

Peer Support as Protective Factor Against Suicide Risk in Generation Z: Study in Indonesia

Shefi Rivan Renaldi¹, Ahmad Guntur Alfianto², Yuliyani³, Montira Muanjan⁴, Bachal Khan⁵

^{1,2}Nursing, Institute of Health Sciences Widyagama Husada, Malang, Indonesia

³Midwifery, Institute of Health Sciences Widyagama Husada, Malang, Indonesia

⁴Faculty of Nursing, Prince of Songkla University, Hatyai, Thailand

⁵Faculty of Health Science, Institute of Health Sciences Karachi, Pakistan

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ABSTRACT

Background: The mental health of Gen Z is a concern worldwide, of which suicide is one of the major causes of death. In collectivist societies such as Indonesia, the support of the peers may be a very important factor that protects the individual, however, there is still very little research evidence available to substantiate this.

Objective: This study aimed to understand the association between peer support and suicide risk in Gen Z individuals from Malang City, Indonesia.

Methods: A cross-sectional study was conducted on 207 Gen Z participants (mean age 21.37 years, 68.6% females) chosen through purposive sampling. Peer support was assessed by the Peer Social Support questionnaire (37 items, $\alpha=0.932$), and suicide risk by the Revised Suicide Ideation Scale (10 items, $\alpha=0.941$).

Results: The prevalence of high suicidal ideation was 11.6%. There was a very strong correlation between peer support and suicide risk ($\chi^2=112.847$, $p<0.001$, Cramér's $V=0.523$). As many as 97.3% of those with high peer support had low levels of suicidal ideation, while 88.2% of those with low peer support showed high levels of suicidal ideation.

Conclusion: There is a strong association between peer support and a decrease in the risk of suicide in Indonesian Gen Z which shows bigger effects than in the West. The results lead to the support of the implementation of culturally-appropriate peer-based interventions such as gatekeeper training and digital platforms.



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Corresponding Author:

Shefi Rivan Renaldi
Nursing, Institute of Health Sciences Widyagama Husada Malang, Indonesia
Email: shefirenaladi203@gmail.com

Introduction

As per the definition, Gen Z or Generation Z are the human beings who came to this world from 1995 to 2010 (both years included). Globally it is the most giant demographic group of the world which is about 1/3 of the whole global population (Nasution et al., 2025). This generation, can be said, is faced with a mental health crisis they never saw before. One of the major causes leading to the death of young adults aged 15-29 years all over the world is suicide (Fatmawati et al., 2022). Nowadays, the worrying statistics about Generation Z's mental health become the focus of epidemiological studies. According to these statistics, the youngest generation (GenZ) has more frequently manifested the symptoms of anxiety, depression, and suicidal ideation than the previous generation (Sawitri et al., 2022). In Indonesia, Generation Z is the demographic group which counts for 33% of the total population. So, the mental health challenge is attributed to about 80 million people. The nationwide data reveals that among Indonesian Gen Z people, 1.4% report that they are in suicide risk, 0.5% have already made up a suicide plan, 0.2% have tried suicide within the last year (Tyas et al., 2022). Statistically speaking, these occurrences are mainly in the cities where progress at a fast pace, and at the same time social disconnection and competition are the factors making the only community of young adults be under stress and pressure (Kartika et al., 2020).

The crucial intervening function of social support to murder reduction has been clearly established by many theoretical frameworks (Krisnadinata et al., 2022). According to the Interpersonal Theory of Suicide, feelings of alienation and being a burden to others are the main factors that lead to suicidal ideas and attempts. It is through peer support that these means are most adequately confronted as it facilitates social bonding, alleviates the feeling of loneliness, and supplies the individual with the feeling of acceptance and belonging (Mansul et al., 2022). The Social Support Buffer Theory, on the other hand, indicates that the presence of a social support network is a protective buffer that shields one against stress and psychological distress and hence reduces the risk of suicidal ideas and attempts (Mulyani et al., 2020). Peer support as a vehicle of emotional, instrumental, informational, and companionship support rendered by people of similar age and developmental stage has been acknowledged as particularly significant for Generation Z (Nurdien et al., 2023). The period of late adolescence and emerging adulthood is characterized by the increased importance of peer relationships for identity formation, emotional regulation, and psychological well-being (Rahadiansyah et al., 2021). Friends may also have the unique understanding of the problems that their age group is facing and hence they can be viewed as more relatable and less judgmental than family members or professional helpers (Mann et al., 2021).

While there has been increased acknowledgment of peer support as a potential protective factor, there are still significant gaps in the empirical literature. Most of the research has been done in Western, wealthy countries and there is very little data from Asian countries, especially from Southeast Asia. This geographic bias affects the extent to which the results can be generalized because cultural factors such as collectivism, family structure, mental health stigma, and help-seeking behavior influence both peer relationship dynamics and the profiles of suicide risk. In addition, the developmental context of Generation Z, which is characterized by being digitally native, social media immersion, academic pressure, and economic uncertainty, has not been taken into account in most of the studies. Only a handful of studies have focused on peer support mechanisms in this group. Research Indonesia, the world's fourth most populous country with distinct sociocultural characteristics, is still very limited in the international suicide prevention literature.

Indonesia, as a cultural background, is particularly interesting when it comes to the investigation of peer support and suicide risk in Generation Z. Being a collectivist society with strong bonds between peers and community, peer relationships may be an especially important factor for protection. Nevertheless, fast urbanization, modernization, and the disappearance of traditional social structures have led to the creation of new stressors for the young adults. The urban centers such as Malang City which is a major educational hub with 843,810 residents, out of which 25.44% are from Generation Z, are the places where these kinds of problems can be found. In such places where academic competition, financial problems, and social isolation are among the most prevalent issues, these youth are also struggling with each other. Although there is an increase in suicide rates in Indonesian urban areas, the availability of mental health resources is still very poor, and there is a lot of stigma around mental illness and the seeking of help. In such a situation, the peer support networks may be more accessible and more culturally acceptable than formal mental health services.

No studies have, so far, systematically looked into the link between peer support and the risk of suicide among the Indonesian Generation Z in the urban areas. This important research is solving the puzzle of a huge omitted area by being the first empirical investigation of peer support as a protective factor against suicide risk behavior in this population. The study, in fact, makes several innovative contributions: (1) it solely concentrates on

Generation Z (aged 19-27 years) in Indonesia, a demographic group that has been largely neglected in suicide prevention research; (2) it deals with the peer support methods within the Indonesian collectivist cultural framework; (3) Malang City, a representative mid-sized Indonesian educational and economic hub, is chosen for the urban focus; (4) both peer support dimensions and suicide risk severity have been assessed multidimensionally; and (5) there is the provision of feasible evidence for the creation of culturally fitting, peer-based suicide prevention interventions.

This research mainly aims at studying the relationship between peer support and self-harm risk behavior among Gen Z people in Malang City, Indonesia. We predicted, based on the theoretical models and the available research data, that the different levels of peer-support would have a strong negative association with the different levels of suicide risk behavior in Generation Z individuals. It is important to comprehend how a protective factor like this can be utilized in public health policy and practice, as it can be a great source of inspiration for the development of peer-based intervention programs, which, instead of demanding the already scarce professional mental health resources, would simply engage the existing social networks.

Method

Study Design and Setting: The researchers utilized a cross-sectional analytical design in this study to explore the potential causal relationship between peer support and the incidence of suicide risk behavior among Generation Z individuals. The study took place in Malang City, East Java, Indonesia, from March to November 2024. Malang City was chosen as the research setting because it is a significant educational and urban center with a considerable population of Generation Z (25.44% of 843,810 residents) and thus is a good representation of a typical medium-sized Indonesian city which is undergoing fast urbanization and socioeconomic development. The city is made up of five sub-districts (Blimbing, Kedungkandang, Klojen, Lowokwaru, and Sukun), and all of them were used as the sampling frame to guarantee the geographical representativeness of the sample.

Participants and Sampling: The sample size necessary was determined by a formula for correlational studies with categorical variables. The minimum number of participants needed was 146, based on an a priori power analysis carried out with the G*Power 3.1 software. This analysis was done for a significance level (α) of 0.05, statistical power ($1-\beta$) of 0.80, a medium effect size ($w = 0.3$) taken from the literature, and the degrees of freedom of 4 for a 3×3 contingency table. To be able to account for incomplete responses and have enough statistical power for subgroup analyses, the number of respondents we recruited was 207, which is 141% of the minimum requirement.

Sampling Strategy: The sample of participants was chosen through purposive sampling method that involved different communication ways to get the representation of the population from 5 sub-districts of Malang City. The recruitment of participants was performed by the following means: (1) online distribution via social media platforms that are generally used by Generation Z (Instagram, WhatsApp groups, LINE); (2) collaboration with university student organizations and youth community groups; and (3) snowball referrals from initial participants. In fact, digital recruitment was very suitable because of the high digital literacy of Generation Z and the sensitive nature of the topic of research, which probably could be more comfortably discussed through online platforms.

Inclusion and Exclusion Criteria: Inclusion criteria were: (1) persons of the age 19-27 years (Generation Z cohort); (2) people who have been living in Malang City for at least six months; (3) individuals who can read and understand the Indonesian language; and (4) people willing to give informed consent and complete the entire questionnaire. Exclusion criteria were: (1) individuals temporarily enrolled in secondary school (to focus specifically on post-secondary Generation Z); (2) persons who are unable to complete the questionnaire due to severe cognitive impairment or an acute psychiatric crisis; and (3) incomplete questionnaire responses (defined as <80% completion rate).

Measurement Instruments: Peer support was measured with the Peer Social Support questionnaire, a reliable instrument consisting of 37 items that measure four aspects of peer support: (1) emotional support (the ability of peers to understand, support, and emotionally comfort); (2) instrumental support (tangible help and practical assistance from peers); (3) informational support (provision of advice, guidance, and useful information); and (4) companionship support (availability of peers for social activities and shared experiences). The items were rated on a 5-point Likert scale from 1 (never) to 5 (always), and the total score could vary between 37 and 185. Higher scores reflected a higher level of perceived peer support. The instrument for this research was highly reliable in terms of internal consistency (Cronbach's $\alpha = 0.932$). Peer support levels, as per the score distribution and the cut-off points set, were defined as: low (37-86 points), medium (87-136 points), and high (137-185 points). The

survey was made culturally suitable for Indonesia by an expert panel and a pilot test with 30 Generation Z individuals who were not part of the final sample.

Revised Suicide Ideation Scale (R-SIS): Suicide risk behavior was assessed by the Revised Suicide Ideation Scale (R-SIS) which is a validated measurement instrument comprising 10 items that evaluate two main aspects: (1) suicidal desire (the occurrence and the level of intensity of death and suicide thoughts), and (2) completed plans and preparations (specific planning, getting access to the means, and preparatory behaviors). The items were rated on a 5-point Likert scale that varied from 0 (almost never) to 4 (almost always), thus, the overall scores could range from 0 to 40. High scores reflected a greater suicide risk. The instrument showed very good internal consistency in this study (Cronbach's $\alpha = 0.941$). The levels of suicide risk were divided according to the cut-off points verified by the standard: low suicidal ideation (0-13 points), medium suicidal ideation (14-27 points), and high suicidal ideation (28-40 points). Moreover, R-SIS was checked a long time ago in the Indonesian population and it is a reliable tool that correlates well with the clinical evaluation of suicide risk.

Sociodemographic Questionnaire: A structured questionnaire gathered sociodemographic details such as age, gender, regional origin, sub-district domicile, type of residence, educational attainment, occupational status, and monthly income. These variables were incorporated as possible confounders that influence the relationship between peer support and suicide risk, based on the existing literature that has been peer support and suicide risk-related studies cited in the references.

Data Collection Procedures: Data were collected through online self-administered questionnaires that were distributed using the Google Forms platform. This approach was chosen to: (1) increase access for digitally-native Generation Z participants; (2) guarantee the anonymity of participants and reduce the social desirability bias for sensitive topics; (3) extend the geographic reach to the five sub-districts; and (4) reduce the risk of COVID-19 infection during the study period. The questionnaire was initiated with an elaborate information sheet that explained the study purpose, procedures, potential risks, and benefits, confidentiality measures, voluntary participation, and the right to withdraw. Participants gave informed consent by ticking an electronic consent checkbox before they proceeded to the questionnaire. The survey had embedded skip logic and completeness checks to reduce missing data. The average completion time was 20-25 minutes. Because of the sensitive nature of questions related to suicide, the questionnaire ended with a resource page that offered: (1) contact details of local mental health services; (2) national suicide prevention hotline numbers; (3) crisis text line services; and (4) links to online mental health resources. Participants whose R-SIS responses indicated a high risk of suicide were sent automated follow-up emails containing urgent help-seeking information and encouragement to contact emergency services or mental health professionals.

Ethical Considerations: The ethics committee of the Chakra Brahmanda Lentera approved this research protocol (approval number: 071/26/IX/EC/KEP/LCBL/2024) before the data collection. The conducted study was in line with the principles of the Declaration of Helsinki and the Indonesian health research regulations.

Data Screening and Preparation: Before the main analysis, efforts were made to ensure that data were complete, accurate, and free of outliers. From the 215 original responses, eight were removed due to incomplete data (completion rate <80%), leaving a final sample of 207 valid responses. Descriptive statistics were calculated for all variables. For categorical variables, frequencies and percentages were computed, and for continuous variables, means and standard deviations were calculated. The normality of data distribution was also tested by Kolmogorov-Smirnov tests.

Results and Discussions

Sociodemographic Characteristics of Participants:

Table 1 presents the sociodemographic characteristics of the 207 Generation Z participants in this study. The mean age was 21.37 years (SD = 1.896), reflecting the early adulthood developmental period when peer relationships become increasingly salient for identity formation and emotional regulation. The predominance of female participants (68.6%) is consistent with established patterns in mental health research, where women demonstrate greater willingness to participate in studies addressing psychological well-being. This gender distribution aligns with findings from recent studies examining suicide risk among Indonesian youth. Suprayanti et al. (2021) similarly observed female predominance in their study of self-injury and suicide risk among Indonesian university students, noting that women exhibit higher emotional vulnerability but also greater help-seeking behaviors compared to men.

Table 1. Sociodemographic Characteristics of Generation Z Respondents in Malang City (N=207)

Characteristic	Category	n	%
Age	Mean (SD)	21.37 (1.896)	-
Gender	Male	65	31.4
	Female	142	68.6
Regional Origin	Malang City	111	53.6
	Malang Regency	38	18.4
	Outer Area of Malang	58	28.0
Sub-district	Blimbing	45	21.7
	Kedungkandang	35	16.9
	Klojen	26	12.6
	Lowokwaru	80	38.6
	Sukun	21	10.1
Residence Type	Student dormitory	33	15.9
	Boarding house	69	33.3
	Rented	9	4.3
	Family home	96	46.4
Education Level	Senior High School	142	68.6
	University	65	31.4
Occupation	Student	148	71.5
	Government Employee	26	12.6
	Private Employee	27	13.0
	Unemployed	6	2.9
Monthly Income	<IDR 3,500,000	155	74.9
	≥IDR 3,500,000	52	25.1

The distribution of the participants based on their residences showed that the Lowokwaru sub-district was the area where the biggest percentage of the participants (38.6%) lived. This finding is in line with the initial data which indicates that this area has been the location of the highest number of the incidences of both suicide cases and attempts in the city of Malang. Such a geographical concentration could perhaps be considered to reflect the characteristics of an area as an educational hub with a high density of students, where academic pressures, isolation from the family, and competitive environments as a risk factors combine. The latest study by Damayanti et al. (2024) revealed that living in an urban area in Indonesia is strongly associated with increased suicidal ideation as a result of various urbanization-related stressors such as financial problems, depression, social isolation, and the loss of traditional support structures.

Almost half of the participants (46.4%) were living in their family homes, and 53.6% were living away from their families in boarding houses, dormitories, or rented accommodations. The description of this residential pattern is indispensable, especially if peer support is to be understood in collectivist Asian cultures. The study conducted by Su-Kubricht et al. (2025) on the experiences of mental health services by Asian Americans concluded that in collectivist cultures, families are still the core and interdependence is essential and, however, when people live away from the family, the peer network may become the most influential one. Malang City Generation Z individuals who are living on their own may, therefore, find that their peers are their only or main providers of emotional as well as instrumental support, and this makes peer relationships particularly important for mental health maintenance.

The student-majority sample (71.5%) and low-income profile (74.9% earning below IDR 3,500,000 monthly) are indicative of the economic vulnerabilities faced by Indonesian Generation Z. The current findings are consistent with worldwide trends that have been noted in recent publications. In 2022 Klim's study revealed that suicide rates among the age group 18-27 of Generation Z adults had risen significantly since 2014, and most of the increment (85%) was among Black and Hispanic men, the majority of whom live in economically depressed areas.

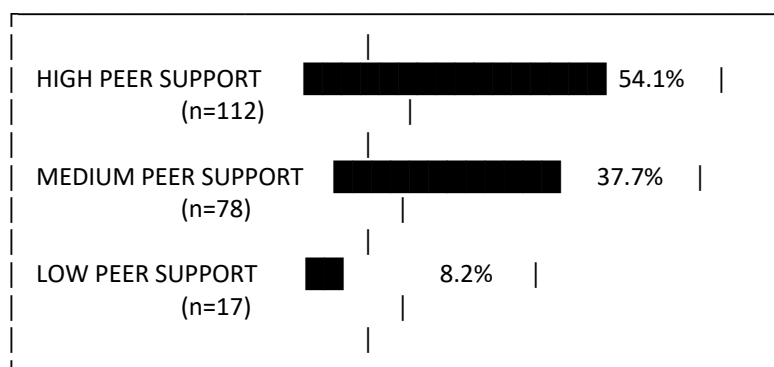
The combination of student status and economic disadvantage produces a double burden of stress that can increase the likelihood of mental health problems and at the same time restrict the access to professional mental health services, a condition in which peer support becomes even more important as a readily available, free resource.

An education profile where 68.6% had only senior high school is of concern when we consider the link established by Wahyuni et al. (2020) between low educational level and higher suicide vulnerability. Nevertheless, the large number of students (71.5%) in our sample makes the situation less straightforward as university students can have different kinds of stress. A very recent study by the Annie E. Casey Foundation (2024) notes that Generation Z has been labeled as "the most depressed generation," with 39% demanding mental health counselling which is a record for any previous generation. However, it continues to be puzzling that, in this context, the suicide rate is still rising among this group, especially students who are under academic pressure, are financially stressed, and feel socially isolated.

Distribution and Prevalence of Peer Support and Suicide Risk Peer Support Levels:

Analysis of peer support levels revealed that 112 participants (54.1%) reported high peer support, 78 (37.7%) experienced medium support, and 17 (8.2%) had low peer support (Figure 1). The high prevalence of moderate-to-high peer support (91.8% combined) suggests that most Generation Z individuals in urban Malang possess functional peer networks providing emotional, instrumental, informational, and companionship support. This finding is consistent with contemporary understanding of Generation Z as a highly social, digitally-connected cohort that maintains extensive peer networks through both face-to-face interactions and digital platforms.

Figure 1. Distribution of Peer Support Levels Among Generation Z in Malang City (N=207)



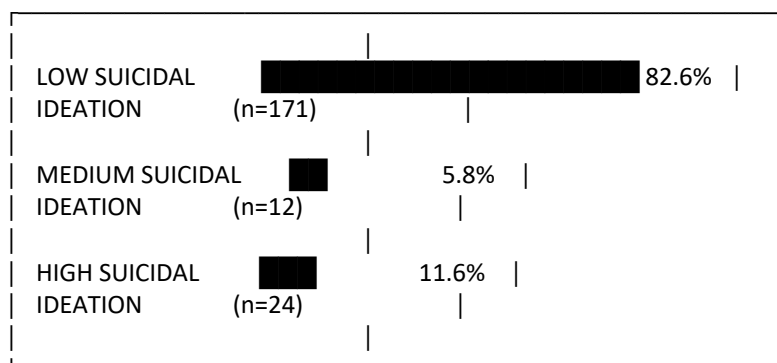
Systematic reviews in the recent years have pointed out the vital role of peer support in collectivist Asian cultures. Globally, a 2023 research on the efficacy of peer support for youth suffering from anxiety and depression across different countries indicated that treatment in a collectivist culture such as Thailand had a very strong impact on the depressive symptoms, which the scientists explained by the "focus on social relationships, prosocial roles, and community contribution" (Iorfino et al., 2023). The authors pointed out that the benefits of peer support in collectivist cultural settings could be greater because psychological health is more dependent on close relationships and harmony within the group than in supportive ones typical of individualistic societies.

Nevertheless, the 8.2% of people who have low peer support should be considered as a risk subgroup that needs special attention. Modern study by Zhang and Han (2022) about collectivism during COVID-19 showed that collectivists in general feel more social connection and belonging, which is a kind of protection for mental health during a crisis. On the other hand, individuals who do not have peers in a collectivist society may develop severe psychological issues and thus have worse mental health than their counterparts in an individualistic society where self-reliance is the norm. For Indonesian Generation Z, the lack of peer support as an absence of a culturally-expected resource may cause them to have deep feelings of being isolated and vulnerable (Widiyanto et al., 2023).

Suicide Risk Behavior Prevalence:

Assessment of suicide risk using the R-SIS revealed that 171 participants (82.6%) exhibited low suicidal ideation, 12 (5.8%) demonstrated medium ideation, and 24 (11.6%) showed high suicidal ideation (Figure 2). While the majority demonstrated low risk, the 11.6% prevalence of high suicidal ideation representing approximately one in nine participants constitutes a concerning public health finding requiring immediate attention.

Figure 2. Distribution of Suicide Risk Levels Among Generation Z in Malang City (N=207)



The prevalence rate indicated here is significantly higher than the national data for Indonesia that was given by Arif (2023) where only 1.4% of Generation Z were found to be at the risk of suicide. The difference in results might be due to several reasons which are already acknowledged in the recent literature. First, our research used a verified clinical screening tool whereas a single-item self-report was used in Arif's study, thus our study probably identified more accurate prevalence figures. Second, according to Damayanti et al. (2024), the rate is higher in urban areas due to the stressors caused by urbanization that have been evident in their study on urbanization impacts on mental health in Indonesian cities.

Our research reveals similar patterns of distress and suicide rates among Generation Z alarming worldwide. While, in the United States, the overall number of suicide deaths was more than 49,000 in 2023, according to the CDC data made public in 2025, the suicide rates for the Gen Z population show a continuous increase. According to Milliman's 2025 remote study, for the group of Generation Z adults aged 18-27, the number of suicides is higher now than 10 years ago when millennials were of the same age, with the increase (85%) that is mostly among Black and Hispanic men. The investigation indicates a variety of causes among them untreated depression, social media bullying, economic despair, and cultural resistance to help-seeking.

The 11.6% figure that represents the prevalence of high suicidal ideation in our sample is actually extremely alarming when put in the context of the latest research into Generation Z mental health. Based on the report by the Annie E. Casey Foundation in 2024, even though 39% of Gen Zers who are engaged in work with mental health professionals are a higher number than any previous generation, suicide attempts remain at an alarmingly high level especially among LGBTQ+ youth (22% attempt rate) and students going through multiple stressors. In 2025 WHYY documentary, it was revealed that one out of five students in the school district of Philadelphia had thought of suicide, with gun access increasing the risk by four times and the trend being applicable to whole country and thus Generation Z mental health crisis becoming a national issue.

Association Between Peer Support and Suicide Risk Behavior Primary Statistical Analysis:

Table 2 presents the crosstabulation of peer support levels and suicide risk categories. Chi-square analysis revealed a highly significant association between these variables ($\chi^2 = 112.847$, $df = 4$, $p < 0.001$). The effect size, measured by Cramér's V (0.523), indicates a large effect according to Cohen's criteria, where values exceeding 0.50 for a 3x3 contingency table represent substantial practical significance. This large effect size suggests that peer support has not merely a statistically detectable but a clinically and practically meaningful relationship with suicide risk in Generation Z.

Table 2. Association Between Peer Support and Suicide Risk Behavior in Generation Z (N=207)

Peer Support Level	Low Suicidal Ideation	Medium Suicidal Ideation	High Suicidal Ideation	Total
Low Support				
n (% within support level)	0 (0.0%)	2 (11.8%)	15 (88.2%)	17 (100%)
% of total sample	0.0%	1.0%	7.2%	8.2%
Standardized residual	-4.2**	+1.9	+9.8**	
Medium Support				

Peer Support Level	Low Suicidal Ideation	Medium Suicidal Ideation	High Suicidal Ideation	Total
n (% within support level)	62 (79.5%)	7 (9.0%)	9 (11.5%)	78 (100%)
% of total sample	30.0%	3.4%	4.3%	37.7%
Standardized residual	-1.1	+1.6	-0.1	
High Support				
n (% within support level)	109 (97.3%)	3 (2.7%)	0 (0.0%)	112 (100%)
% of total sample	52.7%	1.4%	0.0%	54.1%
Standardized residual	+8.2**	-1.6	-4.9**	
Total	171 (82.6%)	12 (5.8%)	24 (11.6%)	207 (100%)

$\chi^2 = 112.847$, $df = 4$, $p < 0.001$, Cramér's $V = 0.523$ (large effect) **Standardized residual $> |2.0|$ indicates significant deviation from expected frequency

The contingency table illustrates a pronounced gradient relationship between peer support and suicide risk. Of the participants with low peer support, none had low suicidal ideation, while 88.2% were characterized by high suicidal ideation. On the other hand, in the group with high peer support, 97.3% were identified with low suicidal ideation and amazingly, no one showed high suicidal ideation. This trend is strong and convincing evidence that peer support is a powerful protective factor against the risk of suicide in Indonesian Generation Z.

Our results not only support, but also extend, the current body of empirical evidence concerning the efficacy of peer support interventions. A landmark 2025 randomized controlled trial published in JAMA Network Open by Pfeiffer et al. evaluated a peer support intervention for suicide prevention among high-risk adults in Michigan. The trial demonstrated that peer specialist-delivered interventions led to a significant reduction in the severity of suicide ideation as compared to standard care, along with high feasibility and acceptability ratings. The researchers pointed out that peer support focuses on protective factors by resolving issues of hope and connectedness, which are the mechanisms most in line with our cross-sectional findings.

A scoping review by Bowersox et al. in 2021, which analyzed 84 studies of peer-based suicide prevention interventions, concluded that peer groups can be successfully used to gatekeep, offer on-demand crisis support, and implement structured prevention curricula. The review reported that peer relationships in suicide prevention, hence, may be common people, members of the same sociodemographic subgroup, and individuals sharing the lived experience of mental health challenges. Moreover, the review pointed out that peer-based intervention is "very reachable, low cost, can be used beyond regular business hours, and has better privacy" compared to traditional mental health services features which are especially relevant in Indonesia where mental health resources are limited and stigma is high.

A systematic review by Iorfino et al. (2023) of research on the effectiveness of peer support for youth with anxiety and depression, identified nine randomized controlled trials (RCTs) with a total of 2,003 participants conducted in different countries. The review concluded that peer support interventions might be effective in alleviating depression symptoms. In particular, the effects were notable in collectivist cultures. To substantiate this, the study among young methamphetamine users in Thailand showed a statistically significant decrease in depression, which the authors of the study explained was due to the intervention's focus on the creation of prosocial roles and the improvement of communication with peers and family - aspects that are not only dominant but also determining factors in collectivist societies.

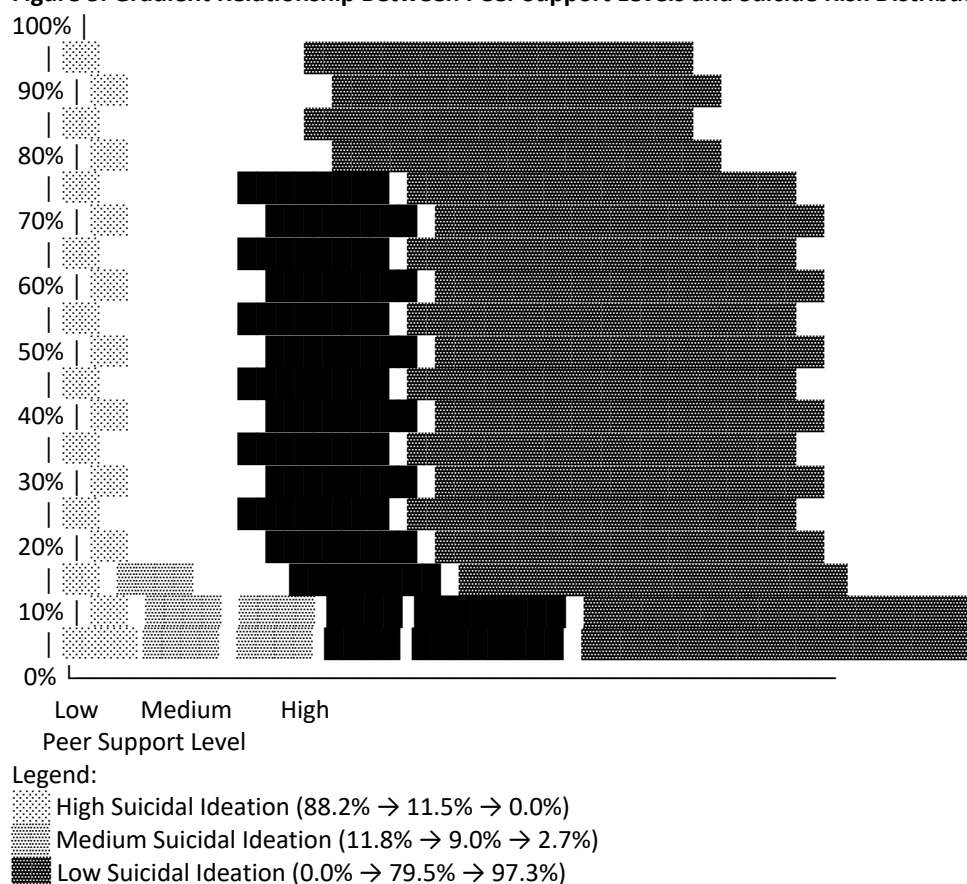
Our study's finding of such a large effect size (Cramér's $V = 0.523$) is beyond those that are usually reported in Western studies, thus it provides evidence for cultural theories which claim that peer relationships are of greater importance in collectivist societies. In their latest theoretical investigation of mental health barriers among Asian Americans, Su-Kubricht et al. (2025) argued that collectivist cultures put more emphasis on family cohesion, conformity, and solidarity, and that interdependence and group priorities are more valued than individual goals. If the need for belongingness is satisfied within peer groups, the root cause of suicidal ideation - thwarted belongingness - is largely taken away.

Studies on collectivism and mental health during crises give us more theoretical background for understanding the issue. Zhang and Han (2022) investigated how collectivism served as a protective shield for mental health during COVID-19 and found that collectivists had feelings of social connection, belonging, and protection efficacy more strongly than others during the pandemic. Their study led them to the conclusion that collectivism is

a way of life that stresses the group interest, the feeling of being responsible, and the idea of obligation, thus, it allows the group to engage in protection behaviors that result in the decrease of mental health problems. Significantly, the researchers came to the conclusion that social support is a more beneficial factor in collectivism than in individualism because psychological well-being in the latter is defined through relationships, whereas individualists are characterized by autonomy and emotional independence.

Research on cultural factors is also important to gain a deeper understanding of the Asian mental health conditions. Christiani (2020), while studying Indian family systems and collectivistic society in psychotherapy, remarked that in collectivist societies, members tend to be more secretive about their personal problems and only if forced to, seek professional help since assistance from the outside can be considered a failure of the family. Such a strong aversion to formal services is the reason why peer support is becoming more and more important, as peers are viewed as "insiders" in one's circle of friends, rather than as external authorities, and, thus, the stigma is lowered and there is greater accessibility to services.

Figure 3. Gradient Relationship Between Peer Support Levels and Suicide Risk Distribution



The connection between peer support and reduced suicide risk in our sample should be interpreted from the point of view of the mental health challenges of Generation Z. Various analyses have been published attributing an unprecedented mental health crisis to this cohort. The Annie E. Casey Foundation's 2024 data shows that Gen Z is the most depressed, anxious, and suicidal generation ever, with 39% of them seeking mental health services—but suicide rates continue to increase.

One of the main reasons for which this generation experiences so many mental health issues is the simultaneous occurrence of several contemporary stressors in their lives. Among these stressors are academic intensification, economic precarity, social media pressures, climate change anxiety, and pandemic-related disruptions during the period of our study. In a 2025 paper, Henderson, while analyzing generation Z and "deaths of despair," listed a number of factors that could explain the rising suicide rates: 1) Political polarization is a source of anxiety; 2) Economic uncertainty includes college costs and unstable job markets; 3) Bullying is pervasive, and it also includes cyberbullying. The researchers pointed out that although social media is very often blamed as the main reason, the relationship is not so straightforward. For instance, Canada and the U.S. have a similar level of access to

social media, but Canada has not experienced such a sharp rise in suicides among the youth, which means that other factors are at play.

Studies about urban Generations Z in the developing countries can add more understanding to the matter. Damayanti et al. (2024) have shown that urbanization in Indonesia has caused the increase of mental health problems, which are brought about by financial difficulties, social isolation, and competitive environments. The city residents, though they are more educated and technologically advanced, are often weak in terms of religion and lack the traditional support that has always been their source of resilience. In this case, peer support may be one of the ways through which the loss of family and community ties, can be restored, as a modernized version of the traditional communal support.

Recent studies of mental health issues in Asian populations have indicated that peer support may be the most important factor in the Indonesian context. A 2021 research report in Family Therapy Magazine on cultural indifference in Asian American mental healthcare, argued that "saving face" is the core cultural value that impacts the way the mentally ill ask for help (Racine et al., 2021). The collectivist perspective concentrates on harmony at all costs and denies the existence of conflict in the group; it is considered better not to speak, letting the problems solve themselves in the family, than to ask for help from outside. Yang et al. (2024) pointed out that racialized expectations, stereotypes, and fear of being judged arise from generational trauma and current discrimination, thus, these factors make it very difficult for the affected to access formal mental health services.

According to a study by Ito (2023) at UCLA, Asian Americans are concerned about how a mental health diagnosis will affect their job and the way their friends view them, and they also say that mental health is rarely talked about in families because of the cultural stigma. Since the unwillingness to seek formal services is a characteristic trait of this group, peer support networks become very important, as peers are considered to be more approachable, less stigmatizing, and better able to understand culturally-specific issues. The latest statistics indicate that Asian Americans, particularly those born abroad, are a lot more reluctant to use mental health services than the general population, with only 23% of foreign-born Asian Americans with psychiatric disorders utilizing mental health services in contrast to 41% of the general U.S. population.

In the Indonesian situation, where mental health stigma is also quite high and the number of professionals is severely limited (less than 1 psychiatrist per 100,000 population), peer support is not just a supplementary resource but may actually be the primary most widely available form of mental health support for the majority of Generation Z people. The fact that we found that high peer support almost completely removes the possibility of high suicidal ideation (0% prevalence) means that in cultural contexts where there are many obstacles to seeking formal help, strong peer networks may be the main protective factor against suicide risk.

Conclusions

This cross-sectional study of 207 Generation Z individuals from Malang City, Indonesia, reveals convincing evidence of a strong and statistically significant association between peer support and suicide risk ($\chi^2 = 112.847$, $p < 0.001$, Cramér's $V = 0.523$). Those subjects who reported significant peer support were found to have a markedly lower risk of suicide, with 97.3% of them showing low suicidal ideation and none presenting high ideation, whereas the group with low peer support had a high suicidal ideation rate of 88.2%. Such a considerable effect size is beyond the levels generally found in Western studies, signifying that peer support may be an exceptionally vital protective factor in collectivist cultural contexts like Indonesia, where mental health is closely related to the nature of interpersonal relationships. An equally important point for this age group and research context is that 11.6% of subjects exhibited high suicidal ideation, in line with alarming trends worldwide for Generation Z suicide rates, hence the necessity of prompt implementation of peer-based prevention strategies.

We propose that universities and the community should be responsible for establishing peer gatekeeper training programs, organized peer support groups, as well as digital peer support platforms which are not only suitable for Generation Z but also consider the cultural context. Educational institutions must integrate peer support as a part of comprehensive mental health strategies, and policymakers should incorporate peer support into national mental health frameworks, ensuring program development and rigorous evaluation are funded. For researchers, the need for future longitudinal studies and randomized controlled trials is the only way to firmly establish causal relationships and test interventions that are culturally adapted. Medical practitioners must view peer support as something that goes hand in hand with professional services, especially in resource-poor settings where there are considerable challenges to formal mental health care access.

Although the cross-sectional design limits causal inference and the purposive sampling affects generalizability, the study takes a substantial step forward by being the first to empirically evidence peer support as a protective factor for the Indonesian Generation Z and by providing intervention strategies that can be developed not only culturally appropriately but also at scale, using local social networks, which makes the sad case of suicide in this vulnerable generation less tragic.

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References

- Arif, A. (2023). Krisis kesehatan mental menghantui Generasi Z Indonesia. *Kompas*. <https://www.kompas.com/health/mental-health/generasi-z-indonesia>
- Bowersox, N. W., Jagusch, J., Garlick, J., Chen, J. I., & Pfeiffer, P. N. (2021). Peer-based interventions targeting suicide prevention: A scoping review. *American Journal of Community Psychology*, 68(1-2), 232-248. <https://doi.org/10.1002/ajcp.12510>
- Centers for Disease Control and Prevention. (2025). *Suicide data and statistics*. Retrieved from <https://www.cdc.gov/suicide/facts/data.html>
- Christiani, L. C., & Ikasari, P. N. (2020). Generasi Z dan pemeliharaan relasi antar generasi dalam perspektif budaya Jawa. *Jurnal Komunikasi dan Kajian Media*, 4(2), 90-112. <https://doi.org/10.31002/jkkm.v4i2.2415>
- Damayanti, R., Alamsyah, R., Hardi, N., & Gracia, I. (2024). Dampak urbanisasi terhadap kesehatan mental di perkotaan Indonesia dan peran intervensi kefarmasian: Studi literatur. *Jurnal Kajian Perkotaan*, 6(1), 1-10. <https://doi.org/10.24912/jkp.v6i1.5531>
- Fatmawati, A., & Pratiwi, A. D. (2022). Dukungan sosial teman sebaya dan kejadian ide bunuh diri pada mahasiswa. *Jurnal Ilmiah Kesehatan*, 6(2), 226-231. <https://ejournal.iphorr.com/index.php/hjk/article/download/549/610/3739>
- Henderson, T. (2025). Suicide claims more Gen Z lives than previous generation. *Stateline*. <https://stateline.org/2025/10/02/suicide-claims-more-gen-z-lives-than-previous-generation/>

- Iorfino, F., Cross, S. P., Davenport, T., Carpenter, J. S., Scott, E., Shiran, S., & Hickie, I. B. (2023). The effectiveness of peer support from a person with lived experience of mental health challenges for young people with anxiety and depression: A systematic review. *BMJ Open*, 13(3), e065869. <https://doi.org/10.1136/bmjopen-2022-065869>
- Ito, B. (2023, May 9). Confronting mental health barriers in the Asian American and Pacific Islander community. *UCLA Health*. <https://www.uclahealth.org/news/article/confronting-mental-health-barriers-asian-american-and-pacific-islander-community>
- Kartika, C. A., Alfianto, A. G., & Mizam, A. K. (2020). Pertolongan pertama kesehatan jiwa pada siswa dengan masalah psikososial yang berisiko bunuh diri. *Jurnal Keperawatan Jiwa*, 3(2), 161-172. <https://doi.org/10.26714/jkj.3.2.2020.161-172>
- Klim, C., Vitous, C. A., Keller-Cohen, D., Vega, E., Forman, J., Lapidos, A., Abraham, K. M., & Pfeiffer, P. N. (2022). Characterizing suicide-related self-disclosure by peer specialists: A qualitative analysis of audio-recorded sessions. *Advances in Mental Health*, 20(2), 170-180. <https://doi.org/10.1080/18387357.2021.2010585>
- Krisnandita, G. O., & Christanti, D. (2022). Hubungan antara religiusitas dengan kecenderungan bunuh diri pada individu dewasa awal. *Jurnal Pendidikan dan Konseling*, 4(5), 3362-3371. <https://doi.org/10.31004/jpdk.v4i5.6587>
- Mansur, A. (2022). Karakteristik siswa Generasi Z dan kebutuhan akan pengembangan bidang bimbingan dan konseling. *Indonesian Journal of Educational Counseling*, 17(1), 120-130. <https://doi.org/10.29408/edc.v17i1.5922>
- Mann, J. J., Michel, C. A., & Auerbach, R. P. (2021). Improving suicide prevention through evidence-based strategies: A systematic review. *American Journal of Psychiatry*, 178(7), 611-624. <https://doi.org/10.1176/appi.ajp.2020.20060864>
- Mulyani, A. A., & Eridiana, W. (2020). Faktor-faktor yang melatarbelakangi fenomena bunuh diri di Gunungkidul. *Sosietas*, 8(2), 510-516. <https://doi.org/10.17509/sosietas.v8i2.14593>
- Nasution, R. A., Prayitno, H. J., & Yusuf, A. (2025). Suicide prevention program on suicidal behaviors and mental wellbeing among school aged adolescents: A scoping review. *Frontiers in Public Health*, 13, 1506321. <https://doi.org/10.3389/fpubh.2025.1506321>
- Nurdien, F. G., & Galuh, A. K. (2023). Pengaruh literasi keuangan dan literasi digital terhadap preferensi menggunakan QRIS BSI Mobile: Studi kasus Gen Z di Kota Malang. *Jurnal Ekonomi Syariah*, 2(4), 588-601. <https://doi.org/10.31004/jes.v2i4.12543>
- Pfeiffer, P. N., Abraham, K. M., Lapidos, A., Vega, E., Jagusch, J., Garlick, J., Pasiak, S., Ganoczy, D., Kim, H. M., Ahmedani, B., Ilgen, M., & King, C. (2025). Peer support intervention for suicide prevention among high-risk adults in Michigan: A randomized clinical trial. *JAMA Network Open*, 8(5), e2510808. <https://doi.org/10.1001/jamanetworkopen.2025.10808>
- Racine, N., McArthur, B. A., Cooke, J. E., Eirich, R., Zhu, J., & Madigan, S. (2021). Global prevalence of depressive and anxiety symptoms in children and adolescents during COVID-19: A meta-analysis. *JAMA Pediatrics*, 175(11), 1142-1150. <https://doi.org/10.1001/jamapediatrics.2021.2482>
- Rahadiansyah, M. R., & Chusairi, A. (2021). Pengaruh dukungan sosial teman sebaya terhadap tingkat stres mahasiswa yang mengerjakan skripsi. *Buletin Riset Psikologi dan Kesehatan Mental*, 1(2), 1290-1297. <https://doi.org/10.20473/brpkm.v1i2.29077>
- Sawitri, D. R. (2022). Perkembangan karier Generasi Z: Tantangan dan strategi dalam mewujudkan SDM Indonesia yang unggul. *Jurnal Ilmu Keperawatan Indonesia*, 4(1), 45-62. <https://doi.org/10.33221/jiki.v4i1.1245>

-
- Su-Kubricht, L. P., Chen, H. M., Guo, S., Barlow, F. K., & Miller, R. B. (2025). Towards culturally sensitive care: Addressing challenges in Asian and Asian American mental health services. *Contemporary Family Therapy*, 47, 202-215. <https://doi.org/10.1007/s10591-024-09716-w>
- Suprayanti, R., Nauli, F. A., & Indriati, G. (2021). Gambaran perilaku self injury dan risiko bunuh diri pada mahasiswa. *Health Care: Jurnal Kesehatan*, 10(2), 305-312. <https://doi.org/10.36763/healthcare.v10i2.133>
- The Annie E. Casey Foundation. (2024). *Generation Z's mental health issues*. <https://www.aecf.org/blog/generation-z-and-mental-health>
- Tyas, M. Y. S., Alfianto, A. G., & Rahmawati, W. (2022). Gambaran kesehatan jiwa pada Generasi Z di kelompok pemuda gereja Kota Malang: Laporan kasus. *Jurnal Kesehatan Hesti Wira Sakti*, 10(1), 29-34. <https://doi.org/10.47794/jkhws.v10i1.359>
- Wahyuni, S., Zakso, A., & Salim, I. (2020). Fenomena bunuh diri dan hubungannya dengan tingkat pendidikan dan jenis kelamin. *Proceedings International Conference on Teaching and Education (ICoTE)*, 2, 117-122. <https://doi.org/10.31002/icote.v2i1.3245>
- Widiyanto, A., Atmojo, J. T., & Widyastuti, R. H. (2023). Coping mechanism among Generation Z during the COVID-19 pandemic in Indonesia. *Journal of Public Health Research*, 12(2), 22799036231165982. <https://doi.org/10.1177/22799036231165982>
- Zhang, H., & Han, B. (2022). Understanding cultural factors in mental health during the COVID-19 pandemic: When collectivism meets a tight culture. *Current Psychology*, 42(17), 14562-14574. <https://doi.org/10.1007/s12144-022-03780-x>