Relationship of Psychological Adjustment, Anxiety, Stress, Depression, Suicide Ideation, and Social Support among University Students

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Abstract
Tending to the emotional well-being necessities for students in universities networks is a higher priority than at any other time. The purpose of the current research is to study on how social support, psychological adjustments, anxiety, stress and depression, suicide ideation, variables have relationship among university students in Malaysia, by using online computer administration surveys. A total of 415 university students participated. The psychological instruments used for this current study were International Adjustment Disorder Questionnaire (IADQ), Anxiety Scale (AS), Perceived Stress Scale (PSS), Beck Depression Inventory (BDI), Multidimensional Scale of Perceived Social Support (MSPSS) and Scale for Suicide Ideation (SSI). Through statistical analysis, the results indicated that social support has a statistically significant negative relationship (p<.001) with psychological adjustment, stress, anxiety, depression and Suicide ideation. There is also evidence of significant relationship between the variables with suicidal ideation. Overall social support can mediate the level and intensity of suicidal ideation (r = -.579, p<.001). The researcher concluded that this research can contributes to the theoretical understanding of these complex dynamics of the interrelationships of the variables. This research highlight the need of planned services to target the psychological adjustment, anxiety, stress, depression, suicidal ideation and support mechanisms for students good psychological wellbeing.
Keywords: Social Support, Moderation, Psychological Adjustments, Anxiety, Depression, Suicidal Ideation, Post-Pandemic, COVID-19

Introduction
Academic concerns combined with the lack of clear guidance, contribute significantly to the deterioration of mental well-being. This current epidemic has caused extensive morbidity and mortality as well as interference on people's lives and livelihood across the globe; this has

happened as a consequence of both indisposition of coronavirus and the measures taken to prevent the spread in order to protect the health people (John et al., 2020). Wang et al (2020) investigated the mental health of college students in the United States during the pandemic and found that among 2 031 students, 80.57% has reported different level of depression ranging from mild to severe. 366 of the students also reported that they had contemplated suicide or self harm. They also found that 71.26% of the students mentioned that their level of stress and anxiety had elevated during the last few years. The students feel that they have difficulty in concentrating and adjusting to distance learning and they are fearful of their academic progress and performance.

The number of people showing anxiety, depression and/or thoughts of ending life is alarming, especially in this crucial for university students wellbeing (Arslan et al., 2022). Previous literature has established significant associations between pandemic-related stressors among students – including economic crises, female gender, academic delays, disruptions in daily life, and diminished social support – and the manifestation of suicidality. Stigmas on mental health problems among society, even before the pandemic, may had cause procrastination of individuals from seeking help when they need it and may had also delay the recognition of mental health issues. The result of a longitudinal research conducted by Zhang et al (2021) indicated a correlation between compromised psychological adjustment and an elevated risk of suicidal ideation. This is also supported by a research conducted by Daly & Robinson (2021) that examined the complex interplay of factors influencing suicidal ideation, including the role of social isolation among students. Li et al (2023) examined review of scientific literature, focusing on the prevalence of suicidal ideation and suicide deaths linked to the pandemic in Spanish-speaking countries by employing PRISMA model as its primary method. The research selected 28 articles for analysis from three reputable databases; SCOPUS, Web of Science and the ProQuest Database. The research highlighted an upward trajectory in both suicidal ideation and suicidal deaths. This upward trend involved children, adolescents, and young women of university age, particularly those from lower socioeconomic backgrounds. Identified risk factors contributing to this alarming increase included residing in rural areas, experiencing poor mental health, unemployment, and facing family deaths attributed to the current psychosocial factors (Moutinho et al., 2017). This comprehensive exploration provided valuable insights into the complex dynamics of suicide-related outcomes related psychological adjustment, anxiety, depression, stress and social support.

Methodology
This research was conducted using the quantitative method. The non-probability sampling method was used to choose a representative sample from the population to be tested for the objectives of the research. This research was a cross-sectional study, indicating that the data collected from the sample was s done at one-time point. The quantitative research design used survey in Google Form (web-based survey) as it was easier to assess and can be taken at any preferred time by the targeted population. The selection of respondents was guided by several inclusion criteria including, 1) students in tertiary educational institutes, 2) currently an active students, 3) residing and pursuing studies in Malaysia, 4) age above 18 years old, and 5) able to understand English. The Cochran formula was used to calculate the minimum estimated sample size and the calculation resulted with an approximately 385 students. A total of 415 active students between the ages of 18 to above 30 years old participated in this research. The survey distributions had been passed on multiple social media platforms;

Facebook, Instagram, WhatsApp messenger, students' email, etc. The flow of the survey distributions can be seen in Figure 2.
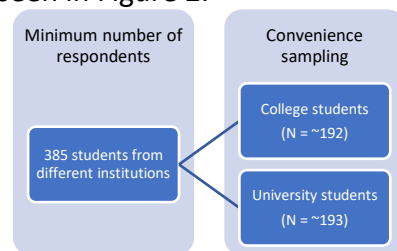

Figure 2 Flow of survey distributions

The self-reported survey consisted of informed consent, demographic information and psychological instruments to measure the variables. The first instrument measured the perceived social support of respondent using the Multidimensional Scale of Perceived Social Support (MSPSS). The psychological adjustments among respondents were examined using International Adjustment Disorder Questionnaire (IADQ-19). Psychological distress such as anxiety, stress and depression were observed using the Anxiety Scale (AS), Perceived Stress Scale (PSS-14) and Beck's Depression Inventory (BDI-21) respectively. The last instrument measured the presence of suicidal ideation using the Scale of Suicidal Ideation (SSI). All of the instruments can be accessed by respondents through a provided link.

In order to answer the research objectives, descriptive analysis and inferential statistics are carried out to measure the relationship between the variables. Correlation explores the significant relationships between all the variables within the data set. The data collected were tabulated and analysed using Statistical Package for Social Science (SPSS) version 22.0 software.

Results
Table 1
Descriptive of Demographic Variables

Variables	Level	Frequency (N)	Percentage (%)	Std. Deviation (SD)	Mean (*M*)
Gender	Female	210	50.6	.505	1.50
	Male	204	49.2		
	Prefer not to say	1	0.2		
Age range	18 – 20 years old	47	11.3	.956	2.61
	21 – 23 years old	151	36.4		
	24 – 26 years old	142	34.2		
	27 – 29 years old	66	15.9		
	≥ 30 years old	9	2.2		
Race	Malay	190	45.8	.850	1.78
	Chinese	141	34.0		
	Indian	69	16.6		
	Others	15	3.6		
Level of education	Foundation	40	9.6	.921	2.83
	Diploma	77	186		
	Bachelor's degree	232	55.9		
	Masters degree	46	11.1		
	Doctorate	20	4.8		

Table 1 the demographic analysis of the respondents. The gender of the respondents; female and male participated in this research was almost balanced. All the respondents involved in this research vary in age; from as young as 18 years old to thirty years old. The standard deviation and mean for gender, age and current level of education indicated that there are no outliers in the data.

Table 2
Summary of Correlations Coefficient

		MSPSS	IADQ	AS	PSS	BDI	SSI
MSPSS	Pearson Correlation	1	-.217**	-.266**	-.310**	-.609**	-.579**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	415	415	415	415	415	415
IADQ	Pearson Correlation	-.217**	1	.569**	.578**	.414**	.120*
	Sig. (2-tailed)	.000		.000	.000	.000	.014
	N	415	415	415	415	415	415
AS	Pearson Correlation	-.266**	.569**	1	.478**	.477**	.232**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	415	415	415	415	415	415
PSS	Pearson Correlation	-.310**	.578**	.478**	1	.405**	.266**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	415	415	415	415	415	415
BDI	Pearson Correlation	-.609**	.414**	.477**	.405**	1	.737**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	415	415	415	415	415	415
SSI	Pearson Correlation	-.579**	.120*	.232**	.266**	.737**	1
	Sig. (2-tailed)	.000	.014	.000	.000	.000	
	N	415	415	415	415	415	415

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

MSPSS = Multidimensional Scale of Perceived Social Support, IADQ = International Adjustment Disorder Questionnaire, AS = Anxiety Scale, PSS = Perceived Stress Scale, BDI = Beck Depression Inventory, SSI = Scale of Suicidal Ideation

MSPSS indicates negative correlation with IADO (r=-.217**), As (r=-.266**), PSS (r=-.310**) , BDI (r=-.609**) and SSI (r=-.579**), which interpret that the higher score of perceived social support, will reduce the adjustment, anxiety, stress, depression and suicidal ideation score among students.

Discussion

Social support, accessed via the Multidimensional Scale of Perceived Social Support (MSPSS), demonstrates a significant relationship with psychological adjustment, anxiety, stress, and depression. The findings reveal positive correlations between psychological adjustment, anxiety, stress, depression, and suicidal ideation. However, these variables show a negative

correlation with social support. Relevant literature Abdel Wahed & Hassan (2017) underscores the importance of comprehending the interconnectedness of these variables amidst the psychological challenges encountered by students. The study into the psychological landscape of university students unveils a nuanced interplay among psychological adjustment, anxiety, stress, depression, suicidal ideation, and the crucial role of social support. Drawing on pertinent literature Jafari et al (2017); Cheng et al (2021); Zhang & Ma (2022), the discussion delves into the intricate relationships among these factors, offering insights into the multifaceted challenges confronted by University students.

Psychological adjustment, anxiety, stress, depression, and suicidal ideation were assessed using the International Adjustment Disorder Questionnaire (IADQ), Coronavirus Anxiety Scale (CAS), Perceived Stress Scale (PSS), Beck Depression Inventory (BDI), and Scale of Suicidal Ideation (SSI) respectively. The research findings support the hypothesis proposing a significant relationship between suicidality and psychological adjustment, anxiety, stress, and depression among students. This is corroborated by literature Chang et al (2021); Lee & Kim (2022) highlighting the intricate interactions among these factors and their impact on suicidal ideation, Additionally, studies Johnson et al (2021); Liu et al (2022); Smith & Jones (2023) provide insights into the complex dynamics linking these variables and underscore the heightened vulnerability of students.

 Existing research Taktak & Oz (2023) underscores the protective role of social support against suicidal ideation, highlighting the need for targeted interventions to strengthen support systems for students. This finding aligns with Restrepo et al (2023), who also identified social support as a protective factor against suicide. Consistent with the literature, the analysis demonstrates an inverse relationship between social support and suicidal ideation ((Ibrahim et al., 2020). Strong social support networks are associated with lower rates of suicidal thoughts and depression. The discussion delves into various dimensions of social support, including emotional, instrumental, and informational support, stressing their collective impact on mitigating the risk of suicidal ideation (Onyekachi et al., 2024). The evolving role of social support in the digital age, including online communities and virtual networks, is explored Valiente et al (2020) considering their potential benefits and limitations in preventing suicidal ideation among university students. Citing relevant literature Wan, et al (2022), this study examines social support as a key intermediary influencing mental health outcomes and mitigating suicidal ideation risks. Numerous studies (Schmidt, et al 2023) establish a protective link between social support and mental health, exploring its emotional, instrumental, and informational dimensions.

The implications of the research on the relationship between psychological adjustment, anxiety, stress, depression, and suicidal ideation, along with the moderating effect of social support among university students in Malaysia, are far-reaching. This research contributes to theoretical understanding and offers practical insights for academia, mental health professionals, and policymakers. Universities should prioritize the development of comprehensive social support programs, including peer mentorship initiatives and awareness campaigns, to foster community and mitigate mental health challenges. Policymakers should consider policies prioritizing mental health and well-being, such as flexible academic accommodations and destigmatization of seeking help. Mental health support services should be accessible through digital platforms, and involving families in support networks is crucial. Suicide prevention programs should focus on mental health awareness, destigmatization, and early intervention.

Conclusion

The relationship of psychological adjustment, anxiety, stress, depression, and suicidal ideation and the effect of social support among student is very important to study and highlight the significance of these variables and its outcome for students care. This article also discussed the implications and limitations of the research. Thus, the researcher hopes that this research can help future researcher as a reference paper, especially for those investigating the same variables.

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