alterations in cognitions and mood, 5) alterations in arousal and reactivity, 6) duration (indicating that symptoms persist for more than a month), 7) functional significance and 8) exclusion (indicating that symptoms are not attributable to medication, substance use, or other illnesses). The end of pandemic also causes more added trauma that may heightened the state of mental health issues as students are forced to transition to another phase.

The implementation of isolation and lockdown measures has limited social activities, contributing to psychological distress and an increased likelihood of suicide contemplation among vulnerable populations. The imposition of social distancing induces anxiety, particularly among university students, and those most at risk are individuals with pre-existing mental health issues who live in solitary and isolated conditions. These individuals tend to engage in self-judgment and experience severe suicidal ideation. The uncertainty of when the social distancing been lifted, mass unemployment, academic progress, the new learning norms, being fearful for one's health and loved ones' and future career unpredictability, may lead to risk of suicidality. These stressors can also cause the students to feel hopeless and worthless about the present and future.

Even as the immediate health crisis abates, individuals may continue to experience anxiety and uncertainty about the future. Concerns about the potential for new variants, the pace of economic recovery, and the reintegration into pre-pandemic routines can contribute to ongoing stress. Many individuals experienced loss during the pandemic, whether it is the loss of loved ones, employment, or a sense of normalcy.

Grieving and coping to these losses can exert enduring impacts on mental well-being.

Besides that, as societies reopen and people return to more typical activities, some individuals may face challenges in readjusting to social interactions. Social anxiety, fear of crowds, and concerns about exposure to illness may impact mental well-being. Vulnerable populations, including students with pre-existing mental health conditions, may face continued challenges accessing support and resources. Disparities in healthcare and mental health services may persist or worsen.

The transition to a 'new norm' may bring its own set of challenges. Adjusting to changes in work and education environments, shifting social norms and uncertainties about the future can contribute to stress and anxiety. For those who continue to work remotely or experience changes in work structures, the challenges associated with remote work, such as blurred boundaries between work and personal life, may impact mental health. Individuals who experienced severe stress or trauma during the pandemic, such as frontline healthcare workers or those directly affected by the virus, may continue to grapple with post-traumatic stress in the post-pandemic period. The pandemic has been linked to a surge in mental health issues, encompassing heightened levels of anxiety, depression, and stress. The post-pandemic period may continue to see these issues, exacerbated by ongoing challenges such as economic uncertainties, social disruptions, and lingering health concerns.

The world has entered a post-pandemic phase, marked by the relaxation of community and border measures. Nevertheless, the repercussions of COVID-19 will persist, affecting social and mental health services. This will result from breakthrough infections, reinfections, and the enduring impact of COVID-19 on mental health

(Houben-Wilke et al., 2022). There is a crucial need to establish resilient and sustainable social and mental health services, and achieving this goal involves prioritising the well-being of social and mental health providers. Effective interventions in preserving providers' mental health include the implementation of safe working conditions, such as shorter shifts, and facilitating access to mental health support to promote overall well-being (Byrne et al., 2021).

With the global administration of COVID-19 vaccines, it is imperative to consider the aftermath of the pandemic and its implications for mental health. In addition to the commonly observed symptoms of insomnia, anxiety, and impaired cognitive function during the acute phase of infection, there exists the potential for an extension to post-traumatic stress disorder (PTSD), anxiety, and depression in the post-outbreak stage of coronavirus infection. The long-term psychiatric consequences remain uncertain. Notably, individuals in close proximity to infected cases, including families and frontline healthcare workers, have experienced both acute and post-traumatic stress (Kisely et al., 2020). On a broader scale, the pervasive fear of infection and uncertainty has impacted individuals globally, resulting in heightened anxiety and depression across various countries in the general population.

While the containment of the COVID-19 is an inevitable prospect in the future, its psychological repercussions are likely to persist, arising from both direct consequences of the viral infection and responses to the 'new normal'. These effects are pervasive, impacting adults, children, families, and workplaces across all facets of society. Over the past decades, globalization facilitated the rapid global spread of infectious diseases, with recent examples being Severe Acute Respiratory Syndrome

(SARS-CoV) and Middle East Respiratory Syndrome (MERS-CoV). However, the COVID-19 pandemic surpasses them in terms of its extensive reach in both temporally and geographically. Considering the potential recurrence of infectious epidemics and their corresponding psychiatric implications, it is imperative to augment funding and foster international collaboration to comprehensively comprehend the impact of epidemics on mental health.

Gender can also significantly influence how social support moderates psychological adjustment, anxiety, stress, depression and suicidal ideation among university and college students in Malaysia after the COVID-19 pandemic. research indicates that men and women often experienced and expressed psychological distress differently, with women typically reporting higher levels of anxiety and depression, while men may experienced more stress and be less inclined to seek help. Gender norms also affect social support-seeking behaviours, with women generally more likely to seek emotional support and men potentially benefiting more from practical support. Additionally cultural expectations in Malaysia had further shaped these gender-specific dynamics, influencing how students of different genders cope with mental health challenges and engaged with support systems.

The psychological consequences of COVID-19 can be significant. Yet, information regarding the extended psychological effects on individuals and the ways to hinder the effect post-outbreak is limited. Thus, this is why research should be done to investigate the moderating role of social support towards psychological adjustments, anxiety, stress and depression and its effect among university students' suicidality after the COVID-19 pandemic in Malaysia. Research persuades researchers to investigate

the most recent evidence/proof or information. Since COVID-19 endemic is a new issue globally, there are always new discoveries and findings. Therefore, this current research can provide a significant evidence and reference for other researchers to contribute with the same variables. Besides that, this research is to fill the gap of inadequate researches among university students, specifically in Malaysia, post-outbreak COVID-19 pandemic. This research also aims to help raise mental health awareness to the society as we fight against the pandemic and adjust to the post-pandemic. Lastly, this current research is conducted because of the researcher's curiosity and commitment to learning.

1.4 Research question(s)

Research question is a statement which identifies the problem that the research is going to address. Research question provides focal point of research. The current research is to address the following questions;

1. What is the prevalence of psychological adjustment, anxiety, stress, depression, and suicidal ideation among students post-pandemic in Malaysia?
2. Would there be a relationship between psychological adjustment, anxiety, stress, and depression among students post-outbreak of COVID-19?
3. Will psychological adjustment, anxiety, stress and depression contribute towards the level of suicidal ideation among students after the pandemic in Malaysia?
4. Would there be any significant gender difference on the relationship between the psychological adjustment, anxiety, stress, depression on suicidal ideation?

5. Would there be a relationship between each of the sub-domains of social support (family, friends and significant others) on suicidal ideation among students after the pandemic in Malaysia?
6. Would the overall social support contribute to the severity of suicidal ideation among students after the pandemic in Malaysia?
7. Can psychological adjustment, anxiety, stress and depression effect social support moderate the severity of suicidal ideation among students after the pandemic in Malaysia?

1.5 Research objective(s)

This research consists of the following objectives, which are:

1. To investigate the prevalence of psychological adjustment, anxiety, stress, depression, and suicidal ideation among students post-pandemic in Malaysia.
2. To investigate the relationship between psychological adjustment, anxiety, stress, and depression on social support among students post-pandemic COVID-19 in Malaysia;
 - a) Psychological adjustment and social support among students after the pandemic in Malaysia.
 - b) Anxiety and social support among students after the pandemic in Malaysia.
 - c) Stress and social support among students after the pandemic in Malaysia.

d) Depression and social support among students after the pandemic in Malaysia.

3. To investigate the relationship of psychological adjustment, anxiety, stress, and depression on suicidal ideation among students post-pandemic in Malaysia;

- Psychological adjustment on suicidal ideation among students post-pandemic in Malaysia.
- Anxiety on suicidal ideation among students post-pandemic in Malaysia.
- Stress on suicidal ideation among students post-pandemic in Malaysia.
- Depression on suicidal ideation among students post-pandemic in Malaysia.

4. To study the significant difference of psychological adjustment, anxiety, stress, and depression on suicidal ideation based on gender among students post-outbreak of COVID-19 in Malaysia;

- Psychological adjustment and suicidal ideation on gender among students post-pandemic in Malaysia.
- Anxiety and suicidal ideation on gender among students post-pandemic in Malaysia.
- Stress and suicidal ideation on gender among students post-pandemic in Malaysia.
- Depression and suicidal ideation on gender among students post-pandemic in Malaysia.

5. To identify which of the sub-domains of social support system will have significant relationship with suicidal ideation among students post-pandemic in Malaysia;

- a) Family
- b) Friend(s)
- c) Significant other(s)

6. To examine if there is significant relationship of overall social support towards the severity of suicidal ideation among students in Malaysia after the pandemic.
7. To predict how the effect of psychological adjustment, anxiety, stress and depression is influenced by social support on the severity of students' suicidal ideation after the pandemic in Malaysia.

1.6 Significance of the study

The purpose of this research is to study on the relationship between psychological adjustments, anxiety, stress and depression and the moderating role of social support and if it has a consequential relationship on suicidal ideation of students after the COVID-19 pandemic in Malaysia. Mann, Wateraux & Hass et al. (2008) proposed a clinical-biological model that suggested psychiatric problems serve as stressors but only lead to suicidality when combined with vulnerability. The theory is based on the notion of the proneness to retaliate to frustration or provocation with resentment or in short impulsive aggression, as a biological factor and often correlates to suicidality (Bridge, Goldstein & Brent, 2006). Psychological theories of suicidality have expanded in number and complexity over the past years and have probable significant consequences for research and expanding methods for suicidal prevention.

By conducting this research, there are few conveniences and advantages to the researcher and society. Firstly, by carrying out this research, there will be new evidence and/or proof indicating the prediction if social support can act as a moderator to psychological adjustments, anxiety, stress and depression and the tendency for students to contemplate and/or attempt suicide as an after effect of COVID-19 pandemic. Furthermore, this will help researcher determine if the pandemic has any effect among students' mental health conditions and if the transition of pandemic to endemic has also affected the rate of contemplated suicide among the vulnerable population in Malaysia.

COVID-19 pandemic is a crisis dealt by everyone globally. The post-pandemic is an appropriate environment to study the role of perceived social support on psychological adjustment, anxiety, stress and depression and if it leads to suicidal ideation among students. Daily regime have completely changed as individuals try to adapt to the pandemic and back to normal regime, and social relations have declined due to the government advise to stay at home and minimal social interactions between people to decrease contact and exposure to the virus during the pandemic and the abrupt change back to normal causes difficulties for students to engage back with social interactions. The aftermath of pandemic has caused uncertainties to arise.

In addition, examining the post-pandemic phase allows researchers and healthcare professionals to assess the enduring mental health effects that may persist even after the acute phase of the pandemic has subsided. This understanding is essential for developing targeted interventions and support services. Insights gained from studying mental health post-pandemic can inform the development of policies and strategies aimed at addressing the specific mental health needs of individuals and

communities. This can include resource allocation, mental health services, and preventive measures. The post-pandemic period provides an opportunity to identify and address the mental health needs of vulnerable populations. Certain groups, such as frontline workers, individuals with pre-existing mental health conditions, and those facing economic challenges, may require tailored interventions.

Data analysis from the research will also help identify which mental health conditions (anxiety, stress or depression) have a higher significant relationship with suicidality as an after effect of COVID-19 pandemic among students in Malaysia context. Data analysis will also provide evidence on which social support system has a higher moderating effect on students' suicidality. The overall result of this research is expected to promote awareness to the society on the importance of mental health towards personal life improvements and its effect that may lead to suicidality if left untreated. The researcher hoped that this current research can be further studied in order to curb the percentage of suicide attempts among youth in Malaysia corresponding to mental health conditions, as well as providing alternatives and/or initiatives to help students be well-adjusted to the new norm of learning during the post-pandemic era.

In addition to that, this current research will also help and promote mental health and suicidality awareness in educational institutions. The alarming inclination in mental health issues and contemplation of suicide among students after the COVID-19 pandemic in Malaysia is staggering. Several educational institutions have established strong programs to curb the mental health crisis exist within the higher education. Educational institution could offer for-credit course for new and existing students that would notify students of the availability of services, and offering the students a first-

hand opportunity to learn and question their social and psychological needs. Besides that, with the current research, institutions could develop effective policies as well as initiatives that could help students in need of help, especially in the post-pandemic.

Lastly, studying mental health in the post-pandemic era is expected to contribute to reducing stigma associated with mental health issues. Increased awareness and understanding of the psychological impact during the pandemic can foster empathy and support for individuals experiencing mental health challenges. Mental health is an integral aspect of public health, and addressing mental health needs post-pandemic contributes to overall community well-being. Prioritising mental health in public health initiatives can lead to healthier, more resilient societies. Researcher believed that conducting a research in the post-pandemic period and its impact on mental health is vital for developing effective strategies to address the mental health challenges that may persist. This knowledge can guide interventions, policies, and support systems to promote the well-being of individuals and communities in the aftermath of a global health crisis.

1.7 Definition of variables

In this section, all the variables for the research were defined and expounded upon, both conceptually and operationally. The difference between both types of definition can be distinguished by its meaning. A conceptual definition or in other term is theoretical definition explains the concept or framework in abstract way of academic discipline and it relates to the mental concepts or philosophical or imaginary ideas. Conceptual

definition explains how one construct that is being studied related to other constructs. Conceptual definitions assume that both knowledge and depending conceptions of theories without a falsifiable operational definition. Operational definition, on the other hand, elucidates constructs by establishing a connection between a construct and real-world observation or measurement of observable events, independently aligning with theoretical concepts. It denotes a clear statement detailing the transformation of a conceptual variable into a measured variable. The operational definition acknowledges the properties within the definition of terms and the nature of the variables.

1.7.1 Conceptual definition of social support

Social support may be delineated as an individual's perception of their relationships with friends, family members, and other available sources that offer material, psychological, and comprehensive support during times of need. As per the definition provided by the American Psychological Association (APA) social support is characterized by the provision of assistance or comfort to others, typically aimed at aiding individuals in coping with stressors in their lives, encompassing biological, psychological, and/or social aspects. Melrose (2015) described social support acting as a buffer that guards individuals against stressors attributes from experiences such as illness, death or other life events.

Seeman (2008) provided an elucidation of social support, defining it as diverse forms of assistance or aid individuals receive from others. This assistance can be broadly classified into two principal categories; emotional support and instrumental

support. Emotional support encompasses actions undertaken by others that foster feelings of love, care and an augmented sense of self-worth in an individual. On the other hand, instrumental support typically manifests as tangible forms of assistance that others may provide. The National Cancer Institute characterizes social support as a network comprising family, friends, neighbours, and community members, which becomes accessible during times of necessity to furnish physical, emotional, psychological, and financial aid. Social support can also be described as an interpersonal relationship of individual that might affect to psychological and social functioning (Caplan, 1974) while Folkman and Lazarus (1988) assumed that when an individual has a good relationship with their family and peers are more adaptable when faced with stressors in their lives and are more prone to cope more efficiently with life's distress and encounter positive adjustment and mental health outcomes. Meadows (2007) agreed with the latter definition, in which perceived social support indicates that the person is part of an interpersonal relationship that includes their parents and peers.

Social support stands out as a paramount facet within the realm of social relationships, constituting a significant function. It is characterized by the perception or encounter of having individuals in one's life who harbour affection and concern, serving as a resource to which individuals may turn for assistance during times of exigency. This support can manifest in various forms, encompassing financial or material aid, as well as the provision of empathetic listening and counsel. Research has underscored the pivotal role of social support exhibit a diminished susceptibility to illness in comparison to those who grapple with social isolation.

Social support post-pandemic can be refers to the support individuals obtain from their social networks, encompassing assistance, encouragement, and resources provided by family, friends, and communities, as they navigate the challenges and aftermath of a global health crisis, such as the COVID-19 pandemic. This support can take various forms, including emotional support, instrumental assistance, information, and companionship. Social support plays a crucial role in promoting resilience, mental well-being, and adaptive coping strategies as people work to rebuild their lives and communities in the aftermath of the pandemic. Thoits (2011) explores the mechanisms through which social ties and support influence both physical and mental health, providing a foundation for understanding the importance of social support post-pandemic.

1.7.2 Operational definition of social support

Social support can operationally be defined by score obtained from the Multidimensional Scale of Perceived Social Support (MSPSS) establish by Zimet, Dahlem, Zimet and Farley in 1988. The MSPSS is a 12-item, self-report inventory that measures the individual's insight on support that they received from family (abbreviated as Fam), friends (abbreviated as Fri) and significant others (abbreviated as SO). Each subscale has 4-items; Fam = item numbered 3, 4, 8, and 11, Fri = item numbered 6, 7, 9, and 12, and SO = item numbered 1, 2, 5, and 10.

The items are rated on a 7-Likert scale ranging from 1 (very strongly disagree) to 7 (very strongly agree). The range for possible scores varies from a minimum total of 4 to a maximum total of 28 for each subscale. The higher score reflects more support from each subscale. The MSPSS is commonly and widely used to measure social support and is readily available online to public.

1.7.3 Conceptual definition of psychological adjustment

The American Psychological Association (APA) delineated adjustment as a modification in behaviour, attitude, or a combination of both, prompted by a recognized need or desire for change. This alteration is particularly oriented towards assimilating to the prevailing environment or adapting to unforeseen, unconventional, or changing circumstances. The genesis of the concept of adjustment can be traced back to the biological notion of 'adaptation'. While biologists traditionally employ the term 'adaptation' to denote the varied physical demands posed by the environment, psychologists diverge in their usage, employing the term 'adjustment' to encapsulate a broader array of conditions related to social or interpersonal relations with society (Ubale, 2018). In accordance with Shaffer's (1961) perspective, adjustment is the mechanism through which a living organism preserves equilibrium between its needs and the external conditions that impact the fulfilment of these needs. This notion aligns with the perspective put forth by Britannic (2018), positing that adjustment is a behavioural process through which both humans and other animals sustain equilibrium amidst their diverse needs and the challenges presented by their environment.

In this context of research, psychological adjustment has the most accurate definition. According to Cruz et al. (2020), psychological adjustment can be delineated as an individual's subjective perception of distress and the extent to which they operate in their daily life. Good psychological adjustments depend upon; 1) satisfactory understanding into the events and psychological changes that might have taken place and a personal integration of these changes, 2) a proper adjustment of the perception of self, 3) modification of personal goals and belief, and 4) the attainment of appropriate strategies to compensate as far as possible for any residual impediment (Beaumont, 2004).

Psychological adjustments can also be described as a behavioural process involving the equilibrium of conflicting needs or needs confronted by environmental obstacles. Adjustment disorder arises when there is a failure to achieve a typical adaptation to a particular need or stress within the environment. There is a new proposal for a new definition of adjustment disorder for the 11th edition of the International Classification of Disease (ICD – 11) released by World Health Organisation, (WHO, 2018). The novel proposal characterizes adjustment disorder as a stress response to substantial and identifiable life stressors, marked by a clinical manifestation that encompasses two primary symptoms; 1) preoccupation with the stressor, and 2) an inability to adapt.

The fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-V) noted that adjustment disorders are linked to an increased risk of suicide attempts and completed suicide. Furthermore, it can co-occur with most mental disorders and any medical condition. The DSM-V has proposed four diagnostic criteria

of adjustment disorders; 1) the emergence of emotional and behavioural symptoms in response to an identifiable stressor(s) within three months of their onset, 2) the clinical significance of these symptoms or behaviours, as indicated by either or both of the following; a) notable distress disproportionate to the severity or intensity of the stressor, considering external context and cultural factors influencing symptom severity and presentation, and/or; b) considerable impairment in social, occupational, or other vital areas of functioning; 3) the symptoms do not represent ordinary bereavement and lastly; 4) upon termination of the stressor (or its consequences), the symptoms do not endure for more than an additional six months (DSM-V, 2013).

Psychological adjustment post-pandemic refers to the process through which individuals adapt and cope with the psychological and emotional impact of living through a global health crisis, such as the COVID-19 pandemic. This adjustment involves changes in cognition, emotion, and behaviour to achieve a new state of equilibrium or well-being in the aftermath of the crisis. Factors influencing psychological adjustment post-pandemic may include the duration and severity of the pandemic, individual differences of illness or loss, economic challenges, social disruptions, and the effectiveness of coping strategies. Psychological adjustment can encompass a range of outcomes, from resilience and positive growth to persistent mental health challenges.

1.7.4 Operational definition of psychological adjustments

Psychological adjustment is operationally defined by the score of the International Adjustment Disorder Questionnaire (IADQ-19) developed by Shevlin et al. (2019). It is a brief, simply worded self-report measure, focusing only on the core features of Adjustment Disorder. The IADQ-19 was developed to reflect the principles of the eleventh edition of International Classification of Diseases (ICD-11), as set forth by World Health Organisation (WHO) to ensure international applicability and maximise clinical utility focuses on the core symptoms of the disorder.

It comprises of 19-items designed to assess the disorder fulfilling the requirements of; 1) psychosocial stressor (items 1 to 9, score ≥ 1), 2) at least one 'Preoccupation' symptom (items 10 to 12, scored ≥ 2), 3) at least one 'Failure to Adapt' symptom (items 13 to 15, scored ≥ 2), 4) symptoms began within one month of the stressor (item 16, marked yes), and 5) evidence of functional disability indicated by any item from 17 to 19 (scored ≥ 2). The IADQ-19 is freely available in the public domain.

1.7.5 Conceptual definition of anxiety

Anxiety can be described as feelings of stress, worried thoughts and physical changes such as an increase in blood pressure (APA). According to DSM-V, anxiety disorders comprise conditions characterized by excessive fear and anxiety, along with associated behavioural disturbances. Individuals afflicted with anxiety disorders commonly experience persistent intrusive thoughts or apprehensions, leading to avoidance of

specific situations due to concerns. Worrying is a psychological phenomenon involving the recurrent occurrence of negative and catastrophic thoughts, which has been associated with both depression and various anxiety-related disorders.

Coronavirus crisis has taken a toll on psychological health. Individuals are in persistent worry about their health and the exposure to information about the virus has caused elevated levels of fear. Coronavirus anxiety can be defined as the uncertainty surrounding coronavirus causing individual to fear for their health. Health anxiety can be described as the inclination to misconstrue ordinary or harmless physical symptoms and harbour the belief that one is afflicted with or developing a severe illness, despite the absence of any actual illness (Anxiety & Depression Association of America; ADAA, 2021). A podcast interview between Dr. Baruch Fischhoff with the APA suggested that coronavirus anxiety has been reported throughout the pandemic. Dr. Fischhoff stated that society might be worrying more about the new and unknown risks such as the coronavirus rather than the familiar ones. He also stated that because the number of positive cases and death tolls of the virus continues to rise every day, society are in fear of the COVID-19.

According to a researcher in the field of risk and decision-making at the University of Oregon, Dr. Paul Slovic, the increase in coronavirus anxiety is probably cause by people using emotions instead of logical reasoning to evaluate the situation. Instead of looking at the data, people assume based on the worst and catastrophizing (cognitive distortion tactic), which is an irrational thought where individual make something out to be far worse than it actually is. Documentation of anxiety disorders linked with the coronavirus anxiety include phobias, health anxiety, and obsessive-

compulsive disorder (OCD), plausibly connected by an underlying cause of intolerance to uncertainty (Wheaton, Messner & Marks, 2021; Aardema, 2020).

Pandemic anxiety can be triggered by situation or internally and individuals experiencing this may have brief episodes. The intensity of this anxiety ranges from mild to severe and usually caused by fear of uncertainty, fear of contracting COVID-19, fear of contaminating others with the virus and fear of being judged or socially shamed. Pandemic anxiety may impact daily functioning such as adaptation of lifestyle to preserve self and others safety and maintaining social life through social distancing and virtual presence.

Anxiety post-pandemic refers to the heightened state of apprehension, worry,

and unease experienced by individuals and communities as they navigate the aftermath of global health crisis, such as the COVID-19 pandemic. This anxiety can stem from various sources, including health concerns, economic uncertainties, social disruptions, and the challenges of adapting to a changed world. It involves the anticipation of potential threats and difficulties, both immediate and long-term, as individuals cope with the psychological impact and adjust to the 'new normal' following the pandemic. While focused on suicide rates, a literature (Sher, 2020) touches on the broader mental health impact of the pandemic, including anxiety, and underscores the need for mental health considerations in the post-pandemic period. Another article (Pfefferbaum et al., 2020) discusses the mental health impact of COVID-19 pandemic, including the potential for increased anxiety, and highlights the importance of addressing mental health concerns in the post-pandemic period.

1.7.6 Operational definition of anxiety

The Coronavirus Anxiety Scale (CAS) newly developed by Sherman A. Lee in 2020 can operationally define the coronavirus-related anxiety, in accordance to current research context. The self-reported measure comprises of 5-items that measures anxiety symptoms. Each item in CAS is rated on a 5-point Likert scale to reflect the intensity of each anxiety symptoms, ranging from 0 (not at all) to 4 (nearly every day) over the preceding two weeks. Respondent scoring ≥ 9 are classified as having dysfunctional anxiety associated with the pandemic. The CAS is available on public domain. The qualities in CAS make it a useful assessment tools that is needed for rapid assessment and research especially those involving COVID-19 and mental health markers (Medeiros et al, 2021).

1.7.7 Conceptual definition of stress

According to a survey conducted in 2019 by American Psychological Association (APA) found that in America, more than three-quarters of the adult population reported physical or emotional symptoms of stress and nearly half of them mentioned that they have trouble sleeping at night because of the stress in the past month. Lazarus and Folkman (1984) characterized stress as an actual or perceived disparity between the environmental demands necessary for survival and an individual's capacity to adjust to these requisites. Stress can also be defined as an adaptive response to a perceived threat that involves cognitive, physiological, affective and behavioural components in an individual.

The COVID-19 pandemic has altered every aspect of every individual's lives. Elevated level of stress related to the pandemic is the new normal for every individual worldwide. In the long-term run, this pandemic may negate serious and long-lasting negative mental health effects from the coronavirus. Stress is a dynamic process herein an individual recognizes and reacts to situations assessed as formidable or perilous to one's well-being. According to Hans Selye (1976), the physiological response to stress, such as the fight-or-flight response proposed by Walter Cannon in 1932, is an integral component of the general adaptation syndrome unfolds through three sequential stages; the alarm reaction (manifesting as the fight-or-flight response), resistance (signifying the body's adaptive adjustments to sustained stress), and exhaustion (characterized by a depletion of adaptive energy, leading to the onset of physical repercussions due to stress).

The extended stress experienced by individuals worldwide, especially the increased in level of stress reported directly linked to the pandemic, has a serious impact on the mental and physical health. A number of people have reported that they felt strain on their mental well-being because of the quarantine and social distancing. Physiopedia (2021) listed a number of specific stressors linked to COVID-19 outbreak that might affect the general population such as the fear of being infected and infecting others and assuming that common symptoms of other health problems like flu, fever or coughing could be contractions of the virus.

Stress post-pandemic refers to the psychological and physiological responses individuals and communities may experience as they cope with the lingering effects, uncertainties, and challenges arising after a global health crisis, such as the COVID-19



pandemic. This stress can result from a combination of factors, including ongoing health concerns, economic disruptions, social changes, and the demands of adjusting to a transformed environment. It encompasses the emotional and physiological strain individuals may face as they navigate the aftermath of the pandemic and work towards rebuilding their lives. An article by Maunder & Hunter (2020) discusses human resilience and coping strategies in the context of a pandemic, shedding light on the factors that contribute to stress and the importance of adaptive coping mechanisms. Besides that, a book (Choi & Taylor, 2019) published before the COVID-19 pandemic provides insights into the psychological aspects of pandemics and offers a conceptual framework for understanding stress in the post-pandemic context.

1.7.8 Operational definition of stress



Stress is operationally defined by the total score of the 14-items Perceived Stress Scale (PSS-14) developed by Sheldon Cohen in 1983. The PSS-14 is a widely-used, self-reported psychological instrument that measures the perception of stress presence in individual. It is designed to assess the unpredictability, uncontrollability, and overloaded individual perceives their lives to be. The items numbered by 4, 5, 6, 7, 9, 10, and 13 are scored in reverse direction. The total score ranges from 0 to 56; higher scores on the PSS-14 indicate elevated level of stress. The PSS-14 is the world's most widely used instrument and is readily available to public.



1.7.9 Conceptual definition of depression

Depression is one of the most common mental disorders in the transition phase of adolescence to early adulthood (Contoyannis and Jinhu, 2013). According to World Health Organisation (WHO) an estimate of more than 264 million people of all ages are affected by depression, a common mental health disorder that resulted from a complex interaction of social, psychological and biological factors. Symptoms of depression include loss of interest or pleasure, depressed mood, loss of energy, lack of sleep or disturbed appetite, poor concentration, and feelings of guilt or self-worthlessness. Depression can be long-lasting with moderate to severe intensity and recurrent, substantially leading to disability to function on daily basis or cope with life.

According to the American Psychological Association (APA) depression is described as the most common mental disorder in which individual with depression exhibits symptoms such as loss of interest and pleasure in daily routines, sleep problems such as insomnia or excessive sleeping, weight gain or loss, excessive guilt and feeling unworthy and recurrent thoughts of death or suicide. The low mood and predisposition towards pessimistic thoughts may have negative impact on thought processes that will eventually lead to suicidality (Rollman et al, 2003).

The current pandemic has created new level of anxiety and stress and eventually falling into depression thus ultimately caused suicidal thoughts and / or attempts. Social distancing practises and financial crisis seems to be one of the major triggers for individual to develop depression. Students have difficulty of the new norm of open and distance learning (ODL) because they are forced to switch from classroom presence to

a virtual one. Silvia Saccardo's research in 2020 points to a disconcerting surge in anxiety and depression levels, particularly among the youth, with a specific emphasis on college students, as the academic semester unfolds. The study exposes substantial disruptions in the regular activities of daily life, coupled with a noticeable decline in overall well-being as the semester progresses. This underscores the need for a more nuanced understanding of the evolving mental health landscape among the younger demographic during academic periods, calling attention to the intricate interplay between educational pressures and psychological well-being.

Depression post-outbreak of pandemic refers to a persistent and pervasive state of low mood, sadness, and emotional distress experienced by individuals and communities as they grapple with the aftermath of a global health crisis, such as the COVID-19 pandemic. This depression state may be influenced by a combination of factors including ongoing health concerns, economic uncertainties, social disruptions, and the challenges of adapting to a changed world. Post-pandemic depression involves a complex interplay of psychological, social, and environmental factors that contribute to a prolonged and impairing negative affective state. Research by Tull et al. (2020) investigates the psychological outcomes, including depression, associated with stay-at-home orders during the COVID-19 pandemic, offering insights into the potential impact on mental health in the post-pandemic period. Another research by Daly et al. (2020) compares rates of depression reported before and during the early stages of the COVID-19 pandemic, shedding light on the potential changes in mental health during this period.

1.7.10 Operational definition of depression

The self-reported measure of 21-items Beck Depression Inventory (BDI) operationally defines the measure of depression. BDI was introduced by Aaron T. Beck in 1961 to measure the severity, intensity and depth of depression in individual over the preceding week. The BDI was developed to investigate the depth of depression using quantitative assessment. It is a widely-use, famously known assessment and the result from BDI can easily be interpreted. Each item in BDI had a set of at least four possible responses, ranging in severity. The total scores can range between 0 until 63, in which the higher total scores indicated severe depressive symptoms and vice versa. The standard cut-off scores were; 0 – 9 (minimal depression), 10 – 18 (mild depression), 19 – 29 (moderate depression) and 30 – 63 (severe depression). The instrument has been made readily available by University of Maryland Medical System (UMMS).

1.7.11 Conceptual definition of suicidal ideation

According to the fifth edition of Diagnostic and Statistical Manual of Mental Disorders (DSM-V; 2013), suicidal ideation can be described as having thoughts of self-harm, with deliberate consideration or planning of possible ways of causing one's own death. Suicide in general is taking your own life. It is a tragic reaction towards stressful or traumatic life events, i.e. the coronavirus pandemic. Pederson (2018) defined suicidal ideation as the consideration of ending one's own life. Suicidal ideation can range greatly from brief contemplation to preoccupation to detailed planning.

An alarming increase in suicide attempts and death in Malaysia during the first movement control order (MCO) has emerged and according to statistics by the police, 266 cases were reported between March 18 and October 30, 2020 (TheStar, 2021). Within the documented instances, a quarter or reported cases were perpetrated by individuals in the youthful age of 25 to 18 years. The report delineates prevalent causes for youth suicide in Malaysia, highlighting factors such as financial indebtedness, familial and marital challenges, interpersonal relationship disruptions, and occupational stresses. The news article additionally underscores the heightened incidence of mental health issues among individuals aged 16 to 29, asserting that young individuals face an increased susceptibility to suicide during this pivotal developmental phase, characterized by the transition from adolescence to adulthood.

According to American Psychiatric Association (APA), the prevalence of suicide, usually indicated by suicidal ideation or intent, especially in the presence of a well-elaborated suicidal plan, are known as suicidality. APA also mentioned that recent stressor or sudden traumatic event can be the 'tipping point' towards suicide. Suicide completion occurs when a person intends to take his/her life and succeeded in death (American Association of Suicidology; AAS, 2020). While women are prone to attempt suicide, men are more likely to complete suicide because they usually use more lethal methods, such as firearm.

Suicidal ideation post-pandemic refers to the presence of thoughts, fantasies, or contemplation of engaging in self-harm or taking one's own life that individuals may experience as a consequence of the psychological, social, and economic challenges arising after the global health crisis, such as the COVID-19 pandemic. Suicidal ideation

involves a spectrum of thoughts, ranging from fleeting considerations to more persistent and distressing thoughts about suicide. The post-pandemic period may amplify risk factors, such as social isolation, economic stressors, and mental health challenges, contributing to an increased vulnerability to suicidal thoughts. A systematic examination conducted by Rogers et al. (2020) delves into the psychiatric and neuropsychiatric manifestations linked to severe cases of coronavirus infections. This review offers valuable perspectives on the plausible mental health repercussions of the pandemic, including the potential for suicidal ideation. In a parallel vein, Gunnel et al. (2020) scrutinizes the risk of suicide and preventive measures amidst the COVID-19 pandemic, underscoring the critical necessity of comprehending and mitigating the factors that contribute to suicidal ideation within the framework of a worldwide health crisis (Gunnel et al., 2020).

In their recent publication, Lin et al. (2022) highlighted the importance of directing attention toward geriatric suicidality in the aftermath of the pandemic. The researchers elucidated this concern by presenting two cases involving elderly individuals who manifested signs of depression subsequent to the onset of the COVID-19 outbreak, eventually culminating in suicide attempts post-pandemic era (Lin et al., 2022). The researcher suggested that the number of suicides may initially decrease to its lower point following the peak of the pandemic, only to subsequently rise again with the decline in infection rates. This observation aligns with the findings of Chen et al. (2021), who noted a temporary decline in the suicide rate among elderly adults (≥ 65) in the initial stages of the pandemic, followed by a sustained upward trajectory as the crisis unfolded (Chen et al., 2021).

1.7.12 Operational definition of suicidal ideation

Suicidal ideation can be operationally defined by the obtained scores of Scale for Suicide Ideation (SSI). This 19-items, self-reported psychological instrument measures characteristics of individual's plan and ideation to commit or attempt suicide. The three subscales in the measure determine the factor to suicidal risk; active suicidal desire, passive suicidal desire, and specific plans. Each item in the subscales consist of three options marked according to intensity and severity of suicidality and scored on a 3-point Likert scale; 0 (no ideation) to 2 (strong ideation). The scores range from 0 to 38, indicating the higher the score, the greater the tendency for the individual to attempt or commit suicide.

1.7.13 Conceptual framework

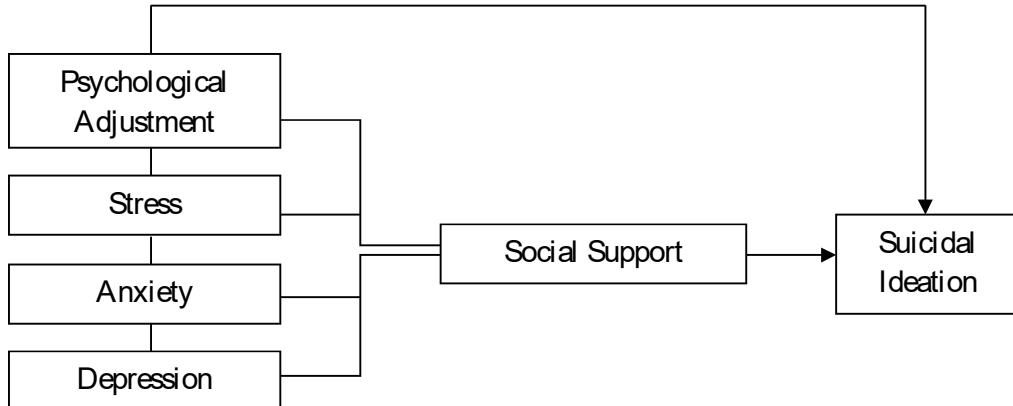


Figure 1.1. Conceptual Framework of Research Design

Figure 1.1 indicates the conceptual framework of current research. Psychological adjustments, anxiety, stress and depression can be regarded as psychological distress. This psychological distress is common among students. Eventually, the psychological distress may contribute towards suicidal ideations. In this research, social support may act as a protective factor towards suicidal ideations. The researcher believes that this current research will have direct or indirect contributions of psychological adjustment, anxiety, stress and depression towards suicidality and if social support received by students can act as a buffer/enhancer.

1.8 Theoretical approach

1.8.1 Theory of social support: Cassel's Theory of Social Support on Health and Lakey & Cohen's Social Support Theory

Social support is defined as how individuals support each other within a social network, including friends, family or significant other, to seek help from in times of need or calamity to give the individual a broader focus and positive self-worth and self-image. Social support is known to be a moderator against unfavourable life events and increases their quality of life. The supportive interaction within these social networks will reduce the uncertainty thus creating reassurance within the individual. A theory by Cassel (1976) found a relationship between social support and health. The researcher expressed that social support can act either as a defensive or protective factor to individual's vulnerability as a consequence of stress on health (Cassel, 1976).

There are three major perspectives on social support according to this theory.

The first view highlighted on stress and how social support will help to balance and normalize the stress. This is due to the interactions between individuals that aid them to achieve a sense of security or belongingness. The second perspective views social support positively contributes with regard to health through boosting self-esteem that the individual obtains through support from others. The third perspective views on how individual's health is affected by associations.

Lakey and Cohen (2000) presented an overview of three major theoretical views on social support; 1) the stress and coping view, 2) the social constructionist view, and 3) the relationship view. The stress and coping aspect of social support suggested that support can provide to health by protecting individual from the unpleasant effects of stress. The alternative perspective posits that support plays a direct and influential role in shaping health outcomes by fostering positive self-esteem and self-regulation, even in the face of prevailing stressors. This viewpoint contends that the impact of social support on health is not merely a singular, isolated influence; rather, it intertwines with various relationship dynamics. These include but are not limited to companionship, intimacy, and maintaining low levels of social incompatibility. The relationship-centric stance suggests that dissecting the health effects of social support necessitates an understanding of the complex interplay with these associated relationship processes, acknowledging their coexistence and mutual influence on overall well-being (Lakey & Cohen, 2000).

1.8.2 Theory of psychological adjustment: Theory of Psychological Adjustments Needs

The recently introduced Theory of Psychological Adjustment Needs, as outlined by Soundy and Elder (2016), delineates five fundamental psychological needs inherent in individuals that play a crucial role in influencing psychological adjustment and adaptation. These core needs encompass: 1) cultivating hope in possibilities, 2) recognizing and acknowledging events or the implications of situations for the individual, 3) realizing the imperative for choice, independence, dignity, and purpose, 4) actively engaging in fulfilling the need for choice, independence, dignity, and purpose, and 5) addressing the psychological needs associated with character. This framework provides a comprehensive understanding of the key factors shaping individuals' psychological adjustment and adaptation processes (Soundy & Elder, 2016).

Primarily, an individual's cognitive requirement for psychological adjustment is grounded in the psychological needs of acknowledgment and hope in possibility. The psychological need for acknowledgment encompasses elements of awareness, realization, and acceptance of one's circumstances, especially in the face of adversity. It involves acknowledging an individual's current situation within the context of an uncontrollable or uncertain future. On the other hand, hope in possibility pertains to an individual's capacity to envision positive outcomes for the future and persevere in their journey. This involves the ability to look beyond immediate challenges and uncertainties, fostering resilience and a forward-looking perspective in the pursuit of a meaningful life. The synthesis of acknowledgment and hope in possibility contributes

significantly to an individual's cognitive well-being and lays the foundation for effective psychological adjustment.

Furthermore, two additional psychological adjustment needs involve recognizing the imperative for choice, independence, dignity, and purpose, and subsequently taking action on these needs. The process of realization can be viewed as an empowering journey wherein individuals cultivate an internal sense of belief and agency, enabling them to take ownership of their circumstances and extract value from them. This signifies a proactive engagement with the situation, a willingness to activate internal resources, and a decision to interface with available services. Acting on these needs encompasses activities such as seeking information, initiating changes, and actively shaping one's life. This involves employing distinct coping strategies and mechanisms that foster independence and contribute to the attainment of meaningful achievements. The act of taking initiative is central to the utilization of resources and the pursuit of a path that aligns with an individual's values and aspirations. In essence, the interplay between recognizing the need for certain psychological elements and actively responding to them constitutes a pivotal aspect of effective psychological adjustment.

Lastly, the requirement of character represents the imperative for individuals to tap into and leverage their internal resources to bolster mental well-being. The needs of character hinge upon crucial psychological constructs, including motivation, courage, determination, and resilience. The capacity to confront challenges is intricately linked to these foundational elements, underscoring the significance of motivation as a driving force, the courage to face adversity, the determination to persevere, and the resilience

to rebound from setbacks. The significance of willpower and self-control has been underscored in earlier research, emphasizing their pivotal role in self-regulation. Both attributes, while influential, are not immune to depletion. Recognizing the finite nature of these resources prompts a nuanced understanding of the challenges individuals face in maintaining sustained levels of willpower and self-control. This underscores the intricate balance individuals must strike in replenishing and preserving their internal reservoirs to navigate the complexities of life effectively. In essence, the need of character underscores the importance of cultivating and utilizing these internal psychological resources to fortify mental well-being and navigate the ebb and flow of life's demands.

1.8.3 Theory of anxiety: Cognitive Theories of Anxiety

According to cognitive theory, anxiety is the tendency of an individual to misjudge the potential threat or danger of surrounding. Individual presence with anxiety tends to overestimate a scenario and disregard situations that they feel threatens them. The theory also informed that the intrusive thoughts may lead to extreme emotions, thus assisting in maladaptive behaviors. Beck (1956) mentioned that the way we perceive surrounding events is a function of our core schema. A core schema is a critical assumption about oneself, others and the world. Cognitive approach on anxiety helps to understand individual's behavior by assessing thought process.

Cognitive perspectives posit three motivational factors underlying anxiety and fear: loss of control, challenges in developing coping strategies, and the distinction

between state anxiety and trait anxiety. The concept of loss of control pertains to situations where individuals encounter unpredictability or lack of control, eliciting feelings of anxiety and, ultimately, a sense of helplessness. Seligman (1975) mentioned that unpredictability associated with an event or task may cause anxiety. The inability to develop an adaptive response to a threat or perceiving that there is no coping strategies available will eventually lead to anxiety.

Besides that, a proposed cognitive perspective stated that in order to overcome anxiety, individual should transform it into fear. This will help individual identify what is causing the anxiety and forming a coping mechanism to deal with the cause. Individual creating coping strategies by transforming anxiety into fear, and forming ways on how to deal with it, will eventually create a sense of security in oneself. The James-Lange theory (1927) posits that fear and anxiety serve as adaptive responses triggered when an individual confronts a situation jeopardizing their survival. In such instances, individuals undergo a fight-or-flight response, inducing a sense of fear and anxiety.

1.8.4 Theory of stress: Lazarus' Theory of Stress Appraisal

Stress is the result of disproportion between demands and resources that occurred when the stressors exceeds individual's perceived ability to overcome it according to Lazarus' Theory of Stress Appraisal. Lazarus described psychological stress as a distinct relationship between the individual and the surrounding that is seen by the person as more than the resources available and threatening well-being. According to Lazarus and

Folkman (1984), the effect of stress has on an individual is based on one's feeling of vulnerability, feeling of threat and the capability to overcome the stressor rather than the stressful situation itself.

Lazarus also mentioned that stress is a two-way process involving the exaggerations of stressors from the surrounding, and the reaction of the individual experiencing the particular stressor(s). This conceptualisation of stress led to the theory of cognitive appraisal. The theory claimed that during individual's perception of two major factors promoting to the response to stress, cognitive appraisal occurs. These factors include the following; 1) the startling tendency of the stress towards the individual, and 2) the evaluation of resources available to minimize, tolerate or remove the stressors and the generated stress (Lazarus & Folkman, 1984).

Stress appraisal theory considers how individual differences play a vital role in determining stressors and assessing relevant coping responses. Lazarus mentioned that cognitive appraisal can be divided to two types; primary and secondary appraisal. However, stress does not always happen with cognitive appraisal. Richard Lazarus and Susan Folkman (1984) stated that every individual has their own resources and skills that can be regarded as coping mechanisms. Coping mechanism are developed since early life and through adulthood. The Lazarus' stress and coping theory centre around the skills an individual have and the stress that the individual experiences.

1.8.5 Theory of depression: Beck's Cognitive Theory of Depression

Aaron Beck (1976) stated that depressive symptoms are particularly caused by intrusive thoughts, originated from dysfunctional beliefs. Beck studied individuals suffering from depression and discovered that these individuals analyse events in a negative manner. Therefore, he proposed that there are three mechanisms that might cause depression; 1) the cognitive triad, 2) negative self-schemas and 3) errors in logic (Beck, 1976).

Cognitive triad contains three forms of negative thinking according to Beck, that generally exist in individuals with depression; specifically the negative view of oneself, the world and the future. Because it is an automatic response in depressed individuals, these views occur spontaneously. As these views interact, they disrupt normal cognitive processing, thus leading the individual to give in to their negative thinking. According to Beck's theory, depression has the potential to prompt individuals to develop negative self-schemas. These adverse self-schemas are hypothesized to originate during childhood, potentially as a consequence of traumatic experiences, as elucidated by Beck (1976). The formation of these negative self-schemas may contribute significantly to the perpetuation and exacerbation of depressive tendencies throughout an individual's life. Beck's framework underscores the enduring impact of early experiences on the development of cognitive structures that influence one's perception of oneself and, consequently, play a pivotal role in the manifestation of depressive symptoms.

Individuals harbouring negative self-schemas tend to exhibit cognitive distortions, characterized by a propensity to engage in logical errors in their thought processes. This cognitive distortion manifests as a selective focus on specific aspects of a situation while concurrently overlooking equally pertinent information. Beck's recognition of this phenomenon extends to a broader classification termed systematic negative bias, encompassing logical errors or faulty thinking. These negative biases not only contribute to self-destructive patterns but also have the potential to heighten levels of anxiety or depression in the affected individual. The acknowledgment of systematic negative bias underscores the detrimental impact of distorted thinking patterns on mental well-being, emphasizing the need for cognitive restructuring interventions in therapeutic contexts.

1.8.6 Theory of suicidal ideation: Joiner's Interpersonal – Psychological Theory of Suicidal Behaviour and Three-Step Theory

Thomas Joiner (2005) stated that an individual will not die by suicide unless the individual had both desire to die by taking one's own life and the capability to commit. Based on Joiner's Interpersonal – Psychological Theory of Suicidal Behaviour, there are particular characteristics to be met for an individual to have suicidal ideation. Those characteristics include lack of belongingness or social alienation, consideration of burdensomeness and the expected suicide. Suicidal ideation may occur when the individual believed that oneself as a burden and ultimately experience the dissociated relationship with others.

Joiner (2005) also mentioned that if suicidal ideation is combined with perceived potential, the combination can be very crucial to the development of suicide premeditation and attempt. In accordance to Joiner's theory, anger and increased level of inconvenient acknowledgement may be some of the critical factors of escalating risk of suicide. According to Joiner, when an individual has the desire to contemplate suicide, the individual should be presenting two psychological states, which are concluded burdensomeness and sense of social withdrawal.

The Three-Step Theory (3ST; Klonsky & May, 2014) described that ideation-to-action framework should lead suicide theory, research and prevention. From these perspectives, 1) the development of suicidal ideation and 2) the continuation from ideation to attempts are contrasting process with unrelated explanations. This theory hypothesises that suicidal ideation is the result of combined pain and hopelessness. It also theorised that between individuals experiencing pain and hopelessness, connectedness can act as a buffer against elevating risk of ideation. The theory also view the advancement from ideation to action is assisted by dispositional, acquired, and empirical benefactors to the probability of attempting suicide.

1.8.7 Summary of theories used

To summarize the theoretical approach, the researcher has used several distinct theories that coincide with one another in order to investigate the relationship of all the variables. Social support can be defined by using Cassel's Theory of Social Support on Health and Lakey & Cohen's Social Support Theory. In Cassel's Theory of Social Support,

Cassel stated that support is how individuals receive and give support to one another within a social network. In addition to that theory, Lakey and Cohen also mentioned three major perspectives on social support to show how social relationships affect health and well-being. The authors asserted that the prevailing theoretical perspectives on social support propose that the mitigating impact of support on the health implications of stressful life events is attributable to the supportive interventions of others or the conviction that support is readily available.

Psychological adjustment is defined by Theory of Psychological Adjustments Needs (TPAN). This theory described in details that in order to achieve psychological adjustment, five core psychological needs have to be met. Besides that, the researcher also used Cognitive Theories of Anxiety to further explain anxiety and its significant effect on individual based on how individual's thought process works when faced with threat in the surroundings. The intensity and severity of anxiety faced by individuals is critical in determining whether it will disrupt individual's functioning.

Lazarus' Theory of Stress Appraisal defined stress as the result of how individual manage the feeling of threat, vulnerability, individual's relationship with surroundings and the ability to overcome stressor rather than focusing on the event causing the stress. Lazarus and Folkman (1984) mentioned that there are resources and skills in every individual that can be transformed into coping mechanism. Another variable in this research is depression. Beck's Cognitive Theory of Depression proposed three mechanisms that probably triggers depression; 1) the cognitive triad, 2) negative self-schemas and 3) errors in logic. Beck (1976) also mentioned that

depression can cause individual to develop negative self-schema, which can be acquired during childhood.

Lastly, to define suicidal ideation, the researcher used two theories which are Joiner's Interpersonal – Psychological Theory of Suicidal Behaviour and the Three-Step Theory (3ST). In Joiner's Interpersonal – Psychological Theory of Suicidal Behaviour, suicide only happens when an individual have both desire to die by taking one's own life and the ability to take action on that desire. Joiner (2005) also mentioned that for an individual to have suicidal ideation, specific requirements have to be met first. The 3ST defined suicidal ideation by a framework of ideation-to-action. The theory also proposed that suicidal ideation is the result of individual's feelings of pain and hopelessness.

1.9 Hypotheses of the research

General forecast has been made from this research in which there is positive relationship between social support, psychological adjustment, anxiety, stress and depression towards suicidal ideation among students in Malaysia post the global outbreak of COVID – 19 pandemic. Students experiencing difficulty in psychological adjustments, high level of anxiety, stress and depression, have a higher tendency of contemplating suicide. In contrast, students with higher social support may report a lower level of anxiety, stress and depression and higher level of psychological adjustments. Besides that, students reporting lower social support may experience higher level of suicidal ideation and elevated risk of suicidal action. Lastly, social

support can be a moderator to suicidal ideation among students post-outbreak of COVID-19 in Malaysia.

H_01 : There is no significant relationship between social support, psychological adjustment, anxiety, stress and depression with suicidal ideation among students after the global outbreak of COVID-19 in Malaysia;

H_11 : There is a significant relationship between social support, psychological adjustment, anxiety, stress and depression with suicidal ideation among students after the global outbreak of COVID-19 in Malaysia;

H_02 : There is no significant relationship between social support towards psychological adjustment, anxiety, stress and depression among students post global outbreak of COVID-19 in Malaysia;

H_12 : There is a significant relationship between social support towards psychological adjustment, anxiety, stress and depression among students post global outbreak of COVID-19 in Malaysia;

H_03 : There is no significant relationship between psychological adjustment, anxiety, stress and depression toward suicidal ideation among students post global outbreak of COVID-19 in Malaysia;

H_13 : There is a significant relationship between psychological adjustment, anxiety, stress and depression toward suicidal ideation among students post global outbreak of COVID-19 in Malaysia;

H_04 : There is no significant difference between the psychological adjustment, anxiety, stress, depression and suicidal ideation on gender;

H_14 : There is a significant difference between the psychological adjustment, anxiety, stress, depression and suicidal ideation on gender;

H₀5: There is no significant relationship between the overall social supports received on the effect of suicidal ideation among students after the global outbreak of COVID-19 in Malaysia;

H₁5: There is a significant relationship between the overall social supports received on the effect of suicidal ideation among students after the global outbreak of COVID-19 in Malaysia;

H₀6: There is no significant difference between suicidal ideation and different domains of social support received among students after the global outbreak of COVID-19 in Malaysia;

H₁6: There is a significant difference between suicidal ideation and different domains of social support received among students after the global outbreak of COVID-19 in Malaysia;

H₀7: Social support is not a moderator of the interrelation of psychological adjustment, anxiety, stress and depression to suicidal ideation among students in Malaysia after the pandemic;

H₁7: Social support is a moderator of the interrelation of psychological adjustment, anxiety, stress and depression to suicidal ideation among students in Malaysia after the pandemic;

1.10 Conclusion

As summary, this chapter introduced the background of the research on the role of social support on psychological adjustments, anxiety, stress and depression that may lead to suicidal ideation post global outbreak of COVID-19 among students in



Malaysia. Since COVID-19 endemic is a new issue worldwide, very few researches have attributed into the research pertaining the psychological distress (e.g. psychological adjustment, anxiety, stress, depression) among students, especially in Malaysia. This research will help to provide further understanding and references to new research, while preventive strategies can be developed as more research under the same variables will be available.

