







A survey of suicide risk among university students across three regions in Java, Indonesia

Ninik Yunitri^{1,2*}, Erna Rochmawati³, Henny Dwi Susanti⁴, Nuraenah Nuraenah^{1,2}, Fitriani Rayasari^{2,5}, Dea Chairunnisa⁶, Sephia Salsabila⁶, Rani Septiawantari^{1,2}, and Slametningsih Slametningsih^{1,2}

¹ Mental Health and Psychiatric Nursing Department, Faculty of Nursing, Universitas Muhammadiyah Jakarta, Banten, Indonesia

² Faculty of Nursing, Universitas Muhammadiyah Jakarta, Banten, Indonesia

³ Faculty of medicine and health science, Universitas Muhammadiyah Yogyakarta, Bantul, Indonesia

⁴ Faculty health science, Universitas Muhammadiyah Malang, Malang, Indonesia

⁵ Medical Surgical Nursing Department, Faculty of Nursing, Universitas Muhammadiyah Jakarta, Banten, Indonesia

⁶ Bachelor program, Faculty of Nursing, Universitas Muhammadiyah Jakarta

*Correspondence: Ninik Yunitri. Address: Mental Health and Psychiatric Nursing Department, Faculty of Nursing, Universitas Muhammadiyah Jakarta, Banten, Indonesia. Email: yunitri@umj.ac.id

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ABSTRACT

Introduction: Suicide remains a significant global health and social problem, with Indonesia showing a lower suicide rate compared to other Asian countries. However, the underreporting of cases in Indonesia suggests that the incidence rate of suicide is higher than documented. This study aimed to identify the risk of suicide among Indonesian college students.

Methods: A cross-sectional study was conducted involving 557 students from three universities across Java Island, recruited using the purposive sampling method. The Beck Scale for Suicide Ideation (BSSI) was used to assess suicide risk. The data was analyzed using descriptive statistics to determine the prevalence of suicide-related outcomes. Additionally, linear regression analysis was conducted to examine the associations between suicide risk, suicidal ideation, suicide planning, and self-control in relation to age, sex, and year of study.

Results: The average suicide risk among college students was 4.04 (SD= 6.60; 95%CI = 3.49 – 4.59) out of 38, indicating a generally low risk. However, 34.6% of students experienced the desire to die at least once, and 12.7% had a strong desire to make active suicide attempts. Furthermore, 15.8% of students found suicide an acceptable solution to their problems. Gender was found to be significant predictor of overall suicide risk, ideation and self-control.

Conclusions: These findings highlight the need for targeted interventions and support for college students to prevent suicide and promote mental well-being.

Keywords: students, suicide risk, university,

Introduction

Suicide has become a health and social problem globally. At least 700,000 people die due to suicide every year (WHO, [2021b](#)). The mortality rate due to suicide is higher than HIV/AIDS, breast cancer, war, murder, and malaria (WHO, [2021b](#)). Suicide has been the fourth leading cause of death among adolescents and young adult (WHO, [2023b](#)). About 88% of adolescents who

committed suicide were from low and low-middle income countries (WHO, [2020](#)).

Compared to other Asian countries, Indonesia has had a lower suicide rate. According to the Asian suicide consensus, Indonesia had been ranked fourth in terms of the rate of suicide after Thailand, Singapore, and Vietnam (WHO, [2021a](#)). About 2.24 per 100,000 people in Indonesia attempt suicide every year. However, these numbers are much lower considering the under-



reporting of cases reaching up to 859.10% (Onie *et al.*, 2024), referring to suicides not reported or documented as the cause of death. This indicates that the incidence of suicide in society exceeds the number documented by the relevant official institution. Several factors contribute to this high rate of underreporting. One of the primary issues is the inadequate health infrastructure, which limits accurate data collection and reporting, especially in rural or underserved areas. Additionally, the stigma surrounding suicide remains deeply rooted in Indonesian society. Families of individuals who die by suicide often choose not to report this as the cause of death due to fear of shame, social exclusion, or religious judgment. Moreover, reports from field workers indicate that the law enforcement authorities frequently do not pursue in-depth investigations into suspected suicide cases, which further contributes to the lack of reliable data. This combination of systemic, cultural, and institutional barriers has led to significant challenges in understanding the true scale of suicide in the country and underscores the urgent need for improved surveillance, education, and stigma reduction (Onie *et al.*, 2023; Setiyawati *et al.*, 2024). Therefore, suicide incidence is a tip of the iceberg of a phenomenon that should be taken seriously.

Suicide has become a prominent and concerning topic among Indonesian population in recent times. This heightened awareness has been prompted by a series of incidents involving college students across Indonesia. Based on documentation from the Indonesian police department, the reported prevalence of suicide has seen a notable rise, increasing from 613 cases in 2021 to 826 cases in 2022 (Salma, 2023). Suicide is the most common psychological issue experienced by college students. The risk of suicide among students is relatively high. The lifetime prevalence of suicide ideation was found to be 22.3%, with 3.2% among them attempting to (Mortier *et al.*, 2018). The psychological and counseling services department at the University of Mississippi notes that up to 38% of students have considered suicide, with the highest incidence among transgender students (64%), those with disabilities (43%), those with a GPA below 2.4 (47%), and those facing financial problems (37-40%) (CAPS, 2023). This study focused on three regions of the island of Java, Indonesia: Jakarta, Yogyakarta, and Malang. The selection of universities in these areas was based on multiple considerations, including institution size, regional representation, and contextual relevance. According to data from the Indonesian Police registration and local government offices (Onie and Daswin, 2022), Yogyakarta reports a relatively high suicide rate (4.42 per 100,000 population) and suicide attempt rate (7.94). Although the suicide rate in East Java is comparatively lower (1.52), there is a rising trend in suicide attempts (6.66), suggesting a potential emerging risk. Jakarta was included due to the complex stressors faced by college

students in the capital, highlighting the need for further investigation and targeted mental health support.

One of the targets of the WHO mental health action plan 2013-2030 is the reduction of the rate of suicide (Singh, 2021). Early detection has become a crucial stage in which to address the suicide rate and develop related programs. However, the WHO found that the screening for suicide is still below the standard (Singh, 2021). Many mental health studies overlook such screening in young populations at a high risk of suicide (WHO, 2020). Therefore, this study has aimed to identify the risk of suicide among Indonesian college students.

Materials and Methods

Research design, time, and place

Using a cross-sectional research design, this study involved Indonesian college students from three universities across Java Island. The data was collected from April to May 2024.

Population and samples

The participants of this study were actively enrolled undergraduate students from three universities, representing a diverse range of years of study and majors. The participants were selected using purposive sampling and stratified based on university, faculty, and year of study. The sample size was determined using OpenEpi version 3.0, employing a proportion of one million, with a predictive prevalence 8.7% (Bureau *et al.*, 2012), a confidence limit of 5%, a design effect of 1, and a confidence level of 99.99%. This calculation yielded a required sample size of 481 respondents. Six hundred students were contacted to join the research and in total, 557 respondents filled out the questionnaire.

Instrument and outcomes

Sociodemographic characteristics

The sociodemographic characteristics including age, sex, year of study, major, and siblings, were assessed using a self-developed instrument.

Suicide risk

The Beck Scale for Suicide Ideation (BSSI) was used to determine the risk of suicide among the participants, and was developed by Beck *et al.* (Beck *et al.*, 1988). The score ranged between 0 to two with a total possible score of 38 (Bureau *et al.*, 2012; Kliem *et al.*, 2017). The first five items of the BSSI function as a screening tool for suicidal ideation, while the fourth and fifth items specifically assess the presence of suicidal thoughts. Suicidal ideation is considered to be active when the score falls between one and two, whereas a score of zero indicates passive suicidal ideation (de Beurs *et al.*, 2015; Kliem *et al.*, 2017). A higher score reflects a greater risk of suicide (Esfahani *et al.*, 2015). The BSSI has been adapted into Bahasa

Indonesian, and showed good reliability with a Cronbach's alpha = 0.963 (Kesuma *et al.*, 2021).

The outcomes were categorized into three domains: suicidal ideation, self-control, and suicide planning. Suicidal ideation refers to the presence of thoughts about ending one's life, even in the absence of any action. Suicide self-control represents both the internal and external factors that inhibit an individual from acting on suicidal thoughts. Suicide planning implies proactive behavior where the individual has taken concrete steps toward preparing for a suicide attempt, indicating a higher level of risk.

Procedure

The questionnaire was distributed by the team leader from each university in collaboration with the head of the schools. The participants were provided with comprehensive information related to the study in advance. Those who chose to participate filled out the informed consent and were directed to complete the electronic form questionnaire. The data was gathered and documented by a research assistant using Microsoft Excel.

Statistical analysis

The data was analyzed using Jamovi version 2.3.28, an open statistical software (Team, 2021; The jamovi project, 2022). As the natural suicide risk was presented on a continuous scale, the analysis used descriptive analysis to measure its mean and standard deviation. The mean suicide risk was differentiated according to institutions, gender, major, and year of studies. Another analysis took into account the answers to the items in the BSSI questionnaire. The data was analyzed using a cross-sectional approach to determine the prevalence of suicide-related outcomes. Additionally, linear regression analysis was conducted to examine the associations between suicide risk, suicidal ideation, suicide planning, and self-control in relation to age, sex, and year of study.

The results were presented using estimate and standard error (SE). A positive coefficient indicates that as the variable increases, the risk of suicide also tends to increase, whereas a negative coefficient suggests that higher values of the variable are associated with a lower risk of suicide. The classification of effect sizes is commonly referenced in the scientific literature. For standardized coefficients (β), values ranging from 0.10 to 0.29 are typically considered small, those from 0.30 to 0.49 are regarded as moderate, and values of 0.50 or higher are viewed as indicating a large effect (Cohen, 2013).

A p-value of less than 0.05 showed a significant association with the risk of suicide.

Ethics statement

The protocol of this study was reviewed and approved by the Ethics Review Board of the Faculty of Health and Medicine, Universitas Muhammadiyah Jakarta, Indonesia No.12/PE/KE/FAK-UMJ/2/2024. This study supports the participants' right to self-determination. The participants were treated as autonomous agents, free to choose whether or not to take part in the study. The consent form consisted of several sections. The first section provided a brief explanation of the study. The second section contained the informed consent form to obtain the participants' agreement. Only after providing consent could the participants proceed to the next section, which included the BSSI instrument. This study also guarantees the participants' right to protection from exploitation. The participants' identities were replaced with unique codes known only to the researcher. The data will be securely stored for five years following the completion of the study and will be used solely for academic purposes. Participants identified as being at a high risk of suicide were contacted to obtain their consent before reporting the case to the university counsellor. If

Table 1. Sociodemographic characteristics of the participants (n=577)

Variables	Total 3 regions	1 st University (Jakarta)	2 nd University (Yogyakarta)	3 rd University (Malang)
Sex				
Male	128 (23.0)	80 (28.5)	16 (21.9)	32 (15.8)
Female	429 (77.0)	201 (71.5)	57 (78.1)	171 (84.2)
Year of study				
1st year	106 (19.0)	81 (28.8)	25 (34.2)	
2nd year	322 (57.8)	111 (39.5)	19 (26.1)	192 (94.6)
3rd year	91 (16.3)	69 (24.5)	12 (16.4)	10 (4.9)
4th year	37 (6.6)	19 (6.8)	17 (23.3)	1 (0.5)
>4th year	1 (0.2)	1 (0.4)		
Colleges				
Engineering	12 (2.2)	12 (4.3)		
Law	35 (6.3)	35 (12.6)		
Nursing Science/ Health & Medicine/ Public Health	382 (68.6)	118 (42.0)	61 (83.6)	203 (100)
Islamic Study	43 (7.7)	43 (15.3)		
Education	15 (2.7)	3 (1.1)	11 (15.0)	
Economy & Business	8 (1.4)	8 (2.9)		
Agricultural	8 (1.4)	8 (2.9)		
Social & Political Science	54 (9.7)	53 (18.9)	1 (1.4)	
Age, mean (SD)	20.3 (1.65)	20.2 (1.41)	20.8 (3.36)	20.1 (0.73)

Abbreviation. Standard deviation (SD)

Note. Sample size (n); percentage (%)

the participant did not agree, the reporting process was cancelled.

Results

The questionnaire was distributed to 600 college students from three universities. The response rate was 92.8% with missing data from 0.7% of participants. Most of the participants were female (77%), in their 2nd year of study (57.8%), from the faculty of nursing/health/medicine (59.4%), and with a mean age of 20.3 (1.65) years old (Table 1).

Suicide risk

The average suicide risk among college students was 4.04 (SD = 6.60; 95% CI = 3.49 – 4.59) of 38, indicating a generally low risk of suicide. Among the three regions, Yogyakarta showed the highest suicide risk (5.55) compared to Jakarta (4.62) and Malang (2.69). A deeper examination of the individual survey items sheds a light on the specific thoughts and behaviors related to suicide among the students from three different regions. College students in the Yogyakarta region showed the highest percentages in almost all items of the BSSI. Surprisingly, college students from the Malang region tended to have the lowest percentages overall, except in passive suicidal desire, where they scored the highest (5.9%). In terms of suicidal thought, although only 0.4% of students expressed a weak desire to continue living and 34.6% of them experienced the desire to die at least once to constantly. Furthermore, about 12.7% had a strong desire to make an active suicide attempt. In term of suicide attitudes, 15.8% of students found suicide to be an escape or regard it as solving a problem faced. In terms of suicide plan, about 13 (2.3%) students had an exact plan or anticipated making a suicide attempt with 3 (0.5%) having completed their suicide preparations and 8 (1.4) students having completed their suicide notes (Table 2).

The linear regression analysis of the respondent's characteristics according to the correlation with suicide found that male students tend to show a lower overall suicide risk including suicide idea and suicide plan, yet higher self-control (p-value <0.05) with a high and moderate effect size. According to the year of study, second year students showed a lower suicide risk, idea,

and plan (p-value <0.05), with a high and moderate effect size. Although the results were not statistically significant, fourth-year students tended to show a higher level of suicide risk and planning with a high effect size (Table 3).

Discussions

This pioneering study on suicide among college students in Indonesia encompasses a large sample size. This study provides crucial insights into the risk factors associated with suicidal thoughts and behaviors among this population. The findings serve as a source of foundational data that can inform the need for the development of an effective suicide prevention program.

The suicide risk in Yogyakarta was once again consistent with the findings from previous studies (Onie and Daswin, 2022). However, a different result was observed for the Jakarta region. In this study, Jakarta evidenced a higher suicide risk compared to the Malang region. Jakarta is well-known as being one of the most stressful cities in Indonesia (Fajriadi, 2024). People living in Jakarta face more complex living conditions compared to those in other cities. This situation also affects college students. A highly competitive academic and work environment, combined with various aspects of an unhealthy urban setting, are among the most prominent factors contributing to mental health issues. There are several reasons why this might have influenced the differing results. This study focused on a specific population—college students—which may represent a different context compared to the general population. Therefore, the suicide risk among college students should be taken into account as a priority population in suicide prevention programs in Jakarta.

As global research has identified an increasing trend of suicidal behavior among young people (Bertuccio *et al.*, 2024; Van Meter *et al.*, 2023), this study also revealed that a significant number of college students had experienced suicidal ideation, while a subset of these individuals had developed suicide plans. Most of them experienced negative feelings toward their life and had no desire to continue it.

These findings highlight crucial and alarming facts for all institutions involved, indicating a pressing need to

Table 3. Predictors of suicide risk, suicidal ideation, suicide self-control, and suicide planning (n=557)

Variable	Suicide risk			Suicide ideation			Suicide self-control			Suicide plan		
	Est	SE	p-value	Est	SE	p-value	Est	SE	p-value	Est	SE	p-value
Age	0.079	0.170	0.643	0.023	0.072	0.753	0.011	0.037	0.778	0.046	0.071	0.521
Sex												
Female	Ref											
Male	-1.600	0.662	0.016	-0.743	0.281	0.008	-0.381	0.144	0.008	-0.475	0.277	0.087
Year of study												
1st year	Ref											
2nd year	-1.495	0.735	0.043	-0.662	0.313	0.035	-0.163	0.160	0.310	-0.670	0.307	0.029
3rd year	0.269	0.938	0.775	0.171	0.399	0.668	0.211	0.205	0.304	-0.113	0.391	0.773
4th year	0.521	1.254	0.678	0.151	0.533	0.776	0.014	0.274	0.958	0.355	0.523	0.497
>4th year	-4.830	6.597	0.464	-2.038	2.805	0.468	-0.877	1.440	0.543	-1.915	2.751	0.487

Abbreviation. Estimates (Est), Standard error (SE)

Note. Significance level 0.05. positive value acts as a risk factor while negative values act as protective factors

develop suicide prevention programs. However, meeting the mental health needs of students is challenging. The “transitional age youth” marks a crucial time for mental development (AHRQ, 2022). Adolescents and young adults face multiple stressors related to their personal lives, families, and environments, impacting their mental health. Rapid mood changes in adolescents and young adults can sometimes hinder their teachers or families from detecting these issues. Adolescents and young adults often perceive themselves as being responsible for their own lives and may not disclose suicidal thoughts unless directly questioned, compounding their difficulties and leaving problems unresolved. This mindset can be harmful, as it prevents adolescents and young adults from seeking help when they need it, leading to a lack of support and resources for those experiencing suicidal thoughts. In fact, mental disorders commonly start due to untreated issues during adolescence (Jones, 2013). About 58% of adolescents with mental problems had not received proper mental health care (Ghafari *et al.*, 2022). It is essential to note that untreated mental health issues during adolescence can lead to long-term consequences, making early intervention and treatment crucial for young individuals. Regular screening is crucial in preventing suicide among young people and it has been recommended as a national strategy for suicide prevention (Morris-Perez *et al.*, 2023).

This study found that male students exhibited a lower risk of suicide, particularly in terms of suicidal ideation, yet demonstrated higher levels of self-control. The evidence from the provided studies presents a nuanced picture of the relationship between sex and suicide risk. While some studies indicate a higher suicide risk in females, others suggest a higher risk in males or a more complex relationship influenced by various factors. For instance, Bühring and Inostroza (2022) supports the notion of a higher risk of suicide attempts among women, particularly in young sexual minority groups. Berardelli *et al.* (2022) discuss the “gender paradox” in suicidology, where females are more likely to engage in non-fatal suicidal behavior, while males are more likely to complete the act of suicide. In summary, the relationship between gender and suicide risk is complex and varies across different populations and contexts. The evidence suggests that sex-specific factors, including the type of suicidal behavior and associated psychiatric conditions, play a significant role in the suicide risk as a whole (Barboza *et al.*, 2016; Berardelli *et al.*, 2022; Shelef, 2021). Therefore, suicide prevention strategies should consider these sex differences to effectively address the elevated risk across different groups.

This study found that second-year students reported significantly lower levels of suicide risk, ideation, and planning compared to students in other academic years. Further analysis revealed that students in their first-and-fourth years exhibited higher levels of suicide risk and

planning. Previous studies have similarly identified first-year college students as being at a particularly high risk for self-harm and suicidal behavior (Arria *et al.*, 2009; Klonoff-Cohen *et al.*, 2024). Several factors may contribute to this vulnerability, including stigma and attitudinal barriers toward seeking help. The transition to college, which often involves moving away from home and gaining partial independence, can be a particularly stressful period, especially for students who are psychologically vulnerable and lack sufficient support (Wilcox *et al.*, 2010). First-year students often struggle with decision-making and have a limited awareness of their need for professional support. Many believe they can manage their problems independently or prefer to confide in their friends rather than seek help from mental health professionals (Klonoff-Cohen *et al.*, 2024).

Enhancing mental health awareness also plays a significant role in preventing mental issues. Increased education and awareness are key to prevention through improved mental health literacy. A previous study found there to be a lack of knowledge on mental awareness strongly associated with suicidal behavior among police officers in the United Kingdom (Edwards and Kotera, 2021). Numerous programs have been developed to prevent suicide among adolescents, including media campaigns (Mohn *et al.*, 2024; Torok *et al.*, 2017), health educational programs, and community engagement interventions (Morgan *et al.*, 2022; WHO, 2018). These interventions have been shown to improve the literature, knowledge, and attitudes toward suicide, as well as lessening the act of suicide itself.

Another study focused on fourth-year college students reported similar findings. Approximately 12% and 9% of them showed persistent suicidal ideation and planning, respectively (Wilcox *et al.*, 2010). In Indonesia, the academic curriculum requires final-year students to complete a research project, which may be one of the precipitating factors contributing to suicide risk. Several suicide cases have been linked to stress related to the final research project, commonly known as the “skripsi”. However, academic stress is not the sole cause of suicide among adolescents and young adults. Suicide should be understood as the result of cumulative, multifactorial stressors, including prior depression (Looijmans *et al.*, 2024; Wilcox *et al.*, 2010) and a lack of family support (Li *et al.*, 2020). Students who exhibit symptoms of depression during their first year of college should be considered at a high risk of suicide. Early detection at the time of college entry is a crucial step in suicide prevention among students. Furthermore, screening for suicide risk and other mental health issues should be conducted annually throughout the academic period.

Prevention strategies should not focus solely on the students' internal factors. The surrounding environment also plays a significant role in influencing suicide risk. Social support extends beyond parents and family

members, encompassing peers, educators, and the broader community. One of the most concerning external factors is social media, which can contribute to emotional distress and negative mental health outcomes. Social media is known for its dual-edged polarity. As mentioned previously, it can be used to enhance the public awareness of mental health issues. On the other hand, it also has potential negative consequences in terms of mental health. Inappropriate suicide reporting, especially those who have a high social influence, on the media might promote imitative behavior (WHO, 2023a). There was an improvement by up to 13% of the risk of suicide and 30% of death with the same method after the media reported the death of a celebrity by suicide (Niederkröthaler *et al.*, 2020). Further investigation into the use of social media and how it may contribute to the suicide risk among college students is needed.

This study represents the first to employ a large sample size to assess the risk of suicide among university students. However, there are several factors that should be taken into account when interpreting the results. Firstly, the sample size was not evenly distributed across faculties or majors, which could impact the final outcomes since the burden experienced by students might vary. Secondly, all participants were recruited from universities on the island of Java in Indonesia, which may limit the study's generalizability to other areas of the country. Third, this study did not examine certain factors that are strongly associated with suicide, such as economic status and parental attachment.

Conclusion

The likelihood of suicide among university students was found to be relatively minimal. Nevertheless, a considerable number of students are at risk of engaging in suicidal behavior as a substantial proportion of them exhibited active suicidal ideation and planning. This study underscores the importance of implementing early detection and intervention measures to mitigate the suicide risk amongst college students in Indonesia.

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Availability of data and materials

The data supporting the findings of this study are available from the corresponding author upon reasonable request. Interested researchers may contact the authors to access the datasets for academic and non-commercial purposes.

Authors' contributions

Ninik Yunitri contributed to the design and planning of the study, supervised instrument selection, evaluated data collection, interpreted data analysis, and conceptualized the manuscript; Erna Rochmawati participated in planning the study, collecting the data, and supervising the data analysis; Henny Dwi Susanti contributed to planning the study, data collection, and supervision of data analysis; Nuraenah supervised the data collection and contributed to the interpretation of the analysis; Fitriani Rayasari was involved in data collection and conceptualization of the manuscript; Dea Chairunnisa contributed to data collection, submission of the study for ethical approval, data analysis, and manuscript conceptualization; Sephia Salsabila participated in data collection, submission of the study for ethical approval, data analysis, and manuscript conceptualization; Rani Septiawantari contributed to the conceptualization of the manuscript; Slametiningsih contributed to the conceptualization of the manuscript.

Declaration of Interest

There are no conflicts of interest to be declared.

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Table 2 Suicide risk among the participants (n=557)

Variable	Total 3-regions	1 st University Jakarta	2 nd University Yogyakarta	3 rd University Malang
Suicide risk, mean (SD)	4.04 (6.60)	4.62 (6.90)	5.55 (8.07)	2.69 (5.25)
1. Desire to live				
• strong	540 (96.9)	271 (96.4)	69 (94.5)	200 (35.9)
• moderate	15 (2.7)	9 (3.2)	3 (4.1)	3 (0.5)
• weak	2 (0.4)	1 (0.4)	1 (1.4)	-
2. Wish to die				
• moderate to strong	78 (14.0)	47 (16.7)	13 (17.8)	18 (8.9)
• once	115 (20.6)	56 (19.9)	19 (26.0)	40 (19.7)
• none	364 (65.4)	178 (63.4)	41 (56.2)	145 (71.4)
3. Reasons for living or dying				
• dying outweighs living	11 (2.0)	6 (2.1)	3 (4.1)	2 (0.1)
• about equal	81 (14.5)	43 (15.3)	14 (19.2)	24 (11.8)
• for living outweigh for dying	465 (83.5)	232 (82.6)	56 (76.7)	177 (87.1)
4. Desire to make an active suicide attempt				
• moderate to strong	71 (12.7)	41 (14.6)	15 (20.5)	15 (7.4)
• weak	87 (15.6)	43 (15.3)	13 (17.8)	31 (15.3)
• none	399 (71.6)	197 (70.1)	45 (61.7)	157 (77.3)
5. Passive suicidal desire				
• would avoid steps necessary to save or maintain life	44 (7.9)	28 (1.0)	4 (5.5)	12 (5.9)
• would leave life or death to chance	64 (11.5)	35 (12.5)	14 (19.2)	15 (7.5)
• would take precautions to save life	449 (80.6)	218 (77.5)	55 (75.3)	176 (86.6)
6. Time dimension: duration of suicidal ideation or wish				
• continuous (chronic) or almost continuous	29 (5.2)	15 (5.3)	7 (9.6)	7 (3.4)
• longer periods	25 (4.5)	17 (6.1)	6 (8.2)	2 (1.0)
• brief, fleeting periods	503 (90.3)	249 (88.6)	60 (82.2)	194 (95.6)
7. Time dimension: frequency of suicidal thought				
• persistent or continuous	10 (1.8)	6 (2.1)	3 (4.1)	1 (0.49)
• intermittent	64 (11.5)	35 (12.5)	13 (17.8)	16 (7.88)
• rare, occasional	483 (86.7)	240 (85.4)	57 (78.1)	186 (91.63)
8. Attitude toward ideation or wish				
• accepting	4 (0.7)	3 (1.1)	1 (1.4)	-
• ambivalent: indifferent	98 (17.6)	54 (19.2)	17 (23.3)	27 (13.3)
• rejecting	455 (81.7)	224 (79.7)	55 (75.3)	176 (86.7)
9. Control over suicidal action or acting-out wish				
• has no sense of control	6 (1.1)	3 (1.1)	2 (2.7)	1 (0.49)
• unsure of control	39 (7.0)	26 (9.3)	5 (6.9)	8 (3.94)
• has sense of control	512 (91.9)	252 (89.6)	66 (90.4)	194 (95.57)
10. Deterrents to active attempt e.g. family, religion, irreversibility				
• minimal or no concern about deterrents	19 (3.4)	12 (4.3)	3 (4.1)	4 (2.0)
• some concern about deterrents	42 (7.5)	27 (9.6)	6 (8.2)	9 (4.4)
• would not attempt because of a deterrent	496 (89.0)	242 (86.1)	64 (87.7)	190 (93.6)
11. Reason for contemplated attempt				
• escape, solve problems	88 (15.8)	47 (16.7)	16 (21.9)	25 (12.3)
• combination of 0 and 2	42 (7.5)	24 (8.5)	9 (12.3)	9 (4.4)
• to manipulate the environment; get attention, revenge	427 (76.7)	210 (74.7)	48 (65.8)	169 (83.3)
12. Method: specificity or planning of contemplated attempt				
• details worked out or well-formulated	11 (2.0)	5 (1.8)	5 (6.9)	1 (0.49)
• considered but details not worked out	84 (15.1)	58 (20.7)	12 (16.4)	14 (6.90)
• not considered	462 (82.9)	218 (77.5)	56 (76.7)	188 (92.61)
13. Method: availability or opportunity for contemplated attempt				
• future opportunity or availability of method anticipated	34 (6.1)	20 (7.1)	7 (9.6)	7 (3.4)
• method would take time or effort; opportunity not readily available	27 (4.8)	19 (6.8)	3 (4.1)	5 (2.5)
• method not available; no opportunity	496 (89.0)	242 (86.1)	63 (86.3)	191 (94.1)
14. Sense of “capability” to carry out attempt				
• I am competent and brave enough to commit suicide	7 (1.3)	4 (1.4)	2 (2.7)	1 (0.49)
• competent to commit suicide but not sure they have the courage	81 (14.5)	45 (16.0)	14 (19.2)	22 (10.84)
• no courage, too weak, afraid, incompetent	469 (84.2)	232 (82.6)	57 (78.1)	180 (88.67)

Variable	Total 3-regions	1 st University Jakarta	2 nd University Yogyakarta	3 rd University Malang
15. Expectancy/anticipation of actual attempt				
• yes	13 (2.3)	8 (2.8)	3 (4.1)	2 (1.0)
• uncertain, not sure	111 (19.9)	65 (23.1)	16 (21.9)	30 (14.8)
• no	433 (77.7)	208 (74.1)	54 (74)	171 (84.2)
16. Actual preparation for contemplated attempt				
• complete (e.g. had pills, loaded gun)	3 (0.5)	1 (0.4)	2 (2.7)	-
• partial (e.g. starting to collect pills)	26 (4.7)	18 (6.4)	3 (4.1)	5 (2.5)
• none	528 (94.8)	262 (93.2)	68 (93.2)	198 (97.5)
17. Suicide note				
• completed	8 (1.4)	5 (1.8)	2 (2.7)	1 (0.49)
• started but not completed; only thought about	53 (9.5)	35 (12.5)	7 (9.6)	11 (5.42)
• none	496 (89.0)	241 (85.7)	64 (87.7)	191 (94.09)
18. Final acts in anticipation of death (e.g. insurance, will etc)				
• made definite plans or completed arrangements	5 (0.9)	3 (1.1)	2 (2.7)	-
• thought about or made some arrangements	121 (21.7)	68 (24.2)	18 (24.7)	35 (17.2)
• none	431 (77.4)	210 (74.7)	53 (72.6)	168 (82.8)
19. Deception or concealment of contemplated suicide				
• held back on revealing	71 (12.7)	43 (15.3)	13 (17.8)	15 (7.5)
• held back on revealing	45 (8.1)	24 (8.5)	5 (6.9)	16 (7.8)
• revealed ideas openly	441 (79.2)	214 (76.2)	55 (75.3)	172 (84.7)

Abbreviation. Standard deviation (SD)

Note. Sample size (n); percentage (%)