

ORIGINAL ARTICLE

An Exploratory Study of Factors Influencing Help-seeking for Suicidal Ideation in a Sample of Malaysian and Canadian University Students

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ABSTRAK

Terdapat prevalens tingkah laku bunuh diri yang lebih tinggi dalam kalangan pelajar universiti berbanding rakan sebaya mereka dalam populasi umum. Walau bagaimanapun, tahap mendapatkan bantuan dalam kalangan populasi ini adalah rendah walaupun sumber bantuan tersedia. Kami mengkaji faktor-faktor yang mempengaruhi tingkah laku mendapatkan bantuan dalam kalangan pelajar universiti di Malaysia dan Kanada berkaitan dengan niat bunuh diri melalui penilaian tekanan psikologi, tekanan yang dirasakan, daya tahan, sokongan sosial, kemahiran daya tindak dan pengetahuan kesihatan mental. Analisis regresi menggunakan skor 'General Help-Seeking Questionnaire' sebagai pemboleh ubah bersandar menunjukkan bahawa skor yang lebih tinggi pada daya tindak adaptif ($\beta = 0.164$, $p \leq 0.005$) dan sokongan sosial yang lebih baik daripada keluarga ($\beta = 0.311$, $p \leq 0.001$) meramalkan niat mendapatkan bantuan yang lebih tinggi dalam kalangan pelajar universiti. Sebaliknya, tekanan psikologi yang lebih tinggi yang diukur menggunakan K10 ($\beta = -0.160$, $p \leq 0.05$) serta jantina perempuan ($\beta = -0.127$, $p \leq 0.05$) meramalkan kebarangkalian yang lebih rendah untuk mendapatkan bantuan berkaitan isu bunuh diri. Peningkatan dan pengukuhan rangkaian sokongan sosial dalam kalangan populasi ini mungkin merupakan langkah penting dalam meningkatkan tingkah laku mendapatkan bantuan bagi mencegah niat bunuh diri.

Kata kunci: Budaya; keinginan mencari bantuan; niat membunuh diri; pelajar universiti; tingkah laku mencari bantuan

ABSTRACT

There is a higher prevalence of suicidal behaviour in university students in comparison to their counterparts in the general population. However, help-seeking is low in this population despite the provision of resources available to them. We investigated the factors that influence help-seeking in Malaysian and Canadian university students with regards to suicidal intent via assessments of psychological distress, perceived stress, resilience, social support, coping skills and mental health knowledge. A regression

analysis using General Help-Seeking Questionnaire scores as the dependent variable showed that higher scores on adaptive coping ($\beta = 0.164$, $p \leq 0.005$) and better social support from family ($\beta = 0.311$, $p \leq 0.001$) predicted higher help-seeking intentions for suicidality in university students whereas higher psychological distress measured via K10 ($\beta = -0.160$, $p \leq 0.05$) and female gender ($\beta = -0.127$, $p \leq 0.05$) predicted less likelihood of help-seeking intentions for suicidality. Increasing and engaging the social support network of the aforementioned population may be an important intervention in increasing help-seeking for suicidal ideation.

Keywords: Culture; help-seeking behaviour; help-seeking intentions; suicidal ideation; university students

INTRODUCTION

University-going young adults are at a higher risk of exploring suicidal ideas and attempting self-harm compared to their general population counterparts (Leahy et al. 2010). A meta-analysis by Mortier et al. (2018) showed that the lifetime prevalence for suicidal ideation in college students is 22.3% which includes Canada. Multinational studies conducted by Peltzer et al. in 2017 and Eskin et al. in 2019 reported a lifetime prevalence of suicidal ideation in university going students of 0.9-16.3% (Dessauvague et al. 2022). The studies by Peltzer et al. (2017) and Eskin et al. (2019) are relevant to our present study as the population are of Association of Southeast Asian Nations (ASEAN) countries, including Malaysia.

Help-seeking behaviour for mental health issues in college students are low, with less than a third of those with emotional difficulties seeking help (Zhao et al. 2025). University students are less likely to seek help compared to those who are not despite similar risks for mental illness (Eisenberg et al. 2012). Improved understanding of factors influencing help-seeking behaviour are vital to developing population-specific prevention and intervention programs.

Cross-national studies have shown that only a quarter of university students reported being willing to seek-help for a future emotional problem. Barriers to seeking formal support for mental health problems included individual-level factors such as the preference for self-help or informal support from family, feeling embarrassed about requiring professional help and psychiatric conditions such as suicidal

thoughts and behaviours, existing major depression and alcohol use disorder (Ebert et al. 2019). However, data from Ebert et al. (2019) had limited representation of low-and-middle-income countries as only two out of eight countries i.e Mexico and Africa, included in the study were of that economical category. Therefore, there is limited generalisability of all study findings as Malaysia is a Southeast-Asian upper-to-middle income country. Another meta-analysis and systematic review by Zhao et al. in 2025 showed that formal help-seeking remains low despite an overall increase in trend for help-seeking behaviour among college students with mental health problems. The prominent barriers of help-seeking were self-reliance, lack of time, limited awareness of available resources and lack of perceived need (Zhao et al. 2025). Similar to the data available in the study by Ebert et al. in 2019, majority of the data was from high income countries. Only seven out of 53 studies were conducted in low and middle income countries.

While there are several published studies of help-seeking for suicidal ideation among university student populations, findings are either limited to relatively homogenous ethnic groups in Sweden (Joiner Jr et al. 2006) and China (Han et al. 2018), or did not explore the role of ethnic diversity in Australia (Chan et al. 2014). Malaysia is an upper-middle-income, South-East-Asian, multiracial and multi-religious nation, with increasing influence of Western culture especially among young adults (Mun et al. 2015). Canada is a high-income, Western country that is increasingly becoming heterogenous, especially

in urban areas, with an increase in the number of ethnic minorities (Vézina et al. 2017). Despite studies of risk factors and prevalence of suicidal behaviour in these two countries, there is limited information on the help-seeking intentions for suicidal ideation among university students in Malaysia and Canada.

The aim of this investigation is to investigate sociocultural and psychological factors influencing help-seeking intentions for suicidal ideation among a cohort of culturally heterogeneous first-year university students from Malaysia and Canada. The association between help-seeking intentions for suicidal ideations and socio-demographic factors, psychological distress, perceived stress, resilience, coping skills (including religious coping) perceived social support, mental health knowledge and stigma were explored.

MATERIALS AND METHOD

Study Design

This study is part of a larger study of university students from Malaysia and Canada conducted after approval from the ethics review boards of the respective universities. Ethical approval was obtained from the Ethical Review Committee of Universiti Kebangsaan Malaysia (UKM) (UKM PPI/111/8/JEP-2016-482) and University of Toronto Scarborough Canada (#31091) in August 2016 and January 2015, respectively.

For logistic reasons and due to time constraints, convenience sampling was employed. Hence, all first-year undergraduate medical students who registered at the Malaysian university for year 2016 were selected, while participants from the Canadian university were recruited from first-year undergraduates registered for the 2015-2016 academic year. Participants were excluded if they were first-year repeaters to ensure homogeneity of the cohort of students. Including first year repeaters could potentially introduce confounders and heterogeneity as their experience in the university may be understandably different in comparison to a new

batch of first years. Participants were enrolled only after full and informed written consent was obtained.

Measures

(i) Help-seeking for suicidal thoughts

Help-seeking intent was measured using the General Help-Seeking Questionnaire (GHSQ). The 14-item questionnaire was divided into two domains; personal/emotional problems and suicidal ideation, with subscales to determine formal, informal or no help-seeking (Deane et al. 2001). Items were rated on a 7-point Likert scale with higher scores indicating higher help-seeking intentions. Formal help-seeking was categorised as help from mental health professional, family doctor/GP, phone helpline and religious figures. Informal help source referred to family, intimate partner or friends (Rickwood et al. 2007). The GHSQ had good reliability and validity in various populations (Rickwood et al. 2005; Wilson et al. 2005). Pre-test Cronbach's alpha in a Malaysian sample was 0.842 for total GHSQ scores and 0.835 for the subscale of suicidal thoughts. In this study, Cronbach's alpha for the University of Toronto Scarborough Canada (UTSC) cohort was 0.861 for total GHSQ scores and 0.824 for the subscale of suicidal thoughts, while Cronbach's alpha of GHSQ for the UKM cohort was 0.808 for total GHSQ scores and 0.705 for the suicidal thoughts subscale.

(ii) Psychological distress

The Kessler Psychological Distress Scale (K10) is a self-administered screening tool of emotional distress (Andrews & Slade 2001; Kessler et al. 2002) with 10 items pertaining to the preceding 30 days, with responses being on a 5-point Likert scale. Higher scores indicated greater levels of psychological distress. The K-10 had been widely used in university populations, with established levels of reliability and validity in Canada and Malaysia. K10 had been validated in Canadian populations (Cairney et al. 2007; Vasiliadis et al.

2015), while in Malaysia, although the English version of K10 had previously been used (Ong et al. 2016; Rajiah et al. 2014), only the Malay version had been validated (Tiong et al. 2018). Pre-test Cronbach's alpha was 0.841. In this study, the Cronbach's alpha for the UKM and UTSC cohort were 0.843 and 0.918, respectively.

(iii) Perceived stress

Perception of stress was measured using the Perceived Stress Scale (PSS), a 14-item questionnaire which rated the experiences of stress over the preceding month on a 5-point scale. Higher scores indicated greater levels of perceived stress (Cohen et al. 1983). The PSS had been translated into several languages and used in different countries, including Malaysia and Canada, with good psychometric properties (Al-Dubai et al., 2012; Andreou et al. 2011; Özücü & Demir 2009; Cohen et al. 1983; Lee 2012; Lesage et al. 2012; Mimura & Griffiths 2004; Remor 2006). The Cronbach's alpha for PSS in this study was 0.748 for the UKM cohort, and 0.816 for the UTSC cohort.

(iv) Resilience

This was measured using the 14-item Resilience Scale (RS-14). Higher scores indicated better psychological resilience (Wagnild & Young 1993). The use of the RS-14 in a wide range of study populations had shown it to be a reliable and valid tool (Damásio et al. 2011; Pritzker & Minter 2014; Wagnild 2009), including in populations of university students (Abiola & Udofia, 2011; Aiena et al. 2015; Nishi et al. 2010). Pre-test Cronbach's alpha in a sample of Malaysian medical students was 0.931. In this study, the Cronbach's alpha for the UKM and UTSC cohorts were 0.889 and 0.913 respectively

(iv) Coping strategies

The Brief Coping Scale (COPE) is a 28-item questionnaire with a 4-point scale of response (Carver 1997). It was used to qualify coping

styles into adaptive and maladaptive strategies. The use of Brief COPE had been found to be reliable in Canadian populations (Fillion et al. 2002; Jibeen & Khalid 2010), while in Malaysia, both the English and Malay versions had been validated with good psychometric properties (Yusoff 2010; Yusoff 2011). Cronbach's alpha in this study was 0.793 for the UKM cohort and 0.857 for the UTSC cohort.

(v) Social support

Perceived social support was evaluated using the 12-item Multidimensional Scale of Perceived Social Support (MSPSS), measuring perceived support from family, friends and significant other (Zimet et al. 1988). Higher scores indicated greater perceived social support. The MSPSS had been used in various populations, including university students, with reliable psychometric properties (Bruwer et al. 2008; Canty-Mitchell & Zimet 2000; Chou 2000; Clara et al. 2003; Edwards 2004; Zimet et al. 1990). MSPSS had been validated in populations in both Canada and Malaysia (Clara et al., 2003; Kazarian & McCabe 1991; Ng et al. 2010; Talwar & Ar 2013). In this study, the value of Cronbach's alpha was 0.869 for the UKM cohort and 0.921 for the UTSC cohort (Validated in Malaysia).

(vi) Mental health knowledge

Mental health knowledge and stigma was measured using the Mental Health Knowledge and Attitudes Scale (MHKAS) (Kutcher et al. 2013). This scale had 28 items measuring knowledge of mental health, with higher scores indicating better knowledge, and 8 items measuring attitude towards mental illnesses, with higher scores indicating lower stigma (Ravindran et al. 2018). Pre-test Cronbach's alpha value was 0.570, while in this study, values were 0.649 and 0.761 for the UKM and UTSC cohorts respectively.

(vii) Demographics

Demographic data including age, gender, ethnicity and course of study were collected from all participants. For the Malaysian cohort, religion was also recorded.

Data Analysis

Statistical analysis was conducted using the Statistical Package for the Social Sciences (SPSS) version 20 (IBM Corp, Armonk, NY, USA). Participants who had completed all the measures were included in the analysis. Demographic data were analysed with T-tests and Mann-Whitney U tests. The correlation of each measure to the help-seeking intent for suicidal thoughts were analysed with either Pearson or one-way analysis of variance (ANOVA) for parametric data, or Spearman or Kruskal-Wallis for nonparametric data.

Prior to multiple linear regression analysis, assumptions were assessed. Linearity between continuous independent variables and total GHSQ scores was evaluated using scatterplots and residual plots. Normality of residuals was assessed using histogram and normal probability

(Q-Q) plots. Homoscedasticity was examined by visual inspection of residuals versus fitted values. Independence of observations was ensured by study design. Multicollinearity was assessed using variance inflation factors (VIFs), with no evidence of problematic multicollinearity.

Cohort, gender, K10, PSS, Brief COPE (adaptive subscale), RS14, MHKAS aAttitude, MHKAS Knowledge, MSPSS Family, MSPSS Friends and MSPSS Significant Other were entered into a multiple linear regression model after regression assumptions were assessed.

RESULTS

The Malaysian cohort comprised 139 students from the Faculty of Medicine, while the Canadian cohort consisted of 224 students from the Faculties of Business Administration (6%), Arts (18%) and Science (76%). Table 1 showed the demographics of the two cohorts. The Malaysian cohort was slightly older than the Canadian cohort ($p < 0.001$), but there were no gender differences ($\chi^2 = 1.03$, $p = 0.311$).

TABLE 1: Demographics of the respondents

Characteristic	Cohort			
	Malaysia (n = 139)		Canada (n = 224)	
	Mean	SD	Mean	SD
Age	18.98	0.19	18.23	2.18
	n	%	n	%
Gender				
Female	98	70.5	169	65
Ethnicity				
Malaysia				
Malay	73	52.5	-	-
Chinese	33	23.7	-	-
Indian	27	19.4	-	-
Other	6	4.3	-	-
Canada				
White (North American, European)	-	-	39	17.4
Black (African, North American, Caribbean)	-	-	18	8.0
Asian	-	-	133	59.4
Other	-	-	34	15.2
Religion				
Muslim	74	53.2	-	-

Total Help-seeking Intentions for Suicidal Thoughts

Analyses were conducted to determine the relationship between the score on GHSQ and other clinical measures and the demographic variables. For the Malaysian cohort, higher use of religion as coping ($r = 0.180$, $p = 0.034$) and higher perceived support from friends ($r = 0.249$, $p = 0.003$) were positively correlated with intention to seek help for suicidal thoughts. Females were less likely to seek help compared to males ($t = 2.002$, $df = 137$, $p = 0.047$). There were no significant associations between age, religion, and ethnicity and total help-seeking intentions.

For the Canadian cohort, the degree of resilience ($r = 0.284$, $p < 0.001$) and the use of several coping measures including adaptive coping skills in general ($r = 0.229$, $p < 0.001$), active coping ($r = 0.206$, $p = 0.003$), instrumental coping ($r = 0.265$, $p < 0.001$), emotional coping ($r = 0.248$, $p < 0.001$), planning ($r = 0.159$, $p = 0.022$) and religion ($r = 0.156$, $p = 0.025$) correlated significantly with help-seeking. Similarly higher perceived social support ($r = 0.349$, $p < 0.001$), including the subscales of family ($r = 0.409$, $p < 0.001$), friends ($r = 0.205$, $p = 0.003$), and significant other ($r = 0.220$, $p < 0.001$) indicated greater likelihood of help-seeking for suicidal thoughts. Higher levels of psychological distress (K10: $r = -0.228$, $p < 0.001$), perceived stress ($r = -0.188$, $p = 0.007$) and the use of maladaptive coping skills in general ($r = -0.254$, $p < 0.001$) were associated with less likelihood of help-seeking. There were no significant demographic associations with total help-seeking intentions for suicidal thoughts.

Bivariate Correlations between MSPSS and Help-seeking Intentions for Suicidal Thoughts

There were significant correlations between the GHSQ and MSPSS, compared to the other measures. The Canadian cohort had a greater likelihood of seeking help for suicide with higher total and subscale MSPSS scores (Table 2). Formal help-seeking was positively correlated

with total ($p = 0.004$) and family subscale ($p < 0.001$) scores, while informal help-seeking was positively correlated with total ($p < 0.001$), family ($p < 0.001$), friends ($p < 0.001$) and significant other ($p < 0.001$) scores.

For the Malaysian cohort, greater likelihood of total help-seeking was predicted by total and friends subscale MSPSS scores. There were no significant correlations for formal help-seeking, while informal help-seeking was positively correlated with total ($p < 0.001$), friends ($p < 0.001$), and significant other ($p = 0.009$) scores.

Regression Analysis

Cohort, gender, K10, PSS, Brief COPE (adaptive subscale), RS14, MHKAS Attitude, MHKAS Knowledge, MSPSS Family, MSPSS Friends, and MSPSS Significant Other were checked for assumptions and entered into a multiple linear regression model, with total GHSQ scores as the dependent variable (Table 3). There was a collective significant effect between the independent variables ($F(11, 333) = 8.188$, $p < 0.001$, $R^2 = 0.213$). Higher scores on adaptive coping ($t = 2.83$, $p = 0.005$) and better social support from the family ($t = 4.97$, $p < 0.001$) predicted higher help-seeking intentions for suicidal ideation, while higher scores on K10 ($t = -2.33$, $p = 0.020$) and being female ($t = -2.50$, $p = 0.013$) predicted less likelihood of help-seeking intentions for suicidal ideation. The final regression model showed 21.3% of variance which was a modest figure. Although the model was significant, a large portion (78.7%) of the variance in help-seeking intentions remained unexplained by the variables in this study.

DISCUSSION

This study examined the association between help-seeking intentions for suicidal thoughts and demographic and psychological factors among first-year university students from Malaysian and Canadian universities. We found that being male, high degree of perceived social support from the family, lower psychological distress

TABLE 2: Association between MSPSS and formal, informal and no help-seeking intentions for suicidal thoughts

Variable	Cohort	
	Malaysia (n = 139)	Canada (n = 224)
Total help-seeking		
MSPSS		
Total	0.127	0.349***
Family	0.053	0.409***
Friends	0.249**	0.205**
Significant other	0.043	0.220***
Formal help-seeking		
MSPSS		
Total	-0.050	0.201**
Family	-0.009	0.292***
Friends	0.082	0.073
Significant other	-0.101	0.106
Informal help-seeking		
MSPSS		
Total	0.300***	0.373***
Family	0.085	0.410***
Friends	0.351***	0.230***
Significant other	0.222*	0.249***
No help-seeking		
MSPSS		
Total	-0.045	-0.382***
Family	-0.075	-0.361***
Friends	-0.100	-0.278***
Significant other	0.004	-0.307***

Note. * $p \leq 0.05$, ** $p \leq 0.005$, *** $p \leq 0.001$.

MSPSS: Multidimensional Scale of Perceived Social Support. Values obtained using Spearman's correlation.

TABLE 3: Regression analysis of total help-seeking intentions for suicidal thoughts

Independent Variables	B	SE B	β
Cohort	3.066	2.247	0.133
Gender	-3.114	1.245	-0.127*
K10	-0.215	0.092	-0.160*
PSS	0.103	0.115	0.071
RS14	0.090	0.059	0.094
Brief COPE (Adaptive)	0.214	0.076	0.164**
MSPSS (Family)	2.426	0.488	0.311***
MSPSS (Friends)	0.354	0.538	0.038
MSPSS (Significant other)	0.106	0.421	0.014
MHKAS (Knowledge)	-0.033	0.144	-0.013
MHKAS (Attitude)	0.092	0.080	0.078
R^2		0.213***	

Note. * $p \leq 0.05$, ** $p \leq 0.005$, *** $p \leq 0.001$. Cohort coded as 0: Malaysia, 1: Canada. Gender coded as 0: Male, 1: Female. K10: Kessler Psychological Distress Scale; PSS: Perceived Stress Scale; RS14: Resilience Scale; MSPSS: Multidimensional Scale of Perceived Social Support; MHKAS: Mental Health Knowledge and Attitude Scale

and possessing adaptive coping skills predicted greater likelihood of help-seeking for suicidal ideation among students. Among them, gender and family support were of higher predictive value compared to levels of psychological distress and use of coping skills.

In contradiction to our finding, previous research has shown that females are more likely to seek help for suicidal ideation compared to men (Eisenberg et al. 2007). Subjects in this study comprised largely of students pursuing medical, health and science studies. Females in these fields were shown to be at a higher risk for poor mental health and suicide but were also less likely to seek help (Hawton et al., 2011; Schernhammer & Colditz 2004). It is possible that the factors which influence their help-seeking behaviour may already be applicable to female university students (Van Wyk et al. 2016).

Gender role attitudes towards help-seeking have shifted to a more equal and less traditional perspective (Boehnke 2011), and combined with an environment which acknowledges the seriousness of suicidal thoughts, this may have contributed to better help-seeking for suicidal ideation among males in this study. Alternatively, the gender-related findings could be explained by the small sample size of the subjects and the over-representation of females.

This study measured stigma through mental health knowledge and found no direct relationship to help-seeking. However, it is pertinent to note that a lack of finding in the aforementioned relationship between stigma and help-seeking may be contributed by the less than ideal Cronbach's alpha value of 0.649 (pre-test value is 0.570) for the Mental Health Knowledge and Attitudeness Scale. Although stigma may significantly influence help-seeking, the evidence has been mixed (Golberstein et al. 2009; Pedersen & Paves 2014), suggesting the presence of other potential moderators (Eisenberg et al. 2012).

This study found that better social support predicted higher likelihood of help-seeking for suicidal ideation and thus the impact of resource availability. This is in keeping with previous reports of resource availability (Benight & Bandura 2004)

directly increasing the likelihood of help-seeking whether informally through the individual's social network (Czyz et al. 2013; Yakunina et al. 2010) or formally due to the social network encouraging professional help-seeking (Downs & Eisenberg 2012). In this context, thwarted belongingness and perceived burdensomeness, both reflecting poor perceived social support, has been suggested as contributing to suicidal ideation (Barzilay et al. 2015; Van Orden et al. 2010), which can be effectively reduced by good social support.

Both cohorts consisted largely of students of Asian ethnicity, making up 74.9% of the combined cohort. Several studies found Asian ethnicities to be less willing to seek help for mental health issues compared to their non-Asian counterparts (Kim & Zane 2016; Okazaki et al. 2014). Tang and Masicampo (2018) suggested perceived burdensomeness as a mediator between race and help-seeking for suicidal ideation among Asian American college students. This proposition is supported by our findings that perceived social support is associated with increased likelihood of help-seeking. Better social support from the family has been noted to lower the perceived burden of the individual, reduce the effects of values of self-resilience and avoidance of shame (Chan & Thambu 2016), and increases the likelihood of help-seeking for mental illnesses. Furthermore, social support may serve both as a buffer for cultural values (Shavitt et al. 2016) or act independently of cultural factors (Šedivý et al. 2017).

Our findings suggest that strategies to reduce suicidal behaviour should increase both the likelihood of help-seeking as well as devise more effective help-seeking pathways. As participants in this study consisted of first-year university students, the results show that factors that influence help-seeking intentions for suicide are present early in the course of studies. It is imperative that prevention programs be implemented from the first year of studies, such as mentorship programs, peer support groups, and extra-curricular activities encouraging altruistic behaviour and increasing engagement

with the community. As university students may be more likely to seek informal help, empowering students to recognise signs of distress, making them aware of how to help their peers, and providing information on pathways to help may improve help-seeking (Micheltore & Hindley 2012).

The involvement of family and the community is important in reducing the negative views of mental illness and improving mental health knowledge leading to early recognition and effective intervention (Okazaki et al. 2014). Implementation of culturally sensitive psychoeducation programs with community outreach programs and the educational system, as well as engagement with parents have been shown to be effective (Goldston et al. 2008).

Previous studies of help-seeking for suicidal ideation in young adults have reported several barriers to help-seeking, including negative attitudes towards obtaining help and the presence of suicidal ideation itself. Logistic barriers such as cost, time, transport and access to treatment were also contributory factors, as well as negative beliefs about treatment, self-reliance, low perceived need for help and stigma (Czyz et al. 2013; Downs & Eisenberg 2012). On the other hand, positive attitudes toward treatment, personal experience of previous help-seeking, severity of suicidal ideation, knowledge about treatment and the availability of a social support network were found to promote help-seeking (Downs & Eisenberg 2012; Hunt & Eisenberg 2010; Yakunina et al. 2010). Positive coping skills and conducive environments also encourage help-seeking for any reason (Barker et al. 2005).

We acknowledge the difference in the field of studies of the Malaysian and Canadian students i.e. medical students from the Malaysian cohort compared to students from Business, Arts and Science in the Canadian cohort. The nature of the different courses itself impacts the students differently as they are exposed to different stressors with regards to their education. This may limit the impact of comparative findings in our study and should be a primary interpretive filter for all findings.

Limitations

This is an exploratory study in two countries that may not have comparable cohorts. The generalisability of this study is limited by the selection method of the participants, as the findings may be attributed to factors such as the university, course and timepoint of data collection. Use of self-report questionnaires with Likert scales may also have resulted in biases. The cross-sectional nature of this study limits the findings to associations and not causations, and the results may not translate similarly into the long-term. While this study looked at help-seeking intentions for suicidal ideation, the participants were not assessed for the presence of suicidal ideation or history of suicide attempts. Another limitation that may have impacted our study findings was the usage of general mental health knowledge and stigma measurements rather than newer and more suicide specific knowledge and stigma scales such as the Literacy of Suicide Scale, (LOSS) (Calear et al. 2021) and Stigma of Suicide scale (SOS) (Batterham et al. 2013). The lack of the validation of the Mental Health Knowledge and Attitudeness Scale to assess stigma may have contributed to the non-significant findings in relation to help-seeking behaviour for suicidal ideation in our study populations. Future studies should consider using validated tools to measure stigma, involving larger sample sizes and several different universities and courses of study. This would allow for better understanding of help-seeking intentions for suicidal thoughts among more globally-represented university students. Furthermore, translation of help-seeking intentions into measurable behavioural changes such as the number of referrals sought for suicidal ideation and attendance of appointments to mental health services as well as rates of suicidal behaviour are important areas for future research.

CONCLUSION

This preliminary investigation explored factors related to help-seeking for suicidal thoughts in university students. A key finding is that

good quality social support may facilitate help-seeking intentions for suicidal thoughts. This finding reinforces the importance of engaging and empowering the social support network in order to increase the effectiveness of informal help-seeking and encourage formal help-seeking among university students. It found that female students may be less likely to seek help, which needs further systematic study with larger numbers of students exploring the role of relevant demographic and psychosocial factors.

Data availability statements: The datasets generated and/or analysed for this study are not publicly available due confidentiality and privacy purposes but are available from the corresponding author on reasonable request.

Author contributions: Study conceptualisation and design: FS, TS, TIMD, AR, LFC; Data collection: FS, TS; NHAR; Data analysis: FS; TIMD; Supervision: AR, TIMD, SB, MM, RAM, LFC; Writing-original draft: FS, NWO, SKM, LFC; Writing-review and editing: FS, TS, TIMD, AR, SB, MM, NHAR, NWO, SKM, RAM, LFC. All authors read and approved the final manuscript.

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REFERENCES

Abiola, T., Udofoia, O. 2011. Psychometric assessment of the Wagnild and Young's resilience scale in Kano, Nigeria. *BMC Research Notes* 4: 1-5.

- <https://doi.org/10.1186/1756-0500-4-509>
- Aiena, B.J., Baczwaski, B.J., Schulenberg, S.E., Buchanan, E.M. 2015. Measuring resilience with the RS-14: A tale of two samples. *J Pers Assess* 97(3): 291-300. <https://doi.org/10.1080/00223891.2014.951445>
- Al-Dubai, S.A., Alshagga, M.A., Rampal, K.G., Sulaiman, N.A. 2012. Factor structure and reliability of the Malay version of the perceived stress scale among Malaysian medical students. *Malays J Med Sci* 19(3): 43-9.
- Andreou, E., Alexopoulos, E.C., Lionis, C., Varvogli, L., Gnardellis, C., Chrousos, G.P., Darviri, C. 2011. Perceived stress scale: Reliability and validity study in Greece. *Int J Environ Res Public Health* 8(8): 3287-98. <https://doi.org/10.3390/ijerph8083287>
- Andrews, G., Slade, T. 2001. Interpreting scores on the Kessler psychological distress scale (K10). *Australian and New Zealand Journal of Public Health* 25(6): 494-7. <https://doi.org/10.1111/j.1467-842X.2001.tb00310.x>
- Barker, G., Olukeya, A., Aggleton, P. 2005. Young people, social support and help-seeking. *Int J Adolesc Med Health* 17(4): 315-36. <https://doi.org/10.1515/IJAMH.2005.17.4.315>
- Barzilay, S., Feldman, D., Snir, A., Apter, A., Carli, V., Hoven, C., Wasserman, C., Sarchiapone, M., Wasserman, D. 2015. The interpersonal theory of suicide and adolescent suicidal behavior. *J Affect Disord* 183: 68-74. <https://doi.org/10.1016/j.jad.2015.04.047>
- Batterham, P.J., Caele, A.L., Christensen, H. 2013. The stigma of suicide scale. Psychometric properties and correlates of the stigma of suicide. *Crisis* 34(1): 13-21. <https://doi.org/10.1027/0227-5910/a000156>
- Benight, C.C., Bandura, A. 2004. Social cognitive theory of posttraumatic recovery: The role of perceived self-efficacy. *Behav Res Ther* 42(10): 1129-48. <https://doi.org/10.1016/j.brat.2003.08.008>
- Boehnke, M. 2011. Gender role attitudes around the globe: Egalitarian vs. traditional views. *Asian J Soc Sci* 39(1): 57-74. <https://doi.org/10.1163/156853111X554438>
- Bruwer, B., Emsley, R., Kidd, M., Lochner, C., Seedat, S. 2008. Psychometric properties of the multidimensional scale of perceived social support in youth. *Comprehensive psychiatry* 49(2): 195-201. <https://doi.org/10.1016/j.comppsych.2007.09.002>
- Cairney, J., Veldhuizen, S., Wade, T.J., Kurdyak, P., Streiner, D.L. 2007. Evaluation of 2 measures of psychological distress as screeners for depression in the general population. *Can J Psychiatry* 52(2): 111-20. <https://doi.org/10.1177/070674370705200209>

- Calear, A.L., Batterham, P.J., Trias, A., Christensen, H. 2021. The literacy of suicide scale. *Crisis* 43(5): 385-90. <https://doi.org/10.1027/0227-5910/a000798>
- Canty-Mitchell, J., Zimet, G.D. 2000. Psychometric properties of the multidimensional scale of perceived social support in urban adolescents. *Am J Commun Psychol* 28(3): 391-400. <https://doi.org/10.1023/A:1005109522457>
- Carver, C.S. 1997. You want to measure coping but your protocol's too long: Consider the brief cope. *Int J Behav Med* 4(1): 92-100. https://doi.org/10.1207/s15327558ijbm0401_6
- Chan, L.F., Thambu, M. 2016. Cultural factors in suicide prevention. In *The International Handbook of Suicide Prevention*. Edited by O'Connor RC, Pirkis J. John Wiley & Sons, Ltd.; 541-55. <https://doi.org/10.1177/0020764018792585>
- Chan, W.I., Batterham, P., Christensen, H., Galletly, C. 2014. Suicide literacy, suicide stigma and help-seeking intentions in Australian medical students. *Australas Psychiatry* 22(2): 132-9. <https://doi.org/10.1177/1039856214522528>
- Chou, K.L. 2000. Assessing Chinese adolescents' social support: The multidimensional scale of perceived social support. *Pers Individ Dif* 28(2): 299-307. [https://doi.org/10.1016/S0191-8869\(99\)00098-7](https://doi.org/10.1016/S0191-8869(99)00098-7)
- Clara, I.P., Cox, B.J., Enns, M.W., Murray, L.T., Torgudic, L.J. 2003. Confirmatory factor analysis of the multidimensional scale of perceived social support in clinically distressed and student samples. *J Pers Assess* 81(3): 265-70. https://doi.org/10.1207/S15327752JPA8103_09
- Cohen, S., Kamarck, T., Mermelstein, R. 1983. A global measure of perceived stress. *J Health Soc Behav* 24(4): 385-96. <https://doi.org/10.2307/2136404>
- Czyz, E.K., Horwitz, A.G., Eisenberg, D., Kramer, A., King, C.A. 2013. Self-reported barriers to professional help seeking among college students at elevated risk for suicide. *J Am Coll Health* 61(7): 398-406. <https://doi.org/10.1080/07448481.2013.820731>
- Damásio, B.F., Borsa, J.C., Da Silva, J.P. 2011. 14-item resilience scale (RS-14): Psychometric properties of the Brazilian version. *J Nurs Meas* 19(3): 131-45. <https://doi.org/10.1891/1061-3749.19.3.131>
- Deane, F.P., Wilson, C.J., Ciarrochi, J. 2001. Suicidal ideation and help-negation: Not just hopelessness or prior help. *J Clin Psychol* 57(7): 901-14. <https://doi.org/10.1002/jclp.1058>
- Dessauvagie, A.S., Dang, H.M., Nguyen, T.A.T., Groen, G. 2022. Mental health of university students in Southeastern Asia: A systematic review. *Asia Pac J Public Health* 34(2-3): 172-81. <https://doi.org/10.1177/10105395211055545>
- Downs, M.F., Eisenberg, D. 2012. Help seeking and treatment use among suicidal college students. *J Am Coll Health* 60(2): 104-14. <https://doi.org/10.1080/07448481.2011.619611>
- Ebert, D.D., Mortier, P., Kahlke, F., Bruffaerts, R., Baumeister, H., Auerbach, R.P., Alonso, J., Vilagut, G., Martínez, K.U., Lochner, C. 2019. Barriers of mental health treatment utilization among first-year college students: First cross-national results from the WHO World Mental Health International College Student Initiative. *Int J Methods Psychiatr Res* 28(2): e1782. <https://doi.org/10.1002/mpr.1782>
- Edwards, L.M. 2004. Measuring perceived social support in Mexican American youth: Psychometric properties of the multidimensional scale of perceived social support. *Hispanic J Behav Sci* 26(2): 187-94. <https://doi.org/10.1177/0739986304264374>
- Eisenberg, D., Golberstein, E., Gollust, S.E. 2007. Help-seeking and access to mental health care in a university student population. *Med Care* 45(7): 594-601. <https://doi.org/10.1097/MLR.0b013e31803bb4c1>
- Eisenberg, D., Hunt, J., Speer, N. 2012. Help seeking for mental health on college campuses: Review of evidence and next steps for research and practice. *Harv Rev Psychiatry* 20(4): 222-32. <https://doi.org/10.3109/10673229.2012.712839>
- Eskin, M., AlBuhairan, F., Rezaeian, M., Abdel-Khalek, A.M., Harlak, H., El-Nayal, M., Asad, N., Khan, A., Mechri, A., Noor, I.M., Hamdan, M., Isayeva, U., Khader, Y., Al Sayyari, A., Khader, A., Behzadi, B., Öztürk, C.Ş., Hendarmin, L.A., Khan, M.M., Khatib, S. 2019. Suicidal thoughts, attempts and motives among university students in 12 Muslim-majority countries. *Psychiatr Q* 90(1): 229-48. <https://doi.org/10.1007/s1126-018-9613-4>
- Fillion, L., Kovacs, A.H., Gagnon, P., Endler, N.S. 2002. Validation of the shortened COPE for use with breast cancer patients undergoing radiation therapy. *Curr Psychol* 21: 17-34. <https://doi.org/10.1007/BF02903157>
- Golberstein, E., Eisenberg, D., Gollust, S.E. 2009. Perceived stigma and help-seeking behavior: longitudinal evidence from the healthy minds study. *Psychiatr Serv* 60(9): 1254-6. <https://doi.org/10.1176/ps.2009.60.9.1254>
- Goldston, D.B., Molock, S.D., Whitbeck, L.B., Murakami, J.L., Zayas, L.H., Hall, G.C.N. 2008. Cultural considerations in adolescent suicide prevention and psychosocial treatment. *Am Psychol* 63(1): 14-31. <https://doi.org/10.1037/0003-066X.63.1.14>
- Han, J., Batterham, P.J., Calear, A.L., Ma, J. 2018. Seeking professional help for suicidal ideation: A comparison between Chinese and Australian university students. *Psychiatry Res* 270: 807-14. <https://doi.org/10.1016/j.psychres.2018.10.080>
- Hawton, K., Agerbo, E., Simkin, S., Platt, B., Mellanby, R.J. 2011. Risk of suicide in medical and related occupational groups: a national study based

- on Danish case population-based registers. *J Affect Disorders* 134(1-3): 320-6. <https://doi.org/10.1016/j.jad.2011.05.044>
- Hunt, J., Eisenberg, D. 2010. Mental health problems and help-seeking behavior among college students. *J Adolesc Health* 46(1): 3-10. <https://doi.org/10.1016/j.jadohealth.2009.08.008>
- Jibeen, T., Khalid, R. 2010. Predictors of psychological well-being of Pakistani immigrants in Toronto, Canada. *Int J Intercult Relat* 34(5): 452-64. <https://doi.org/10.1016/j.ijintrel.2010.04.010>
- Joiner Jr, T.E., Hollar, D., Orden, K.V. 2006. On Buckeyes, Gators, Super Bowl Sunday, and the Miracle on Ice: "Pulling together" is associated with lower suicide rates. *J Soc Clin Psychol* 25(2): 179-95. <https://doi.org/10.1521/jscp.2006.25.2.179>
- Kazarian, S.S., McCabe, S.B. 1991. Dimensions of social support in the MSPSS: Factorial structure, reliability, and theoretical implications. *J Commun Psychol* 19(2): 150-60. [https://doi.org/10.1002/1520-6629\(199104\)19:2%3C150::AID-ICOP2290190206%3E3.0.CO;2-I](https://doi.org/10.1002/1520-6629(199104)19:2%3C150::AID-ICOP2290190206%3E3.0.CO;2-I)
- Kessler, R.C., Andrews, G., Colpe, L.J., Hiripi, E., Mroczek, D.K., Normand, S.-L., Walters, E. E., Zaslavsky, A.M. 2002. Short screening scales to monitor population prevalences and trends in non-specific psychological distress. *Psychol Med* 32(6): 959-76. <https://doi.org/10.1017/S0033291702006074>
- Kim, J.E., Zane, N. 2016. Help-seeking intentions among Asian American and White American students in psychological distress: Application of the health belief model. *Cultur Divers Ethnic Minor Psychol* 22(3): 311-21. <https://doi.org/10.1037/cdp0000056>
- Kutcher, S., Wei, Y., Mcluckie, A., Bullock, L. 2013. Educator mental health literacy: A programme evaluation of the teacher training education on the mental health & high school curriculum guide. *Adv Sch Ment Health Promot* 6(2): 83-93. <https://doi.org/10.1080/1754730X.2013.784615>
- Leahy, C.M., Peterson, R.F., Wilson, I.G., Newbury, J.W., Tonkin, A.L., Turnbull, D. 2010. Distress levels and self-reported treatment rates for medicine, law, psychology and mechanical engineering tertiary students: Cross-sectional study. *Aust NZ J Psychiatry* 44(7): 608-15. <https://doi.org/10.3109/0004867100364905>
- Lee, E.H. 2012. Review of the psychometric evidence of the perceived stress scale. *Asian Nurs Res* 6(4): 121-7. <https://doi.org/10.1016/j.anr.2012.08.004>
- Lesage, F.X., Berjot, S., Deschamps, F. 2012. Psychometric properties of the French versions of the Perceived Stress Scale. *Int J Occup Med Environ Health* 25: 178-84. <https://doi.org/10.2478/S13382-012-0024-8>
- Michelmores, L., Hindley, P. 2012. Help-seeking for suicidal thoughts and self-harm in young people: A systematic review. *Suicide Life Threat Behav* 42(5): 507-24. <https://doi.org/10.1111/j.1943-278X.2012.00108.x>
- Mimura, C., Griffiths, P. 2004. A Japanese version of the perceived stress scale: Translation and preliminary test. *Int J Nursing Studies* 41(4): 379-85. <https://doi.org/10.1016/j.ijnurstu.2003.10.009>
- Mortier, P., Auerbach, R.P., Alonso, J., Bantjes, J., Benjet, C., Cuijpers, P., Ebert, D.D., Green, J.G., Hasking, P., Nock, M.K., O'Neill, S., Pinder-Amaker, S., Sampson, N.A., Vilagut, G., Zaslavsky, A.M., Bruffaerts, R., Kessler, R.C.; WHO WMH-ICS Collaborators 2018. Suicidal thoughts and behaviors among first-year college students: Results from the WMH-ICS project. *J Am Acad Child Adolesc Psychiatry* 57(4): 263-73.e1. <https://doi.org/10.1016/j.jaac.2018.01.018>
- Mun, A.S., Fern, C.P., Chin, L.C. 2015. Between ethnicization and globalisation: Mediating contesting cultural identities of Malaysian youths. *Geografia* 11(3): 73-82.
- Ng, C., Siddiq, A.A., Aida, S., Zainal, N., Koh, O. 2010. Validation of the Malay version of the Multidimensional Scale of Perceived Social Support (MSPSS-M) among a group of medical students in Faculty of Medicine, University Malaya. *Asian J Psychiat* 3(1): 3-6. <https://doi.org/10.1016/j.ajp.2009.12.001>
- Nishi, D., Uehara, R., Kondo, M., Matsuoaka, Y. 2010. Reliability and validity of the Japanese version of the resilience scale and its short version. *BMC Research Notes* 3: 1-6. <https://doi.org/10.1186/1756-0500-3-310>
- Okazaki, S., Kassem, A.M., Tu, M.C. 2014. Addressing Asian American mental health disparities: Putting community-based research principles to work. *Asian Am J Psychol* 5(1): 4. <https://doi.org/10.1037/a0032675>
- Ong, H.C., Ibrahim, N., Wahab, S. 2016. Psychological distress, perceived stigma, and coping among caregivers of patients with schizophrenia. *Psychol Res Behav Manag* 9: 211-8. <https://doi.org/10.2147/PRBM.S112129>
- Örücü, M.Ç., Demir, A. 2009. Psychometric evaluation of perceived stress scale for Turkish university students. *Stress Health* 25(1): 103-9. <https://doi.org/10.1002/smi.1218>
- Pedersen, E.R., Paves, A.P. 2014. Comparing perceived public stigma and personal stigma of mental health treatment seeking in a young adult sample. *Psych Res* 219(1): 143-50. <https://doi.org/10.1016/j.psychres.2014.05.017>
- Peltzer, K., Yi, S., Pengpid, S. 2017. Suicidal behaviors and associated factors among university students in six countries in the Association of Southeast Asian Nations (ASEAN). *Asian J*

- Psychiatr* 26: 32-8. <https://doi.org/10.1016/j.ajp.2017.01.019>
- Pritzker, S., Minter, A. 2014. Measuring adolescent resilience: An examination of the cross-ethnic validity of the RS-14. *Child Youth Serv Rev* 44: 328-33. <https://doi.org/10.1016/j.chilcyouth.2014.06.022>
- Rajiah, K., Coumaravelou, S., Ying, O.W. 2014. Relationship of test anxiety, psychological distress and academic motivation among first year undergraduate pharmacy students. *Int J Appl Psychol* 4(2): 68-72. <https://doi.org/10.5923/j.ijap.20140402.04>
- Ravindran, A.V., Herrera, A., Da Silva, T.L., Henderson, J., Castrillo, M.E., Kutcher, S. 2018. Evaluating the benefits of a youth mental health curriculum for students in Nicaragua: A parallel-group, controlled pilot investigation. *Glob Ment Health* 5: e4. <https://doi.org/10.1017/gmh.2017.27>
- Remor, E. 2006. Psychometric properties of a European Spanish version of the Perceived Stress Scale (PSS). *Spanish J Psychol* 9(1): 86-93. <https://doi.org/10.1017/S1138741600006004>
- Rickwood, D., Deane, F. P., Wilson, C.J., Ciarrochi, J. 2005. Young people's help-seeking for mental health problems. *Australian e-J Adv Ment Health* 4(3): 218-51. <https://doi.org/10.5172/jamh.4.3.218>
- Rickwood, D.J., Deane, F.P., Wilson, C.J. 2007. When and how do young people seek professional help for mental health problems? *Med J Australia* 187(S7): S35-9. <https://doi.org/10.5694/j.1326-5377.2007.tb01334.x>
- Schernhammer, E.S., Colditz, G.A. 2004. Suicide rates among physicians: A quantitative and gender assessment (meta-analysis). *Am J Psych* 161(12): 2295-302. <https://doi.org/10.1176/appi.ajp.161.12.2295>
- Shavitt, S., Cho, Y.I., Johnson, T.P., Jiang, D., Holbrook, A., Stavrakantonaki, M. 2016. Culture moderates the relation between perceived stress, social support, and mental and physical health. *J Cross Cult Psychol* 47(7): 956-80. <https://doi.org/10.1177/0022022116656132>
- Vézina, M., Maheux, H., Houle, R., Corbeil, J. 2017. Ethnic and cultural origins of Canadians: portrait of a rich heritage. *Ottawa: Statistics Canada*. <https://www12.statcan.gc.ca/census-recensement/2016/as-sa/98-200-x/2016016/98-200-x2016016-eng.cfm> [Accessed on 26 March 2024]
- Talwar, P., Ar, M.F. 2013. Perceived social support among university students in Malaysia: A reliability study. *Malay J Psych* 22(1): 31-8.
- Tang, Y., Masicampo, E. 2018. Asian American college students, perceived burdensomeness, and willingness to seek help. *Asian Am J Psychol* 9(4): 344. <https://doi.org/10.1037/aap0000137>
- Tiong, X.T., Abdullah, N.S.S., Bujang, M.A., Ratnasingam, S., Joon, C.K., Wee, H.L., Venkataraman, K., Tai, E.S., Yip Fong, A. Y. 2018. Validation of the Kessler's Psychological Distress Scale (K10 & K6) in a Malaysian Population. *ASEAN J Psych* 19(1): 1.
- Van Orden, K.A., Witte, T.K., Cukrowicz, K.C., Braithwaite, S.R., Selby, E.A., Joiner Jr, T.E. 2010. The interpersonal theory of suicide. *Psychol Rev* 117(2): 575. <https://doi.org/10.1037/a0018697>
- Van Wyk, J.M., Naidoo, S.S., Moodley, K., Higgins-Opitz, S.B. 2016. Perceptions of final-year medical students towards the impact of gender on their training and future practice. *Adv Med Educ Pract* 23(7): 541-50. <https://doi.org/10.2147/AMEP.S107304>
- Vasiliadis, H.M., Chudzinski, V., Gontijo-Guerra, S., Préville, M. 2015. Screening instruments for a population of older adults: The 10-item Kessler Psychological Distress Scale (K10) and the 7-item Generalized Anxiety Disorder Scale (GAD-7). *Psych Res* 228(1): 89-94. <https://doi.org/10.1016/j.psychres.2015.04.019>
- Wagnild, G. 2009. A review of the resilience scale. *J Nurs Meas* 17(2): 105. <https://doi.org/10.1891/1061-3749.17.2.105>
- Wagnild, G.M., Young, H.M. 1993. Development and psychometric evaluation of the Resilience Scale. *J Nurs Meas* 1(2): 165-78.
- Wilson, C.J., Deane, F.P., Ciarrochi, J.V., Rickwood, D. 2005. Measuring help seeking intentions: properties of the general help seeking questionnaire. *Can J Couns* 39 (1): 15-28.
- Yakunina, E.S., Rogers, J.R., Waehler, C.A., Werth Jr, J.L. 2010. College students' intentions to seek help for suicidal ideation: Accounting for the help-negation effect. *Suicide Life-Threat Behav* 40(5): 438-50. <https://doi.org/10.1521/suli.2010.40.5.438>
- Yusoff, M.S.B. 2010. A multicenter study on validity of the 30-items Brief COPE in identifying coping strategies among medical students. *Int Med J* 17(4): 249-53.
- Yusoff, M.S.B. 2011. The validity of the Malay Brief COPE in identifying coping strategies among adolescents in secondary school. *Int Med J* 18(1): 29-33.
- Šedivy, N.Z., Podlogar, T., Kerr, D.C., De Leo, D. 2017. Community social support as a protective factor against suicide: A gender-specific ecological study of 75 regions of 23 European countries. *Health Place* 48: 40-6. <https://doi.org/10.1016/j.healthplace.2017.09.004>
- Zhao, R., Amanvermez, Y., Pei, J., Castro-Ramirez, F., Rapsey, C., Garcia, C., Ebert, D.D., Haro, J.M., Fodor, L.A., David, O.A., Rankin, O., Chua, S. N., Martínez, V., Bruffaerts, R., Kessler, R.C., Cuijpers, P. 2025. Research review: Help-seeking intentions, behaviors, and barriers

- in college students - A systematic review and meta-analysis. *J Child Psychol Psychiatry* **66**(10): 1593-605. <https://doi.org/10.1111/jcpp.14145>
- Zimet, G.D., Dahlem, N.W., Zimet, S.G., Farley, G.K. 1988. The multidimensional scale of perceived social support. *J Pers Assess* **52**(1): 30-41. https://doi.org/10.1207/s15327752jpa5201_2
- Zimet, G.D., Powell, S.S., Farley, G.K., Werkman, S., Berkoff, K.A. 1990. Psychometric characteristics of the multidimensional scale of perceived social support. *J Pers Assess* **55**(3-4): 610-7. <https://doi.org/10.1080/00223891.1990.9674095>