PSYCHOLOGICAL DISTRESS, FEAR, CHANGES IN LIFESTYLE-RELATED
BEHAVIOUR AND LIFE SATISFACTION

THE IMPACT OF PSYCHOLOGICAL DISTRESS, FEAR AND CHANGES IN LIFESTYLE-

RELATED BEHAVIOR ON LIFE SATISFACTION AMONG WORKING ADULTS DUE TO

THE IMPLEMENTATION OF MOVEMENT CONTROL ORDER (MCO) IN MALAYSIA

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PSYCHOLOGICAL DISTRESS, FEAR, CHANGES IN LIFESTYLE-RELATED
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The Impact of Psychological Distress, Fear and Changes in Lifestyle-Related

Behaviour on Life Satisfaction among Working Adults

during the Implementation of Movement Control Order (MCO) in Malaysia

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This research project is submitted in partial fulfilment of the requirements for

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CHUA WAN YI

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APPROVAL FORM

This research paper attached hereto, entitled "The impact of psychological distress, fear and changes in lifestyle-related behaviour on life satisfaction among working adults during the implementation of Movement Control Order (MCO) in Malaysia" prepared and submitted by "Chua Wan Yi, Koo Yu Wen, and Ng Pui Ye" in partial fulfillment of the requirements for the Bachelor of Social Science (Hons) Psychology is hereby accepted.

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Supervisor

(Ms. Sanggari a/p Krishnan)

Date: 04 April 2022
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Abstract

Covid-19 has caused havoc in nearly every facet of life since its outbreak in March 2020. Life satisfaction can be adversely affected by a pandemic of a contagious disease. Several studies have investigated life satisfaction among university students or adolescents. Still, few have examined it among working adults, particularly during the confinement period where they are not permitted to work. This cross-sectional study aims to investigate the predictive role of psychological distress, fear and changes in lifestyle-related behaviour on life satisfaction among Malaysian working adults during Movement Control Order (MCO). A total of 261 participants were recruited through convenience sampling. Those who fulfilled inclusion criteria (i.e., adults aged 18-65 year-old who work during MCO) were reached via social media platforms. The data was collected by sending online questionnaire made up of Kessler Psychological Distress Scale, Fear of COVID-19 Scale, Lifestyle-Related Behaviour Questionnaire and Satisfaction with Life Scale across both West and East Malaysia. Female participants occupied 64.3% (N=117), and male participants took up 34.1%(N=62). Three participants withheld their gender (1.6%). The final sample consists of 131 Chinese (72%), 25 Malay and Indian each (13.7%) and one from other races (0.5%). The findings revealed that psychological distress and changes in lifestyle-related behaviour significantly and negatively predict life satisfaction, while fear was found not significantly, negatively predict life satisfaction among Malaysian working adults. The current study's results provided additional insights for future studies on this subject and aided authorities in developing intervention programs for working adults to enhance their perception of their life and improve overall well-being.

Keywords: psychological distress, fear, lifestyle-related behaviour, life satisfaction, Malaysian working adults

DECLARATION

We hereby declare that the material contained in this paper is the end result of our own work and that due acknowledgement has been given in the bibliography and references to ALL sources be they printed, electronic or personal.

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List of Abbreviations

MCO   Movement Control Order

MLR   Multiple Linear Regression

PPMC   Pearson Product Moment Correlation

QoL   Quality of Life

SWB   Subjective Well-Being

SWLS   Satisfaction with Life Scale

UTAR   Universiti Tunku Abdul Rahman

Chapter I

Introduction

1.1 Background of Study

The coronavirus originated from Wuhan, China and has spread worldwide, and

Malaysia was also affected in March 2020. To attempt to control the spreading of

coronavirus, the government implemented a lockdown starting on 18 March 2020, which was

called Movement Control Order (MCO). MCO imposes limits on movement, meetings and

travelling, as well as forced restrictions on the operation of the business, government,

industrial and education organizations. A lot of ill effects, such as numerous psychological

consequences, have been further aggravated. Nobody can deny that it has a significant impact

on people's everyday routines. MCO forced individuals to separate from their families, and

the reunite date is still unknown, especially those who study or work abroad.

Although the lockdown has helped control the spread of COVID-19, it forced feelings

of loneliness on people and thus, the level of happiness and life satisfaction experienced a

considerable decline (Hamermesh, 2020). The situation was even exacerbated when facing a

financial problem and job losses. As they cannot spend time performing activities that they

enjoy, they thus find their life not as meaningful as before and report a decrease in life

satisfaction associated with social relationships, jobs, financial situations and daily activities.

According to Gawrych et al. (2020), life satisfaction has decreased during the COVID-19

epidemic in the largest cities in Poland.

Psychological distress is a collection of unpleasant physical and mental symptoms, and

it might happen when people feel overwhelmed. Psychological distress might lead to many

mental disorders such as major depressive disorder (MDD), schizophrenia and somatisation

disorder. A study in Pakistan indicated that psychological distress is negatively associated with

the life satisfaction of university students in Pakistan (Kumar et al., 2016). Another study

suggested that less educated elders have a higher chance to experience psychological distress,

and their life satisfaction will be affected (Šarić et al., 2018).

People frequently seek out the relevant information of COVID-19 to ensure that their

information is up-to-date. However, people may be misled by the fake news posted by social

media when there is a lack of information announced from the official channels, which will

cause a lot of unnecessary confusion and fear. Cutting down the number of employees and pay

became a norm during COVID-19. Everyone cannot expect what will happen next, and this

will increase their fear level. Fear of the unknown will let people feel anxiety and affect life

satisfaction in healthy people and those experiencing mental health issues (Torales et al.,

2020).

To minimise the spreading of viruses, staying at home has become a norm. The

restriction of movement changes our daily lives, such as remote work and reducing social

participation. Remote work allows workers to spend more time with their families and reduce

the transportation fee. However, it is hard for employees to balance work and personal life

because they are accustomed to fixed working time, and the environment will also affect their

working efficiency. According to Irawanto et al. (2021), life satisfaction negatively correlates

with work- life balance and work stress. A recent review also mentioned the drastic decrease in

social participation during MCO will decrease life satisfaction (Ammar et al., 2020).

The current study intended to address this gap by evaluating psychological distress and

satisfaction with life among working adults during the MCO in Malaysia. Since the relationship

between fear and life satisfaction is still unclear, this study wants to find out the relationship

between the effects of fear toward life satisfaction. Prior studies investigated life satisfaction and

factors that contribute to changes in life satisfaction among university students. However,

relatively few studies have examined whether employed people are satisfied with their daily life

during MCO. Thus, the potential effect of lifestyle changes on life satisfaction is also a

significant study in this research.

1.2 Problem Statement

Since the pandemic of COVID-19 hit enormously on millions of people on Earth, it is

undeniable to say that it has brought a huge impact across the world. As for Malaysia, an

estimated 2,142,924 confirmed cases and around 24,565 deaths had been attributed to

COVID- 19 (World Health Organization, 2021). The government made significant efforts in

curbing the spread of the coronavirus through the enforcement of the Movement Control

Order (MCO). However, they overlooked the negative effects of stringent home confinement

on mental health and various lifestyle habits, including social relationships and life

satisfaction.

Along with an increased mortality rate, psychological problems such as anxiety and

depression have become more prevalent among nations across the country of all ages.

According to Puuskari et al. (2017), psychological distress may lead to high suicidal ideation

and suicide attempts. Befrienders Kuala Lumpur reported 20575 calls received from January

to June this year, compared to 32710 total calls reported last year. Furthermore, 468 suicide

cases have been reported until May 2021, compared to 631 and 609 cases in 2020 and 2019

respectively (Hassan, 2021). In less than six months, the number of suicide cases has

exceeded the number of suicide cases in the previous two years. The three most stated causes

of such suicide cases were family issues, emotional distress and financial difficulties. It has

been discovered that nearly one-third of Malaysians suffered from mild-to-severe depression

during the implementation of MCO (Yee et al., 2021).

Findings observed that life satisfaction is associated with significant psychological

aspects, including suicidal ideation (Zhang et al., 2017). Life satisfaction is a subjective and

cognitive assessment of an individual's life which is built on the alignment of personal

objectives and accomplishments (Diener, 1994). It is a measure of individuals' subjective well-

being (SWB), one of the key components of mental health. Additionally, it has been described

as a component of and critical indication of the quality of life (QoL) (Moons et al., 2006). The

research found that satisfaction with life was associated with several mechanisms previously

recognised as protective factors against mortality, including reduced loneliness and a greater

sense of purpose in life (Kim et al., 2021). In contrast, life dissatisfaction is associated with

various negative health impacts, such as increased injury mortality (Koivumaa-Honkanen,

2000), concurrent depressive symptoms (Koivumaa-Honkanen et al., 2004) and psychiatric

comorbidities and the duration of a disorder (Meyer et al., 2004). Low average national life

satisfaction levels were also associated with a greater suicide rate (Koivumaa-Honkanen et al.,

2001).

Increased levels of psychological distress will reduce life satisfaction among populations

who went through forced home confinement during the outbreak (Zhang et al., 2020).

According to Ammar et al. (2020), the decrease in social participation associated with

implementing MCO resulted in loneliness and thus contributed to the loss of life satisfaction. In

addition, people who fear losing their job and uncertainty about their economic situations

resulting from the lockdown trigger alterations in their perceived quality of life (Gonzalez-

Bernal et al., 2021). However, some studies reported a negative and low association between

fear and life satisfaction during the coronavirus outbreak (Özmen et al., 2021). Furthermore, it

is suggested that changes in lifestyle- related behaviour, such as alterations in sleeping patterns,

eating habits, and physical activity, are significant predictors of depression during Covid-19

(Giuntella et al., 2021). However, the direct association between changes in lifestyle-related

behaviour and life satisfaction is unclear and yet to be widely examined in the Malaysian

context.

1.3 Significance of Study

The government makes a lot of effort to control the coronavirus spreading by

implementing the Movement Control Order (MCO). However, they neglected the potential

negative influence of the MCO that may lead to significant consequences on an individual's

mental health. This research will focus on the Malaysia context as the outbreak of Covid-19

in Malaysia became severe over time, and many people were affected by this pandemic.

The results of this study will directly benefit the working population in Malaysia by

providing significant information regarding an overview of their life satisfaction changes

during the MCO resulting from various factors as well as inspiration to increase their overall

quality of life to improve their mental health. This study will also increase their awareness

about their daily lifestyles to create the greatest life satisfaction (Phulkerd et al., 2021). As there

is a lack of information regarding working adults' health and lifestyle during the lockdown, this

study will benefit the working populations by contributing knowledge about their living

patterns and quality of life and developing a suitable intervention to prevent them from the risk

of an unhealthy lifestyle. Moreover, the findings of this study might benefit the professionals in

related fields in assessing the public's general mental health situation and preparing future

interventions and effective prevention programs to support mental health among working

populations. Understanding these effects and their varying impact on populations is critical for

managing COVID-19's ongoing effects and optimising future pandemic plans.

As most of the existing published studies focused more on the degree of life satisfaction

among adolescents and undergraduate university students (Cheah et al., 2021; Kamaludin et al.,

2020; Sarriera et al., 2015), there are limited resources examining life satisfaction among

Malaysian working adults specifically during the implementation of Movement Control Order

(MCO). Therefore, the findings of this study can help understand the knowledge gap about the

degree of life satisfaction among working adults in Malaysia during the pandemic outbreak.

Furthermore, few studies were conducted to examine the direct association between changes in

lifestyle-related behaviour and life satisfaction. Hence, this study may provide a better insight

into whether changes in lifestyle-related behaviour serves as an important predictor for

individuals' life satisfaction. On the other hand, this research combined potential psychological

factors (i.e. psychological distress and fear) and social factors (i.e. changes in lifestyle-related

behaviours) in examining its impact on individuals' life satisfaction. As a result, the findings

could contribute a more comprehensive understanding and insight on the impact of such factors

on the life satisfaction of working adults in Malaysia.

1.4 Research Objectives

1. To examine the relationship between psychological distress, fear, changes in lifestyle-
   related behaviours and life satisfaction among working adults during Movement
   Control Order (MCO) in Malaysia.

2. To examine whether psychological distress, fear and lifestyle-related behaviour
   predict life satisfaction among working adults during Movement Control Order
   (MCO) in Malaysia.

1.5 Research Questions

1. Is there any significant relationship between psychological distress and life satisfaction among working adults during Movement Control Order (MCO) in Malaysia?

2. Is there any significant relationship between fear and life satisfaction among working adults during Movement Control Order (MCO) in Malaysia?

3. Is there any significant relationship between lifestyle-related behaviour and life satisfaction among working adults during Movement Control Order (MCO) in Malaysia?

4. Do psychological distress, fear and changes in lifestyle-related behaviour predict life satisfaction among working adults during Movement Control Order (MCO) in Malaysia?

1.6 Hypotheses

1.6.1 Hypothesis 1

H_0: There is no significant relationship between psychological distress and life satisfaction among working adults during Movement Control Order (MCO) in Malaysia.

H_1: There is a significant relationship between psychological distress and life satisfaction among working adults during Movement Control Order (MCO) in Malaysia.

1.6.2 Hypothesis 2

H_0: There is no significant relationship between fear and life satisfaction among working adults during Movement Control Order (MCO) in Malaysia.

H_1: There is a significant relationship between fear and life satisfaction among working adults during Movement Control Order (MCO) in Malaysia.

1.6.3 Hypothesis 3

H_0: There is no significant relationship between changes in lifestyle-related behaviour and life satisfaction among working adults during Movement Control Order (MCO) in Malaysia.

H_1: There is a significant relationship between changes in lifestyle-related behaviour and life satisfaction among working adults during Movement Control Order (MCO) in Malaysia.

1.6.4 Hypothesis 4

H_0: Psychological distress, fear, changes in lifestyle-related behaviour do not predict life satisfaction among working adults during Movement Control Order (MCO) in Malaysia.

H_1: Psychological distress, fear and changes in lifestyle-related behaviour predict life satisfaction among working adults during Movement Control Order (MCO) in Malaysia.

1.7 Conceptual Definition

1.7.1 Psychological Distress

Psychological distress is a prevalent mental health issue in the community. According to the American Psychology Association (n.d.), psychological distress is a bundle of painful physical and mental symptoms related to the normal mood swings of most people. It refers to unpleasant feelings or emotions that interfere with a person's daily life. Psychological distress happens when people confront pressures, stressors or obstacles in their daily life that they cannot cope with (Arvidsdotter et al., 2015). These stressors can arise from their daily life, workplace, family, interpersonal relationships, and even traumatic events. When people feel overwhelmed, these unpleasant feelings and emotions will be generated, leading to negative perceptions and views of the environment or the people around them. Some work-related factors, such as heavy workload, lack of autonomy, long hours, job insecurity, and

organisational changes will also contribute to psychological distress. Symptoms of depression

and anxiety usually characterised conditions of psychological distress. These symptoms may

bundle with some somatic symptoms such as headaches, insomnia, fatigue and so on.

Therefore, it will lead to some mental health disorders such as major depressive disorder,

schizophrenia, anxiety disorder, etc.

1.7.2 Fear

Neuropsychologists defined fear as a natural response to an emerging danger that

prepares an individual physically and emotionally for any impending injury (Pappas et al., 2009).

According to the APA Dictionary of Psychology, fear is a strong feeling triggered by the sensing

of impending danger. It is accompanied by an instantaneous alarm response that mobilizes the

body by causing a series of physiological changes such as increased heart rate, tensing muscles,

and an overall mobilization of the body system to act towards potential danger. Fear makes

people aware of the presence of danger or the prospect of injury, whether physical or

psychological. These reactions are also called fight or flight reactions, which release hormones to

prepare the body for fight or run away from the danger (Goldstein, 2010). Sometimes, fear may

also arise from imagined threats. It can be the symptoms of mental health disorders, such as

phobias, post-traumatic stress disorder (PTSD), panic disorder, and anxiety disorders.

1.7.3 Lifestyle-Related Behaviour

A lifestyle is described as an individual's or group's usual way of life or manner of

living, as represented via actions, attitudes, hobbies, and other factors (American Psychological

Association, n.d.). Lifestyle behaviours are daily activities determined by an individual's

values, knowledge, and standards, moulded by the broader cultural and social background

(Jarosz, 2018). It is people's everyday routine activities, including eating habits, physical and

social activities and sleep behaviour. Lifestyle may bring different short-term and long-term, emotive and deliberative, physical and psychological effects (Gschwandtner et al., 2021). A healthy lifestyle can be defined as activities that individuals believe in and practice to maintain health and avoid illness. It can avoid physiological and psychological diseases such as coronary heart disease, obesity, stroke and depression. According to Velten et al. (2018), people who have a lower body mass index, perform more activities physically and mentally, avoid using tobacco products, have a non-vegetarian diet, and conduct a more habitual social routine have better mental health.

1.7.4 Life Satisfaction

Satisfaction is a kind of mental state. Life satisfaction refers to the extent to which an individual positively views the entire quality of their life (Veenhoven, 2014). According to Shin & Johnson (1978), the term "life satisfaction" refers to the comprehensive evaluation of people's quality of life using their standards, such as family life educational experience. Nevertheless, it can also be defined as how much a person enjoys their life. Besides, life satisfaction is a comprehensive assessment rather than one focused on a single point in time or a specific domain. Work, romantic relationships, relationships with peers and family members, personal development, health and wellness, and others contribute to life satisfaction. Life satisfaction metrics are often subjective, meaning they are based on elements that an individual considers personally significant in their existence. It results from a balance between one's desires and current status (Nemati & Maralani, 2016). To put it another way, a person's degree of satisfaction over life decreases when the gap between their wishes and the current state increases.

1.8 Operational Definition

1.8.1 Psychological Distress

There are various scales used to measure psychological distress. Kessler Psychological

Distress Scale is commonly used to measure psychological distress from the clinical and

general perspectives. There are two versions of the Kessler Psychological Scale: the ten-item

version (K10; Kessler et al., 2002) and the six-item version (K6; Kessler et al., 2002). Both

scales measure psychological distress by questioning respondents about the anxiety and

depressive symptoms encountered in the previous four weeks. In addition, the scale of COVID-

19 related psychological distress in the healthy public (CORPD; Feng et al., 2020) is also

developed to examine the psychological distress of people in the COVID-19 affected regions

and countries.

1.8.2 Fear

There are various scales measuring fear. In the context of this, fear was defined using

the Fear of Covid-19 scale (FCV-19S; Ahorsu et al., 2020) designed to measure the extent to

which how people feel, think or act towards Covid-19. Besides, fear can also be accessed using

the COVID-19 Phobia Scale (C19P-S; Arpaci et al., 2020), where the severity of corona

phobia under four factors: psychological, psychosomatic, economic, and social is assessed. In

addition, the fear perception and magnitude of the issue (MED-COVID-19; Mejia et al., 2020)

scale is also developed to examine both the level of fear and the sources of fear.

1.8.3 Lifestyle-Related Behavior

People's lifestyle-related behaviour can be defined using the Lifestyle-Related

Behaviour questionnaire (Kumari et al., 2020). The general population has the opportunity to

check on their routine from three perspectives: dietary habits, physical activities, and sleep

through this questionnaire. Besides, an adolescent's healthy lifestyle can be tested by using the

Adolescent Healthy Lifestyle Questionnaire (Taymoori et al., 2012) from seven subcategories

which included life appreciation (LA), health responsibility (HR), nutrition (N), social support

(SS), physical activity (PA), stress management (SM), and safety. The Global Lifestyle

Questionnaire (GLQ; Lopez-Fontana et al., 2020)) can also be used to assess the general

lifestyle.

1.8.4 Life Satisfaction

There are several instruments measuring individuals' life satisfaction. Firstly,

Satisfaction with Life Scale (SWLS; Diener et al., 1985) is used to assess people's subjective

well-being and satisfaction with life. In addition, the Student Life Satisfaction Scale (SSLS;

Huebner, 1991) is designed to measure the life satisfaction of individuals between 8 to 18 year-

olds. Moreover, the Multidimensional Student Life Satisfaction Scale (MSLSS; Huebner,

1994) is a long scale to measure students' life satisfaction in five domains: family, friends,

school, living environment and self. On the other hand, the Riverside Life Satisfaction Scale

(RLSS; Margolis et al., 2018) measures individuals' life satisfaction through multiple indirect

indicators of life satisfaction.

Chapter II

Literature Review

2.1 Psychological Distress and Life Satisfaction

Most studies have found that psychological distress was significantly correlated with life satisfaction (Chan et al., 2020; Kumar et al., 2016; Rustøen et al., 2010). When people's psychological distress is higher, they tend to detect low life satisfaction (Ashraf et al., 2021). Researchers found that mental health has a significant impact on people's life satisfaction, and people with better and healthier mental health are more satisfied with their life (Dessie et al., 2013; Swami et al., 2006). The outbreak of the Covid-19 pandemic has had an impact on individuals' emotional health as well as physical health. Covid-19 pandemic was found to significantly impact people's mental health (Cao et al., 2020). Regardless of what kind of crisis, people want to remain informed to maintain security or control.

At the early stage of the outbreak, people tried to get more information about the Coronavirus through many platforms. People tend to gather and share as much information as they can because they don't know what the virus is, how it spreads, how it is cured and how to prevent it; it causes uncertainty and anxiety. Seeking out information can help people ease the feeling of uncertainty and anxiety (Webster & Kruglanski, 1994). However, there was a lot of incorrect and misleading information sharing on social media and the internet during the early stage of the pandemic (Salvi et al., 2021). Those misleading information about the disease makes people feel more ambiguous about the situation and leads to a higher degree of anxiety (Mowbray, 2020). Besides, young and middle-aged people who receive information from social media and who do not effectively practise infection prevention and control methods are more prone to psychological distress (Ambelu et al., 2021). The state of psychological distress could

exacerbate and complicate the battle against COVID-19 (Kang et al., 2020).

According to Taylor et al. (2020), the persistent thought about getting infected with Coronavirus can create anxiety and lead to some fear-related distress. Covid-19 pandemics have a negative impact on people's psychological distress, such as an increase in anxiousness, depression and stress, thereby reducing their life satisfaction (Satici et al., 2020). According to Ashraf et al. (2021), the persistent negative thoughts about the Covid-19 pandemic significantly impact people's psychological distress and lead to low life satisfaction.

As people continue to be exposed to information about Covid-19 mortality and infection rates during MCO, concerns and anxiety about infection have increased from time to time (Lee, 2020). When people keep on thinking that they are infected by the Coronavirus or have close contact with an infected person, they are likely to suffer psychological distress (Trzebiński et al., 2020). These persistent depressive thoughts lead to helplessness, low self-esteem and self- confidence, and even serious disturbances in daily activities, a person's overall well-being may be affected (Christ et al., 2020). Therefore, the psychological distress caused by these persistent negative emotions will affect people's satisfaction with life.

2.2 Fear and Life Satisfaction

According to the American Psychological Association (2019), fear is often associated with feelings of anxiousness when efforts to cope with dangers are unsuccessful, with these two unpleasant emotions often coexisting. Consequently, it is believed that the coexistence of fear and anxiety during the pandemic outbreak may result in a variety of psychological issues that will eventually impair people's standard of living (Zhang et al., 2020). In the event of the global pandemic outbreak and followed by the execution of the nationwide Movement Control Order (MCO), the majority of human life components that are intrinsically tied to living

standards and satisfaction faced a major change. The pandemic resulted in changes in work

processes, family disorganisation, and the closing of schools, public spaces, and workplaces.

People are fearful of unemployment, financial crisis and a greater economic downturn. The

problem worsens when government agencies are often perceived as the source of solution to the

pandemic's turmoil (Trzebiński et al., 2020). On the other hand, fear can be maladaptive if it is

not properly tuned to the real threat. For example, when fear is extreme, it can negatively affect

both an individual and society level (Mertens et al., 2020).

Certain characteristics of the global pandemic, which include the development of the

diseases, ambiguity concerning the spreading of the virus, or the immunity of the infected

individuals, and even the absence of vaccination to combat the illness, have raised public dread

regarding this issue (Lee & Crunk, 2020; Ornell et al., 2020). Besides, people are also fearful

of being infected, getting in contact with potentially infected individuals, as well as losing

friends and families (Fardin, 2020; Lin, 2020). Such fears, which are triggered by the

interpretation of dangerous cues, have previously been observed during the prior outbreak of

global pandemics, such as those driven by SARS (Brooks et al., 2020; Person et al., 2004),

Ebola (Kinsman, 2012), H1N1 influenza (McCauley et al., 2013) or the Middle East

Respiratory Syndrome Coronavirus (MERS-CoV; Al-Rabiaah et al., 2020).

Fear plays a key adaptive defence mechanism for humans and animals, which is

essential for survival. It involves several biological processes associated with preparing to react

to potentially threatening occurrences. It may, however, induce mental issues if it exists

excessively or persistently (Garcia, 2017). According to the research conducted by Satici et al.

(2020), it has been shown that fear of Covid-19 increases feelings of sadness, stress, anxiety

and contributes to a decrease in life satisfaction. A comprehensive study found that individuals

who went through self-quarantine during lockdown due to the pandemic outbreak suffered

from anxiety and fear of being infected, as well as isolation, eventually having lower life

satisfaction (Li et al., 2021). Previous research found that frontline healthcare professionals

experiencing fear of infecting friends, family and coworkers, together with the displaying of

symptoms of worry, stress, anxiety, despair as well as sleep problems (Rahman et al., 2020),

eventually tremendously weakened their sense of self-efficacy (Xiao et al., 2020) which Savi

Çakar (2012) found that significantly affects life satisfaction of an individual.

Prior findings reported that high levels of fear associated with feelings of stress

correlated with one's perception of living a meaningful life (Hooker et al., 2017), which is a

vital component for a sense of satisfaction (Peterson et al., 2005). Coronavirus puts one's safety

and will to survive in jeopardy and lowers one's living standards. Therefore, fear of Covid-19

impairs individuals' life satisfaction and well-being (Özmen et al., 2021). However, data

collected from the Vietnam context found that fear of Covid-19 positively correlated with life

satisfaction of individuals, indicating that those with a high level of fear about the pandemic,

while experiencing stringent physical distancing, may come to realise and be satisfied with the

actual meaning of life, such as work-life balance (Cong, 2021).

2.3 Lifestyle-Related Behaviour and Life Satisfaction

Lifestyle is the way of the individual living or the things the person usually performs.

Lifestyle-related behaviour includes sleeping time, eating behaviour, physical activity, etc.

People who consume a healthy diet have higher life satisfaction than those who have

unhealthy food patterns (André et al., 2017). The social factor and eating environment will

also affect the food patterns. The past studies indicated that females have more friends than

males and older adults prefer to share meals with their friends, and they have healthier food

patterns than males (Andréet al., 2017; Grunert et al., 2007; Meiselman, 1996). According to

Gschwandtner et al.(2021), consuming fruits and vegetables and sports activity are positively

related to life satisfaction. Mujcic and J.Oswald (2016) also indicated that the increased

consumption of fruits and vegetables can increase happiness, life satisfaction, and well-being.

Ocean et al. (2019) claim that the happiness of transit from being unemployed to having a job

is the same as raising one's daily fruit and vegetable intake by roughly 10.5 servings.

Social participation will also affect life satisfaction. Participation in any association was

linked to a higher level of life satisfaction, and the effect was particularly strong for egotropic

and religious associations (Ponce et al., 2014). Visiting family members is positively correlated

to life satisfaction but depends on the voluntary nature of the contact, and this is only focused

on family members who live separately from the household (Baeriswyl & Oris, 2021). Li et al.

(2017) stated that social participation is positively correlated with life satisfaction and that

senior adults with higher social participation have lower depression levels. The past research

also indicated that people who perform high and moderate activity levels have higher life

satisfaction and happiness levels than those with low levels of activity (An et al., 2020).

However, life circumstances influence an individual's ability to choose various

lifestyle choices. During the beginning of the Covid-19 home confinement, all social activities

were not allowed, and people could only stay at home. But, the prior study indicated that

outdoor and home-based activities were positively associated with happiness, life satisfaction,

and health perceptions in older Korean individuals (Kim et al., 2021). The reduction of social

participation decreased the life satisfaction of people all around the world (Ammar et al.,

2020).

The pandemic's impact on the economy and society is disastrous. Many people face a

financial problem because many shops and factories cannot operate and cannot work during the

lockdown. Bozkurt and Doğancılı (2021) indicated that those experiencing financial strain and

feeling a sense of employment instability would decrease their life satisfaction level. The past

study stated those who have lost their source of income in 2020 have lower life satisfaction

(Bakkeli, 2021). Besides, the pandemic has rendered a huge percentage of the workers unable to

work at the workplace to decelerate the spreading speed of the virus. The increased distress level

and lower job performance have reduced life satisfaction because many stressors have been

induced when working from home (Kumar et al., 2021).

2.4 Theoretical Framework

Figure 2.1

Theoretical framework of Bottom-up Approach of Life Satisfaction
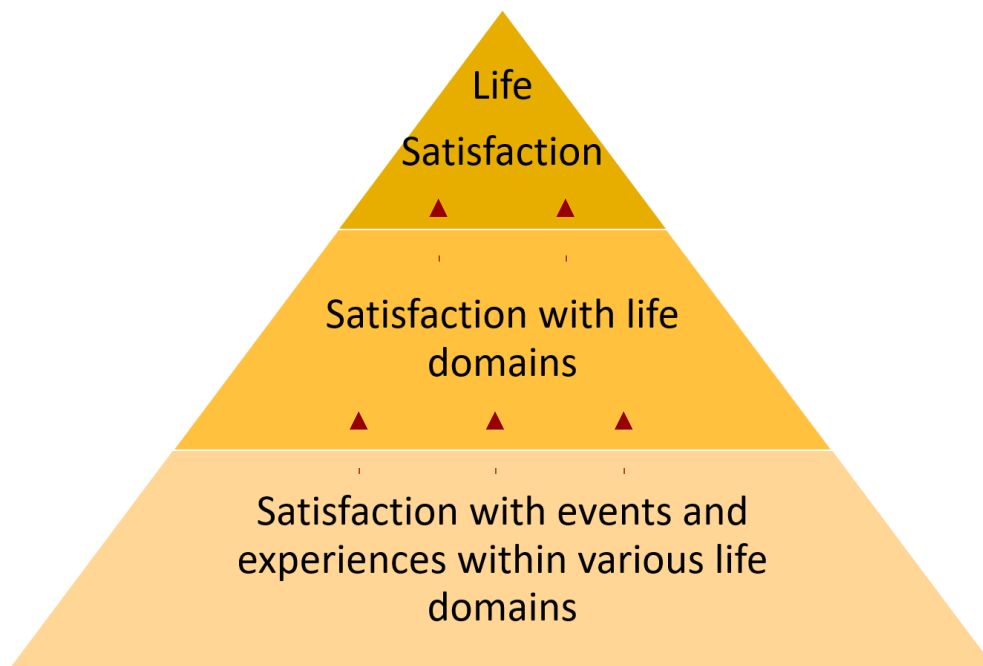
The theoretical framework shown in Figure 2.1 is drawn from the "bottom-up"

approach of life satisfaction proposed by Diener (1984). This approach provided a framework

that a lower degree of domain satisfaction results in a greater degree of overall life satisfaction (Leonardi et al., 2005; Schimmack et al., 2009). To put it in a simple way, the whole is made up of pieces. The approach suggests that the overall life satisfaction of an individual is the result of their objective contentment and satisfaction in various domains of life, which may consist of several life aspects such as work, personal development, family and peer relationships, health, income and others (Headey et al., 2006; Heller et al., 2004; Pavot & Diener, 2008).

From a bottom-up viewpoint, the effects of situational circumstances on overall life satisfaction is moderated by domain satisfaction, in which individuals who have more needs met have a stronger sense of life satisfaction overall. Put simply, an individual who evaluates his or her life as satisfactory and meaningful is precise because he or she experiences many satisfying moments in life. For instance, previous studies found that engagement in physical leisure activities such as exercising is positively associated with an individual's satisfaction with life (Leung & Lee, 2005; Melin et al., 2003). Research also showed that job and life satisfaction stayed considerably positively and mutually associated with that an individual's identity is typically formed via action and involvement, and a consistent working situation suggests stability and allows access to social relationships (Bakkeli, 2021; Judge & Watanabe, 1993).

Research also indicated subjective mental health status and self-rated health is strongly associated with an individual's reported life satisfaction (Lombardo et al., 2018; Palmore & Luikart, 1972). The analysis of 16-year longitudinal data from a large population found that individuals with satisfactory self-rated health, good health status, a lower degree of somatic complaints, greater net income as well as sufficient social support reported a higher

level of life satisfaction (Lacruz et al., 2011).

2.5 Conceptual Framework

Figure 2.2

Psychological Distress, Fear, and Changes in Lifestyle-Related Behaviour as Predictors of

Life Satisfaction
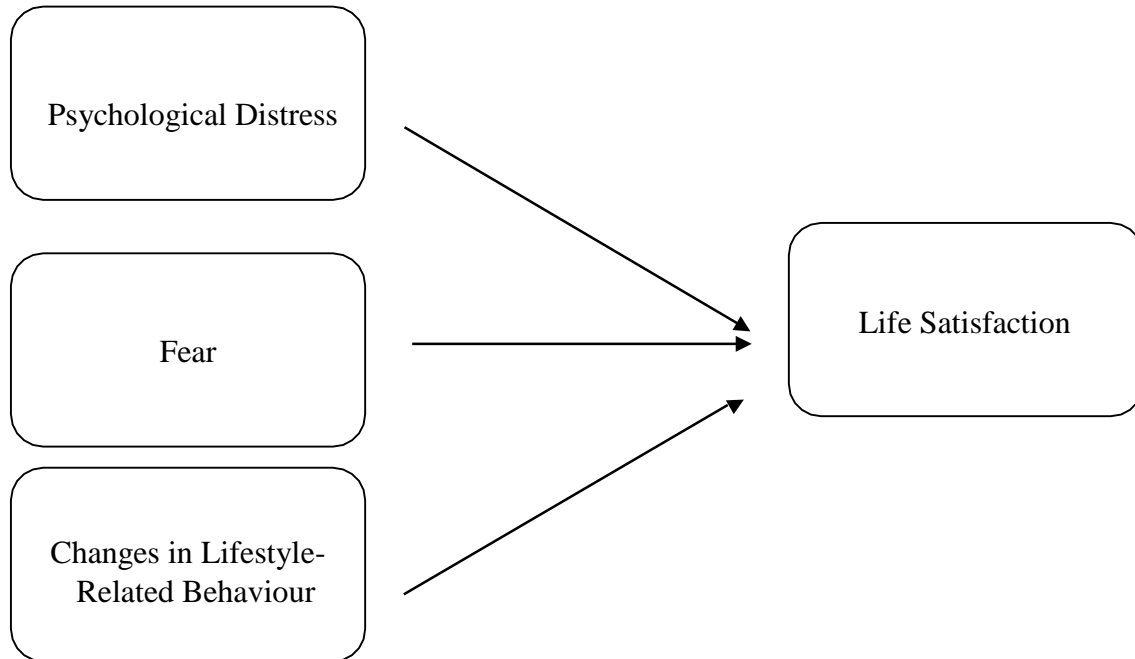
Based on the literature review, psychological distress significantly impacts life

satisfaction (Chan et al., 2020; Kumar, 2016; Rust øen et al., 2010). The feelings of

psychological distress induced by the obsessive thoughts about the pandemic further influence

life satisfaction as such thoughts may lead to a sense of poor self-esteem, lack of control and

severe disruption in everyday functioning (Ashraf et al., 2021). Fear of Covid-19 has

significantly affected life satisfaction (Dymecka et al., 2021). Individuals are concerned about

their health and are afraid of being infected and experiencing serious health consequences, and

fear losing their loved ones due to the pandemic (Fardin, 2020; Super et al., 2021). The feeling

of anxiety resulting from fear will negatively affect one's mental health and eventually diminish

their perceived quality of living (Schou-Bredal et al., 2021). Changes in lifestyle-related

behaviour during COVID-19, such as reducing social participation and work-related problems,

have a significant relationship with life satisfaction (Ammar et al., 2020; Kumar et al., 2021).

According to Diener's proposed "bottom-up" perspectives of life satisfaction, the present study

will examine the role of psychological distress, fear and changes in lifestyle-related behaviour

and their impact on life satisfaction. The relationships between variables are illustrated by the

conceptual model, as shown in Figure 2.2.

Chapter III

Methodology

3. 1 Research Design

This study was quantitative research that collected data from the participants via an

online questionnaire. According to Creswell (2009), quantitative research comprises

evaluating the relationship between variables in order to assess objective concepts. We chose

quantitative research to demonstrate a clear connection between the data. Additionally, the

result will be presented as numerical data that can be projected to a larger population to

understand the phenomena. A cross-sectional study was used in this study because the

samples were collected from the target population at the same time to examine the

relationship between the impact of psychological distress, fear and changes in lifestyle-

related behaviour with life satisfaction among working adults due to Movement Control

Order (MCO) in Malaysia. The cross-sectional study has several advantages, including its

low cost and ease of conduct (Wang & Cheng, 2020). The data collection was one-time and

required no follow-up; however, numerous outcomes and exposures can be evaluated. For the

current study, an online questionnaire is structured to collect the data from the participants.

3. 2 Sampling Procedures

3.2.1 Sampling Method

This study employed a non-probability sampling technique. It is a sampling procedure

that entails selecting a sample from the population in a subjective manner and accordance

with the idea of non-randomization (Etikan et al., 2015). In this regard, participants were

chosen based on their accessibility. By using a non-probability method, certain phenomena

are to be examined with the potential to provide useful insights (Showkat & Parveen, 2017).

More specifically, the current study recruited participants using convenience sampling in

which a sample was drawn from a population subset that was close at hand and easily

accessible (Galloway, 2005). Participants recruited are working adults who underwent the implementation of Movement Control Order (MCO) in Malaysia during the pandemic. The number of respondents was reached based on their accessibility, availability, and willingness to participate. In this context, questionnaires are distributed to "convenient" individuals, such as friends, classmates, family members, or relatives. Convenience sampling was chosen because it is low-cost, simple and the subjects are conveniently accessible.

3.2.2 Location of Study

To reach a more significant number of participants, the present study distributed online questionnaires across Malaysia's states via social media platforms such as Instagram, Facebook, and instant messaging applications such as WhatsApp and WeChat. The current study addressed working adults from both private and public sectors in West and East Malaysia.

3.2.3 Ethical Clearance Approval

Ethical clearance approval was obtained from the UTAR Scientific and Ethical Review Committee (SERC) before disseminating the link of the questionnaire to the target population (Re: U/SERC/299/2021; See Appendix A). A summary of the brief description of the project and questionnaire as well as a complete set of questionnaires comprising an informed consent sheet, the Kessler Psychological Distress Scale, the Fear of COVID-19 Scale, the Lifestyle-Related Behaviour Questionnaire, and the Satisfaction with Life Scale were presented to the committee for evaluation and review.

3.3 Sample Size, Power and Precision

3.3.1 Justification of Sample Size

With Cohen's f^2 calculated, $f^2 = 0.10$, it was proposed that the minimum sample size for this study would be 175 people. An estimated effect size was computed based on the result of past studies. Due to previous research indicating a low to moderate association

between psychological distress and life satisfaction (Ashraf et al., 2021; Karim & Weisz, 2011; Kumar et al., 2016), a small to moderate value of Cohen's f^2 was estimated, $f^2 = 0.20$, in order to ensure the value is within a reasonable range and to calculate the sample size correctly. The findings are consistent in the relationship between changes in lifestyle-related behaviour and life satisfaction are the same. Previous studies indicated a weak association between the two variables (Ammar et al., 2020). As a result, a small effect size was estimated, $f^2 = 0.10$, to arrive at a reasonable and potentially accurate final value.

Meanwhile, a small effect size between fear and life satisfaction, $f^2 = 0.013$, was calculated based on the result of past studies (Dymecka et al., 2021; Özmen et al. 2021). However, to ensure adequate effective data after data filtering, around 250 participants were recruited. A total of 261 responses were collected by the end of the data collection process.

3.3.2 Power Analysis

A-priori sample size calculator for multiple regression (Soper, 2015) was utilized to estimate the minimum sample size required. The estimated effect size calculated is $f^2 = 0.10$, with a statistical power level of 0.95 and an error probability level of 0.05. The numbers of predictors were inserted as three (i.e. psychological distress, fear, changes in lifestyle-related behaviour). According to the A-priori sample size calculator for multiple regression, this study's minimum proposed sample size would be 175 people (See Appendix B). After running data filtering, the number of total finalized participants was 182.

3.4 Data Collection Procedures

3.4.1 Participants

The target population of this study was working adults in Malaysia, divided into three age groups (18-30 years old, 21-50 years old, and 51-65 years old). We chose to recruit participants who were at least 18 years old because this is the legal working age in Malaysia. On the other hand, we decided to recruit participants up to the age of 65 instead of the legal

retirement age (i.e., 60 years old) because Malaysia has started to transition into an aging society. There are many people who need to work longer to ensure the financial stability of the pension system. Thus, we included the participants from age 18 years old to 65 years old. We filtered responses from participants who did not meet the above criteria before the data analysis.

67.6% of our participants were individuals aged between 18-30 years old meanwhile 19.2% of individuals aged between 31-50 years old, and 13.2% of individuals aged between 51-65 years old. Male participants occupied 34.1% and female participants made up 64.3% of the sample. Meanwhile, 1.6% of participants refused to disclose their gender. Malay and Indian participants each accounted for 13.7%, while Chinese participants occupied 72.0%. Individuals from other ethnic groups accounted for 0.5% of participants.

3.4.2 Research Procedure

An online questionnaire was generated by using Qualtrics software. Qualtrics links or QR codes were distributed to our targeted participants who met our inclusion criteria and were easily accessible, such as acquaintances, family and relatives. The survey link was distributed via a variety of social media sites such as "WhatsApp", "Facebook", "WeChat", "Telegram" and "Instagram". A poster consisting of the QR code of the questionnaire (See Appendix I) was presented to anyone at hand who fulfilled the inclusion criteria. The objective of this study was introduced to our target participants when distributing the survey links or QR codes to them. The personal data protection sheet was included on the first page of the questionnaire to obtain the consent of our participants (See Appendix B). We had informed participants that their participation in the research is anonymous and protected by privacy and confidentiality obligations. They were also informed that they had the right to refuse to engage or withdraw from the study at any moment without penalty. Individuals who

clicked the "I agree" button indicating that they were willing to participate in this study

proceeded to answer the survey questions.

Moreover, participants filled in their demographic information such as age, gender,

ethnic background, and occupation by the end of the questionnaire. It took approximately 10

to 15 minutes to complete this questionnaire. The contact information of the three members

and the in-charge supervisor was provided in the questionnaire to enable the respondents to

contact if they have any inquiries. The questionnaire and informed consent form were

reviewed and approved by the UTAR Scientific and Ethical Review Committee (SERC)

before delivering the link. After data collection, we proceeded to the tabulation of data.

3.5 Instruments

3.5.1 Kessler Psychological Distress Scale

The Kessler Psychological Distress Scale (K10; Kessler et al., 2002; See Appendix D)

is a 10-item questionnaire to assess individuals' psychological distress based on anxiety and

depressive symptoms encountered in the previous four weeks. For example, *"In the past 4*

weeks, about how often did you feel tired out for no good reason?", "In the past 4 weeks,

about how often did you feel depressed?", "In the past 4 weeks, about how often did you feel

worthless?". Respondents indicate the extent to which the items describe them on a 5-point

response scale (*score 5= all of the time; score 4= most of the time; score 3= some of the*

time; score 2= a little of the time; score 1= none of the time). A higher score indicates a

higher level of psychological distress. The scale was found to have excellent internal

consistency reliability (Cronbach's α= .93). As for the current study, the scale reflected

excellent internal consistency reliability (Cronbach's α= .945).

3.5.2 Fear of COVID-19 Scale

The seven-item Fear of COVID-19 Scale (FCV-19S; Ahorsu et al., 2020; See

Appendix D) which is used to assess the level of fear among the population during COVID-

19, is developed and validated by Ahorsu et al. with a 5-point Likert scale ranging from *(1= Strongly Disagree)* to *(5= Strongly Agree)*. The items included *"I am most afraid of Corona.", "I am afraid of losing my life because of Corona.", "My heart races or palpitates when I think about getting Corona."*. In addition, the score is ranged from 7 to 35, with a higher total score indicating that the participant has a higher level of fear towards COVID-19. The scale showed good internal consistency reliability of $\alpha = .82$ in the past study (Ahorsu et al., 2020) as well as in the current study (Cronbach's $\alpha = .869$). The concurrent validity of the scale and depression, anxiety, perceived infectability and germ aversion are .425, .511, .483 and .459, respectively.

3.5.3 Lifestyle-Related Behaviour Questionnaire

A lifestyle-related behaviour questionnaire (Kumari et al., 2020; See Appendix E) consisted of 20 items and was designed to measure changes in people's lifestyle-related behaviours during the COVID-19 pandemic. For example, *"During COVID pandemic, how has your quality/ portions of meals and snacks changed?", "During COVID pandemic, how has your participation in leisure and household changed?", "During COVID pandemic, how have your hours of sleep changed?"*. For items 1, 2, 6, 7, 8, 9, 10, 17 and 20 were scoring at a 5-Likert point scale, *(2= Significantly increased; 1= Slightly increased; 0= Grossly similar; -1= Slightly decreased; -2= Significantly decreased)*. Items 4, 5, 11, 12, 13, 14, 15, 16 and 19 are reverse items. For items 3 and 18 were scored as *(0= Grossly similar; -1= Slightly increased/ decreased; -2= Significantly increased/ decreased)*. This questionnaire was internally consistent ($\alpha = .72$) and reported a good content validity with sampling adequacy determined by the Kaiser-Meyer-Olkin value (0.688). The current study found an acceptable internal consistency reliability for this scale (Cronbach's $\alpha = .673$).

3.5.4 Satisfaction with Life Scale

Satisfaction with Life Scale (SWLS; Diener et al., 1985; See Appendix F) is a 5-item

questionnaire used to assess subjective life satisfaction among the population. The

questionnaire included *"In most ways my life is close to my ideal.", "I am satisfied with my*

life.", "If I could live my life over, I would change almost nothing.". The agreement or

disagreement of the participants was assessed using a 7-point Likert scale which ranged from

(7= Strongly agree) to *(1= Strongly disagree)*. Hence, the cumulative score's higher indicates

that the participants are highly satisfied with their lives. The inter-item correlations of SWLS

were .31, .63, .61, .75 and .66 respectively, reflecting a good level of internal consistency for

the scale. The SWLS is internally consistent since it has an excellent internal consistency for

the entire scale reported by the current study (Cronbach's α = .904).

3.6 Data Analysis

After data collection, the Statistical Package for the Social Sciences Version 23 (IBM

SPSS Statistics 23) was utilized to conduct data analysis. First and foremost, data screening

was performed in order to remove invalid data. After that, descriptive analysis of the

demographic data including age, gender, and ethnicity (See Appendix G) was performed to

understand the characteristics and measures of the present sample. In addition, assumptions

of the statistical test were explored prior to hypothesis testing to ensure that there is no

violating the assumption of normality. In terms of this, five indicators for normality

(skewness, kurtosis, histogram, Kolmogorov-Smirnov test and P-P plot) were adopted.

Subsequently, Pearson's Product Moment Correlation (PPMC) was run to explore the

correlation between psychological distress, fear, changes in lifestyle-related behaviour and

life satisfaction. Following this, Multiple Linear Regression (MLR) was performed to

examine the predictive roles of the independent variables (i.e., psychological distress, fear

and changes in lifestyle-related behaviour) on the dependent variable (i.e., life satisfaction).

Chapter IV

Results

This chapter presented the findings in descriptive statistics and inferential statistics. In terms of descriptive statistics, the participants' demographic information including age, gender and ethnicity was displayed using frequencies and percentages. The inferential statistics were presented using relevant statistical analyses which are independent t-test and multiple linear regression (MLR) to generate the statistical data for the independent variables (i.e., psychological distress, fear, changes in lifestyle-related behaviours) and dependent variable (i.e., life satisfaction). Before multiple linear regression analysis, assumption checking was conducted. Data filtering was conducted to remove invalid data and ensure a normal data distribution.

4.1 Descriptive Statistics

Based on Table 4.1, the total participants were 182 working adults, and they were categorised into three age groups which are 18-30 years old (67.6%), 31-50 years old (19.2%) and 51-65 years old (13.2%). There were 62 males (34.1%), 117 females (64.3%) and 3 participants (1.6%) who did not intend to reveal their gender. For the race, most of our participants are Chinese, which are 72% (N=131), Malay and Indian each accounted for 13.7% (N=25).

Table 4.1

Demographic Information of Respondents (N=182)

Variables	Frequency	Percentage (%)
Age (18-30 years old)	123	67.6
(31-50 years old)	35	19.2
(51-65 years old)	24	13.2
Gender		
Male	62	34.1
Female	117	64.3
Prefer not to say	3	1.6

Race		
Malay	25	13.7
Chinese	131	72.0
Indian	25	13.7
Others	1	.5
Working adults	182	100

4.2 Hypothesis Testing

Hypothesis 1

H_0: *There is no significant relationship between psychological distress and life satisfaction among working adults during Movement Control Order (MCO) in Malaysia.*

H_1: *There is a significant relationship between psychological distress and life satisfaction among working adults during Movement Control Order (MCO) in Malaysia.*

A Pearson-product moment correlation test was performed in this study to test if there is a significant relationship between psychological distress, fear, changes in lifestyle-related behaviour and life satisfaction. Table 4.2 indicates that there is a significant negative relationship between psychological distress and life satisfaction ($r = -.351$, N= 182, $p < .001$). The null hypothesis is rejected. The meaning behind this result is that the higher the level of psychological distress of an individual, the lower their life satisfaction is.

Hypothesis 2

H_0: T*here is no significant relationship between fear and life satisfaction among working adults during Movement Control Order (MCO) in Malaysia.*

H_1: *There is a significant relationship between fear and life satisfaction among working adults during Movement Control Order (MCO) in Malaysia.*

A non-significant negative relationship is found between fear and life satisfaction among working adults in Malaysia ($r = -.091$; N= 182; $p = .219$), as indicated in Table 2. The alternative hypothesis is rejected. The higher the fear individuals experience, the lower their

satisfaction with life is. However, the non-significant relationship concluded that the

increases in individuals' level of fear do not significantly relate to a decrease in life

satisfaction.

Hypothesis 3

H_0: *There is no significant relationship between changes in lifestyle-related behaviour and*

life satisfaction among working adults during Movement Control Order (MCO) in Malaysia.

H_1: *There is a significant relationship between changes in lifestyle-related behaviour and life*

satisfaction among working adults during Movement Control Order (MCO) in Malaysia.

According to Table 4.2, it found that changes in lifestyle-related behaviour significantly and

negatively correlated with life satisfaction among working adults in Malaysia during the

implementation of the Movement Control Order (MCO) ($r = -.233$, N= 182, $p < .01$).

Therefore, in terms of this, the null hypothesis is rejected, and the alternative hypothesis is

supported. Hence, the more drastic the changes in lifestyle-related behaviours during the

MCO, the lower the life satisfaction is.

Table 4.2

Pearson-Product Moment Correlation between Psychological Distress, Fear, Lifestyle-

Related Behaviour and Life Satisfaction

Variable	n	Psychological Distress	Fear	Lifestyle-Related Behaviour	Life Satisfaction
Psychological Distress	182				
Fear	182	.433 **			
Lifestyle-related Behaviour	182	.169 *	.126		

Life Satisfaction	182	-.351 **	-.091	-.233 **

Note. n = Number of participants.

* p < .05. ** *p* < .01.

4.3 Multiple Linear Regression (MLR) Analysis

H$_0$*: Psychological distress, fear, changes in lifestyle-related behaviour do not predict life satisfaction among working adults during Movement Control Order (MCO) in Malaysia.*

H$_1$*: Psychological distress, fear and changes in lifestyle-related behaviour predict life satisfaction among working adults during Movement Control Order (MCO) in Malaysia.*

Multiple linear regression was used to test if psychological distress, fear and lifestyle-related behaviour predict life satisfaction among working adults during Movement Control Order (MCO) in Malaysia. Table 4.3 indicates that the model was statistically significant F (3, 178) = 11.349, p < .001, and accounted for 14.6% of the variance. Psychological distress was found as a negative and significant predictor of life satisfaction among working adults during Movement Control Order in Malaysia (β = -.357, p < .001), as did lifestyle-related behaviour (β = -.184, p < .05). It was found that psychological distress is the strongest predictor of life satisfaction, followed by changes in lifestyle-related behaviours. The independent variable of fear (β = .086, p = .259) was not a significant predictor of life satisfaction. It showed insufficient evidence in the sample to conclude that a non-zero correlation exists.

Table 4.3

Regression Model of Life Satisfaction

Model	Predictor variable	F	df	β	t	Sig.
1	(Constant)	11.349	3		16.044	.000

Psychological Distress	-.357	-4.655	.000
Fear	.086	1.132	.259
Lifestyle-Related Behavior	-.184	-2.635	.009

Dependent Variable: Life Satisfaction

Table 4.4

ANOVA Table for Regression Model

Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	1119.715	3	373.238	11.349	.000
	Residual	5854.004	178	32.888		
	Total	6973.720	181			

Note. R^2= .364, Adjusted R^2= .118

4.4 Normality Assumption

According to Table 4.5, the normality assumption of variables was tested by skewness, kurtosis, histogram and P-P plots. Gravetter and Wallnau (2014) indicated that the value of skewness and kurtosis between -2 and 2 is considered acceptable for univariate distribution data. The result showed that the skewness and kurtosis for each variable were within the acceptable range. The P-P plots results also showed that all of the scatters were tightly close to or fell on the diagonal line, which can be inferred as good normality (See Appendix L). Each of the histograms for four variables also showed an amazingly normal curve that signifies a good normality (See Appendix M).

Table 4.5

Normality for Each Variable

Variables	Skewness	Kurtosis	Histogram	P-P plots

Kessler Psychological Distress Scale (K10)	.655	-.157	Normal	Normal
Fear of COVID-19 Scale	.266	-.033	Normal	Normal
Lifestyle-Related Behaviour Questionnaire	-.284	1.737	Normal	Normal
Satisfaction With Life Scale (SWLS)	-.640	.082	Normal	Normal

4.5 Assumptions of Multiple Linear Regression (MLR)

4.5.1 Test on Multivariate Outlier (Cook's, Mahalanobis, Leverage)

The data set's outliers were identified using a casewise diagnostic analysis. After performing the test, there were eight potential outliers found from the dataset of 182 cases. According to Table 4.6, the eight potential outliers were cases 63, 64, 66, 79, 87, 107, 166 and 179. To further detect whether outliers are influential cases that need to be removed, the case summaries on Mahalanobis distance, Cook distance, and Centered Leverage Value were performed to evaluate each outlier (See Appendix P).

The Mahalanobis Distance (D2) have a conservative cut-off point for the sample of 100 which is >15. All the eight potential outliers are shown to have a distance of <15 which do not violate the assumption. According to Cook and Weisberg (1982), they suggested that the values (Cook's Distance) greater than 1 might be potential outliers that need to be considered. The eight potential outliers showed less than 1 which does not violate the assumption. The leverage value for the dataset is calculated to be 0.02198 using the leverage formula (p+1)/n. Hoaglin and Welsch (1978) suggested that values greater than 2 times the Leverage value, 0.04396 for this dataset, be considered outliers. Only case 87 violated this assumption that the leverage value is 0.06737. However, case 87 shows normal in Mahalanobis and Cook's distance, so the case does not need to be excluded from the dataset

as it fulfils 2/3 of the three assumptions. Overall, all the 8 potential outliers shown in Table 6

no need to be removed from the dataset.

Table 4.6

Casewise Diagnostics for Life Satisfaction

Case Number	Std. Residual	Total_SWLS	Predicted Value	Residual
63	-2.083	10	21.95	-11.947
64	-2.044	10	21.72	-11.722
66	-2.657	8	23.24	-15.235
79	-2.694	10	25.45	-15.450
87	-2.133	5	17.23	-12.230
107	-2.537	5	19.55	-14.549
166	-2.080	12	23.93	-11.930
179	-2.896	8	24.61	-16.605

4.5.2 Test on Independence of Errors

SPSS performed the Durbin-Watson test to evaluate whether there are

autocorrelations among the residual terms or not. The Durbin-Watson test can detect whether

the residuals were independent of each other. When the tested value is closer to 2, it indicates

there is no autocorrelation and independence of errors (Durbin & Watson, 1951). Also, the

value within the range of 1 to 3 is considered as not violating the assumption. The value

1.739, as shown in Table 4.7, indicates consistency with assumption and not violating the

independence of error.

Table 4.7

Model Summary of Predictors

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.401	.161	.146	5.73478	1.739

4.5.3 Test on Normality of Residual, Linearity of Residual and Homoscedasticity

A residual scatter plot was developed to evaluate the assumptions of normality and linearity of residual and homoscedasticity. It shows the residuals were distributed randomly and evenly, and all three assumptions were met (See Appendix Q).

4.5.4 Test on Multicollinearity

Collinearity statistics was performed to test the assumption of multicollinearity. According to Hair et al., (2010), the cut-off threshold for tolerance is $\leq .10$ and VIF value $\geq$ 10 must call for a concern (Myers, 1990). Table 4.8 shows that all the tolerance values were more than .10, and all the values of VIF were also less than 10. Hence, it can be concluded that the assumption of multicollinearity was not violated.

Table 4.8

Coefficients among Variables

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Psychological Distress	.800	1.251
	Fear	.810	1.235
	Lifestyle-Related Behaviour	.968	1.033

Chapter V

Discussion and Conclusion

The purpose of this study was to ascertain working adults' perceptions of their life satisfaction during the implementation of MCO. The researchers sought to examine the relationship between psychological distress, fear, changes in lifestyle-related behaviours and life satisfaction, and the predictive roles of independent variables (i.e., psychological distress, fear, changes in lifestyle-related behaviours) on the dependent variable (i.e., life satisfaction).

The chapter reviewed the current study's findings with the support of prior studies' results. Additionally, this chapter addressed the implications of the study, limitations and suggestions for future research, and the conclusion of the study.

5.1 Psychological Distress and Life Satisfaction

The findings reported a significant relationship between psychological distress and life satisfaction among Malaysian working adults during Movement Control Order (MCO), and the null hypothesis is rejected. Psychological distress was negatively correlated with life satisfaction in the current study, which aligned with past studies (Lathabhavan & Sudevan, 2022). Employees have been shifted from physical work setups to working from home to halt the spread of the infection. However, the work-from-home policy has increased one's psychological distress and affected life satisfaction as they need to manage household responsibilities simultaneously (Kumar et al., 2021). For example, working adults need to take care of both their parents and children, increasing their stress levels.

Psychological distress, as assessed by anxiety and depression levels, social dysfunction, and level of confidence, negatively impacts life satisfaction, but life satisfaction can be increased if meaning in life exists (Ashraf et al., 2021). People who cannot identify their purpose in life are more prone to depression and other mental health problems as they will feel lost when they fail to find meaning in life. COVID-19 affected the level of

individual psychological distress. Mindfulness, on the other hand, may help to enhance overall well-being. People with high life satisfaction have lower levels of psychological distress as their depression, anxiety and stress level are reduced during the pandemic (Hartstone & Medvedev, 2021).

COVID-19 has generated unprecedented upheaval in social connections and working settings. Covid stress is a new cognitive emerging factor for a large proportion of Malaysian residents. The instability of the economy brought a massive impact on the self-employed during the pandemic and caused short-term psychological distress compared to the wage workers (Patel & Rietveld, 2020). The financial insecurity induced by COVID-19 also triggers extended stress, and all of the stress will lead to psychological distress and burnout (Rasdi et al., 2021). Pay cuts were common among the companies during COVID-19. Still, this action increased the psychological distress, including depression and anxiety, because pay cuts threatened their finances (Wilson et al., 2020). The previous study stated that psychological distress has a negative impact on life satisfaction as people who have unpleasant and negative emotions are more likely to have a low positive evaluation of their life (Sharma & Garg, 2016).

5.2 Fear and Life Satisfaction

According to the results, there is no significant relationship between fear and life satisfaction among working adults in Malaysia. Hence, the null hypothesis failed to be rejected. This finding is not consistent with past studies (Li et al., 2021; Özmen et al., 2021; Satici et al., 2020; Zhang et al., 2020) that the negative correlation between fear of Covid-19 and life satisfaction was not supported by the Malaysian working adults. A study conducted in Vietnam stated a positive correlation between fears and anxiety of covid-19 and life satisfaction in the Vietnamese student population (Cong, 2021). As the results show a more significant negative impact on Middle Eastern countries (Turkey), Euro countries (Poland and

German) and East Asia countries (China), further research is needed to better understand this issue may be different from the different cultural backgrounds where both Malaysia and Vietnam are Southeast Asian countries.

Besides, the inconsistent result with past studies could be due to the different characteristics of the target populations. Most of the previous studies were examining on the general public (Gawrych et al., 2020; Özmen et al., 2021; Satici et al., 2020), adolescents, undergraduate students (Cong, 2021), adults (Li et al., 2021; Zhang et al., 2020), older adults (Bidzan-Bluma et al., 2020) but there is fewer or can even say none of the research is examining the relationship between fear of Covid-19 and life satisfaction based on the population of working adults. The characteristics of the working adults' population might differ with the undergraduate students, older adults and adolescents. This is because the working adults' circumstances are different from others during the pandemic. Rather than fear of being infected by the coronaviruses, they are more concerned, panicked and stressed about family problems, financial problems or their working progress. These assumptions might be researched and further answered in future studies.

In addition, as of March 24, 2022, the cumulative number of Covid-19 cases in Malaysia reached 4.05 million, with daily confirmed cases exceeding 20,000 (Ministry of Health Malaysia, 2022). In this scenario, a narcotising dysfunction effect might happen. According to the Narcotising Dysfunction Approach by Lazarsfeld and Merton (1948), narcotizing dysfunction is described as a phenomenon in which the media extensively covers an issue to the point that the public becomes unable and numb to act on the knowledge, regardless of how compelling the problem is. There are flooded daily reports and information about new cases and deaths on Covid-19 on social media, print media, broadcast news and the internet in Malaysia. Hence, public and working adults in Malaysia may have become numb to Covid-19 and gradually become less concerned about it and even do not care about

it. With the mutation of the coronavirus to today's omicron virus, people have thought that it is just like the normal flu, which can recover after self-quarantine for a few days or after getting the vaccinations. However, further research might address these problems to confirm the assumptions.

5.3 Changes in Lifestyle-Related Behaviour and Life Satisfaction

The findings indicate that changes in lifestyle-related behaviour have shown a significant relationship with life satisfaction. As a result, the null hypothesis is rejected. Our findings are consistent with prior studies cited in the literature review. Individuals' daily routines have been significantly disrupted because of the pandemic, including but not limited to leisure, screen time, social engagement, physical activity, sleep quality and eating behaviour. Social distancing measures have a visible effect on physical activities and social interaction. The impact of changes in social relationships on one's life satisfaction may be related to specific personality characteristics (e.g., extraversion, open-mindedness) (Brindal et al., 2021). Individuals with high levels of extraversion could not satisfy their social demands, resulting in deteriorated social interaction and decreased life satisfaction. On the other hand, the findings reported that individuals indicated increased usage of technology and longer screening time during Movement Control Order (MCO). However, it is interesting that this medium may provide a means of fostering social connection through a virtual world and further satisfy the fundamental human desire for togetherness and belongingness. As a result, it may help to alleviate life dissatisfaction.

Dietary changes during home confinement also correlated with individuals' life satisfaction. Some individuals reported practising unhealthy diet behaviour during the confinement, such as increasing snacking between meals and junk food consumption. In contrast, some participants reported bringing up a healthy diet since the period of home confinement by decreasing having an outside meals and increasing home cooking activities,

increasing the consumption of fresh produce, including fruits and vegetables, and increasing

supplementation. Unhealthy diet behaviour has been linked with weight gain during the

confinement period, which was associated with a decrease in individuals' life satisfaction

(Brindal et al., 2021). On the other hand, a healthy diet was associated with an increase in life

satisfaction, which may be attributed to vitamins present in nutritious food such as fruits and

vegetables, which assist individuals in regulating mood and energy. Besides, a healthy diet

improves general health, which further contributes to an enhancement in subjective well-

being and thus increases life satisfaction.

Based on the findings, sleep hours and sleep quality differed significantly among

participants over the confinement period. As the participants of this study were working

adults, it is assumed that their sleep quality and sleep duration may be impacted by

employment-related variables, such as working from home, concerning income and so on,

which is consistent with the findings of a study on sleep issues during the pandemic period

conducted by Tasnim et al. (2020). Adults who were prohibited from attending work

physically and were required to work remotely may have had to adjust to this novel working

approach. This constant worry may play a role in contributing to shortening sleep duration

and decreased sleep quality. Inadequate sleep duration and sleep quality have detrimental

effects on health status and further affect one's life satisfaction (Becker et al., 2018;

Casagrande et al., 2020). Adequate physical activity was presumed to endow an improvement

in sleep quality. As individuals experienced a decreased time spent on physical activity

during MCO, thus their sleep quality and sleep duration have been worsened, resulting in

lower life satisfaction. Furthermore, sleep quality, a critical component of human life, has a

substantial impact on our emotional well-being (Bidzan-Bluma et al., 2020), and it has been

found that enough sleep has a favourable effect on one's evaluation of their life, resulting in

improved life satisfaction (Shin & Kim, 2018).

5.5 Limitations

First and foremost, this study employed self-report measures in data collecting and some drawbacks need to be recognized. The primary problem is that it may contribute to the likelihood of unreliable and invalid results. In terms of this, respondents may not be truthful when reporting on their own experiences. This may contribute to a situation known as "social desirability bias." They may be inclined to report on socially acceptable or desirable experiences. In addition, this measure also posed a risk on the clarity of the items, in which the wording of the questions may be ambiguous or have varying interpretations across participants. Besides, other issues raised, such as "response bias", which is the tendency of participants to reply in a specific manner regardless of the questions, are also potential disruptors to the reliability of the result. In this regard, they may, for example, be more prone to answer "yes" or "no" despite the subject of the questions.

Moreover, some participants provided feedback regarding the questionnaire, stating that it was lengthy. As a result, some invalid results with missing values were observed and needed to be excluded from the data analysis. The length of the questionnaires influences the response rates and further affects the reliability. In the event of a lengthy questionnaire, participants will get bored closer to the end of the questionnaire and will not pay attention to reading the survey questions. This will negatively affect the reliability of the result and even the data collection process. They may stop at the middle of the questionnaire seeing that several questions need to be answered. As a result, this will increase the amount of missing data towards the end of the survey.

Furthermore, convenience sampling as a sampling method in the recruitment of participants may lead to several drawbacks. The critical disadvantage of convenience sampling is that a convenience sample lacks the ability to provide a representative result (Jager et al., 2017). The lack of clear generalizability implies that the feedback obtained from

the sample is helpful on an individual basis. However, it fails to provide knowledge and

insight about the entire population. Besides, the population of working adults in Malaysia is

equivalent to 16.26 million persons up until October of 2021 (Department of Statistics

Malaysia, 2022). Therefore, the results collected from 182 participants recruited in this study

may not be sufficient to apply to the whole population. In other words, this contributes to the

generalisation of results as well.

5.6 Recommendations

There are several recommendations regarding the limitation of the study. To address

the limitation of self-report measures, it is recommended that self-reported measures can be

replaced with other types of measures that do not need to rely on the respondents' answers.

For instance, the lifestyle-related behaviour questionnaire can be replaced with an observer

rating measurement, which can be done by the respondents' spouse, parents, relatives, close

friends, colleagues, or other people who constantly interact with them. It might avoid the

"social desirable bias" and increase the credibility and validity of the result.

In addition, there is a possibility that language proficiency would affect the research

findings. As Malaysia is a multicultural country with three main races, it is recommended to

conduct a bilingual or trilingual survey in the future study if in the Malaysian context.

Sometimes the meaning of some complex words or terms can be misinterpreted or

misunderstood if they are not proficient in English, which will influence the response's

accuracy. Answering the survey questions in their mother language can let them better

understand the meaning of the questions and increase the validity of the results.

Moreover, other sampling methods such as stratified sampling can be used to better

generalise the results. Future research can make a stratified sample for the participants from

different areas to increase the precision and ensure an equal representation for the entire

population. The stratified sampling can also decrease the sampling errors because there are no overlapping strata in this sampling method.

Furthermore, since the limitations indicated that lengthy questions would increase the invalid response rate, it is recommended to use a shorter version of the questionnaire in future research. The shorter version questionnaire can avoid respondents feeling bored and giving up on completing the questionnaire halfway or filling the answers indiscriminately, which affects the accuracy and validity of results. Adapting a shorter version questionnaire can also decrease the rate of invalid data and increase the response rate. Also, the current study may be biased due to the unequal gender demographic. It is recommended that future studies could recruit a balanced number of participants from different gender, age and ethnic groups. An independent t-test can further be conducted during the data analysis to determine whether there is a difference in life satisfaction between different demographic groups among the working adults. In addition, it is suggested that future studies can investigate life satisfaction in different populations, such as healthcare workers, the elderly, quarantined adults, medical students, and so on to gather more enlightenment regarding life satisfaction from various groups of affected individuals during the confinement period.

The current study suggested a significant relationship between psychological distress, lifestyle-related behaviour, and life satisfaction among working adults in Malaysia. It is recommended that future research focus more on these variables as well as additional variables associated with life satisfaction such as health worries, happiness, coping styles and so on, so that to get an in-depth understanding of the potential mechanisms of the relationship. It could contribute to the body of theoretical knowledge and provide relevant information to authorities and the public.

5.4 Implications of Study

5.4.1 Theoretical Implications

The current study could contribute to society in several ways. It has further expanded understanding of the underlying correlation of psychological distress and changes in lifestyle-related behaviour on life satisfaction among Malaysian working adults. The findings obtained could be utilised to support existing theories, which reinforce our understanding regarding the potential predictive roles of psychological distress and changes in lifestyle-related behaviour on life satisfaction as reported by the current study results. This study also provided a useful framework for analysis. It provided references for future research as there are only a few or even no previous studies focused on this field of study among working adults in the Malaysian context.

The present study found that psychological distress and changes in lifestyle-related behaviour negatively and significantly predict life satisfaction, while fear negatively does not significantly predict life satisfaction of Malaysian working adults. The study results support the bottom-up approach to life satisfaction by demonstrating that satisfaction with aspects of life (i.e., psychological distress, changes in lifestyle-related behaviour) contributes to overall satisfaction with life. However, the current study developed a non-significant result between fear and life satisfaction. Further studies need to be conducted to contribute more insights regarding the predictive role of fear on life satisfaction. Nevertheless, the findings of the studies can contribute to the new development of the bottom-up approach to life satisfaction.

5.4.2 Practical Implications

Overall, the present study provides a better understanding of the relationship between psychological distress, fear, changes in lifestyle-related behaviour and life satisfaction among working adults in Malaysia. The findings of the current study provide several practical implications for future studies. The results suggested a significant relationship between

psychological distress and lifestyle-related behaviour on life satisfaction among working

adults in Malaysia. Therefore, future studies can focus more on these two variables that will

influence the life satisfaction of working adults and come out with some interventions or

related workshops to increase the life satisfaction of the working adult population. For

instance, psychological distress could lower the job performance of working adults and,

consequently decrease productivity. As the previous chapter stated, people with

psychological distress would also have a higher intensity to suffer from depression. Hence,

with better insight from the current studies, people can conduct a workshop based on

increasing the life satisfaction of working adults to lower their psychological distress. Job

performance will further increase with enhanced satisfaction with life and improve overall

well-being.

Furthermore, this research finding could give some hints to the authorities, such as

organisations or employers, on improving the employees' job performance, productivity and

effectiveness. As for the organisation or employer, they could organise some program which

can help the employees to improve their work-life balance to decrease their psychological

distress, which may affect their life satisfaction. For example, the company can conduct a

time management workshop to teach the employees to manage their time better and improve

the work-life balance. Besides, organisations can recruit a few mental health professionals to

avoid the psychological distress of their employees and, in turn, increase their life

satisfaction.

5.5 Conclusion

Convenient sampling was used to recruit 261 participants, but the final sample was

182 because some of the participants did not meet the criteria. The Kessler Psychological

Distress Scale (K10; Kessler et al., 2002), Fear of COVID-19 Scale (FCV-19S; Ahorsu et al.,

2020) and lifestyle-related behaviour questionnaire (Kumari et al., 2020) were used as the

instruments in this study. Data were collected through distributed the link via social media to the targeted participants.

The first objective of the present study has been met as the relationship between psychological distress, fear and changes in lifestyle-related behaviour on life satisfaction among Malaysian working adults during Movement Control Order (MCO). In addition, the second objective, which was to examine whether psychological distress, fear and lifestyle-related behaviour were able to predict life satisfaction among working adults during Movement Control Order (MCO) in Malaysia, also have been met. Both psychological distress and changes in lifestyle-related behaviours have a significant negative relationship on life satisfaction and can predict life satisfaction. However, the Pearson correlation showed no significant relationship between fear and life satisfaction and was unable to predict life satisfaction.

The present study can provide the foundation for the researchers as there is a lack of journal articles related to this topic, and it has not been focused on by the researchers. Therefore, researchers can focus on these variables, which can be helped to increase the life satisfaction of the working adults in Malaysia. It is important to pay attention to this topic as life satisfaction can affect the stress level and lead to mental disorders.

References

Ahorsu, D. K., Lin, C.-Y., Imani, V., Saffari, M., Griffiths, M. D., & Pakpour, A. H. (2020).

The fear of COVID-19 scale: Development and initial validation. *International

Journal of Mental Health and Addiction*. https://doi.org/10.1007/s11469-020-00270-8

Al-Rabiaah, A., Temsah, M.-H., Al-Eyadhy, A. A., Hasan, G. M., Al-Zamil, F., Al-Subaie,

S., Alsohime, F., Jamal, A., Alhaboob, A., Al-Saadi, B., & Somily, A. M. (2020).

Middle east respiratory syndrome- coronavirus (MERS-CoV) associated stress among

medical students at a university teaching hospital in Saudi Arabia. *Journal of

Infection and Public Health*, *13*(5), 687–691.

https://doi.org/10.1016/j.jiph.2020.01.005

Ambelu, A., Birhanu, Z., Yitayih, Y., Kebede, Y., Mecha, M., Abafita, J., Belay, A., & Fufa,

D. (2021). Psychological distress during the COVID-19 pandemic in Ethiopia: An

online cross-sectional study to identify the need for equal attention of intervention.

Annals of General Psychiatry, *20*(1). https://doi.org/10.1186/s12991-021-00344-4

American Psychological Association. (n.d.). *APA dictionary of psychology.* Retrieved

October 25, 2021, from https://dictionary.apa.org/

American Psychological Association. (2019). *APA clinical practice guideline for the

treatment of depression across three age cohorts*. American Psychological

Association. https://www.apa.org/depression-guideline/guideline.pdf

Ammar, A., Chtourou, H., Boukhris, O., Trabelsi, K., Masmoudi, L., Brach, M., Bouaziz, B.,

Bentlage, E., How, D., Ahmed, M., Mueller, P., Mueller, N., Aloui, A., Hammouda,

O., Paineiras-Domingos, L. L., Braakman-Jansen, A., Wrede, C., Bastoni, S.,

Pernambuco, C. S. ... Hoekelmann, A. (2020). Social participation and life satisfaction

of peoples during the COVID-19 home confinement: The ECLB-COVID19

multicenter study. *Medicine, Psychology*.

https://doi.org/10.1101/2020.05.05.20091066

Ammar, A., Chtourou, H., Boukhris, O., Trabelsi, K., Masmoudi, L., Brach, M., Bouaziz, B.,
Bentlage, E., How, D., Ahmed, M., Mueller, P., Mueller, N., Hsouna, H., Aloui, A.,
Hammouda, O., Paineiras-Domingos, L., Braakman-Jansen, A., Wrede, C., Bastoni,
S., & Pernambuco, C. (2020). Covid-19 home confinement negatively impacts social
participation and life satisfaction: A worldwide multicenter study. *International
Journal of Environmental Research and Public Health*, *17*(17).
https://doi.org/10.3390/ijerph17176237

Ammar, A., Trabelsi, K., Brach, M., Chtourou, H., Boukhris, O., Masmoudi, L., Bouaziz, B.,
Bentlage, E., How, D., Ahmed, M., Mueller, P., Mueller, N., Hammouda, O.,
Paineiras-Domingos, L., Braakman-jansen, A., Wrede, C., Bastoni, S., Pernambuco,
C., Mataruna, L. … Hoekelmann, A. (2020). Effects of home confinement on mental
health and lifestyle behaviours during the COVID-19 outbreak: Insights from the
ECLB-Covid19 multicenter study. *Biology of Sport*, *38*(1), 9–21.
https://doi.org/10.5114/biolsport.2020.96857

An, H.-Y., Chen, W., Wang, C.-W., Yang, H.-F., Huang, W.-T., & Fan, S.-Y. (2020). The
relationships between physical activity and life satisfaction and happiness among
young, middle-aged, and older adults. *International Journal of Environmental
Research and Public Health*, *17*(13), 4817. https://doi.org/10.3390/ijerph17134817

André, B., Canhão, H., Espnes, G. A., Rodrigues, A. M. F., Gregorio, M. J., Nguyen, C.,
Sousa, R., & Grønning, K. (2017). Is there an association between food patterns and
life satisfaction among Norway's inhabitants ages 65 years and older? *Appetite*, *110*,
108–115. https://doi.org/10.1016/j.appet.2016.12.016

Arpaci, I., Karataş, K., & Baloğlu, M. (2020). The development and initial tests for the

psychometric properties of the COVID-19 Phobia Scale (C19P-S). *Personality and

Individual Differences*, *164*. https://doi.org/10.1016/j.paid.2020.110108

Arvidsdotter, T., Marklund, B., Kylén, S., Taft, C., & Ekman, I. (2015). Understanding

persons with psychological distress in primary health care. *Scandinavian Journal of

Caring Sciences*, *30*(4), 687–694. https://doi.org/10.1111/scs.12289

Ashraf, F., Zareen, G., Nusrat, A., Arif, A., & Griffiths, M. D. (2021). Correlates of

psychological distress among Pakistani adults during the COVID-19 outbreak:

Parallel and serial mediation analyses. *Frontiers in Psychology*, *12*.

https://doi.org/10.3389/fpsyg.2021.647821

Baeriswyl, M., & Oris, M. (2021). Social participation and life satisfaction among older

adults: Diversity of practices and social inequality in Switzerland. *Ageing & Society*,

1–25. https://doi.org/10.1017/S0144686X21001057

Bakkeli, N. Z. (2021). Health, work, and contributing factors on life satisfaction: A study in

Norway before and during the COVID-19 pandemic. *SSM - Population Health*, *14*.

https://doi.org/10.1016/j.ssmph.2021.100804

Becker, N. B., Jesus, S. N. de, Viseu, J. N., Stobäus, C. D., Guerreiro, M., & Domingues, R.

B. (2018). Depression and quality of life in older adults: Mediation effect of sleep

quality. *International Journal of Clinical and Health Psychology*, *18*(1), 8–17.

https://doi.org/10.1016/j.ijchp.2017.10.002

Bidzan-Bluma, I., Bidzan, M., Jurek, P., Bidzan, L., Knietzsch, J., Stueck, M., & Bidzan, M.

(2020). A Polish and German population study of quality of life, well-being, and life

satisfaction in older adults during the COVID-19 pandemic. *Frontiers in Psychiatry*,

11. https://doi.org/10.3389/fpsyt.2020.585813

Bozkurt, H. Ö., & Doğancılı, O. S. (2021). The effect of financial stress and affective job

insecurity on hotel employees life satisfaction: A research conducted during the

Covid-19 pandemic. *Journal of Business Research - Turk*, *13*(2), 1242–1254.

https://doi.org/10.20491/isarder.2021.1196

Brindal, E., Ryan, J. C., Kakoschke, N., Golley, S., Zajac, I. T., & Wiggins, B. (2021).

Individual differences and changes in lifestyle behaviours predict decreased

subjective well-being during COVID-19 restrictions in an Australian sample. *Journal

of Public Health*, 1–7. https://doi.org/10.1093/pubmed/fdab040

Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., &

Rubin, G. J. (2020). The psychological impact of quarantine and how to reduce it:

Rapid review of the evidence. *The Lancet*, *395*(10227), 912–920.

https://doi.org/10.1016/S0140-6736(20)30460-8

Cao, W., Fang, Z., Hou, G., Han, M., Xu, X., Dong, J., & Zheng, J. (2020). The

psychological impact of the COVID-19 epidemic on college students in China.

Psychiatry Research, *287*. https://doi.org/10.1016/j.psychres.2020.112934

Casagrande, M., Favieri, F., Tambelli, R., & Forte, G. (2020). The enemy who sealed the

world: Effects quarantine due to the COVID-19 on sleep quality, anxiety, and

psychological distress in the Italian population. *Sleep Medicine*, *75*, 12–20.

https://doi.org/10.1016/j.sleep.2020.05.011

Chan, R. C. H., Mak, W. W. S., Ma, G. Y. K., & Cheung, M. (2020). Interpersonal and

intrapersonal manifestations of HIV stigma and their impacts on psychological

distress and life satisfaction among people living with HIV: Toward a dual-process

model. *Quality of Life Research*, *30*(1), 145–156. https://doi.org/10.1007/s11136-020-

02618-y

Cheah, W. L., Law, L. S., Teh, K. H., Kam, S. L., Voon, G. E. H., Lim, H. Y., & Kumar, N.

 S. S. (2021). Quality of life among undergraduate university students during COVID-

 19 movement control order in Sarawak. *Health Science Reports*, *4*(3).

 https://doi.org/10.1002/hsr2.362

Christ, N. M., Contractor, A. A., Wang, X., & Elhai, J. D. (2020). The mediating effect of

 rumination between posttraumatic stress disorder symptoms and anger reactions.

 Psychological Trauma: Theory, Research, Practice, and Policy, *12*(6), 619–626.

 https://doi.org/10.1037/tra0000579

Cong, D. D. (2021). The impact of fear and anxiety of COVID-19 on life satisfaction:

 Psychological distress and sleep disturbance as mediators. *Personality and Individual

 Differences*, *178*. https://doi.org/10.1016/j.paid.2021.110869

Cook, R. D., & Weisberg, S. (1982). *Residuals and influence in regression*. Chapman & Hall.

Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods

 approaches* (3rd ed.). Sage.

Department of Statistics Malaysia. (2022, January 10). *Key Statistics of Labour Force in

 Malaysia, November 2021*. Department of Statistics Malaysia Official Portal.

 https://www.dosm.gov.my/v1/index.php

Dessie, Y., Ebrahim, J., & Awoke, T. (2013). Mental distress among university students in

 Ethiopia: A cross sectional survey. *Pan African Medical Journal*, *15*(1).

 https://doi.org/10.11604/pamj.2013.15.95.2173

Diener, E. (1984). Subjective well-being. *Psychological Bulletin*, *95*(3), 542–575.

 https://doi.org/10.1037/0033-2909.95.3.542

Diener, E. (1994). Assessing subjective well-being: Progress and opportunities. *Social

 Indicators Research*, *31*(2), 103–157. https://doi.org/10.1007/bf01207052

Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction With Life

    Scale. *Journal of Personality Assessment*, *49*(1), 71–75.

    https://doi.org/10.1207/s15327752jpa4901_13

Durbin, J., & Watson, G. S. (1951). Testing for serial correlation in least squares regression.

    II. *Biometrika*, *38*(1/2), 159–178. https://doi.org/10.2307/2332325

Dymecka, J., Gerymski, R., Machnik-Czerwik, A., Derbis, R., & Bidzan, M. (2021). Fear of

    COVID-19 and life satisfaction: The role of the health-related hardiness and sense of

    coherence. *Frontiers in Psychiatry*, *12*. https://doi.org/10.3389/fpsyt.2021.712103

Etikan, I., Musa, S. A., & Alkassim, R. S. (2015). Comparison of convenience sampling and

    purposive sampling. *American Journal of Theoretical and Applied Statistics*, *5*(1), 1–

    4. https://doi.org/10.11648/j.ajtas.20160501.11

Fardin, M. A. (2020). COVID-19 and anxiety: A review of psychological impacts of

    infectious disease outbreaks. *Archives of Clinical Infectious Diseases*, *15*.

    https://doi.org/10.5812/archcid.102779

Feng, L., Dong, Z., Yan, R., Wu, X., Zhang, L., Ma, J., & Zeng, Y. (2020). Psychological

    distress in the shadow of the COVID-19 pandemic: Preliminary development of an

    assessment scale. Psychiatry Research, 291, 113202.

    https://doi.org/10.1016/j.psychres.2020.113202

Garcia, R. (2017). Neurobiology of fear and specific phobias. *Learning & Memory*, *24*(9),

    462–471. https://doi.org/10.1101/lm.044115.116

Gawrych, M., Cichoń, E., & Kiejna, A. (2020). COVID-19 pandemic fear, life satisfaction

    and mental health at the initial stage of the pandemic in the largest cities in Poland.

    Psychology, Health & Medicine, 1–7.

    https://doi.org/10.1080/13548506.2020.1861314

Giuntella, O., Hyde, K., Saccardo, S., & Sadoff, S. (2021). Lifestyle and mental health

disruptions during COVID-19. *Proceedings of the National Academy of Sciences*,

118(9). https://doi.org/10.1073/pnas.2016632118

Goldstein, D. S. (2010). Adrenal responses to stress. *Cellular and Molecular Neurobiology*,

30(8), 1433–1440. https://doi.org/10.1007/s10571-010-9606-9

Gonzalez-Bernal, J. J., Rodríguez-Fernández, P., Santamaría-Peláez, M., González-Santos, J.,

León-del-Barco, B., Minguez, L. A., & Soto-Cámara, R. (2021). Life satisfaction

during forced social distancing and home confinement derived from the COVID-19

pandemic in Spain. *International Journal of Environmental Research and Public

Health*, *18*(4), 1474. https://doi.org/10.3390/ijerph18041474

Grunert, K. G., Dean, M., Raats, M. M., Nielsen, N. A., & Lumbers, M. (2007). A measure of

satisfaction with food-related life. *Appetite*, *49*(2), 486–493.

https://doi.org/10.1016/j.appet.2007.03.010

Gschwandtner, A., Jewell, S., & Kambhampati, U. S. (2021). Lifestyle and life satisfaction:

The role of delayed gratification. *Journal of Happiness Studies*.

https://doi.org/10.1007/s10902-021-00440-y

Hair, J., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis: a

global perspective*. Pearson Education, Cop.

Hamermesh, D. (2020). *Lockdowns, loneliness and life satisfaction* (pp. 1–24). Institute of

Labor Economics. https://ftp.iza.org/dp13140.pdf

Hartstone, J. M., & Medvedev, O. N. (2021). The role of mindfulness and life satisfaction in

psychological distress during the COVID-19 lockdown in New Zealand: A quasi-

experimental study. *Mindfulness*, *12*, 2693–2706. https://doi.org/10.1007/s12671-021-

01731-4

Hassan, H. (2021, July 12). Malaysia sees rise in suicides and calls to helplines amid

COVID-19 pandemic. *The Straits Times*. https://www.straitstimes.com/asia/se-

asia/malaysia-sees-rise-in-suicides-and-calls-to-helplines-amid-covid-19-pandemic

Headey, B., Veenhoven, R., & Weari, A. (2006). Top-down versus bottom-up theories of

subjective well-being. *Citation Classics from Social Indicators Research*, *24*(1), 401–

420. https://doi.org/10.1007/1-4020-3742-2_15

Heller, D., Watson, D., & Ilies, R. (2004). The role of person versus situation in life

satisfaction: A critical examination. *Psychological Bulletin*, *130*(4), 574–600.

https://doi.org/10.1037/0033-2909.130.4.574

Hoaglin, D. C., & Welsch, R. E. (1978). The hat matrix in regression and ANOVA. *The

American Statistician*, *32*(1), 17–22.

https://doi.org/10.1080/00031305.1978.10479237

Hooker, S. A., Masters, K. S., & Park, C. L. (2017). A meaningful life is a healthy life: A

conceptual model linking meaning and meaning salience to health. *Review of General

Psychology*, *22*(1), 11–24. https://doi.org/10.1037/gpr0000115

Huebner, E. S. (1991). Initial development of the student's life satisfaction scale. *School

Psychology International*, *12*(3), 231–240.

https://doi.org/10.1177/0143034391123010

Huebner, E. S. (1994). Preliminary development and validation of a multidimensional life

satisfaction scale for children. *Psychological Assessment*, *6*(2), 149–158.

https://doi.org/10.1037/1040-3590.6.2.149

Irawanto, D. W., Novianti, K. R., & Roz, K. (2021). Work from home: Measuring

satisfaction between work–life balance and work stress during the COVID-19

pandemic in Indonesia. *Economies*, *9*(3), 96.

https://doi.org/10.3390/economies9030096

Jager, J., Putnick, D. L., & Bornstein, M. H. (2017). More than just convenient: The scientific

merits of homogeneous convenience samples. *Monographs of the Society for

Research in Child Development*, *82*(2), 13–30. https://doi.org/10.1111/mono.12296

Jarosz, E. (2018). Lifestyle behaviours or socioeconomic characteristics? Gender differences

in covariates of BMI in Hungary. *Obesity Science & Practice*, *4*(6), 591–599.

https://doi.org/10.1002/osp4.316

Judge, T. A., & Watanabe, S. (1993). Another look at the job satisfaction-life satisfaction

relationship. *Journal of Applied Psychology*, *78*(6), 939–948.

https://doi.org/10.1037/0021-9010.78.6.939

Kamaludin, K., Chinna, K., Sundarasen, S., Khoshaim, H. B., Nurunnabi, M., Baloch, G. M.,

Sukayt, A., & Hossain, S. F. A. (2020). Coping with COVID-19 and movement

control order (MCO): Experiences of university students in Malaysia. *Heliyon*, *6*(11).

https://doi.org/10.1016/j.heliyon.2020.e05339

Kang, L., Li, Y., Hu, S., Chen, M., Yang, C., Yang, B. X., Wang, Y., Hu, J., Lai, J., Ma, X.,

Chen, J., Guan, L., Wang, G., Ma, H., & Liu, Z. (2020). The mental health of medical

workers in Wuhan, China dealing with the 2019 novel coronavirus. *The Lancet.

Psychiatry*, *7*(3), e14. https://doi.org/10.1016/S2215-0366(20)30047-X

Karim, J., & Weisz, R. (2011). Emotions at work: The role of emotional intelligence and

emotional labor in predicting work-family conflict, psychological distress, and life

satisfaction. *International Journal of Arts & Sciences*, *4*(3), 29–44.

Kessler, R. C., Andrews, G., Colpe, L. J., Hiripi, E., Mroczek, D. K., Normand, S.-L.T.,

Walters, E. E., & Zaslavsky, A. M. (2002). Short screening scales to monitor

population prevalences and trends in non-specific psychological distress.

Psychological Medicine, *32*(6), 959–976.

https://doi.org/10.1017/s0033291702006074

Kim, E. S., Delaney, S. W., Tay, L., Chen, Y., Diener, E. D., & Vanderweele, T. J. (2021). Life satisfaction and subsequent physical, behavioral, and psychosocial health in older adults. *The Milbank Quarterly*, *99*(1), 209–239. https://doi.org/10.1111/1468-0009.12497

Kim, J., K. Byon, K., & Kim, J. (2021). Leisure activities, happiness, life satisfaction, and health perception of older Korean adults. *International Journal of Mental Health Promotion*, *23*(2), 155–166. https://doi.org/10.32604/ijmhp.2021.015232

Kinsman, J. (2012). "A time of fear": Local, national, and international responses to a large Ebola outbreak in Uganda. *Globalization and Health*, *8*, 15. https://doi.org/10.1186/1744-8603-8-15

Koivumaa-Honkanen, H. (2000). Self-reported life satisfaction and 20-year mortality in healthy Finnish adults. *American Journal of Epidemiology*, *152*(10), 983–991. https://doi.org/10.1093/aje/152.10.983

Koivumaa-Honkanen, H., Honkanen, R., Viinamäki, H., Heikkilä, K., Kaprio, J., & Koskenvuo, M. (2001). Life satisfaction and suicide: A 20-year follow-up study. *American Journal of Psychiatry*, *158*(3), 433–439. https://doi.org/10.1176/appi.ajp.158.3.433

Koivumaa-Honkanen, H., Kaprio, J., Honkanen, R., Viinamaki, H., & Koskenvuo, M. (2004). Life satisfaction and depression in a 15-year follow-up of healthy adults. *Social Psychiatry and Psychiatric Epidemiology*, *39*(12), 994–999. https://doi.org/10.1007/s00127-004-0833-6

Kumar, H., Shaheen, A., Rasool, I., & Shafi, M. (2016). Psychological distress and life satisfaction among university students. *Journal of Psychology & Clinical Psychiatry*, *5*(3). https://doi.org/10.15406/jpcpy.2016.05.00283

Kumar, P., Kumar, N., Aggarwal, P., & Yeap, J. A. L. (2021). Working in lockdown: The

relationship between COVID-19 induced work stressors, job performance, distress,

and life satisfaction. *Current Psychology*. https://doi.org/10.1007/s12144-021-01567-

0

Kumari, A., Ranjan, P., Vikram, N. K., Kaur, D., Sahu, A., Dwivedi, S. N., Baitha, U., &

Goel, A. (2020). A short questionnaire to assess changes in lifestyle-related behaviour

during COVID 19 pandemic. *Diabetes & Metabolic Syndrome: Clinical Research &

Reviews*, *14*(6), 1697–1701. https://doi.org/10.1016/j.dsx.2020.08.020

Lacruz, M. E., Emeny, R. T., Baumert, J., & Ladwig, K. H. (2011). Prospective association

between self-reported life satisfaction and mortality: Results from the

MONICA/KORA Augsburg S3 survey cohort study. *BMC Public Health*, *11*, 579–

588. https://doi.org/10.1186/1471-2458-11-579

Lathabhavan, R., & Sudevan, S. (2022). The impacts of psychological distress on life

satisfaction and wellbeing of the Indian general population during the first and second

waves of COVID-19: A comparative study. *International Journal of Mental Health

and Addiction*. https://doi.org/10.1007/s11469-021-00735-4

Lee, S. A. (2020). How much "thinking" about COVID-19 is clinically dysfunctional? *Brain,

Behavior, and Immunity*, *87*(1), 97–98. https://doi.org/10.1016/j.bbi.2020.04.067

Lee, S. A., & Crunk, E. A. (2020). Fear and psychopathology during the COVID-19 crisis:

Neuroticism, hypochondriasis, reassurance-seeking, and coronaphobia as fear factors.

OMEGA - Journal of Death and Dying, 1–14.

https://doi.org/10.1177/0030222820949350

Leonardi, F., Spazzafumo, L., & Marcellini, F. (2005). Subjective well-being: The

constructionist point of view. A longitudinal study to verify the predictive power of

top-down effects and bottom-up processes. *Social Indicators Research*, *70*(1), 53–77.

https://doi.org/10.1007/s11205-005-5016-7

Leung, L., & Lee, P. S. N. (2005). Multiple determinants of life quality: The roles of Internet

activities, use of new media, social support, and leisure activities. *Telematics and

Informatics*, *22*(3), 161–180. https://doi.org/10.1016/j.tele.2004.04.003

Li, A., Wang, S., Cai, M., Sun, R., & Liu, X. (2021). Self-compassion and life-satisfaction

among Chinese self-quarantined residents during COVID-19 pandemic: A moderated

mediation model of positive coping and gender. *Personality and Individual

Differences*, *170*, 110457. https://doi.org/10.1016/j.paid.2020.110457

Li, C., Jiang, S., Li, N., & Zhang, Q. (2017). Influence of social participation on life

satisfaction and depression among Chinese elderly: Social support as a mediator.

Journal of Community Psychology, *46*(3), 345–355.

https://doi.org/10.1002/jcop.21944

Lin, C. Y. (2020). Social reaction toward the 2019 novel coronavirus (COVID-19). *Social

Health and Behavior*, *3*(1), 1–2. https://doi.org/10.4103/shb.shb_11_20

Lombardo, P., Jones, W., Wang, L., Shen, X., & Goldner, E. M. (2018). The fundamental

association between mental health and life satisfaction: Results from successive

waves of a Canadian national survey. *BMC Public Health*, *18*(1).

https://doi.org/10.1186/s12889-018-5235-x

Lopez-Fontana, I., Perrot, A., Krueger, K. R., Le Scanff, C., Bherer, L., & Castanier, C.

(2020). A global lifestyle assessment: Psychometric properties of the general lifestyle

questionnaire. *Psychologie Française*. https://doi.org/10.1016/j.psfr.2019.06.004

Margolis, S., Schwitzgebel, E., Ozer, D. J., & Lyubomirsky, S. (2018). A new measure of life

satisfaction: The Riverside Life Satisfaction Scale. *Journal of Personality Assessment*,

101(6), 621–630. https://doi.org/10.1080/00223891.2018.1464457

McCauley, M., Minsky, S., & Viswanath, K. (2013). The H1N1 pandemic: Media frames,

stigmatization and coping. *BMC Public Health*, *13*(1). https://doi.org/10.1186/1471-

2458-13-1116

Meiselman, H. L. (1996). The contextual basis for food acceptance, food choice and food

intake: The food, the situation and the individual. *Food Choice, Acceptance and

Consumption*, 239–263. https://doi.org/10.1007/978-1-4613-1221-5_6

Mejia, C. R., Tovani-Palone, M. R., Ticona, D., Rodriguez-Alarcon, J. F., Campos-Urbina,

A. M., Catay-Medina, J. B., Porta-Quinto, T., Garayar-Peceros, H., Ignacio-Quinte,

C., Esteban, R. F. C., & Mamani, P. G. R. (2020). The media and their informative

role in the face of the coronavirus disease 2019 (COVID-19): Validation of fear

perception and magnitude of the issue (MED-COVID-19). *Electronic Journal of

General Medicine*, *17*(6). https://doi.org/10.29333/ejgm/7946

Melin, R., Fugl-Meyer, K. S., & Fugl-Meyer, A. R. (2003). Life satisfaction in 18- to 64-

year-old Swedes: In relation to education, employment situation, health and physical

acitivity. *Journal of Rehabilitation Medicine*, *35*(2), 84–90.

https://doi.org/10.1080/16501970306119

Mertens, G., Gerritsen, L., Duijndam, S., Salemink, E., & Engelhard, I. M. (2020). Fear of

the coronavirus (COVID-19): Predictors in an online study conducted in March 2020.

Journal of Anxiety Disorders, *74*, 102258.

https://doi.org/10.1016/j.janxdis.2020.102258

Meyer, C., Rumpf, H.-J., Hapke, U., & John, U. (2004). Impact of psychiatric disorders in the

general population: Satisfaction with life and the influence of comorbidity and

disorder duration. *Social Psychiatry and Psychiatric Epidemiology*, *39*(6), 435–441.

https://doi.org/10.1007/s00127-004-0755-3

Ministry of Health Malaysia. (2022, March 24). *COVIDNOW in Malaysia*. COVIDNOW.

    https://covidnow.moh.gov.my/

Moons, P., Budts, W., & De Geest, S. (2006). Critique on the conceptualisation of quality of

    life: A review and evaluation of different conceptual approaches. *International*

    Journal of Nursing Studies, *43*(7), 891–901.

    https://doi.org/10.1016/j.ijnurstu.2006.03.015

Mowbray, H. (2020). In Beijing, coronavirus 2019-nCoV has created a siege mentality. *BMJ*,

    m516. https://doi.org/10.1136/bmj.m516

Mujcic, R., & Oswald, A. J. (2016). Evolution of well-being and happiness after increases in

    consumption of fruit and vegetables. *American Journal of Public Health*, *106*(8),

    1504–1510. https://doi.org/10.2105/ajph.2016.303260

Myers, R. (1990). *Classical and modern regression with applications.* Boston, MA: Duxbury.

Nemati, S., & Maralani, F. M. (2016). The relationship between life satisfaction and

    happiness: The mediating role of resiliency. *International Journal of Psychological*

    Studies, *8*(3), 194. https://doi.org/10.5539/ijps.v8n3p194

Ocean, N., Howley, P., & Ensor, J. (2019). Lettuce be happy: A longitudinal UK study on the

    relationship between fruit and vegetable consumption and well-being. *Social Science*

    & Medicine, *222*, 335–345. https://doi.org/10.1016/j.socscimed.2018.12.017

Ornell, F., Schuch, J. B., Sordi, A. O., & Kessler, F. H. P. (2020). "Pandemic fear" and

    COVID-19: Mental health burden and strategies. *Brazilian Journal of Psychiatry*,

    42(3). https://doi.org/10.1590/1516-4446-2020-0008

Özmen, S., Özkan, O., Özer, Ö., & Yanardağ, M. Z. (2021). Investigation of COVID-19 fear,

    well-being and life satisfaction in Turkish society. *Social Work in Public Health*,

    36(2), 164–177. https://doi.org/10.1080/19371918.2021.1877589

Palmore, E., & Luikart, C. (1972). Health and social factors related to life satisfaction.

Journal of Health and Social Behavior, *13*(1), 68–80.

https://doi.org/10.2307/2136974

Pappas, G., Kiriaze, I. J., Giannakis, P., & Falagas, M. E. (2009). Psychosocial consequences

of infectious diseases. *Clinical Microbiology and Infection*, *15*(8), 743–747.

https://doi.org/10.1111/j.1469-0691.2009.02947.x

Patel, P. C., & Rietveld, C. A. (2020). The impact of financial insecurity on the self-

employed's short-term psychological distress: Evidence from the COVID-19

pandemic. *Journal of Business Venturing Insights*, *14*(4), e00206.

https://doi.org/10.1016/j.jbvi.2020.e00206

Pavot, W., & Diener, E. (2008). The satisfaction with life scale and the emerging construct of

life satisfaction. *The Journal of Positive Psychology*, *3*(2), 137–152.

https://doi.org/10.1080/17439760701756946

Person, B., Sy, F., Holton, K., Govert, B., Liang, A., Garza, B., Gould, D., Hickson, M.,

McDonald, M., Meijer, C., Smith, J., Veto, L., Williams, W., & Zauderer, L. (2004).

Fear and stigma: The epidemic within the SARS outbreak. *Emerging Infectious

Diseases*, *10*(2), 358–363. https://doi.org/10.3201/eid1002.030750

Peterson, C., Park, N., & Seligman, M. E. P. (2005). Orientations to happiness and life

satisfaction: The full life versus the empty life. *Journal of Happiness Studies*, *6*(1),

25–41. https://doi.org/10.1007/s10902-004-1278-z

Phulkerd, S., Thapsuwan, S., Chamratrithirong, A., & Gray, R. S. (2021). Influence of

healthy lifestyle behaviors on life satisfaction in the aging population of Thailand: A

national population-based survey. *BMC Public Health*, *21*(1).

https://doi.org/10.1186/s12889-020-10032-9

Ponce, M. S. H., Rosas, R. P. E., & Lorca, M. B. F. (2014). Social capital, social participation
and life satisfaction among Chilean older adults. *Revista de Saúde Pública*, *48*(5),
739–749. https://doi.org/10.1590/s0034-8910.2014048004759

Puuskari, V., Aalto-Setälä, T., Komulainen, E., & Marttunen, M. (2017). Suicidal ideation,
suicide attempts, and psychological distress among intoxicated adolescents in the
pediatric emergency department. *Nordic Journal of Psychiatry*, *72*(2), 137–144.
https://doi.org/10.1080/08039488.2017.1400099

Rahman, M. A., Hoque, N., Alif, S. M., Salehin, M., Islam, S. M. S., Banik, B., Sharif, A.,
Nazim, N. B., Sultana, F., & Cross, W. (2020). Factors associated with psychological
distress, fear and coping strategies during the COVID-19 pandemic in Australia.
Globalization and Health, *16*(1). https://doi.org/10.1186/s12992-020-00624-w

Rasdi, R. M., Zaremohzzabieh, Z., & Ahrari, S. (2021). Financial insecurity during the
COVID-19 pandemic: Spillover effects on burnout–disengagement relationships and
performance of employees who moonlight. *Frontiers in Psychology*.
https://doi.org/10.3389/fpsyg.2021.610138

Rustøen, T., Cooper, B. A., & Miaskowski, C. (2010). The importance of hope as a mediator
of psychological distress and life satisfaction in a community sample of cancer
patients. *Cancer Nursing*, *33*(4), 258–267.
https://doi.org/10.1097/ncc.0b013e3181d6fb61

Salvi, C., Iannello, P., Cancer, A., McClay, M., Rago, S., Dunsmoor, J. E., & Antonietti, A.
(2021). Going viral: How fear, socio-cognitive polarization and problem-solving
influence fake news detection and proliferation during COVID-19 pandemic.
Frontiers in Communication, *5*(1). https://doi.org/10.3389/fcomm.2020.562588

Šarić, Z. R., Takšič, V., & Božičević, V. (2018). Psychological distress and life satisfaction
among the elderly: Relationships with some sociodemographic variables. *Papers on*

Philosophy, Psychology, Sociology and Pedagogy, 27(4).

https://doi.org/10.15291/radovifpsp.2420

Sarriera, J. C., Bedin, L., Calza, D. A. T., & Casas, F. (2015). Relationship between social

support, life satisfaction and subjective well-being in Brazilian adolescents.

Universitas Psychologica, *14*(2), 459–474. https://doi.org/10.11144/Javeriana.upsy14-

2.rbss

Satici, B., Gocet-Tekin, E., Deniz, M. E., & Satici, S. A. (2020). Adaptation of the fear of

COVID-19 scale: Its association with psychological distress and life satisfaction in

Turkey. *International Journal of Mental Health and Addiction*.

https://doi.org/10.1007/s11469-020-00294-0

Savi Çakar, F. (2012). The relationship between the self-efficacy and life satisfaction of

young adults. *International Education Studies*, *5*(6), 123–130.

https://doi.org/10.5539/ies.v5n6p123

Schimmack, U., Diener, E., & Oishi, S. (2009). Life-satisfaction is a momentary judgment

and a stable personality characteristic: The use of chronically accessible and stable

sources. *Assessing Well-Being*, 181–212. https://doi.org/10.1007/978-90-481-2354-

4_9

Schou-Bredal, I., Grimholt, T., Bonsaksen, T., Skogstad, L., Heir, T., & Ekeberg, Ø. (2021).

Optimists' and pessimists' self-reported mental and global health during the COVID-

19 pandemic in Norway. *Health Psychology Report*.

https://doi.org/10.5114/hpr.2021.102394

Sharma, M., & Garg, D. (2016). A comparative study of psychological distress, life

satisfaction, forgiveness and happiness in private sector it professionals: An

exploratory study. *International Journal of Indian Psychology*, *3*(3).

https://doi.org/10.25215/0303.178

Shin, D. C., & Johnson, D. M. (1978). Avowed happiness as an overall assessment of the

quality of life. *Social Indicators Research*, *5*(1), 475–492.

https://doi.org/10.1007/bf00352944

Shin, J., & Kim, J. K. (2018). How a good sleep predicts life satisfaction: The role of zero-

sum beliefs about happiness. *Frontiers in Psychology*, *9*.

https://doi.org/10.3389/fpsyg.2018.01589

Soper, D. S. (2015). *A-priori sample size calculator for multiple regression*.

https://www.danielsoper.com/statcalc

Super, S., Pijpker, R., & Polhuis, K. (2021). The relationship between individual, social and

national coping resources and mental health during the COVID-19 pandemic in the

Netherlands. *Health Psychology Report*, *9*(2), 186–192.

https://doi.org/10.5114/hpr.2020.99028

Swami, V., Chamorro-Premuzic, T., Sinniah, D., Maniam, T., Kannan, K., Stanistreet, D., &

Furnham, A. (2006). General health mediates the relationship between loneliness, life

satisfaction and depression. *Social Psychiatry and Psychiatric Epidemiology*, *42*(2),

161–166. https://doi.org/10.1007/s00127-006-0140-5

Tasnim, S., Rahman, M., Pawar, P., Chi, X., Yu, Q., Zou, L., Sultana, A., McKyer, E. L. J.,

Ma, P., & Hossain, M. M. (2020). Epidemiology of sleep disorders during COVID-19

pandemic: A systematic scoping review. *MedRxiv Preprint*.

https://doi.org/10.1101/2020.10.08.20209148

Taylor, S., Landry, C. A., Paluszek, M. M., Fergus, T. A., McKay, D., & Asmundson, G. J.

G. (2020). Development and initial validation of the covid stress scales. *Journal of

Anxiety Disorders*, *72*(1), 102232. https://doi.org/10.1016/j.janxdis.2020.102232

Taymoori, P., Lubans, D., Moeini, B., & Bharami, M. (2012). Development and

psychometric testing of the adolescent healthy lifestyle questionnaire. *Journal of
Education and Health Promotion*, *1*(1), 20. https://doi.org/10.4103/2277-9531.99221

Torales, J., O'Higgins, M., Castaldelli-Maia, J. M., & Ventriglio, A. (2020). The outbreak of
COVID-19 coronavirus and its impact on global mental health. *International Journal
of Social Psychiatry*, *66*(4), 317-320. https://doi.org/10.1177/0020764020915212

Trzebiński, J., Cabański, M., & Czarnecka, J. Z. (2020). Reaction to the COVID-19
pandemic: The influence of meaning in life, life satisfaction, and assumptions on
world orderliness and positivity. *Journal of Loss and Trauma*, 1–14.
https://doi.org/10.1080/15325024.2020.1765098

Veenhoven, R. (2014). The overall satisfaction with life: Subjective approaches (1). *Global
Handbook of Quality of Life*, 207–238. https://doi.org/10.1007/978-94-017-9178-6_9

Velten, J., Bieda, A., Scholten, S., Wannemüller, A., & Margraf, J. (2018). Lifestyle choices
and mental health: A longitudinal survey with German and Chinese students. *BMC
Public Health*, *18*(1). https://doi.org/10.1186/s12889-018-5526-2

Wang, X., & Cheng, Z. (2020). Cross-sectional studies. *Chest*, *158*(1), 65–71.
https://doi.org/10.1016/j.chest.2020.03.012

Webster, D. M., & Kruglanski, A. W. (1994). Individual differences in need for cognitive
closure. *Journal of Personality and Social Psychology*, *67*(6), 1049–1062.
https://doi.org/10.1037/0022-3514.67.6.1049

Wilson, J. M., Lee, J., Fitzgerald, H. N., Oosterhoff, B., Sevi, B., & Shook, N. J. (2020). Job
insecurity and financial concern during the COVID-19 pandemic are associated with
worse mental health. *Journal of Occupational & Environmental Medicine*, *62*(9),
686–691. https://doi.org/10.1097/jom.0000000000001962

World Health Organization. (2021). *WHO COVID-19 dashboard*. World Health

Organization. https://covid19.who.int/

Xiao, H., Zhang, Y., Kong, D., Li, S., & Yang, N. (2020). The effects of social support on

sleep quality of medical staff treating patients with coronavirus disease 2019

(COVID-19) in January and February 2020 in China. *Medical Science Monitor:*

International Medical Journal of Experimental and Clinical Research, *26*.

https://doi.org/10.12659/MSM.923549

Yee, A., Hodori, N. A. M., Tung, Y.-Z., Ooi, P.-L., Latif, S. A. B. A., Isa, H. M., Ng, D.-L.-

C., Chai, C.-S., & Tan, S.-B. (2021). Depression level and coping responses toward

the movement control order and its impact on quality of life in the Malaysian

community during the COVID-19 pandemic: A web-based cross-sectional study.

Annals of General Psychiatry, *20*(1). https://doi.org/10.1186/s12991-021-00352-4

Zhang, J., Liu, Y., & Sun, L. (2017). Life satisfaction and degree of suicide intent: A test of

the strain theory of suicide. *Comprehensive Psychiatry*, *74*, 1–8.

https://doi.org/10.1016/j.comppsych.2016.12.002

Zhang, S. X., Wang, Y., Rauch, A., & Wei, F. (2020). Unprecedented disruption of lives and

work: Health, distress and life satisfaction of working adults in China one month into

the COVID-19 outbreak. *Psychiatry Research*, *288*.

https://doi.org/10.1016/j.psychres.2020.112958

Appendix A

Ethical Approval Letter for Research Project

UNIVERSITI TUNKU ABDUL RAHMAN
Wholly Owned by UTAR Education Foundation (Company No. 578227-M)

Re: U/SERC/299/2021

30 December 2021

Dr Pung Pit Wan
Head, Department of Psychology and Counselling
Faculty of Arts and Social Science
Universiti Tunku Abdul Rahman
Jalan Universiti, Bandar Baru Barat
31900 Kampar, Perak.

Dear Dr Pung,

Ethical Approval For Research Project/Protocol

We refer to the application for ethical approval for your students' research projects from Bachelor of Social Science (Hons) Psychology programme enrolled in course UAPZ3013/UAPZ3023. We are pleased to inform you that the application has been approved under Expedited Review.

The details of the research projects are as follows:

No	Research Title	Student's Name	Supervisor's Name	Approval Validity
1.	Social Loafing Behaviour in Collaborative Group Work Among University Students in Malaysia: Self-Efficacy, Group Cohesion and Task Interdependence	1. Dheenosheeni a/p Maganthrin Kumar 2. Khoo Jing Wen 3. Kishuvan a/l Marimuthu	Dr Chie Qiu Ting	30 December 2021 - 29 December 2022
2.	Examining the Role of Materialism, Perceived Stress and Gender Difference in Compulsive Buying Behavior Among Young Adults in Malaysia	1. Looi Ke Xin 2. Tan Kai Ni 3. Tee Geok Hong		
3.	The Mediating role of Social Anxiety on Perceived Stress and Internet Addiction Among Undergraduate Students in Malaysia	1. Chong Khai-Juen 2. Lai Ming Han 3. Len Wan Qi		
4.	The Association of Psychological Distress and Burnout on Job Satisfaction Among Frontliners in The Healthcare Industry During the Pandemic COVID-19 in Malaysia	1. Loochana a/p Krishna Rao 2. Adrianna a/l P Silvarajah 3. Visshan a/l Miyanthan	Dr Nurul Iman binti Abdul Jalil	
5.	Perceived Stress and Emotional Intelligence as Predictors of Life Satisfaction Among Undergraduates in Malaysia	1. Ooi Yu Jie 2. Lim Syi Wei 3. Cham Han Tein		
6.	The Mediating Role of Money Desire in Death Anxiety Toward Materialism Among Young Adults in Malaysia	1. Britney Bong Sue Fun 2. Jemimah Choong Giet Hee 3. Kwok Koh Yee		
7.	Social Anxiety, Perceived Stress Level and Perceived Social Support as Predictors of Smartphone Addiction Among Undergraduate Students in Malaysia	1. Chua Pei Yi 2. Chuah Yi Ting 3. See Jie Sheng	Mr Tay Kok Wai	
8.	The Relationship Between Intrinsic Motivation, Extrinsic Motivation on Job Performance and Job Satisfaction Among Academic Staff in Malaysia	1. Chen Chi Shan 2. Ishwinder Kaur a/p Jasper Singh 3. Jessica Teoh Wan Jie		
9.	Cognitive Behavioral Therapy Informed Workshop on Sleep: A Preliminary Randomized Controlled Trial	1. Joanna Eileen Chan 2. Michele Chu Hiew Mun 3. Sanjeetra a/p Ravindharan		

No	Research Title	Student's Name	Supervisor's Name	Approval Validity
10.	Cognitive Behavioral Therapy Informed Workshop on Procrastination: A Preliminary Randomized Controlled Trial	1. Phuah Wai Hong 2. Wong Weng Han	Mr Tay Kok Wai	
11.	Relationship Between Self-Esteem, Fear of Covid-19 and Instagram Addiction Among Undergraduates in Malaysia	1. Lee Jia Jie 2. Loon Ling Lee 3. Thio Kai Qi	Ms Evelyn Toh Kheng Lin	
12.	The Relationship Between Perfectionism, Cognitive Flexibility and Suicide Ideation Among Malaysian Undergraduates	1. Zoe Chng Woon Chin 2. Liew Kee Yee 3. Tiong Wei Jie		
13.	The Relationship Between Depression, Anxiety, Perceived Social Support and Suicidal Intention Among Gay and Lesbian Young Adults' Community	1. Fo Han Sien 2. Gabriel Chai Yeet Jher 3. Beh Jin Ying		30 December 2021 - 29 December 2022
14.	Knowledge, Risk Perception and Protective Behaviour Among Malaysian Young Adults During COVID-19 Pandemic	1. Gan Hui Min 2. Jeanette Elena Tan 3. Swi Zi Qing	Dr Gan Su Wan	
15.	Online Social Support, Offline Social Support and Academic Readiness as Predictors of Academic Resilience Among Undergraduates in Malaysia	1. Kenny Ng Kai Feng 2. Ng In Yan 3. Karthiyaini a/p Sathiyaseelan		
16.	Big 5 Personality Traits as the Predictors of Psychological Well-being Among Adults Working from Home (WFH) in Malaysia During COVID-19 Pandemic	1. Liew Qian Qi 2. Lim Yee Wen	Ms Sanggari a/p Krishnan	
17.	Impact of Psychological Distress, Fear, Changes in Lifestyle-Related Behavior and Life Satisfaction Among Working Adults During Movement Control Order (MCO) in Malaysia	1. Chua Wan Yi 2. Koo Yu Wen 3. Ng Pui Ye		

The conduct of this research is subject to the following:

(1) The participants' informed consent be obtained prior to the commencement of the research;

(2) Confidentiality of participants' personal data must be maintained; and

(3) Compliance with procedures set out in related policies of UTAR such as the UTAR Research Ethics and Code of Conduct, Code of Practice for Research Involving Humans and other related policies/guidelines.

(4) Written consent be obtained from the institution(s)/company(ies) in which the physical or/and online survey will be carried out, prior to the commencement of the research.

Should the students collect personal data of participants in their studies, please have the participants sign the attached Personal Data Protection Statement for records.

Thank you.

Yours sincerely,

Professor Ts Dr Faidz bin Abd Rahman
Chairman
UTAR Scientific and Ethical Review Committee

c.c   Dean, Faculty of Arts and Social Science
        Director, Institute of Postgraduate Studies and Research

Appendix B

Sample Size Calculation

▦ A-priori Sample Size Calculator for Multiple Regression

This calculator will tell you the minimum required sample size for a multiple regression study, given the desired probability level, the number of predictors in the model, the anticipated effect size, and the desired statistical power level.

Please enter the necessary parameter values, and then click 'Calculate'.

Anticipated effect size (f^2):	0.10	❷
Desired statistical power level:	0.95	❷
Number of predictors:	3	❷
Probability level:	0.05	❷

Calculate!

Minimum required sample size: 175

Appendix C

Personal Data Protection Sheet

Wholly owned by UTAR Education Foundation
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DU012(A)

Department of Psychology and Counselling

Faculty of Arts and Social Science

Universiti Tunku Abdul Rahman

Please be informed that in accordance with Personal Data Protection Act 2010 ("PDPA") which came into force on 15 November 2013, Universiti Tunku Abdul Rahman ("UTAR") is hereby bound to make notice and require consent in relation to collection, recording, storage, usage and retention of personal information.

1. Personal data refers to any information which may directly or indirectly identify a person which could include sensitive personal data and expression of opinion. Among others it includes:

   a) Name
   b) Identity card
   c) Place of Birth
   d) Address
   e) Education History
   f) Employment History
   g) Medical History
   h) Blood type
   i) Race
   j) Religion
   k) Photo
   l) Personal Information and Associated Research Data

2. The purposes for which your personal data may be used are inclusive but not limited to:

   a) For assessment of any application to UTAR
   b) For processing any benefits and services
   c) For communication purposes
   d) For advertorial and news
   e) For general administration and record purposes
   f) For enhancing the value of education
   g) For educational and related purposes consequential to UTAR
   h) For replying any responds to complaints and enquiries

    i)   For the purpose of our corporate governance

    j)   For the purposes of conducting research/ collaboration

3.   Your personal data may be transferred and/or disclosed to third party and/or UTAR collaborative partners including but not limited to the respective and appointed outsourcing agents for purpose of fulfilling our obligations to you in respect of the purposes and all such other purposes that are related to the purposes and also in providing integrated services, maintaining and storing records. Your data may be shared when required by laws and when disclosure is necessary to comply with applicable laws.

4.   Any personal information retained by UTAR shall be destroyed and/or deleted in accordance with our retention policy applicable for us in the event such information is no longer required.

5.   UTAR is committed in ensuring the confidentiality, protection, security and accuracy of your personal information made available to us and it has been our ongoing strict policy to ensure that your personal information is accurate, complete, not misleading and updated. UTAR would also ensure that your personal data shall not be used for political and commercial purposes.

Consent:

6.   By submitting or providing your personal data to UTAR, you had consented and agreed for your personal data to be used in accordance to the terms and conditions in the Notice and our relevant policy.

7.   If you do not consent or subsequently withdraw your consent to the processing and disclosure of your personal data, UTAR will not be able to fulfill our obligations or to contact you or to assist you in respect of the purposes and/or for any other purposes related to the purpose.

8.   You may access and update your personal data by writing to us at cwyexo@1utar.my (Chua Wan Yi), babewenwen0402@1utar.my (Koo Yu Wen), bettyng601@1utar.my (Ng Pui Ye), sanggari@utar.edu.my. (Ms. Sanggari a/p Krishnan).

Acknowledgment of Notice

[   ] I have been notified and that I hereby understood, consented and agreed per UTAR above notice.

[   ] I disagree, my personal data will not be processed.

…………………………
Name:
Date:

Appendix D

Kessler Psychological Distress Scale (K10)

Please tick the answer that is correct for you:	All of the time (score 5)	Most of the time (score 4)	Some of the time (score 3)	A little of the time (score 2)	None of the time (score 1)
1. In the past 4 weeks, about how often did you feel tired out for no good reason?					
2. In the past 4 weeks, about how often did you feel nervous?					
3. In the past 4 weeks, about how often did you feel so nervous that nothing could calm you down?					
4. In the past 4 weeks, about how often did you feel hopeless?					
5. In the past 4 weeks, about how often did you feel restless or fidgety?					
6. In the past 4 weeks, about how often did you feel so restless you could not sit still?					
7. In the past 4 weeks, about how often did you feel depressed?					
8. In the past 4 weeks, about how often did you feel that everything was an effort?					
9. In the past 4 weeks, about how often did you feel so sad that nothing could cheer you up?					
10. In the past 4 weeks, about how often did you feel worthless?					

The total score is obtained by summing up the score on each item (range from 10 to 50).

Suggestions for cut-off values:

- 10-19= Likely to be well

- 20-24= Likely to have a mild disorder

- 25-29= Likely to have a moderate disorder

- 30-50= Likely to have a severe disorder

Appendix E

Fear of COVID-19 Scale (FCV-19S)

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I am most afraid of Corona.					
2. It makes me uncomfortable to think about Corona.					
3. My hands become clammy when I think about Corona.					
4. I am afraid of losing my life because of Corona.					
5. When I watch news and stories about Corona on social media, I become nervous or anxious.					
6. I cannot sleep because I'm worrying about getting Corona.					
7. My heart races or palpitates when I think about getting Corona.					

Scoring:

The total score is calculated by adding up each item score (ranged from 7 to 35).

Appendix F

Lifestyle related behavior questionnaire

(a)- Significant increased   (d)- Slightly decreased

(b)- Slightly increased   (e)- Significantly decreased

(c)- Grossly similar

	(a)	(b)	(c)	(d)	(e)
1. During COVID pandemic, how has your probability of skipping one of the main meals (breakfast/ lunch/ dinner) changed?					
2. During COVID pandemic, how has your habit of snacking between meals changed?					
3. During COVID pandemic, how has your quality/ portions of meals and snacks changed?					
4. During COVID pandemic, how has your daily intake of fruits and vegetables changed?					
5. During COVID pandemic, how has your intake of a balanced diet (including healthy ingredients such as whole wheat, pulses, legumes, eggs, nuts, fruits and vegetables) changed?					
6. During COVID pandemic, how has your consumption of junk food/ fast food and fried food changed?					
7. During COVID pandemic, how has your intake of sugar-sweetened beverages (carbonated soft drinks, sugar-sweetened juices) changed?					
8. During COVID pandemic, how has your consumption of sweets/ candies/ chocolate changed?					
9. During COVID pandemic, how has your participation in cooking new/ traditional recipes changed?					
10. During COVID pandemic, how has your consumption of unhealthy food when you are bored or stressed or upset changed?					
11. During COVID pandemic, how has your intake of immunity-boosting foods (lemon, turmeric, garlic, citrus fruits and					

green leafy vegetables) in the diet changed?					
12. During COVID pandemic, how has your intake of nutrition supplements to boost immunity changed?					
13. During COVID pandemic, how has your support of your family and friends in eating healthy changed?					
14. During COVID pandemic, how has your interest in learning healthy eating tips from the media (newspaper articles/ magazines blogs/ videos/ TV shows/ text messages) changed?					
15. During COVID pandemic, how has your participation in aerobic exercise changed?					
16. During COVID pandemic, how has your participation in leisure and household changed?					
17. During COVID pandemic, how has your sitting and screen time changed?					
18. During COVID pandemic, how have your hours of sleep changed?					
19. During COVID pandemic, how has your quality of sleep changed?					
20. During COVID pandemic, how have your stress and anxiety levels changed?					

Scoring:

Items 1, 2, 6, 7, 8, 9, 10, 17, 20:

2= Significantly decreased, 1= Slightly decreased, 0= Grossly similar, -1= Slightly increased, -2= Significantly increased

Items 4, 5, 11, 12, 13, 14, 15, 16, 19:

2= Significantly increased, 1= Slightly increased, 0= Grossly similar, -1= Slightly decreased, -2= Significantly decreased

Items 3, 18:

0= Grossly similar, -1= Slightly increased/ decreased, -2= Significantly increased/ decreased

Appendix G

Satisfaction with Life Scale (SWLS)

1- Strongly disagree   5- Slightly agree

2- Disagree   6- Agree

3- Slightly disagree   7- Strong agree

4- Neither agree nor disagree

	7	6	5	4	3	2	1
In most ways my life is close to my ideal.							
The conditions of my life are excellent							
I am satisfied with my life							
So far I have gotten the important things I want in life.							
If I could live my life over, I would change almost nothing.							

Scoring:

The total score is obtained by summing up the score for each item.

Suggestions for cut-off values:

- 31-35= Extremely satisfied
- 26-30= Satisfied
- 21-25= Slightly satisfied
- 20   = Neutral
- 15-19= Slightly dissatisfied
- 10-14= Dissatisfied
- 5-9   = Extremely dissatisfied

Appendix H

Demographic Information

Q1. Age

- o   18-30 years old

- o   31-50 years old

- o   > 50 years old

Q2. Gender

- o   Male

- o   Female

- o   Prefer not to say

Q3. Ethnicity

- o   Malay

- o   Chinese

- o   Indian

- o   Others (Specify:_____)

Q4. Occupation

Appendix I

Poster to Questionnaire

Appendix J

Descriptive Table

Descriptives

			Statistic	Std. Error
Total_K10	Mean		23.9451	.68841
	95% Confidence Interval for Mean	Lower Bound	22.5867	
		Upper Bound	25.3034	
	5% Trimmed Mean		23.4902	
	Median		23.0000	
	Variance		86.251	
	Std. Deviation		9.28715	
	Minimum		10.00	
	Maximum		49.00	
	Range		39.00	
	Interquartile Range		14.00	
	Skewness		.655	.180
	Kurtosis		-.157	.358
Total_FCV	Mean		19.2802	.41948
	95% Confidence Interval for Mean	Lower Bound	18.4525	
		Upper Bound	20.1079	
	5% Trimmed Mean		19.1581	
	Median		19.0000	
	Variance		32.026	
	Std. Deviation		5.65915	
	Minimum		7.00	
	Maximum		35.00	
	Range		28.00	
	Interquartile Range		8.00	
	Skewness		.266	.180
	Kurtosis		-.033	.358
Total_L	Mean		-2.6758	.48453
	95% Confidence Interval for Mean	Lower Bound	-3.6319	
		Upper Bound	-1.7198	
	5% Trimmed Mean		-2.5836	
	Median		-1.0000	
	Variance		42.729	
	Std. Deviation		6.53671	
	Minimum		-25.00	
	Maximum		21.00	
	Range		46.00	
	Interquartile Range		8.00	
	Skewness		-.284	.180
	Kurtosis		1.737	.358
Total_SWLS	Mean		23.1703	.46011
	95% Confidence Interval for Mean	Lower Bound	22.2625	
		Upper Bound	24.0782	

5% Trimmed Mean	23.4426	
Median	24.0000	
Variance	38.529	
Std. Deviation	6.20716	
Minimum	5.00	
Maximum	35.00	
Range	30.00	
Interquartile Range	9.00	
Skewness	-.640	.180
Kurtosis	.082	.358

Appendix K

SPSS Output of Correlation Analysis

Correlations

		Total_K10	Total_FCV	Total_SWLS	Total_L
Total_K10	Pearson Correlation	1	.433**	-.351**	.169*
	Sig. (2-tailed)		.000	.000	.023
	N	182	182	182	182
Total_FCV	Pearson Correlation	.433**	1	-.091	.126
	Sig. (2-tailed)	.000		.219	.089
	N	182	182	182	182
Total_SWLS	Pearson Correlation	-.351**	-.091	1	-.233**
	Sig. (2-tailed)	.000	.219		.002
	N	182	182	182	182
Total_L	Pearson Correlation	.169*	.126	-.233**	1
	Sig. (2-tailed)	.023	.089	.002	
	N	182	182	182	182

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Appendix L

P-P Plot
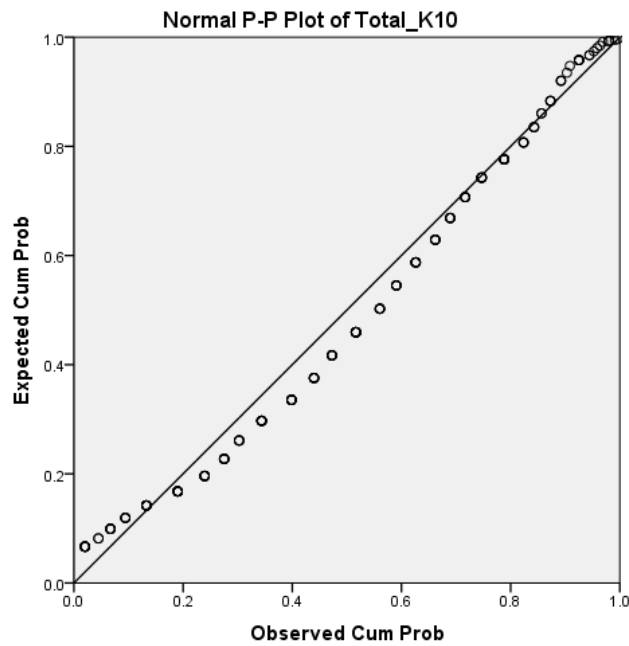
Figure L1. P-P plot for Psychological Distress.
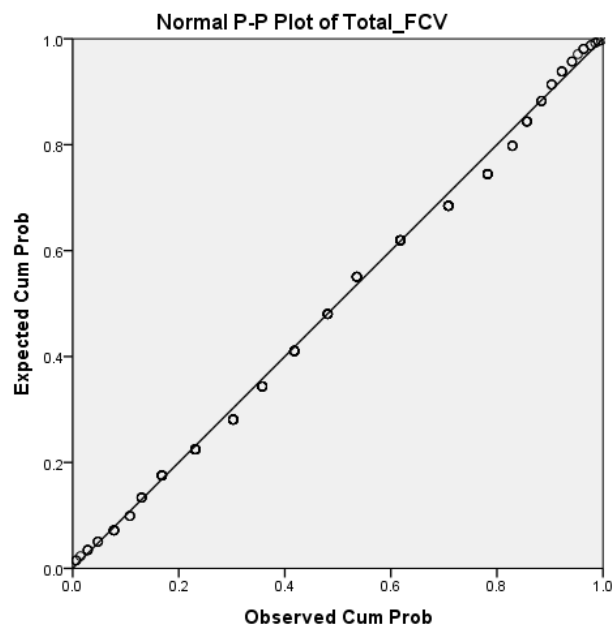
Figure L2. P-P plot for Fear of Covid-19.
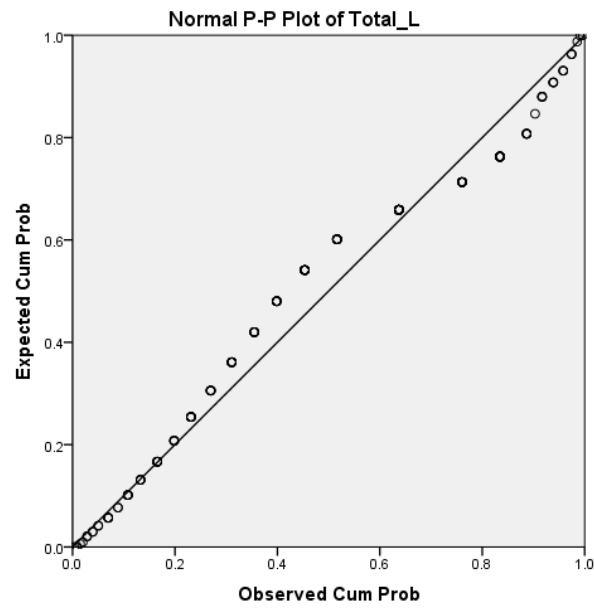
Figure L3. P-P plot for Changes in Lifestyle-Related Behaviour.
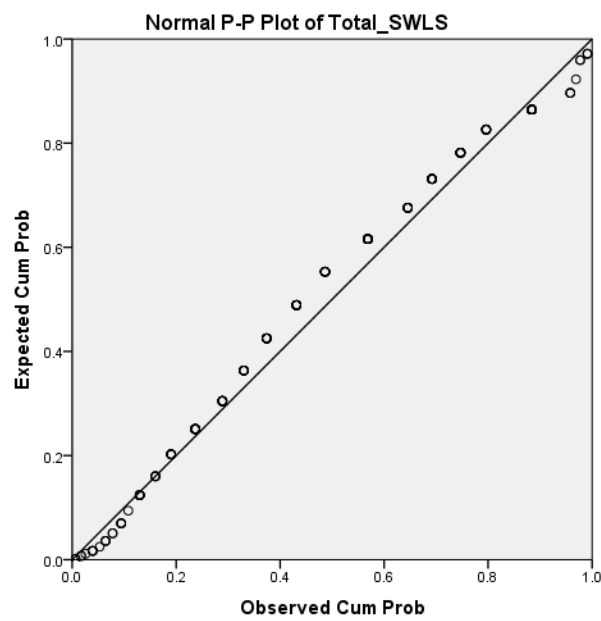
Figure L4. P-P plot for Life Satisfaction.

Appendix M

Histogram for Normality Assumption
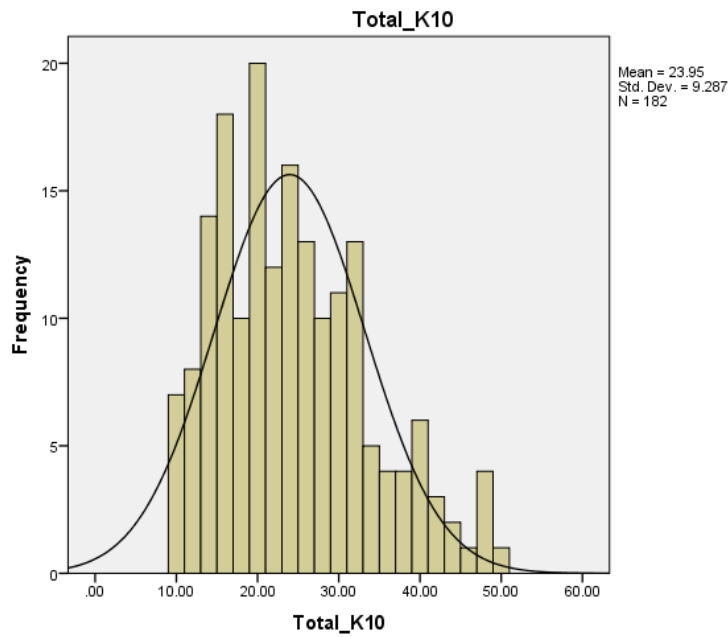
Figure M1. Histogram for Psychological Distress.
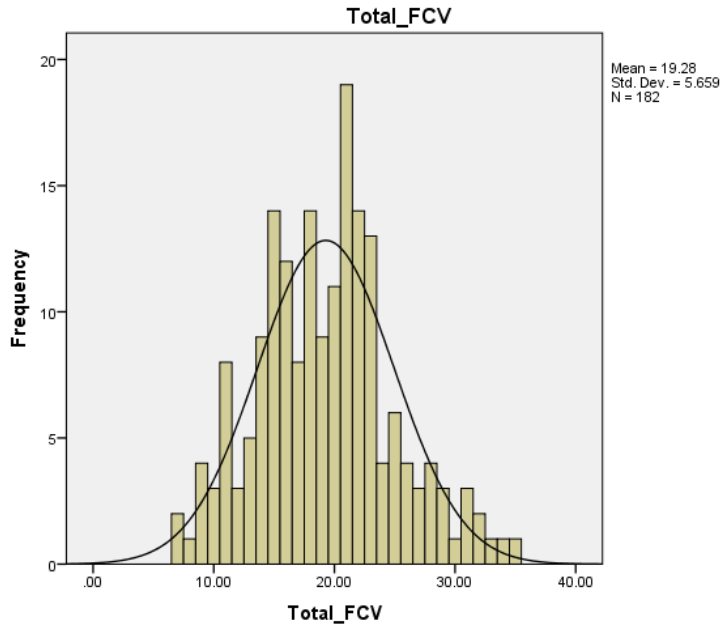
Figure M2. Histogram for Fear of Covid-19.
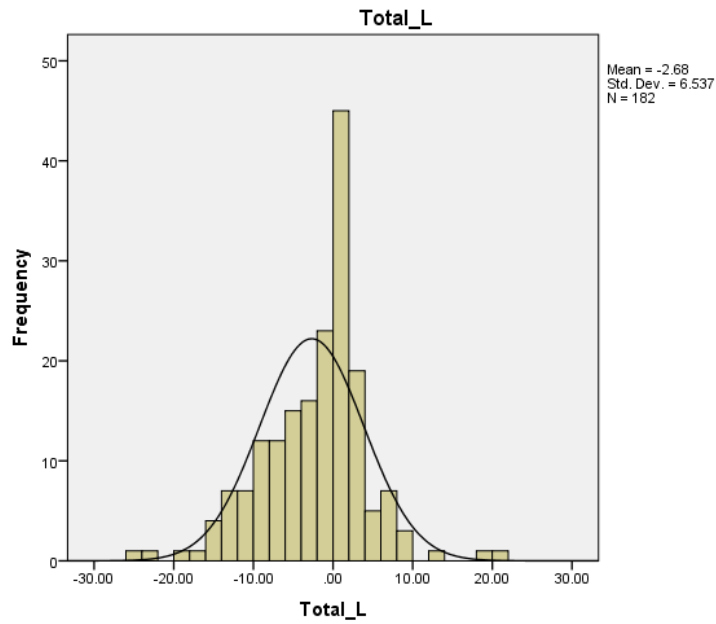
Figure M3. Histogram for Changes in Lifestyle-Related Behaviour.
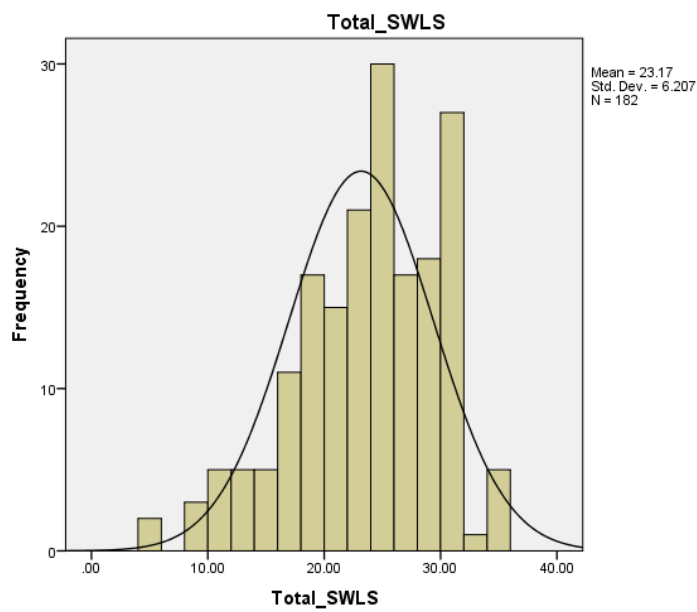
Figure M4. Histogram for Life Satisfaction.

Appendix N

Kolmogorov-Smirnov (K-S) Test and Shapiro-Wilk (S-W)

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Total_K10	.088	182	.002	.953	182	.000
Total_FCV	.074	182	.016	.987	182	.082
Total_L	.118	182	.000	.956	182	.000
Total_SWLS	.105	182	.000	.960	182	.000

a. Lilliefors Significance Correction

Appendix O

Skewness and Kurtosis

Statistics

		Total_K10	Total_FCV	Total_SWLS	Total_L
N	Valid	182	182	182	182
	Missing	0	0	0	0
Mean		23.9451	19.2802	23.1703	-2.6758
Std. Error of Mean		.68841	.41948	.46011	.48453
Median		23.0000	19.0000	24.0000	-1.0000
Mode		15.00ᵃ	21.00	30.00	.00
Std. Deviation		9.28715	5.65915	6.20716	6.53671
Variance		86.251	32.026	38.529	42.729
Skewness		.655	.266	-.640	-.284
Std. Error of Skewness		.180	.180	.180	.180
Kurtosis		-.157	-.033	.082	1.737
Std. Error of Kurtosis		.358	.358	.358	.358
Range		39.00	28.00	30.00	46.00
Minimum		10.00	7.00	5.00	-25.00
Maximum		49.00	35.00	35.00	21.00
Percentiles	25	16.0000	15.0000	19.0000	-7.0000
	50	23.0000	19.0000	24.0000	-1.0000
	75	30.0000	23.0000	28.0000	1.0000

a. Multiple modes exist. The smallest value is shown

Appendix P

Stepwise Regression

Case Summaries

	Case Number	Mahalanobis Distance	Cook's Distance	Centered Leverage Value
1	1	1.84156	.00452	.01017
2	2	4.66775	.01365	.02579
3	3	.97191	.00505	.00537
4	4	2.06211	.00314	.01139
5	5	1.03956	.00189	.00574
6	6	3.27700	.02371	.01810
7	7	.36071	.00011	.00199
8	8	1.16148	.00012	.00642
9	9	7.04187	.01534	.03891
10	10	3.66679	.00176	.02026
11	11	1.77280	.00637	.00979
12	12	.41479	.00081	.00229
13	13	2.73243	.00185	.01510
14	14	.67286	.00622	.00372
15	15	4.46506	.00878	.02467
16	16	3.53228	.00082	.01952
17	17	3.76663	.00839	.02081
18	18	7.90619	.03613	.04368
19	19	1.07229	.00513	.00592
20	20	2.27154	.00040	.01255
21	21	2.81547	.00833	.01556
22	22	2.50313	.00041	.01383
23	23	.82077	.00037	.00453
24	24	3.19784	.00428	.01767
25	25	1.52080	.00180	.00840
26	26	3.30856	.00310	.01828
27	27	3.82036	.00174	.02111
28	28	1.88042	.00150	.01039
29	29	.57421	.00002	.00317
30	30	2.01804	.00241	.01115

31	31	1.38501	.00645	.00765
32	32	1.91251	.00064	.01057
33	33	1.33743	.00642	.00739
34	34	1.07893	.00214	.00596
35	35	4.14281	.00505	.02289
36	36	4.28544	.00534	.02368
37	37	.47922	.00010	.00265
38	38	4.12079	.00207	.02277
39	39	1.49314	.00135	.00825
40	40	2.03435	.00041	.01124
41	41	.68123	.00489	.00376
42	42	1.57026	.00086	.00868
43	43	.24956	.00035	.00138
44	44	.29938	.00028	.00165
45	45	3.35955	.01291	.01856
46	46	3.07738	.02148	.01700
47	47	3.09794	.01021	.01712
48	48	1.00377	.00191	.00555
49	49	1.02881	.00410	.00568
50	50	.87140	.00087	.00481
51	51	2.65661	.00340	.01468
52	52	6.49251	.00150	.03587
53	53	2.12627	.00319	.01175
54	54	6.91892	.00852	.03823
55	55	4.01494	.01556	.02218
56	56	.68142	.00104	.00376
57	57	.94868	.00001	.00524
58	58	15.99540	.00008	.08837
59	59	2.73910	.00918	.01513
60	60	2.22972	.00414	.01232
61	61	.97409	.00019	.00538
62	62	.90834	.00066	.00502
63	63	.92266	.01174	.00510
64	64	.44598	.00845	.00246
65	65	2.43235	.00000	.01344
66	66	1.65873	.02664	.00916

67	67	4.32189	.00553	.02388
68	68	4.49001	.00178	.02481
69	69	.58339	.00077	.00322
70	70	.60992	.00075	.00337
71	71	1.07550	.00214	.00594
72	72	1.89065	.00186	.01045
73	73	.91292	.00466	.00504
74	74	1.36370	.00350	.00753
75	75	1.99425	.00130	.01102
76	76	2.19330	.01393	.01212
77	77	.10029	.00080	.00055
78	78	2.17186	.00195	.01200
79	79	5.21023	.06670	.02879
80	80	4.09724	.00484	.02264
81	81	.59218	.00047	.00327
82	82	2.79938	.00020	.01547
83	83	1.04907	.00008	.00580
84	84	.27830	.00073	.00154
85	85	1.20654	.00171	.00667
86	86	.67911	.00923	.00375
87	87	12.19474	.09638	.06737
88	88	3.47663	.00162	.01921
89	89	6.09718	.01788	.03369
90	90	3.74546	.00303	.02069
91	91	.17346	.00001	.00096
92	92	.48845	.00166	.00270
93	93	2.74199	.00175	.01515
94	94	7.81360	.00013	.04317
95	95	.91655	.00053	.00506
96	96	12.23639	.01211	.06760
97	97	9.07300	.00131	.05013
98	98	10.96495	.00268	.06058
99	99	.94428	.00086	.00522
100	100	7.68060	.00322	.04243
101	101	4.75951	.00212	.02630
102	102	.61900	.00128	.00342

103	103	1.29861	.00823	.00717
104	104	5.69928	.00039	.03149
105	105	7.87364	.01031	.04350
106	106	1.30137	.00060	.00719
107	107	4.42238	.05117	.02443
108	108	1.84744	.00118	.01021
109	109	1.46919	.00097	.00812
110	110	.23851	.00046	.00132
111	111	4.86719	.00215	.02689
112	112	.27378	.00088	.00151
113	113	1.91134	.00064	.01056
114	114	3.14540	.00558	.01738
115	115	2.91880	.00016	.01613
116	116	.68469	.00000	.00378
117	117	2.61144	.00521	.01443
118	118	.08791	.00017	.00049
119	119	1.78840	.00000	.00988
120	120	4.00133	.00098	.02211
121	121	2.04654	.00025	.01131
122	122	1.01684	.00109	.00562
123	123	.40725	.00007	.00225
124	124	2.84300	.00011	.01571
125	125	4.68721	.00993	.02590
126	126	2.39067	.00312	.01321
127	127	.85249	.00185	.00471
128	128	1.77084	.00051	.00978
129	129	.67601	.00000	.00373
130	130	1.85135	.00000	.01023
131	131	4.18187	.00089	.02310
132	132	2.25358	.00389	.01245
133	133	1.85962	.00987	.01027
134	134	2.81420	.00055	.01555
135	135	1.89554	.00240	.01047
136	136	.55664	.00024	.00308
137	137	1.93842	.00536	.01071
138	138	3.22803	.00024	.01783

139	139	.48191	.00233	.00266
140	140	3.71911	.02069	.02055
141	141	1.16148	.00474	.00642
142	142	3.54236	.00079	.01957
143	143	1.29388	.00418	.00715
144	144	.61884	.00111	.00342
145	145	1.16860	.00038	.00646
146	146	.44732	.00012	.00247
147	147	3.16530	.00068	.01749
148	148	1.44406	.01141	.00798
149	149	1.89554	.00002	.01047
150	150	3.58785	.01576	.01982
151	151	19.29276	.00646	.10659
152	152	2.65661	.01722	.01468
153	153	1.78800	.00006	.00988
154	154	1.31974	.00858	.00729
155	155	5.47673	.00010	.03026
156	156	1.58880	.00049	.00878
157	157	1.16980	.00879	.00646
158	158	1.40375	.00105	.00776
159	159	2.06590	.01270	.01141
160	160	2.64571	.00135	.01462
161	161	14.06766	.02236	.07772
162	162	3.10049	.00000	.01713
163	163	1.59300	.00042	.00880
164	164	2.26745	.00542	.01253
165	165	4.70780	.00259	.02601
166	166	1.32540	.01423	.00732
167	167	1.34360	.00021	.00742
168	168	.61990	.00041	.00342
169	169	2.32831	.00111	.01286
170	170	3.81411	.01567	.02107
171	171	3.07528	.00816	.01699
172	172	8.86516	.01382	.04898
173	173	16.00685	.02299	.08844
174	174	4.11883	.01177	.02276

175	175	4.08254	.00123	.02256
176	176	17.23433	.02908	.09522
177	177	6.65203	.00001	.03675
178	178	4.62992	.00083	.02558
179	179	.93794	.02286	.00518
180	180	.57140	.00097	.00316
181	181	.17853	.00142	.00099
182	182	7.47718	.00218	.04131
Total N		182	182	182

Appendix Q

Scatterplot

Scatterplot

Dependent Variable: Total_SWLS

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UNIVERSITI TUNKU ABDUL RAHMAN
FACULTY OF ARTS AND SOCIAL SCIENCE
DEPARTMENT OF PSYCHOLOGY AND COUNSELLING

UAPZ 3023 Final Year Project II

<u>Quantitative Research Project Evaluation Form</u>

<u>TURNITIN:</u> *'In assessing this work you are agreeing that it has been submitted to the University-recognised originality checking service which is Turnitin. The report generated by Turnitin is used as evidence to show that the students' final report contains the similarity level below 20%.'*

Project Title: The impact of psychological distress, fear and changes in lifestyle-related behaviour on life satisfaction among working adults due to Movement Control Order (MCO) in Malaysia.	

Supervisor: Ms. Sanggari a/p Krishnan	

Student's Name:	Student's ID
1. Chua Wan Yi	1. 18AAB04894
2. Koo Yu Wen	2. 18AAB05201
3. Ng Pui Ye	3. 18AAB04945

INSTRUCTIONS:
Please score each descriptor based on the scale provided below:

1. Please award 0 mark for no attempt.

2. For criteria **7**:
   Please retrieve the marks from "**Oral Presentation Evaluation Form**".

1. ABSTRACT (5%)	Max Score	Score
a. State the main hypotheses/research objectives.	5%	
b. Describe the methodology: • Research design • Sampling method • Sample size • Location of study • Instruments/apparatus/outcome measures • Data gathering procedures	5%	
c. Describe the characteristics of participants.	5%	
d. Highlight the outcomes of the study.	5%	
e. Conclusions, implications, and applications.	5%	
Sum	25%	/25%
Subtotal (Sum/5)	5%	/5%

Remark:

2. METHODOLOGY (25%)	Max Score	Score
a. Research design/framework: • For experiment, report experimental manipulation, participant flow, treatment fidelity, baseline data, adverse events and side effects, assignment method and implementation, masking. (*if applicable with the study design) • For non-experiment, describe the design of the study and data used.	5%	
b. Sampling procedures: • Justification of sampling method/technique used. • Description of location of study. • Procedures of ethical clearance approval. (Provide reference number of approval letter)	5%	
c. Sample size, power, and precision: • Justification of sample size. • Achieved actual sample size and response rate. • Power analysis or other methods (if applicable).	5%	
d. Clear explanation of data collection procedures: • Inclusion and exclusion criteria • Procedures of obtaining consent • Description of data collection procedures • Provide dates/duration of recruitment repeated measures or follow-up. • Agreement and payment (if any)	5%	
e. Explanation of instruments/questionnaire used: • Description of instruments	5%	

	Max Score	Score
• Scoring system • Meaning of scores • Reliability and validity		
Subtotal	25%	/25%
Remark:		

3. **RESULTS (20%)**	Max Score	Score
a. Descriptive statistics: • Demographic characteristics • Topic-specific characteristics	5%	
b. Data diagnostic and missing data: • Frequency and percentages of missing data. (if applicable) • Methods employed for addressing missing data. (if applicable) • Criteria for post data-collection exclusion of participants. • Criteria for imputation of missing data. • Defining and processing of statistical outliers. • Analyses of data distributions. • Data transformation (if applicable).	5%	
c. Appropriate data analysis for each hypothesis or research objective.	5%	
d. Accurate interpretation of statistical analyses: • Accurate report and interpretation of confidence intervals or statistical significance. • Report of p values and minimally sufficient sets of statistics (e.g., *dfs*, *MS*, *MS error*). • Accurate report and interpretation of effect sizes. • Report any problems with statistical assumptions.	5%	
Subtotal	20%	/20%
Remark:		

4. **DISCUSSION AND CONCLUSION (20%)**	Max Score	Score
a. Constructive discussion of findings: • Provide statement of support or nonsupport for all hypotheses. • Analyze similar and/or dissimilar results. • Rational justifications for statistical results.	8%	

		Max Score	Score
b.	Implication of the study: • Theoretical implication for future research. • Practical implication for programs and policies.	4%	
c.	Relevant limitations of the study.	4%	
d.	Recommendations for future research.	4%	
	Subtotal	20%	/20%

Remark:

5. LANGUAGE AND ORGANIZATION (5%)	**Max Score**	**Score**
a. Language proficiency	3%	
b. Content organization	1%	
c. Complete documentation (e.g., action plan, originality report)	1%	
Subtotal	5%	/5%

Remark:

6. APA STYLE AND REFERENCING (5%)	**Max Score**	**Score**
a. 7th Edition APA Style	5%	/5%

Remark:

*ORAL PRESENTATION (20%)	Score		
	Student 1	Student 2	Student 3
Subtotal	/20%	/20%	/20%

Remark:

PENALTY	**Max Score**	**Score**	
Maximum of 10 marks for LATE SUBMISSION (within 24hours), or POOR CONSULTATION ATTENDANCE with supervisor. *Late submission after 24hours will not be graded	10%		
	Student 1	Student 2	Student 3
**FINAL MARK/TOTAL	/100%	/100%	/100%

***Overall Comments:

_____

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Signature: _____   **Date:** _____

1. **Subtotal**:   The sum of scores for each assessment criterion
2. **FINAL MARK/TOTAL**:   The summation of all subtotal score
3. Plagiarism is **NOT ACCEPTABLE**. Parameters of originality required and limits approved by UTAR are as follows:
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    Any works violate the above originality requirements will NOT be accepted. Students have to redo the report and meet the requirements in **SEVEN (7)** days.

*The marks of "Oral Presentation" are to be retrieved from **"Oral Presentation Evaluation Form".**
**It is compulsory for the supervisor/examiner to give the overall comments for the research projects with A- and above or F grading.

Action Plan of UAPZ 3023 (group-based)Final Year Project II for Jan & May trimester

Supervisee's Name: 1. Chua Wan Yi   2. Koo Yu Wen   3. Ng Pui Ye

Supervisor's Name: Ms. Sanggari a/p Krishnan

Task Description	Duration	Date/Time	Supervisee's Signature	Supervisor's Signature	Supervisor's Remarks
Methodology, Data Collection & Data Analysis	W1-W2	29/1/2022, 2:00 pm			Amend chap 3
Finding & Analysis	W3-W6				Amend chap 4
Discuss Findings & Analysis with Supervisor		15/2/2022, 4:15 pm			
Amending Findings & Analysis		2/3/2022, 3:00 pm			
Discussion & Conclusion	W7-W9				

						Amend Chap 4&5
Discuss Discussion & Conclusion with Supervisor		12/3/2022, 3:00 pm				
		29/3/2022, 12:00 pm				
Amending Discussion & Conclusion						

|		
Submission of first draft*	Monday of Week 10	submit the first draft to Turnitin.com to check similarity rate
Amendment	W10	
Submission of final FYP (FYP I + FYP II)*	Monday of W11	final submission to supervisor
Oral Presentation		Oral Presentation Schedule will be released and your supervisor will inform you

Notes:
    1. **The listed duration is for reference only, supervisors can adjust the period according to the topics and content of the projects.**

    2. ***Deadline for submission can not be changed, one mark will be deducted per day for late submission.**

    3. **Supervisees are to take the active role to make appointments with their supervisors.**

    4. **Both supervisors and supervisees should keep a copy of this record.**   **5. This record is to be submitted together with the submission of the FYP II.**

Next Appointment Date/Time
15/2/2022, 4.00 pm
12/3/2022, 3:00 pm

1/4/2022, 3pm

FACULTY OF <u>ARTS AND SOCIAL SCIENCE</u>
UNIVERSITI TUNKU ABDUL RAHMAN

Date: <u>4 April 2022</u>

SUBMISSION OF FINAL YEAR PROJECT/ DISSERTATION/ THESIS

It is here by certified that <u>CHUA WAN YI</u> (ID No: <u>18AAB04894</u>) has completed this final year project entitled <u>"The impact of psychological distress, fear and changes in lifestyle-related behaviour on life satisfaction among working adults due to Movement Control Order (MCO) in Malaysia"</u> under the supervision of <u>Ms.Sanggari a/p Krishnan</u> (Supervisor) from the Department of <u>Psychology and Counselling</u>, Faculty of <u>Arts and Social Science</u>.

I understand that University will upload softcopy of my final year project in pdf format into UTAR Institutional Repository, which may be made accessible to UTAR community and public.

Yours truly,

_____

Name: Chua Wan Yi

FACULTY OF <u>ARTS AND SOCIAL SCIENCE</u>
UNIVERSITI TUNKU ABDUL RAHMAN

Date: <u>4 April 2022</u>

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It is here by certified that <u>KOO YU WEN</u> (ID No: <u>18AAB05201</u>) has completed this final year project entitled <u>"The impact of psychological distress, fear and changes in lifestyle-related behaviour on life satisfaction among working adults due to Movement Control Order (MCO) in Malaysia"</u> under the supervision of <u>Ms.Sanggari a/p Krishnan</u> (Supervisor) from the Department of <u>Psychology and Counselling</u>, Faculty of <u>Arts and Social Science</u>.

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Yours truly,

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Name: Koo Yu Wen

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Date: <u>4 April 2022</u>

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It is here by certified that   <u>NG PUI YE</u>   (ID No: <u>18AAB04945</u>) has completed this final year project entitled "<u>The impact of psychological distress, fear and changes in lifestyle-related behaviour on life satisfaction among working adults due to Movement Control Order (MCO) in Malaysia</u>" under the supervision of <u>Ms.Sanggari a/p Krishnan</u> (Supervisor) from the Department of <u>Psychology and Counselling</u>, Faculty of <u>Arts and Social Science</u>.

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Yours truly,

Betty
_____

Name: Ng Pui Ye

FACULTY OF ARTS AND SOCIAL SCIENCE

Full Name(s) of Candidate(s)	1. Chua Wan Yi 2. Koo Yu Wen 3. Ng Pui Ye
ID Number(s)	1. 18AAB04894 2. 18AAB05201 3. 18AAB04945
Programme / Course	Bachelor of Social Science (HONS) Psychology
Title of Final Year Project	The impact of psychological distress, fear and changes in lifestyle-related behaviour on life satisfaction among working adults due to Movement Control Order (MCO) in Malaysia.

Similarity	**Supervisor's Comments (Compulsory if parameters of originality exceeds the limits approved by UTAR)**
Overall similarity index: __10__ % **Similarity by source** Internet Sources: __8__ % Publications: __7__ % Student Papers: __0__ %	
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Note: Parameters (i) – (ii) shall exclude quotes, bibliography and text matches which are less than 8 words.

Note Supervisor/Candidate(s) is/are required to provide softcopy of full set of the originality report to Faculty/Institute

Based on the above results, I hereby declare that I am satisfied with the originality of the Final Year Project Report submitted by my student(s) as named above.

_____
Signature of Supervisor

Name: Sanggari Krishnan

Date: 29 March 2022

_____
Signature of Co-Supervisor

Name: _____

Date: _____