

# Psychological Correlates of Suicidal Ideation Among Women College Students

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Abstract: This study aims to explore the relationship between suicidal ideation and various psychological variables, including self-esteem, hopelessness, perceived social support, and loneliness, among women college students in Chennai City. The study utilises a theoretical framework that emphasises the interplay between these variables to gain a comprehensive understanding of suicidal ideation among this population. Through an Ex Post Facto design and multiple regression analysis, the study examines the contribution of these psychological variables to suicidal ideation. The findings suggest that self-esteem, hopelessness, perceived social support, loneliness, and suicidal ideation are all interconnected and should be addressed holistically in interventions aimed at promoting well-being among women college students. The study highlights the importance of considering other potential factors, such as past trauma, substance abuse, and mental health disorders, in future research. The findings of this study can help the development of effective interventions, including psychotherapy, support groups, and well-being-promoting activities, to combat suicidal ideation among women college students.

Keywords - Suicidal ideation, Self-esteem, Hopelessness, Perceived social support, Loneliness, Young women college students

## 1. INTRODUCTION

The UNDP Human Development Report (2021/2022) "Unsettled Minds in Uncertain Times" declares suicide as one of the leading causes of death globally for individuals between 15-29 years of age. A sizeable population of individuals above 18 and below 30 years of age have been shown to resort to death by suicide (NCRB 2021). Amudhan et al. (2015-2016) put this in perspective, noting that for every death by suicide in India, there are more than 200 people with non-fatal suicidal thoughts and behaviour and more than 15 actual suicide attempts. Global Burden of Disease (GBD) Study for India revealed substantial sex differentials and state-level heterogeneity in suicide death rates in 2017. A 2019 update references mortality by suicide and estimates nearly 85900 (95% uncertainty interval [UI] 68600–106300) women and girls and 109470 (77900–135300) men and boys died by suicide in India in 2019, accounting for 2·1% of the estimated 9·4 million deaths that occurred in the country in 2019. Eskin M & AlBuhairan, F et al. (2019) posited that more women ideate and attempt suicide while more men die by suicide. Vijaykumar et al. (2021) observed that Indian women and girls remain more prone to suicide than their global counterparts. The significant factors leading to suicide are personal, social, and economic circumstances, interpersonal problems, loneliness, and social isolation. (Mendizabal et al., 2019).

It is important to note that female suicide witnesses a marked increase with age. Additionally, females are more likely than males to exhibit internalising disorders -- anxiety and mood disorders -- abuse and interpersonal problems. (Fergusson et al., 1993). An exciting addition to this aspect, made by Vijayakumar (2016), states that women's vulnerability to suicidal behaviour is related more to psychosocial stressors. These disorders and problems may mediate the relationship between suicidal thoughts and behaviours. (Peter & Roberts, 2010; Mars et al.,2014). It is in this cohesive context that this paper is presented.

In India, the Central Government is formulating a National Suicide Prevention Strategy to combat the issue. A scaffolding approach, states Vijaykumar 2016, may be applied to reduce suicide rates. Combating suicide at its root would, therefore, necessitate timely intervention with balanced intensity and duration that assists individuals in navigating situations where they may be more vulnerable and at risk of suicide. Interestingly, legal complications interpret suicide as punishable, leading to underreporting cases. Suicide attempts were a criminal offence in India under Section 309 of the Indian Penal Code (IPC). The Mental Healthcare Act 2017 decriminalised suicide, allowing the person who attempted suicide, unless proven guilty, the individual will receive care, treatment, and rehabilitation to reduce reattempts. However, it is vital to note that despite these claims, there are contradictions with Section 309 of the Indian Penal Code. (Vijayakumar L,2007; The Mental Health Act 2017; Behere et al.,2015). Such challenges make it even more essential to study psychological correlates of suicidal ideation among women college students to create a comprehensive understanding and better measures to address it.

# 2. RESEARCH METHODOLOGY

## 2.1. Aim of the study

The present study explores the relationship between suicidal ideation and other psychological variables like self-esteem, hopelessness, loneliness, and perceived social support among women college students in Chennai City. This aim will be examined through the objectives:

- To study the inter-relationship between suicidal ideation and the psychological variables: Self-esteem, hopelessness, perceived social support and loneliness
- To determine the contribution of the psychological variables to suicidal ideation.
- To assess the severity of suicidal ideation among women college students.

#### 2.2. Theoretical framework of the study

Our understanding of suicidal behaviour has developed considerably over the past few decades thanks to the sustained research into suicidal ideation, planning, attempting, and completing suicide. The premise that suicide attempts resulted from thoughts of suicide getting stronger was proved wrong. According to IPTS, unlike the adaptive need to survive, one must learn how to deal with the suffering and fear of dying by repeatedly experiencing unpleasant or terrifying events. Given this, people used to think that "acquiring capability" was linked to varied adverse experiences, like being mistreated as a child, hurting others (like being exposed to traumatic events), and hurting oneself (like non-suicidal self-injury or NSSI). Developed by Thomas Joiner (2005), the IPTS theory asserts that acquired capabilities function independently of suicidal thoughts; a genuine suicide attempt occurs just when suicidal intent interferes with the ability to approach the fear of death and suffering.

A more recent addition and an off-shoot of Joiner's IPTS theory is the Three-Step Theory of Suicide (3ST) posited by Klonsky ED, Pachkowski MC, et al. in 2021. It builds upon the IPTS positioned in what has come to be known as "the ideation-to-action framework." The framework established by 3ST offers context for identifying and understanding the influences of various 'biopsychosocial risk factors and interventions. Specifically, anything that impacts pain, hopelessness, connection, and suicide capability would be expected to impact suicide risk. (Klonsky et al., September 2021. Thus, the 3ST recommends that suicidal ideation is precipitated by the combined effects of unendurable (usually psychological) pain and hopelessness. Suicidal ideation is intense as one's pain is above or amplifies factors such as connectedness (to valued people, communities, or primary sources of purpose and meaning). Personality factors enable the shift from potent suicidal ideation to fatal suicide attempts, so the 3ST is a theory that predicts suicide based on pain, hopelessness, connectedness, and the ability to kill oneself.

#### 2.3. Population and Sample

The sample included 596 women college students aged 18-25 from two Government, two Aided, and two Self-financing colleges in Chennai city. Departments and classes were randomly selected in each college. A total of 596 students, of which 439 were undergraduate students and 157 were postgraduate students, participated in the study.

#### **2.4.** Tools

Data was collected using the following tools. The questionnaire has six sections. The first is socio-demographic information, followed by Rosenberg's Self-esteem, Beck's Hopelessness Scale, UCLA Loneliness Scale, Multidimensional Scale of Perceived Social Support, and Adult Suicidal Ideation Questionnaire.

- **2.4.1. Self-esteem:** The Rosenberg Self-Esteem Scale, Rosenberg, M. (1965), a widely used self-report instrument for evaluating individual self-esteem, is a 10-item scale. All items are answered using a 4-point Likert scale ranging from strongly agree to strongly disagree. Scores are calculated as follows: for items 1, 3, 4, 7, and 10, the scoring is "Strongly Disagree" 1 point, "Disagree" 2 points, "Agree" 3 points, and "Strongly Agree" 4 points. Items 2, 5,6, 8, and 9 are reversed in the score; therefore: "Strongly Agree" is 1 point, "Agree" 2 points, "Disagree" 3 points, and "Strongly Disagree" 4 points. The total sum of scores is finally tallied. The scale ranges from 0-30. Scores between 15 and 25 are within the normal range, and scores below 15 suggest low self-esteem.
- **2.4.2. Hopelessness**: Beck's Hopelessness Scale, Beck, A. (1974) is a 20-item self-report instrument that assesses emotions about the future, future desires, lack of motivation, and overall hopelessness. Participants perused a statement and responded true or false depending on their feelings. Each favourable response scored 0, and each pessimistic response scored 1. A total score was calculated by summing the pessimistic responses for each of the 20 items. A score of 0-3 is none or minimal hopelessness,4-8 is mild hopelessness, and 9-14 is moderate hopelessness, which may not be in danger but is frequent regular monitoring. 15+- Severe definite suicide risk.
- **2.4.3. Loneliness:** UCLA Loneliness Scale (Russell, Peplau, & Ferguson, 1978) primarily quantifies the levels of loneliness; it consists of 20 items (11 positive and nine negative) rated on a 4-point Likert scale. The scale depends on four Categories: Often=3 points ("I often feel this way"), Sometimes=2 points ("I sometimes feel this way"), Rarely=1 point ("I rarely feel this way"), and Never=0 ("I never feel this way"), and the range is from 0-60, a high score showing more loneliness.

**2.4.4. Perceived Social Support:** The Multidimensional Scale Of Perceived Social Support (MSPSS) Zimet, Dahlem, Zimet, and Farley (1988) is a brief instrument designed to assess perceptions of support from three sources: family, friends, and significant others. The scale consists of 12 items, with each subscale containing four items and a 7-point scale. The scale score is "Very Strongly Agree" with a score of 7, "Strongly Agree" with a score of 6, "Mildly Agree" with a score of 5, Neutral a score of 4," Mildly Disagree," with a score of 3, "Strongly Disagree" a score of 2 and "Very Strongly Disagree" a score of 1. The lower the score, the lower the social support.

**2.4.5. Suicidal Ideation:** The Adult Suicidal Ideation Questionnaire (ASIQ) (Reynolds. 1991)Screens for suicidal ideation in college students and other adults. ASIQ is a 25-item questionnaire. ASIQ evaluates a continuum of suicidal ideation from wishes that one had not been born to more specific thoughts of killing oneself. In addition, ASIQ assesses suicidal ideation to include aspects such as:

- Suicide as retaliation to others
- Suicide as a way to make people see how valuable one is
- Thoughts that nobody cared whether one lived or died
- Suicide as a means of problem-solving

The ASIQ uses a 7-point item response format in which the respondent indicates the frequency of thoughts occurring during the past month. The range from "Almost every day" = a score of 6, "A couple of times a week" =a score of 5, "About once a week" =a score of 4," A couple of times a month" = a score of 3," About once a month" = 2, "I had this thought before but not in the past month= a score of 1, "I never had this thought" = score of 0. A high score reveals numerous suicidal thoughts occurring with a possible range of scores from 0 to 150.

#### 3. PROCEDURE

A pilot study was conducted on 40 women college students. The pilot study determined the tools' relevance, usefulness, ease of administration in groups in a classroom setting, and the time taken to respond to the selected tools. Before this, the college authorities requested and granted permission to administer the questionnaire. Students who expressed a willingness to participate formed the study's respondent group. The nature of the research and its purely academic purpose was explained clearly, and the assurance provided that their responses would be kept confidential. The questionnaire was then administered to small groups of 50 students. The researcher immediately clarified any questions raised about the items. In addition, it was observed that the students could comprehend the questions.

#### 4. RESULTS AND DISCUSSION

Product-moment correlation helped determine the inter-relationship between suicidal ideation and the selected psychological variables. Multiple regression analysis enabled the researcher to determine how these psychological variables contributed to suicidal ideation.

**Table 1:**Relationship between Suicidal Ideation, Self-esteem, Hopelessness, Perceived Social Support, and Loneliness (N=596)

Variables	Self-esteem	Hopelessness	Perceived Social Support	Loneliness	Suicide Ideation
Suicidal Ideation	149**	.305**	.172**	.369**	-
Self-esteem	-	321**	.119**	128**	149**
Hopelessness	321**	-	287**	.313**	.305*
Perceived Social Support	.119**	287	-	395**	172
Loneliness	128**	.313**	395**	-	.369*

<sup>\*\*</sup>p<.01

The correlation coefficients between Suicidal Ideation (SI), Self-Esteem, Hopelessness, Perceived Social Support (PSS), and Loneliness are displayed in the table.

Suicidal Ideation (SI) is negatively correlated with self-esteem (r = -.149) and perceived social support (r = -.172), and positively correlated with hopelessness (r = .305) and loneliness (r = .369), according to the findings. The positive correlation between loneliness, hopelessness, and suicidal ideation suggests that college-aged women who experience loneliness and hopelessness may be more likely to have suicidal thoughts. This emphasises the significance of addressing Loneliness and SI as potential suicide risk factors.

In addition, the table demonstrates that Self-esteem is negatively correlated with hopelessness (r = -0.321) and loneliness (r = -0.128) and positively correlated with PSS (r = .119). In other words, college women with low self-esteem are likelier to experience hopelessness and loneliness. This emphasises the significance of addressing self-esteem issues to prevent or lessen feelings of hopelessness and isolation. Additionally, Hopelessness correlates negatively with self-esteem (r = -.321) and perceived social support (r = -.287) but positively with loneliness (r = .313) and suicidal ideation (r = .305). This suggests that women college students who experience hopelessness may also perceive less social support. This demonstrates the significance of social support in treating feelings of hopelessness.

Positively correlated with self-esteem (r = .119) and negatively correlated with hopelessness (r = .287), loneliness (r = .395), and social isolation (r = .172), perceived social support indicates that women college students with higher self-esteem have better social support networks. This finding supports the notion that enhancing self-esteem can enhance social support. Also, Loneliness is negatively correlated with self-esteem (r = .128) and perceived social support (r = .395) and positively correlated with hopelessness (r = .313) and suicidal ideation (r = .369). Higher levels of loneliness appear to be associated with lower self-esteem and perceptions of social support. In contrast, greater hopelessness and suicidal ideation are associated with a greater sense of isolation. Overall, the findings of this study suggest that self-esteem, hopelessness, perceived social support, Loneliness, and suicidal Ideation are all interrelated and should be addressed together to promote well-being among women college students. Effective interventions may include psychotherapy, support groups, and well-being-promoting activities.

**Table 2:**Multiple regression Analysis: Contribution of Self-esteem, Hopelessness, PSS, Loneliness to Suicidal Ideation

Model	Variables	Beta Coefficients	t-value	Significance
	Self-esteem	048	-1.229	.220
Multiple R= .422 R Square= .178	Hopelessness	.196	4.704	.000
Adjusted R Square= .173	PSS	.011	.259	.796
	Loneliness	.306	7.333	.000

Multiple regression analysis shows the contribution of four predictor variables (self-esteem, hopelessness, perceived social support [PSS], and loneliness) to suicidal ideation.

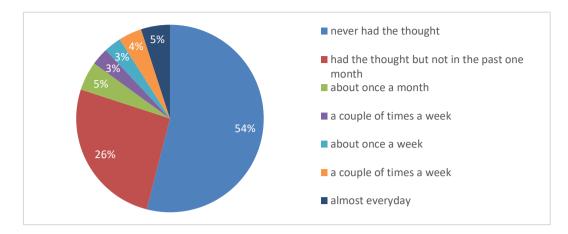
The multiple regression model has an overall multiple R of .422, indicating a moderate positive relationship between the four predictor variables and suicidal ideation. The R-squared value of .178 shows that the four predictor variables explain 17.8% of the variance in suicidal ideation. The adjusted R-squared value of .173 indicates that this is a reasonable estimate of the population variance.

Further, the table shows that hopelessness and loneliness are significant predictors of suicidal ideation. Specifically, hopelessness has a beta coefficient of .196, indicating that higher levels of hopelessness are associated with higher suicidal ideation. Likewise, loneliness has a positive beta coefficient of .306, indicating that higher levels of loneliness are associated with higher levels of suicidal ideation. However, self-esteem and PSS are not significant predictors of suicidal ideation. Specifically, self-esteem has a negative beta coefficient of -.048, indicating that higher levels of self-esteem are associated with lower levels of suicidal ideation, although it is not statistically significant. Likewise, PSS has a positive beta coefficient of .011, indicating that higher levels of perceived social support are associated with lower suicidal ideation, although it is not statistically significant.

In conclusion, this multiple regression analysis suggests that hopelessness and loneliness significantly predict suicidal ideation, while self-esteem and perceived social support do not. Feelings of hopelessness can be brought on by low confidence in the future, whether in terms of goals or opportunities. Higher levels of loneliness indicate that though the respondents are among people, they feel unconnected and aloof in their social relationships. On the other hand, loneliness is subjective and can lead to unsettling levels of overwhelming despair and sadness.

The following three figures discuss the results of specific questions on the Adult Suicide Ideation Scale. These questions may elicit the intensity of suicidal ideation in the respondents.

**Figure 1:**Frequency distribution for the suicidal ideation question" I thought about killing myself."

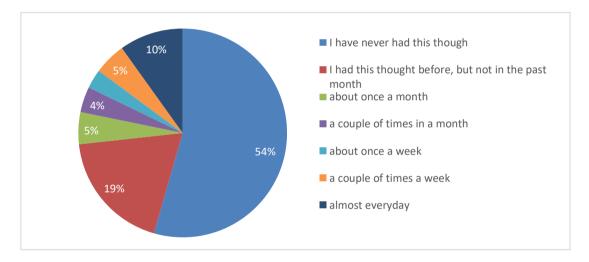


The data shows that a significant proportion of the respondents have had suicidal thoughts at some point. Specifically, 26% of the participants reported having had such thoughts at some point, with 5% experiencing such thoughts almost daily. It is a matter of concern that many respondents reported having suicidal thoughts, particularly in the past month. However, the findings suggest that the respondents may be experiencing significant emotional distress and contemplate suicide as a solution to their problems, which may be related to a range of underlying mental health issues.

It is recommended that the individuals who reported having suicidal thoughts be provided with appropriate mental health support, such as counselling or therapy, to address their emotional distress and suicidal ideation.

Figure 2:

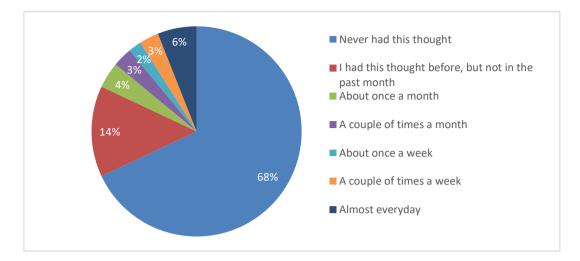
Frequency distribution for the ASI question "I wish I were dead."



The result reveals the suicide ideation question, "I wish I were dead." 327 respondents (54.9% of the sample) reported that they had never had the thought of wishing they were dead. In addition, 112 respondents (18.8% of the sample) reported having suicidal thoughts before but not within the past month. Considering the responses to all the options, the percentage of respondents with ideation is 45.1%. This indicates that some of these respondents may require therapeutic intervention.

Figure 3:

Frequency distribution for the ASI question: "I thought I would kill myself if things did not get better."



Most respondents (68.6%) reported never having thought, "I thought that I would kill myself if things did not get better." .13.9% of the respondents reported having this thought before but not in the past month. A small percentage of respondents (3.4%) reported having this thought about once a month, while a similar rate (3.2%) reported having it a couple of times a month. About 2.3% of the respondents reported having this thought about once a week, while 2.7% reported having it a couple of times a week. A relatively smaller percentage of respondents (5.9%) reported having this thought almost daily. This group of students require prompt intervention.

Most respondents never thought of killing themselves if things did not get better 31.4% of the respondents had suicidal ideation at some time. A possible explanation for this result is that, given the demands of everyday life, some students find it difficult to cope with the challenges they encounter in their academic, social, or emotional domains.

## 5. CONCLUSION

Self-esteem, hopelessness, perceived social support, Loneliness, and suicidal Ideation are all interrelated. Hopelessness and loneliness are significant predictors of suicidal ideation. 11.91% of respondents experienced suicidal ideation at least once a week. 15.77% wished they were dead, and 10.9% thought of killing themselves if things did not improve daily or at least once a week. Although this may seem to be a small proportion, it is significant in promoting mental health services for students.

This study highlights the importance of addressing self-esteem, hopelessness, perceived social support, loneliness and suicidal ideation to promote well-being among women college students. Future research could examine the effectiveness of interventions that target these factors in reducing suicidal ideation and promoting well-being.

#### REFERENCES

Miranda-Mendizabal, A., Castelly, P., Parés-Badell, O., et al., Gender differences in suicidal behaviour in adolescents and young adults: A systematic review and meta-analysis of longitudinal studies. Int J Public Health 64, 265–283 (2019). https://doi.org/10.1007/s00038-018-1196-1

Lövestad, S., Löve, J., Vaez, M. et al. Suicidal ideation and attempts in population-based samples of women: temporal changes between 1989 and 2015. BMC Public Health 19, 351 (2019). https://doi.org/10.1186/s12889-019-6685-5

Klonsky ED, Pachkowski MC, Shahnaz A, May AM. The three-step theory of suicide: Description, evidence, and some useful points of clarification. Prev Med. 2021 Nov;152(Pt 1):106549. doi 10.1016/j.ypmed.2021.106549. Epub 2021 Sep 16, PMID: 34538372.

Rane, A.; Nadkarni, A. (2014) Suicide in India: a systematic review. Shanghai Archives of Psychiatry, 26 (2). pp. 69–80. ISSN 1002-0829 DOI: https://doi.org/10.3969/j.issn.1002-0829.2014.02.003

Desai, N. D., Chavda, P., & Shah, S. (2021). Prevalence and predictors of suicide ideation among undergraduate medical students from a medical college of Western India. Medical Journal, Armed Forces India, 77(Suppl 1), S107. https://doi.org/10.1016/j.mjafi.2020.11.018

Nath Y, Paris J, Thombs B, Kirmayer L. Prevalence and social determinants of suicidal behaviours among college youth in India. Int J Soc Psychiatry. 2012 Jul;58(4):393-9. doi 10.1177/0020764011401164. Epub 2011 Jun 1. PMID: 21632571.

Ernst, M., Klein, E. M., Beutel, M. E., &Brähler, E. (2021). Gender-specific associations of loneliness and suicidal ideation in a representative population sample: Young, lonely men are particularly at risk. Journal of Affective Disorders, 294, 63–70. doi:10.1016/j.jad.2021.06.085

McClelland, H., Evans, J. J., Nowland, R., Ferguson, E., & O'Connor, R. C. (2020). Loneliness as a predictor of suicidal ideation and behaviour: a systematic review and meta-analysis of prospective studies. Journal of Affective Disorders, pp. 274, 880–896. doi:10.1016/j.jad.2020.05.004

Mortier, P., Cuijpers, P., Kiekens, G., Auerbach, R. P., Demyttenaere, K., Green, J. G., ... Bruffaerts, R. (2017). The prevalence of suicidal thoughts and behaviours among college students: a meta-analysis. Psychological Medicine, 48(04), 554–565. doi:10.1017/s0033291717002215

Amudhan S, Gururaj G, Varghese M, et al. A population-based analysis of suicidality and its correlates: findings from the National Mental Health Survey of India, 2015–16, Lancet Psychiatry 2020; 7: 41–51.

Patel V, Ramasundarahettige C, Vijayakumar L, et al. Suicide mortality in India: a nationally representative survey. Lancet 2012; 379: 2343–51. 9 Dandona R, Bertozzi-Villa A, Kumar GA, Dandona L. Lessons from a decade of suicide surveillance in India: who, why and how? Int J Epidemiol 2017; 46: 983–93.

Vijaykumar L. Suicide and its prevention: the urgent need in India. Indian J Psychiatry 2007; 49: 81-84.

The Gazette of India Extraordinary, The Mental Healthcare Act, 2017, April 7, 2017. https://prsindia.org/files/bills\_acts/acts\_parliament/2017/the-mental-healthcare-act,-2017.pdf (accessed Jan 9, 2021).

Behere PB, Sathyanarayana Rao TS, Mulmule AN. Decriminalisation of attempted suicide law: journey of fifteen decades. Indian J Psychiatry 2015; 57: 122–24.

Peter T, Roberts LW (2010). "Bad" boys and "Sad" girls? Examining internalising and externalising effects on parasuicides among youth. J Youth Adolesc 39:495–503. https://doi.org/10.1007/s10964-009-9498-5

Mars B, Heron J, Crane C, et al. (2014). Differences in risk factors for self-harm with and without suicidal intent: findings from the ALSPAC cohort. J Affect Disord 168:407–414. https://doi.org/ 10.1016/j.jad.2014.07.009

Van Orden KA, Witte TK, Cukrowicz KC, Braithwaite SR, Selby EA, Joiner TE. The interpersonal theory of suicide. Psychological Review. 2010;117(2):575–600. doi: 10.1037/a0018697

O'Connor RC. 2011. Towards an integrated motivational–volitional model of suicidal behaviour. In Int. Handbook of suicide prevention: research, policy, and practice (eds O'Connor RC, Platt S, Gordon J), pp. 181–198. Chichester, UK: Wiley.

Kirtley, O. J. (2018). The integrated motivational—volitional model of suicidal behaviour. Philosophical Transactions of the Royal Society B: Biological Sciences, 373(1754). https://doi.org/10.1098/rstb.2017.0268

Blum, R., Sudhinaraset, M., & Emerson, M. R. (2012). Youth at Risk: Suicidal Thoughts and Attempts in Vietnam, China, and Taiwan. Journal of Adolescent Health, 50(3), S37–S44. doi:10.1016/j.jadohealth.2011.12.006

S. M. Yasir Arafat, Anuradha Baminiwatta, Vikas Menon, Pawan Sharma, Mila Nu NuHtay, Hasina Akter, M. Marthoenis& Chencho Dorji (2023). Prevalence of Suicidal Behavior Among Students in South-East Asia: A Systematic Review and Meta-Analysis, Archives of Suicide Research, DOI: 10.1080/13811118.2023.2176272

Klonsky, E. D., & May, A. M. (2015). The Three-Step Theory (3ST): A new theory of suicide rooted in the "ideation-to-action" framework. International Journal of Cognitive Therapy, 8(2), 114–129. https://doi.org/10.1521/ijct.2015.8.2.114

O'Connor, R. C. &Kirtley, O. J. (2018). The Integrated Motivational-Volitional Model of Suicidal Behaviour. Philosophical Transactions of the Royal Society B. 373:20170268. http://dx.doi.org/10.1098/rstb.2017.0268

Harmer B, Lee S, Duong TVH, Saadabadi A. Suicidal Ideation. 2023 Feb 7, Treasure Island (FL): StatPearls Publishing; 2023 Jan–. PMID: 33351435.

Gupta S, Basera D. Youth Suicide in India: A Critical Review and Implication for the National Suicide Prevention Policy. Omega (Westport). 2021 Sep 10:302228211045169. Doi: 10.1177/00302228211045169. Epub ahead of print. PMID: 34505537.

Vijaykumar L. Suicide and its prevention: The urgent need in India. Indian J Psychiatry. 2007 Apr;49(2):81-4. Doi: 10.4103/0019-5545.33252. PMID: 20711387; PMCID: PMC2917089.

Vijayakumar L. Suicide and mental disorders in Asia. Int Rev Psychiatry. 2005 Apr;17(2):109-14. doi: 10.1080/09540260500074735. PMID: 16194780.

Menon V, Kaliamoorthy C, Sridhar VK, Varadharajan N, Joseph R, Kattimani S, Kar SK, Arafat SY. Do Tamil newspapers educate the public about suicide? Content analysis from a high suicide Union Territory in India. Int J Soc Psychiatry. 2020 Dec;66(8):785-791. doi 10.1177/0020764020933296. Epub 2020 Jun 23. PMID: 32571114.

Reynolds, W. M. (1991). Psychometric Characteristics of the Adult Suicidal Ideation Questionnaire in College Students, Journal of Personality Assessment, 56(2), 289–307. doi:10.1207/s15327752jpa5602\_9

Osman, A., Kopper, B.A., Linehan, M.M., Barrios, F.X., Gutierrez, P.M., Bagge, C.L. (1999). Validation of the Adult Suicidal Ideation Questionnaire and the Reasons for Living inventory in an adult psychiatric inpatient sample. Psychological Assessment, 11(2), 115–123.

Reynolds, W. M. (1991). Psychometric Characteristics of the Adult Suicidal Ideation Questionnaire in college students, Journal of Personality Assessment, pp. 56, 289–307.

Strang, S.P. & Orlofsky, J.L. (1990). Factors underlying suicidal ideation among college students: a test of Teicher and Jacobs' model. Journal of Adolescence, pp. 13, 39–52.

Kreuze, E., & Lamis, D. A. (2017). A Review of Psychometrically Tested Instruments Assessing Suicide Risk in Adults. OMEGA - Journal of Death and Dying, 77(1), 36–90. doi:10.1177/0030222816688151

Klonsky, E. D., Dixon - Luinenburg, T., & May, A. M. (2021). The critical distinction between suicidal ideation and suicide attempts. World Psychiatry, 20(3), 439 - 441. doi:10.1002/wps.20909

Eskin, M., AlBuhairan, F., Rezaeian, M., Abdel-Khalek, A. M., Harlak, H., El-Nayal, M., Asad, N., Khan, A., Mechri, A., Noor, I. M., Hamdan, M., Isayeva, U., Khader, Y., Al Sayyari, A., Khader, A., Behzadi, B., Öztürk, C. Ş., Hendarmin, L. A., Khan, M. M., & Khatib, S. (2019). Suicidal Thoughts, Attempts and Motives Among University Students in 12 Muslim-Majority Countries. The Psychiatric Quarterly, 90(1), 229–248. https://doi.org/10.1007/s11126-018-9613-4