

Risk Factors Of Loneliness And Anxiety Symptoms During Movement Control Order Among University Students: A Comparative Analysis

Nurul Rashidah Mohamed Roseli^[1] and Izzah Auni Mahyuddin^[2]

¹ Universiti Utara Malaysia, Sintok

² Universiti Utara Malaysia, Sintok
rashidahroseli@gmail.com

Abstract. COVID-19 is a dreadful virus with extreme infectiousness as it spreads through both direct and indirect methods, as long as human movement exists. Malaysia introduced the first phase of Movement Control Order (MCO) on 18th of March, following the success of other earlier countries such as China, Scotland and England. A number of prohibitions were enforced to minimize human movements in the country. This includes the temporary closure of all educational institutions. The closure of institutions results in the division of university students into two groups: (1) students who were stranded in their respective universities and (2) students who managed to return to their respective hometowns. Meanwhile, prevalence of mental health disturbances among university students was found to be high during MCO due to loneliness and constant pressure from chaotic situation. Previous evidences from other population indicate different prevalence of loneliness across social groups such as gender, economic status and locality. This paper provides a comparative analysis to discover the risk factors of loneliness among university students. Results show that most university students exhibit moderate to high loneliness, however there is no significant difference of loneliness across gender and nationality. No significant difference of loneliness is identified between students who were living in residential college during MCO and those who were staying out-campus. Initiatives to address loneliness issues in residential college is further discussed.

Keywords: Loneliness, Covid-19, Lockdown

1 Introduction

1.1 COVID-19 Pandemic

Pandemic is literally defined as the worldwide disease transmission, or at least involved a lot of countries while inflicting significant harm to a vast number of human beings (Harris, 2000). Medically, World Health Organization (2011) defined the characteristics of influenza pandemic as following: (1) a hazardous viral subtype that is newly identified, (2) lack of immunity in human body towards the virus, (3) significant infectiousness among human and (4) quick virus transmission to various parts of the

world (World Health Organization, 2011). On 11th of March 2011, WHO declared Coronavirus Disease 2019 (COVID-19) as a global pandemic (Cucinotta & Vanelli, 2020). Malaysia is not excluded from the list of affected countries.

Pandemic is not a new thing to the world, however an extremely large scale of pandemic as what the world is currently facing is something very new. To date, COVID-19 has affected over 198 million people in over 200 countries (Malaysia Ministry of Health, 2021). The death toll had increased to over 630,000 people within just approximately six months since the virus started in December 2019. This statistics is far more execrable as compared to the last pandemic announced by WHO, Influenza A virus subtype H1N1 which only recorded 126 168 cases worldwide, with less than 700 fatal cases (LeDuc & Barry, 2004; World Health Organization, 2009).

Symptoms of COVID-19 infection can be very similar to typical flu such as fatigue, fever, cold and breathing difficulties (Tian et. al, 2020). Despite showing early typical symptoms, the disease can progress dreadfully to disrupt the respiratory and cardiac system. Post-mortem procedure conducted on the dead COVID-19 patients brought up the evidences of respiratory dysfunction and cardiac injury (Ruan, Yang & Wang, 2020). Just like any other influenza-type virus, COVID-19 can be transmitted through three methods: direct, indirect and airborne transmission (Asadi, Bouvier, Wexler & Ristenpart, 2020). Thus, China initiated the lockdown in Wuhan on 23rd January 2020 to stop the outbreak and successfully fulfilled the objective by reaching zero local case on 18th of March 2020 (Xufei Ren, 2020; Hernandez, 2020). However, the lockdown is then officially lifted on 10th of April 2020 (Xufei Ren, 2020). The initiative is also adapted by Scotland and England using their respected models (Mahase, 2020).

Movement Control Order in Malaysia

The Prime Minister of Malaysia, Tan Sri Mahiaddin Yasin in his speech announced that the cumulative number of COVID-19 cases in Malaysia had increase to 553 cases on 15th March 2020 (Prime Minister Office, 2020). This situation left the government with no choice but to enforce the Movement Control Order (MCO) starting on 18th of March 2020. The announcement was made on 16th March 2020, giving two days for the citizen to make necessary preparations.

The MCO model in Malaysia includes four temporary restrictions during the stipulated time: (1) total prohibition of gathering and movement, (2) banning any trip out from Malaysia, (3) closure of all non-essential government and non-government premises and (4) closure of all educational institutes (Prime Minister Office, 2020). Citizens are strictly ordered to stay at home except for crucial errands such as obtaining food and medical treatment. Police and soldiers were in charge to enforce and ensure that these restrictions are obeyed.

Given the situation that all educational institutes are closed, Universiti Utara Malaysia (UUM) students were given the option to return to their respective hometowns

before 18th March or to stay in their respective residential colleges. UUM management strictly obey to the guidelines provided by National Security Council. All UUM gates are shut down and no student is allowed to go in and out of the campus. Despite having restrictions, daily meals and health services were provided for the students in residential colleges. As a precaution, COVID-19 swab test was conducted on the students. Throughout the MCO period, no COVID-19 case was reported among UUM students.

Initially, MCO was scheduled to end in a fortnight. According to the official announcement by the Prime Minister, MCO is scheduled to end on 31st March 2020. Thousands of students decided to stay in campus due to several reasons. Some of them were completing their internship and practicum courses. Students from rural areas also reported that they needed to stay because of the good internet connection, learning environment and facilities in UUM, which is not available at their homes. After several weeks of discussions and careful evaluation among top managements such as Department of Higher Education (JPT), Malaysia Ministry of Higher Education (KPT) and other parties, students were gradually allowed to return of starting 27th of April 2020 (Muhammad, 2020). MCO was also extended thrice and finally lifted on 3rd May 2020.

Understanding Loneliness

Whitehorn's Theory of Loneliness (1961) highlighted the concept of 'desired intimacy' and 'intimacy' which refers to one's expectation on intimacy and the real intimacy that has been achieved. As highlighted by Sisenwein (1964), every person has his own expectation or desired concentration and expression of intimacy. However, the expression or level of response he received from other people may not match his desire and expectation. The discrepancy between expected intimacy and actual intimacy is what loneliness is all about. In this lonely state, a person feels alienated, misunderstood, unaccepted and exhibits problematic behavior such as aggression and mourning. Whitehorn (1961) also indicated that due to undesirable nature of loneliness, a person may experience loneliness anxiety: the excessive fear or worry of being left lonely.

Generally, there is a significant prevalence of loneliness in various parts of the world. Study among Moscow, Russia citizens in Moscow shows that 10% of respondents are significantly lonely while in the United Kingdom, around 45% of citizens report higher frequency of undesirable level of loneliness (Stickley, Koyanagi, Leinsalu, Ferlander, Sabawoon, & McKee, 2015; Shovestul, Han, Germine, & Dodell-Feder, 2020). In Malaysia, national-scale research among general population is scarce. However, a simple survey involving over 22,000 respondents from 32 countries indicated that 45% out of 500 Malaysian respondents anticipates that they will feel lonely most of the time in 2020 (IPSOS, 2020). However, this survey only consists of less than five unstandardized questions and is not sufficient to conclude loneliness levels among Malaysians.

Previous researchers also found out that loneliness is differently prevalent across gender. For example, in certain researches, there was no significant difference

of loneliness between male and female older adults (Singh & Misra, 2009; Wilson & Moulton, 2010). However, some other researchers found that males are actually lonelier than females and some reported contradict results (Wang, Zhang, Wang, Li, Shen, Ge, & Hang, 2011; Victor & Yang, 2012). This is due to the fact that male respondents are less likely to acknowledge their loneliness, causing potential inaccuracy in the data (Rokach, 2018). The discrepancies between researches indicates that prevalence of loneliness across gender differs in many populations. Previous researchers also found that people who are studying abroad reported severe rate of loneliness (Jiang, Li, & Shypenka, 2018; Poyrazli & Lopez, 2007). However, international students who are provided with good social support report significantly lower levels of loneliness (O'Reilly, Ryan & Hickey, 2010).

2 Research Procedure

Respondents are selected among UUM students who were staying in residential colleges and students who were staying out-campus during MCO. Researcher submitted a formal request to the Department of Students' Affairs to obtain the list of remaining students in residential colleges from the management. Utilizing stratified random sampling, respondents for the first group are then randomly selected from the list provided by Students' Accomodation Centre (SAC). 69 respondents from residential colleges participated in the study while 306 respondents are students who were staying out-campus. All respondents received an invitation message. Respondents who agreed to participate is then given a questionnaire with a consent form.

Loneliness symptoms were assessed using English version of UCLA Loneliness Scale Version 3 (ULS-3). This instrument is an established instrument that is understandable, valid and reliable. ULS-3 consists of 20 items that are measured on a 4-point Likert Scale. The points available on the scale are 1 = Never, 2 = Rarely, 3 = Sometimes, and 4 = Often. Therefore, the possible total score range is 20 - 80. According to the scoring system provided by Australian Psychological Society (2018), the scores for loneliness severity is 20 - 40 (Low), 41 - 51 (Moderate) and 52 - 80 (High). This questionnaire is sent to a pilot group that consists of 40 students. The Cronbach alpha for ULS-3 is 0.91 which is considered an excellent score of reliability. Thus, researcher maintained the original version of the questionnaire during the actual study.

Statistical Analysis

A descriptive analysis is conducted to describe the sociodemography of UUM students. Gender, residential location and citizenship are analysed using frequency and percentage. Meanwhile, continuous variables are measured using mean, median and standard deviation.

Table 1. Sociodemography and loneliness rate of UUM students

VARIABLE	Fre- quency	Percent- age	Median	Mean	Stand- ard Devia- tion
Gender					
Male	89	23.7%	-	-	-
Female	286	76.3%	-	-	-
Nationality					
Local	339	90.4%	-	-	-
International	36	9.6%	-	-	-
Locality during MCO					
In-campus	69	18.4%	-	-	-
Out-campus	306	81.6%	-	-	-
Family income	-	-	RM3000		RM2902
Loneliness			50.05		9.39

Most respondents are female respondents. Besides, only a minority group stayed in campus. According to Department of Statistics Malaysia (2020), the median family income of UUM students are categorized as B40. B40 refers to group of people with income below RM4850, and they are the bottom 40% people in term of total income. Median is used to describe this variable because the data is skewed to the left, whereby most respondents are from the lower income group. As expected, majority respondents are local students which reflects the real UUM population.

The overall loneliness mean score is 50.05 which is considered moderate level of loneliness. It is important to highlight the score is very close to severe level of loneliness. In order to understand the risk factor of loneliness, an inferential analysis is conducted using independent t-test.

Table 2. Inferential analysis to identify risk factors of loneliness among UUM students

VARIABLE	Category	N	Mean (M)	Stand- ard Devia- tion	t	df	Sig.
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Loneliness	Male	89	49.84	8.83	0.24	373	0.81
	Female	286	50.12	9.57			
	Residen- tial col- lege	69	21.99	13.02	0.18	373	0.86
	Out-cam- pus	306	21.69	12.41			
	Out-cam- pus	339	49.94	9.5	0.73	373	0.47
		36	51.14	8.4			
	Local Interna- tional						

An independent sample t-test is conducted to identify the difference of loneliness between male and female UUM students. Results show that there is no difference of loneliness between male ($M = 49.84$, $SD = 8.83$) and female ($M = 50.12$, $SD = 9.57$). The statistical equation for this test is $[t(373) = 0.24, p > 0.05]$. This means that the loneliness levels between male and female UUM students are almost similar.

The second independent sample t-test is conducted to identify the difference of loneliness between UUM students who underwent MCO in-campus and out-campus. Results show that there is no significant difference of loneliness between UUM students who underwent MCO in-campus ($M = 50.19$, $SD = 10.55$) and out-campus ($M = 50.02$, $SD = 9.13$). The statistical equation for this test is $[t(373) = 0.14, p > 0.05]$. This means that the loneliness levels between students who are staying in-campus and outside campus are almost similar.

The third independent sample t-test is conducted to identify the difference of loneliness between local and international UUM students. Results show that there is no significant difference of loneliness between local ($M = 49.94$, $SD = 9.5$) and international ($M = 51.14$, $SD = 8.4$) UUM students. The statistical equation for this test is $[t(373) = 0.73, p > 0.05]$. This means that the loneliness levels between local and international students are not significantly different.

Discussions

Both local and international students are having similar level of loneliness. There are two explanations for this phenomenon. Firstly, most UUM international students from Asian countries returned home right before the MCO. Students that are left in UUM are mostly from African countries. During the period of these research, not all parts of African are affected by COVID-19 due to the dry climate. Secondly, studies show that some who are studying abroad maintain high resilience against stress (Cheung & Yue, 2012; Li & Gasser, 2005). This is associated with their norm of being apart from their family and local friends. Therefore, their level of loneliness does not

elevate significantly higher than local students. However, the median score reflects a concerning level of loneliness among both groups.

Findings show the prevalence of loneliness does not differ across any of the three variables. The level of loneliness for male students are similar to female students. This is consistent with the previous research conducted by Singh and Misra (2009) among older adult population in Delhi, India. The similarity may be associated with Asian cultural context that highly values social relationships regardless of gender, as compared to Western culture that values individualism. The principle is also verified in a comparative study between East-Asia and North America (Yum, 1988). Asians are said to hold to collectivism while Westerns hold to individualism. Furthermore, students who are staying in campus during MCO report similar level of loneliness compared to students who managed to return home before MCO. This means that the environmental stressor from staying in campus during MCO is similarly strong compared to environmental stressor from staying in hometown.

Despite being stranded in campus, there is no significant difference in loneliness level between students who remained in their residential colleges and students who stayed out-campus during MCO. This is due to several protective measure taken by the university management. Firstly, students' welfare is handled carefully. Meals and health services are provided consistently so that the students are assured about that they are not alone. Besides, counseling services are available for free and is constantly advertised through university social medias. Fellows are also keeping in touch with the students daily to ensure their psychological well-being.

Recommendation

The first stakeholder is UUM management. Most English-based programs that are currently available in UUM are academic-oriented such as online seminar and workshops. Such programs provide great intellectual input for the international students, however it is less beneficial for students' social skill. Therefore, residential colleges should conduct more social activities for the international students such as telematch or virtual family day. The programs should be conducted monthly and involve international students across schools of study. The purpose of these enjoyable programs is to enhance international students' social interaction, which in return will help to reduce their loneliness.

Secondly, Inapan Siswa which serves as hostel management, should conduct social programs that integrate international students into the local student community. It is good to involve them in volunteerism activity such as Sukarelawan Rakan Muda. This will help the international students to understand our local culture and ensuring their participation in the community. As a result, they will not be alienated in the community. This initiative will help to cater the loneliness issue among international students. In a longer run, it is advisable for the Department of Academic Affairs to make it compulsory for international students to pass a Bahasa Melayu preparation course before entering UUM, just like they need to pass their Test of English as a Foreign

Language (TOEFL). This is to help them communicate better and seek help for their loneliness issues.

Conclusion

COVID-19 pandemic is a worldwide disaster, and Malaysia is not excluded from being affected. Apart from economy disruption, Malaysians need to encounter the psychological aftermaths as well. This research explores the psychological effects of MCO among university students using standardized instruments namely UCLA Loneliness Scale Version 3 (ULS-3). It is found that the level of loneliness among UUM students is concerning. Gender, locality and citizenship does not make a significant change in students' loneliness levels.

There are a few limitations in this study. Firstly, this study is conducted using the data describing the first phase of MCO. During this period, students' activities were paused. Therefore, the results may not be used to conclude on the effectiveness of programs in residential colleges. After 3rd May, residential colleges actively organized programs for students such as e-sport tournaments, virtual run and etc. A few improvement ideas are relevant for future researches. Firstly, longitudinal study should be conducted to see the progress of students' loneliness throughout the pandemic. Besides, a deeper analysis can be done using qualitative method such as interviews with affected students.

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