

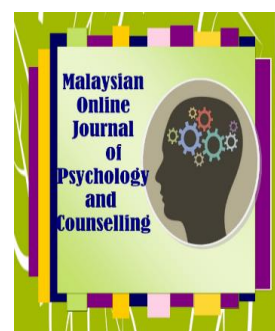
THE RELATIONSHIP BETWEEN PSYCHOLOGICAL DISTRESS, RELIGIOSITY, LONELINESS, AND DEATH ANXIETY AMONG MALAYSIAN PRIVATE UNIVERSITY STUDENTS

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ABSTRACT

Death anxiety has rarely been studied among the younger generation, and could be useful in understanding their attitudes toward death. This study investigated the association between psychological distress, religiosity, loneliness and death anxiety among university students. The cross-sectional quantitative study included 160 students who were from a private university in Malaysia. Participants were self-administered scales on death anxiety, religiosity, depression, anxiety, stress, loneliness, and suicidality. Results showed that religiosity, suicidality, and loneliness were not significantly correlated with death anxiety. However, participants with higher levels of depression, anxiety, and stress reported a significantly lower level of death anxiety. University students with psychological distress should be screened for death anxiety as a lower level of death anxiety may predispose an individual to suicidal ideation.

Keywords: *Death Anxiety; Loneliness; Psychological Distress; Religiosity; University Student*



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INTRODUCTION

Death signifies the finality of life and death anxiety is the innate drive to avoid death (Moore & Williamson, 2003). Death anxiety is defined as the awareness of the reality of dying and death which has negative effects on a person's psychological well-being (Thiemann et al., 2015). Most individuals experience death anxiety in their lives (Thorson & Powell, 1988). Universally, fear is the common response to death (Moore & Williamson, 2003).

According to the latest National Health and Morbidity Survey, about 9% of Malaysians were tested positive for depression symptoms (Institute for Public Health, 2020). Another study among Malaysian adults from Selangor, Terengganu and Penang found that 36% were at least mildly depressed (Yeoh et al., 2017). Anxiety is also a common mental health issue in Malaysia with a prevalence of 1.7% for generalised anxiety disorder amongst individuals 16 years old and above (Maideen et al., 2015). Besides that, a few studies have examined the prevalence of stress among Malaysians and found that between 5.5–25.9% of educators had stress symptoms (Tai et al., 2019).

The majority of Malaysians adhere to a religious faith, such as Islam, Buddhism, Christianity, Hinduism, and others. According to the most recent census report released by the Department of Statistics Malaysia (2010), there are 61.3% Muslims, 19.8% Buddhists, 9.2% Christians, and 6.3% Hindus among Malaysians. The large majority of Malaysians who profess to be affiliated to a religion shows that religion is an important aspect of the Malaysian society.

The focus of this study was university students. University students are more at risk for psychological distress as they are at the juncture of their lives which straddles adolescence and working adulthood (Lamis et al., 2016). According to Auerbach et al. (2018), 35% of university students screened reported at least one major lifetime mental disorder whilst 31% reported at least one major 12-month mental disorder. Even though psychological distress, loneliness, and religiosity have been well-studied among university students, there is currently a dearth of studies on death anxiety among this population. There has also been a lack of research on the relationship between death anxiety, psychological distress and other aspects of undergraduate students' psychological well-being. Most of the studies had focussed on the relationship between religiosity and death anxiety. For example, Bassett and Bussard (2021) in their study among university students in the United States found that those with a punishing view of God, and who perceived a failure to live up to the standards of their religion, had higher levels of death anxiety. On the other hand, more religious individuals reported lower death anxiety. Another study amongst Canadian university students found that the level of death anxiety was moderate, and individuals who were lonelier, less religious, and had lower purpose in life scores reported higher death anxiety (Chow, 2017). Therefore, this study aimed to investigate the influence of depression, anxiety, stress, religiosity, and loneliness on death anxiety among university students.

Death Anxiety

Death anxiety is defined as the awareness of the reality of dying and death which has negative effects on a person's psychological well-being (Thiemann et al., 2015). There are various dimensions that have been discussed under the construct of death anxiety which are debatable amongst researchers because there are differences in defining what constitutes death anxiety (Pollak, 1979). Cultures may also influence the meanings associated with death as individuals in the culture would associate their belief system with death (Schumaker et al., 1988). Moore and Williamson (2003) stated that fear is a

typical response to death as it signifies the finality of life and death anxiety is an innate force that drives individuals to avoid death.

There were a few contexts in which death anxiety has been researched. Rahimah et al. (2018) found that individuals who demonstrated higher levels of death anxiety had a higher likelihood to have green purchase intention and behaviour. Among individuals who had cancer, death anxiety was identified as underlying the general anxiety which these individuals faced (Sharpe et al., 2018). More recently, death anxiety has been explored in light of the COVID-19 pandemic, during which there are daily reminders of death through different death cues and news in the morbidity and mortality of the population (Menzies et al., 2020).

Suicidality

Suicidal ideation is defined as having thoughts or seriously thinking about suicide, or planning a suicide attempt (Klonsky et al., 2016). Individuals who have suicidal ideation may subsequently engage in suicidal behaviours, so research on examining suicidal ideation is important as a way to prevent suicidal behaviours (Ploskonka & Servaty-Seib, 2015). Suicide risk ranges from having low severity such as having passing thoughts of suicide to the highest severity such as planning a suicide or attempting suicide (Wang et al., 2014).

According to Luca et al. (2016), college students who were diagnosed with behavioural health disorders had a higher risk for suicide. Despite the numerous research and efforts to reduce the rate of suicide, the prevalence of suicidal thoughts and behaviors is still high among university students (Bentley et al., 2016). Individuals may also experience suicidal ideation without making plans to die by suicide (Wang et al., 2014). It may happen during a rare moment in a particular period of their lives, instead of a chronic experience that lasts for a long time (Klonsky et al., 2016).

Depression

Hawton and colleagues (2013) stated that depression has a strong relationship with suicide and non-fatal suicidal behaviour. Liu and Miller (2014) found that life stressors have a connection to suicidal ideation and behaviours. Lamis et al. (2016) stated that depressive symptoms are positively associated with a higher probability of individuals experiencing suicidal ideation. Zschoche and Schlard (2015) argued that even when individuals suffer from mild depressive symptoms, they will have increased suicidal ideation.

Depression may be the result of a stressful academic life (Beiter et al., 2015). Wang et al. (2014) agreed that university students are in a critical transitional period of their lives. According to Beiter et al. (2014), the pressure to excel academically may be too demanding for students which can lead to stress if it not viewed as a positive challenge in life. Wang et al. (2014) believed that students often felt frustrated due to the competition to do well and the difficulty to find a job, which resulted in depression.

Anxiety

Anxiety has been linked to suicide, as individuals who are at risk for suicide may also be suffering from anxiety disorders (Bentley et al., 2016). Individuals who suffer from anxiety disorders have a higher risk for suicidal ideation and suicide attempt (May & Klonsky, 2016). However, Victor and

Klonsky (2014) found that anxiety disorders associated with fear may actually be a buffer against a suicide attempt.

Luca et al. (2016) stated that anxiety is one of the diagnosable health disorders for suicide risk among college students. Students suffer from a worse quality of life when they are diagnosed with anxiety disorders (Beiter et al., 2015). They may experience anxiety in their attempts to adapt to the environment by participating in extra-curricular activities and increasing their social circle (Luca et al., 2016). They may also experience anxiety due to having greater ambitions in their lives (Taliaferro & Muehlenkamp, 2015).

Stress

Life stressors may lead to the formation of suicide schemas where stress acts as a trigger for suicidal behaviours (Barzilay & Apter, 2014). Lin and Huang (2013) stated that individuals may experience suicidal tendencies that stemmed from high levels of stress. Students may experience academic burnout resulting from stress which may lead to anxiety and depressive symptoms in the future (Lin & Huang, 2013). This is a major concern as stress is becoming common amongst university students and it has been shown to contribute negatively to their mental health (Beiter et al., 2015). Other than that, anxiety may also influence university students to engage in risky behaviours (Anestis et al., 2014).

Religion

Wang et al. (2016) stated that religion may be a coping strategy for individuals with mental health issues. The topic of religion should be explored in multicultural societies with major ethnic and religious groups, such as Malaysia (Foo et al., 2012). Religion helps students to alleviate their psychological distress (Wang et al., 2016). Students may view suicide as a way to cope with their problems related to finances, romance, stress, hopelessness, and loneliness (Foo et al., 2012). Religion helps them to feel at peace when they experience negative emotions through prayer to a higher force for help and protection when they are in trouble (Wang et al., 2016).

Loneliness

Individuals experience loneliness when they lack social support (Schmidt & Sermat, 1983). A sense of belonging and connectedness is protective against the progression from suicidal ideation to a suicide attempt (May & Klonsky, 2015). Lamis et al. (2016) concurred that social support may prevent students from attempting suicide. Lamis et al. (2016) found that students who have a strong social support reported that they do not feel hopeless when they are faced with a difficult situation. Amongst Asians, relationship with parents constitutes an important form of social support. Students who do not have a good relationship with their parents were found to be prone to having suicidal ideation (Wang et al., 2014).

Relationship Between the Variables

Depression, anxiety, stress, and hopelessness are linked to death anxiety. Individuals who have less death anxiety were found to be more likely to experience suicidal ideation and suicidal behaviours (Pollak, 1979). When their lives are perceived as meaningless, individuals may develop depression and suicidal ideation (Klonsky et al., 2016). This is due to feelings of guilt and regret for wasting away

their lives (Tomer & Eliason, 1996). Hopelessness may also lead to the perception that they are not in control of their own lives and this perceived locus of control may lead to a higher level of death anxiety (Pollak, 1979). As a result of their inability to attain self-actualisation, there may be a discrepancy between how they view themselves and their ideal self, a factor which has been shown to be related to a higher death anxiety (Tomer & Eliason, 1996).

A systematic review of the association between death anxiety and religion found that religious belief alleviated death anxiety by offering a way out of death through immortality, symbolically and literally (Jackson et al., 2018). The influence of religiosity on death anxiety depends on the type of beliefs and commitment held by the individual (Harding et al., 2005). Individuals who had a deeper religious faith reported lower level of death anxiety (Harding et al., 2005).

Chopik (2016) found that social support was associated with death anxiety. Chochinov et al. (1995) stated that low social support and loneliness may lead to depression which in turn influences an individual to yearn for death, instead of taking steps to avoid death. Individuals equipped with better social support were found to have lower levels of death anxiety (Chopik, 2016). When they are more at risk, social support such as family support, may help protect them from wanting to die (Chochinov et al., 1995). The reason is because social support helps to regulate emotions (Chopik, 2016). As stated previously by Ploskonka and Servaty-Seib (2015), there is a relationship between interpersonal factors and suicidality, therefore it should be explored in this study in terms of its relationship between suicidality and death anxiety. Chopik (2016) believed that death anxiety will decrease across the lifespan when individuals have close relationships.

MATERIALS AND METHODOLOGY

Research Design

This is a cross-sectional quantitative survey study.

Sampling Size

A formula has been recommended by Tabachnik and Fidell (2013) to calculate the sample size for multiple linear regression which is “ $50+8m$ ”, where m = number of factors. According to the formula provided, this study should have 178 participants based on the 16 factors to be included by the researchers. Taking into account a 10% dropout rate that may occur for this study, researchers recruited 200 participants to ensure that the dropout rate will not have an effect on the power of this study. Despite this effort, only 168 participants were included in the analysis because 38 had to be discarded due to missing data.

Measures/Instrumentation

Demographics

The demographics section was designed to obtain personal details of the participants, including gender, age, and religion.

Revised Death Anxiety Scale (RDAS)

The RDAS was designed to measure the individuals' level of death anxiety (Thorson & Powell, 1992). The RDAS with 25 items has shown an internal consistency of reliability of .83 (Thorson & Powell, 1992). From this study, this scale had a reliability of .862. However, this study will use 20 items with a "True" or "False" format. Some items asked are "I fear dying a painful death", "I hate the idea that I will be helpless after I die" and "The total isolation of death is frightening to me". A point will be given to items answered "True". Higher scores denoted a higher the level of death anxiety.

Centrality of Religiosity Scale (CRS)

The CRS aimed to measure the core dimensions of religiosity which are public practice, private practice, religious experience, ideology, and the intellectual dimensions (Huber & Huber, 2012). For this study, researchers will use the CRS-15 which has 15 items and three dimensions. The CRS-15 has an internal consistency reliability ranging from .92 to .96 (Huber & Huber, 2012). In this study, this scale had an internal consistency reliability of .796. Some items asked are "To what extent do you believe that God or something divine exists?", "How often do you pray?" and "How often do you experience situations in which you have the feeling that God or something divine intervenes in your life?". Items 1 to 7 are assessed using a 5-point Likert scale, ranging from 1= "not at all" to 5= "very much so". Item 8 is assessed using an 8-point Likert scale, ranging from 1= "several times a day" to 8= "never" whereas item 9 is assessed using a 6-point Likert scale, ranging from 1= "more than once a week" to 6= "never". Items 10 to 15 are assessed using a 5-point Likert scale, ranging from 1= "never" to 5= "very often". The scoring is based on summing up the scores. The higher the final scores, the higher the level of religiosity.

Depression, Anxiety and Stress Scale (DASS-21)

The DASS-21 is designed to measure the frequency and intensity of experiencing negative emotions (Lovibond & Lovibond, 1995). The 21 items of the instrument has 3 domains which are depression, anxiety, and stress. There is an acceptable level of internal consistency for DASS-21 across several studies whereby depression=.829, anxiety=.871 and stress=.871 (Norton, 2007). The Malay version of the DASS has an internal consistency reliability of .94 (overall), .863 for depression, .85 for anxiety and 0.837 for stress (Nordin et al., 2017). In this study, the DASS-21 had an internal consistency reliability of .930 (overall), .858 for depression, .789 for anxiety and .844 for stress. A 4-point Likert is used, ranging from 0="did not apply to me at all" to 3="applied to me very much or most of the time". The scoring is based on summing up the scores, then multiplied it by two to obtain the final score. The higher the final scores for each dimension, the higher the levels of depression, anxiety, or stress.

Differential Loneliness Scale (DLS)

The differential loneliness scale (DLS) is designed to measure the quality and quantity of individuals' interactions within 4 subscales for different types of relationships which are romantic relationship, friendship, family relationship, and within larger groups (Schmidt & Sermat, 1983). The test-retest reliability coefficients were shown to range from .85 to .97 (Kalliopuska & Laitinen, 1987). In this study, the DLS had an internal consistency reliability of .703. For this study, researchers will use a shorter version of the scale which consists of 20 items using a 1="True" or 2="False" format as a response. The higher the scores, the higher the level of loneliness.

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Suicidal Behaviours Questionnaire-Revised (SBQ-R)

Suicidal Behaviours Questionnaire-Revised (SBQ-R) is a scale designed to measure the different dimensions of suicidality. The 4 dimensions included lifetime suicidal ideation and/or suicide attempt, frequency of suicidal ideation over the past twelve months, threat of suicide attempt, and self-reported likelihood of suicidal behaviour in the future (Osman et al., 2001). The SBQ-R had a good internal consistency reliability of .80 when tested among university students in Nigeria (Aloba et al., 2017). From this study, the SBQ-R had an internal consistency reliability of .78.

Data collection

Self-reported questionnaires were used as a method for data collection in this study. Researchers provided an informed consent form to be given to the participants to obtain informed consent. Participation was voluntary and no identifiers were collected.

Data Analysis

After the data had been collected, they were analysed statistically through descriptive analysis, independent samples t-test, one-way ANOVA, and Pearson correlation. The demographic information and data from the questionnaires were keyed into the IBM SPSS Statistics for Windows software, Version 22 (Armonk, NY: IBM Corp.). Missing data were excluded listwise.

Results

A total of 208 university students (mean age=20.60, standard deviation [SD]= 1.790) participated in this study. After data cleaning, the data of only 168 participants were analysed. The majority of the participants were females (68.5%) and Buddhists (67.9%) (refer to Table 1).

Table 1
Demographics of participants (N=168)

Demographics	Frequency (n)	Percentage (%)
Gender		
Male	53	31.5
Female	115	68.5
Religion		
Islam	5	3.0
Buddhism	114	67.9
Hinduism	9	5.4
Christianity	34	20.2
Others	6	3.6

In terms of psychological distress, for the level of depression, the majority of the participants reported normal or minimal (76.8%) depression. For level of anxiety, the majority of the participants reported normal or minimal (67.3%) anxiety. For level of stress, the majority of the participants reported normal or minimal (91.1%) stress. A total of 27.4% of the participants reported suicide risk (refer to Table 2).

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Table 2
Frequencies for psychological distress and suicidal risk

Categories	Frequency (n)	Percentage (%)
Depression		
Normal	129	76.8
Mild	21	12.5
Moderate	9	5.7
Severe	0	0
Extremely severe	0	0
Total	159	94.6
Anxiety		
Normal	113	67.3
Mild	19	11.3
Moderate	27	16.1
Severe	5	3
Extremely severe	0	0
Total	164	97.6
Stress		
Normal	153	91.1
Mild	9	5.4
Moderate	0	0
Severe	0	0
Extremely severe	0	0
Total	162	96.4
Suicidality		
No risk	118	70.2
At risk	46	27.4

An independent samples t-test was conducted to compare the level of death anxiety between males and females. There were no significant differences between males ($M=31.92$, $SD=4.648$) and females ($M=32.99$, $SD=4.680$), $t(161) = -1.366$, $p = .174$. Moreover, the independent samples t-test was also conducted to compare the level of death anxiety between participants with and without suicidal risk. There were no significant differences between no risk ($M=33.11$, $SD=4.471$) and at risk ($M=31.65$, $SD=4.762$), $t(157) = 1.825$, $p = .070$.

A one-way ANOVA was conducted to determine whether there was a difference in death anxiety between those who professed Islam, Buddhism, Hinduism, Christianity, and other religions. The results showed that there were no significant differences between religions, $F(4, 158) = 2.090$, $p = .085$.

The Pearson product-moment correlation analysis was conducted to assess the relationship between the level of religiosity, suicidality, loneliness, depression, anxiety, stress, and death anxiety. There was a negative correlation between the level of death anxiety and the level of depression whereby $r = -.195$ and $p = .028$. This shows that the level of depression influences the level of death anxiety. A negative correlation was found between the level of death anxiety and the level of anxiety whereby $r = -.306$ and $p < .001$. There was a negative correlation between the level of death anxiety and the level of stress whereby $r = -.243$ and $p = .006$ (refer to Table 3).

Table 3

Pearson product-moment correlation analysis on the relationship between age, religiosity, suicidality, loneliness, depression, anxiety, and stress on death anxiety

Variables	r	p-value
Age	-.006	.944
Loneliness	-.078	.318
Suicidality	-.063	.483
Loneliness	-.016	.854
Depression	-.195*	.028
Anxiety	-.306**	<0.001
Stress	-.243**	.006

Correlation is significant at the .01 level (2-tailed).**

Correlation is significant at the .05 level (2-tailed).*

DISCUSSION

The results of this study revealed that there was a negative correlation between the level of death anxiety and depression, anxiety and stress. However, there was no relationship between death anxiety and suicidality, loneliness, and religiosity.

Individuals who reported a higher level of depression indicated a lower level of death anxiety. The findings are of concern, as depression is linked to suicidality, and individuals are more likely to attempt suicide if they have a lower death anxiety (Joiner, 2005; Victor & Klonsky, 2014). Notwithstanding that the relationship between suicidality and death anxiety is non-significant, individuals suffering from depression should still be screened for death anxiety to understand whether their depression and lowered death anxiety poses a suicide risk.

On the other hand, anxiety has a negative relationship with death anxiety. Logically, when individuals are already feeling anxious, they are more likely to feel anxious regarding other matters, such as death. However, in this case, anxiety leads to lower death anxiety. This may be another indication that those who are suffering from psychological distress may have a lower threshold for considering suicide as a way out (Joiner, 2005). There is a need to further examine whether the construct of death anxiety is related to anxiety symptoms in general.

Stress has also found to be linked to death anxiety. When individuals have a high level of stress, they would have a lower level of death anxiety. Similar to depression and anxiety, when they are feeling stressed, they may not fear the thought of death because they could see it as a way to stop their stressful life (Lin & Huang, 2013; Barzilay & Apter, 2014).

In this study, religiosity is not correlated with death anxiety. However, several studies found that religiosity plays an important part in individuals' lives which may reduce the level of death anxiety (Moore & Williamson, 2003; Harding et al., 2005; Wang et al., 2016). Even though religion is a significant aspect in their lives, this study found that it does not appear to contribute to death anxiety. This may be because the participants in this study belong to a younger age group compared to other studies, and therefore may not utilise religion as a buffer against death anxiety in the same way as older adults.

In addition, suicidality level does not influence the level of death anxiety. The results are in contrast with Pollak's (1979) study whereby individuals who reported higher levels of suicidality had lower death anxiety (Pollak, 1979). Similarly, loneliness, which is a risk factor for suicidality, does not correlate with death anxiety. Therefore, more robust investigations need to be conducted on the relationship between these variables in the future.

CONCLUSIONS

The research aimed to investigate the role of depression, anxiety, stress, suicidality, religiosity, loneliness, and death anxiety among students in a private university. This study found that there were no differences in death anxiety amongst students in terms of gender and suicide risk. The study also found no significant relationship between religiosity, suicidality, and death anxiety. However, higher levels of stress, anxiety, and depression were associated with lower levels of death anxiety. The results should prompt future researchers to further investigate in larger and more diverse populations whether psychological distress among those with lower death anxiety may lead to suicidal behaviours.

This study has a few limitations. First, there was only a small number of participants because of missing data in their responses. Furthermore, more than half of the participants were Buddhists. Finally, the students were selected from only one university private university. Therefore, the results could not be generalised to other universities due to the differences in the environment and culture between private and public universities. In the future, researchers may include several universities to participate in this study. This will also allow researchers to determine whether different university environments may affect the level of death anxiety.

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REFERENCES

- Aloba, O., Ojeleye, O., & Aloba, T. (2017). The psychometric characteristics of the 4-item Suicidal Behaviors Questionnaire-Revised (SBQ-R) as a screening tool in a non-clinical sample of Nigerian university students. *Asian Journal of Psychiatry, 26*, 46–51. <https://doi.org/10.1016/j.ajp.2017.01.017>
- American Psychiatric Association (2013). *Diagnostic and statistical manual of mental disorders (5th Ed)*. Washington DC: American Psychiatric Association.
- Anestis, M., Soberay, K., Gutierrez, P., Hernández, T., & Joiner, T. (2014). Reconsidering the link between impulsivity and suicidal behavior. *Personality And Social Psychology Review, 18*(4), 366-386. <https://doi.org/10.1177/1088868314535988>
- Barzilay, S., & Apter, A. (2014). Psychological models of suicide. *Archives of Suicide Research, 18*(4), 295-312. <https://doi.org/10.1080/13811118.2013.824825>
- Bassett, J. F., & Bussard, M. L. (2021). Examining the complex relation among religion, morality, and death anxiety: Religion can be a source of comfort and concern regarding fears of death. *OMEGA-Journal of Death and Dying, 82*(3), 467-487. <https://doi.org/10.1177/0030222818819343>

- Beiter, R., Nash, R., McCrady, M., Rhoades, D., Linscomb, M., Clarahan, M., & Sammut, S. (2015). The prevalence and correlates of depression, anxiety, and stress in a sample of college students. *Journal Of Affective Disorders, 173*, 90-96. <https://doi.org/10.1016/j.jad.2014.10.054>
- Bentley, K. H., Franklin, J. C., Ribeiro, J. D., Kleiman, E. M., Fox, K. R., & Nock, M. K. (2016). Anxiety and its disorders as risk factors for suicidal thoughts and behaviors: A meta-analytic review. *Clinical Psychology Review, 43*, 30-46. <https://doi.org/10.1016/j.cpr.2015.11.008>
- Chochinov, H. M., Wilson, K. G., Enns, M., Mowchun, N., Lander, S., Levitt, M., & Clinch, J. J. (1995). Desire for death in the terminally ill. *American Journal of Psychiatry, 152*(8), 1185-1191. <https://doi.org/10.1176/ajp.152.8.1185>
- Chopik, W. J. (2016). Death across the lifespan: Age differences in death-related thoughts and anxiety. *Death Studies, 41*(2), 69-77. <https://doi.org/10.1080/07481187.2016.1206997>
- Chow, H. P. (2017). A time to be born and a time to die: Exploring the determinants of death anxiety among university students in a western Canadian city. *Death Studies, 41*(6), 345-352. <https://doi.org/10.1080/07481187.2017.1279240>
- Department of Statistics Malaysia (2015). Population Distribution and Basic Demographic Characteristic Report 2010. Retrieved from https://www.dosm.gov.my/v1/index.php?r=column/cthem&menu_id=L0pheU43NWjwRWVSZklWdzQ4TlhUUT09&bul_id=MDMxdHZjWtk1SjFzTzNkRXYzcVZjd09
- Foo, X. Y., Alwi, M. N., Ismail, S. I., Ibrahim, N., & Osman, Z. J. (2012). Religious commitment, attitudes toward suicide, and suicidal behaviors among college students of different ethnic and religious groups in Malaysia. *Journal of Religion and Health, 53*(3), 731-746. <https://doi.org/10.1007/s10943-012-9667-9>
- Gliner, J. A., Morgan, G. A., & Leech, N. L. (2017). *Research methods in applied settings: An integrated approach to design and analysis*. New York: Routledge, Taylor & Francis Group.
- Harding, S. R., Flannelly, K. J., Weaver, A. J., & Costa, K. G. (2005). The influence of religion on death anxiety and death acceptance. *Mental Health, Religion & Culture, 8*(4), 253-261. <https://doi.org/10.1080/13674670412331304311>
- Hawton, K., Casañas i Comabella, C., Haw, C., & Saunders, K. (2013). Risk factors for suicide in individuals with depression: A systematic review. *Journal Of Affective Disorders, 147*(1-3), 17-28. <https://doi.org/10.1016/j.jad.2013.01.004>
- Huber, S., & Huber, O. W. (2012). The Centrality of Religiosity Scale (CRS). *Religions, 3*(3), 710-724. <https://doi.org/10.3390/rel3030710>
- IBM Corp. Released 2017. IBM SPSS Statistics for Windows, Version 25.0. Armonk, NY: IBM Corp.
- Institute for Public Health. *National Health and Morbidity Survey (NHMS) 2019: Key findings*. Retrieved from https://iptk.moh.gov.my/images/technical_report/2020/4_Infographic_Booklet_NHMS_2019_-_English.pdf
- Jackson, J. C., Jong, J., Bluemke, M., Poulter, P., Morgenroth, L., & Halberstadt, J. (2018). Testing the causal relationship between religious belief and death anxiety. *Religion, Brain & Behavior, 8*(1), 57-68. <https://doi.org/10.1080/2153599X.2016.1238842>
- Joiner, T. (2005). *Why people die by suicide*. Cambridge, MA: Harvard University Press.
- Kalliopuska, M., & Laitinen, M. (1987). Testing loneliness on the differential loneliness scale. *Psychological Reports, 60*(1), 15-18. <https://doi.org/10.2466/pr0.1987.60.1.15>
- Klonsky, E. D., & May, A. M. (2015). The three-step theory (3ST): A new theory of suicide rooted in the "ideation-to-action" framework. *International Journal of Cognitive Therapy, 8*(2), 114-129. <https://doi.org/10.1521/ijct.2015.8.2.114>

- Klonsky, E., May, A., & Saffer, B. (2016). Suicide, suicide attempts, and suicidal ideation. *Annual Review Of Clinical Psychology, 12*(1), 307-330. <https://doi.org/10.1146/annurev-clinpsy-021815-093204>
- Lamis, D., Ballard, E., May, A., & Dvorak, R. (2016). Depressive symptoms and suicidal ideation in college students: The mediating and moderating roles of hopelessness, alcohol problems, and social support. *Journal Of Clinical Psychology, 72*(9), 919-932. <https://doi.org/10.1002/jclp.22295>
- Lin, S., & Huang, Y. (2013). Life stress and academic burnout. *Active Learning in Higher Education, 15*(1), 77-90. <https://doi.org/10.1177/1469787413514651>
- Liu, R., & Miller, I. (2014). Life events and suicidal ideation and behavior: A systematic review. *Clinical Psychology Review, 34*(3), 181-192. <https://doi.org/10.1016/j.cpr.2014.01.006>
- Lovibond, P., & Lovibond, S. (1995). The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories. *Behaviour Research and Therapy, 33*(3), 335-343. [https://doi.org/10.1016/0005-7967\(94\)00075-u](https://doi.org/10.1016/0005-7967(94)00075-u)
- Luca, S. M., Franklin, C., Yueqi, Y., Johnson, S., & Brownson, C. (2016). The relationship between suicide ideation, behavioral health, and college academic performance. *Community Mental Health Journal, 52*(5), 534-540. <https://doi.org/10.1007/s10597-016-9987-4>
- Maideen, S. F., Sidik, S. M., Rampal, L., & Mukhtar, F. (2015). Prevalence, associated factors and predictors of anxiety: A community survey in Selangor, Malaysia. *BMC Psychiatry, 15*(1), 1-12. <https://doi.org/10.1186/s12888-015-0648-x>
- May, A. M., & Klonsky, E. D. (2016). What distinguishes suicide attempters from suicide ideators? A meta-analysis of potential factors. *Clinical Psychology: Science and Practice, 23*(1), 5-20. <https://doi.org/10.1111/cpsp.12136>
- Moore, C. C., & Williamson, J. B. (2003). The universal fear of death and the cultural response. *Handbook of Death & Dying, 3*-13. <https://doi.org/10.4135/9781412914291.n1>
- Nordin, R., Kaur, A., Soni, T., Por, L., & Miranda, S. (2017). Construct validity and internal consistency reliability of the Malay version of the 21-item depression anxiety stress scale (Malay-DASS-21) among male outpatient clinic attendees in Johor. Retrieved from <http://www.e-mjm.org/2017/v72n5/Malay-DASS-21.pdf>
- Norton, P. J. (2007). Depression, anxiety and stress scales (DASS-21): Psychometric analysis across four racial groups. *Anxiety, Stress & Coping, 20*(3), 253-265. <https://doi.org/10.1080/10615800701309279>
- Ploskonka, R., & Servaty-Seib, H. (2015). Belongingness and suicidal ideation in college students. *Journal Of American College Health, 63*(2), 81-87. <https://doi.org/10.1080/07448481.2014.983928>
- Pollak, J. M. (1979). Correlates of death anxiety: A review of empirical studies. *OMEGA - Journal of Death and Dying, 10*(2), 97-121. <https://doi.org/10.2190/4kg5-hbh0-nnme-dm58>
- Regehr, C., Glancy, D., & Pitts, A. (2013). Interventions to reduce stress in university students: A review and meta-analysis. *Journal Of Affective Disorders, 148*(1), 1-11. <https://doi.org/10.1016/j.jad.2012.11.026>
- Schmidt, N. & Sermat, V. (1983). Measuring loneliness in different relationships. *Journal of Personality and Social Psychology, 44*, 1038-1047.
- Schumaker, J. F., Barraclough, R. A., & Vagg, L. M. (1988). Death anxiety in Malaysian and Australian university students. *The Journal of Social Psychology, 128*(1), 41-47. <https://doi.org/10.1080/00224545.1988.9711682>
- Sharpe, L., Curran, L., Butow, P., & Thewes, B. (2018). Fear of cancer recurrence and death anxiety. *Psycho-oncology, 27*(11), 2559-2565. <https://doi.org/10.1002/pon.4783>

MALAYSIAN ONLINE JOURNAL OF PSYCHOLOGY & COUNSELING

- Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics*. Boston, MA: Pearson.
- Tai, K. L., Ng, Y. G., & Lim, P. Y. (2019). Systematic review on the prevalence of illness and stress and their associated risk factors among educators in Malaysia. *PloS One*, 14(5), e0217430. <https://doi.org/10.1371/journal.pone.0217430>
- Taliaferro, L. A., & Muehlenkamp, J. J. (2014). Risk factors associated with self-injurious behavior among a national sample of undergraduate college students. *Journal of American College Health*, 63(1), 40-48. <https://doi.org/10.1080/07448481.2014.953166>
- Thiemann, P., Quince, T., Benson, J., Wood, D., & Barclay, S. (2015). Medical students' death anxiety: Severity and association with psychological health and attitudes toward palliative care. *Journal Of Pain And Symptom Management*, 50(3), 335-342.e2. <https://doi.org/10.1016/j.jpainsymman.2015.03.014>
- Thorson, J. A., & Powell, F. C. (1988). Elements of death anxiety and meanings of death. *Journal of Clinical Psychology*, 44(5), 691-701. [https://doi.org/10.1002/1097-4679\(198809\)44:53.0.co;2-d](https://doi.org/10.1002/1097-4679(198809)44:53.0.co;2-d)
- Thorson, J. A., & Powell, F. C. (1992). A revised death anxiety scale. *Death Studies*, 16(6), 507-521. <https://doi.org/10.1080/07481189208252595>
- Tomer, A., & Eliason, G. (1996). Toward a comprehensive model of death anxiety. *Death Studies*, 20(4), 343-365. <https://doi.org/10.1080/07481189608252787>
- Victor, S. E., & Klonsky, E. D. (2014). Correlates of suicide attempts among self-injurers: A meta-analysis. *Clinical Psychology Review*, 34(4), 282-297. <https://doi.org/10.1016/j.cpr.2014.03.005>
- Wang, L., He, C., Yu, Y., Qiu, X., Yang, X. X., Qiao, Z., Sui, H., Zhu, X., & Yang, Y. (2014). Associations between impulsivity, aggression, and suicide in Chinese college students. *BMC Public Health*, 14(1). <https://doi.org/10.1186/1471-2458-14-551>
- Wang, Z., Koenig, H. G., Ma, H., & Shohaib, S. A. (2016). Religion, Purpose in Life, Social Support, and Psychological Distress in Chinese University Students. *Journal of Religion and Health*, 55(3), 1055-1064. <https://doi.org/10.1007/s10943-016-0184-0>
- Yeoh, S. H., Tam, C. L., Wong, C. P., & Bonn, G. (2017). Examining depressive symptoms and their predictors in Malaysia: Stress, locus of control, and occupation. *Frontiers in Psychology*, 8, 1411. <https://doi.org/10.3389/fpsyg.2017.01411>
- Zschoche, M., & Schlarb, A. (2015). Is there an association between insomnia symptoms, aggressive behavior, and suicidality in adolescents? *Adolescent Health, Medicine and Therapeutics*, 29. <https://doi.org/10.2147/ahmt.s76511>