

PREDICTORS OF SUICIDAL THOUGHTS AND RISK FACTORS OF SUICIDAL IDEATION AMONG YOUNGSTERS

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Abstract: "An act of self-inflicted harm, with a fatal outcome, and with an explicit or implicit intent to die" is how the dictionary defines suicide. Young individuals frequently have suicidal thoughts, especially teenagers and young adults. In Tamil Nadu, young people's suicide ideation and risk factors were the subjects of this study. Data from a web-based survey were gathered over a 6-month cross-sectional observational study. Statistical Package for the Social Sciences (SPSS) Version 27 was used to analyze the data. P-value, Regression factor, Mean, and Standard deviation were also used on the pertinent data. 70 (19.9%) of the 352 individuals were at risk of suicide, while the remaining 282 (80.1%) were not at risk of young people committing suicide. Suicidal thinking was discovered to be correlated with a mildly lower level of life satisfaction and a constant stream of stress from medical issues in a child's life, and these elements play a big part in setting off suicidal thoughts. We distributed leaflets on mental health services to raise awareness about them and to prevent young people from having suicidal thoughts.

Key Words: Suicide ideation, suicide thoughts, Statistical Package for the Social Sciences (SPSS), Young people, Awareness.

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Introduction:

With almost 800,000 suicide deaths per year, it is a huge public health concern around the world. [1] Suicidal ideation, often known as thoughts of taking one's own life, is a major risk factor for both suicide attempts and successful suicides. [2] To create effective prevention and intervention measures, it is essential to determine the elements that lead to the emergence of suicidal ideation. Suicidal ideation has been linked to several risk factors, including demographic variables like age, gender, and socioeconomic position, as well as mental health illnesses including depression, anxiety, and substance use disorders. [3,4] Suicidal thoughts have been linked to biological factors such as genetic susceptibilities, brain changes related to neurobiology, and problems with the hypothalamic-pituitary-adrenal axis.^[5]Psychological elements including hopelessness, inadequacy, and helplessness have also been linked to suicidal thoughts. [6] Suicidal ideation has also been connected to social factors such as social exclusion, interpersonal conflict, exposure to traumatic experiences.^[7] Additionally, those who identify as LGBTQ+ and those who have endured abuse or discrimination are more likely to suicidal thoughts. [8,9] According research, young individuals, especially teenagers and young adults, frequently have suicidal thoughts. A National Institute of Mental Health (NIMH) study found that 17.2% of American high school students had made a suicide plan and 7.4% had seriously considered suicide in the previous year. [10] Additionally, other elements like sadness, anxiety, substance addiction, exposure to violence, and abuse might raise a young person's risk of considering suicide.[11] Even after accounting for other factors, including depression and substance misuse, one study indicated that a history of childhood abuse or neglect increased the risk of suicide ideation in young adults. This finding was made in the Journal of Adolescent Health. [12]

Materials and Methods:

Study Design: Cross-sectional observational study

Study Population: 352 responses were collected **Study Mode:** Survey from Google form

Inclusion Criteria:

- ➤ College students of all genders
- ➤ Between the ages of 18 and 25

Exclusion Criteria:

- ➤ The study might only pay attention to young people who have a history of suicidal thoughts or attempts
- ➤ No one under the age of 18 may participate in the survey

College students of both genders who were between the ages of 18 and 25 were chosen for inclusion in our study because a cross-sectional observational study was employed. The study did not include Students younger than 18 or older than 25.

An independently performed survey questionnaire is utilized to provide the data. The questionnaire was divided into three primary components.

Kuppuswamy Socioeconomic Scale:

The Kuppuswamy socioeconomic scale is a tool used to evaluate a person's or a household's social and economic standing in India. It was created by B. Kuppuswamy in 1976 and has been extensively used in India's research and policy-making. Education, occupation, and income are the three key characteristics considered by the scale.

Illiterate, up to elementary, up to middle, up to high school, and graduate or postgraduate are the five categories for education on the scale. There are six levels of occupation, from low-level laborers to senior executives. Seven categories of income are defined, with monthly incomes ranging from less than Rs. 1,000 to more than Rs. 20,000.

Lower class, lower middle class, middle class, higher middle class, and upper class are the five divisions of the Kuppuswamy scale. [13-17]

The Satisfaction with Life Scale:

The Satisfaction with Life Scale (SWLS) is a self-reported tool for gauging one's level of happiness or satisfaction with one's life. The SWLS consists of 5 items, each of which is assessed from 1 (strongly disagree) to 7 (strongly agree) on a Likert scale of 7. Higher scores indicate better life satisfaction; the overall score ranges from 5 to 35 after the scores are added up. [18]

The Suicide Behavior Questionnaire-Revised (SBO-R):

A self-report questionnaire called the Suicide Behaviour Questionnaire-Revised (SBQ-R) is frequently used to measure suicidal behavior and ideation. The original SBQ, created in 1993, was refined and developed into the SBQ-R.

Four subscales make up the SBQ-R:

- Lifetime suicide ideation,
- Lifetime suicide attempts,

- Current suicidal ideation, and
- Current suicide attempts

academic and clinical settings and has been translated into several different languages. [19]

Nine questions make up the survey, and they examine man **Reseatts** of suicidal behavior and ideation, including the frequence In several populations, including mental patients, community samples, and college students, the SBQ-R has demonstrated strong reliability and validity. The questionnaire is frequently used in

Of the 352 participants, 70 (19.9%) were at suicide risk, while the other 282 (80.1%) were not at risk of suicide. Ages 18 to 20 were those of the participants who were most at risk suicide.(Fig-No:1)

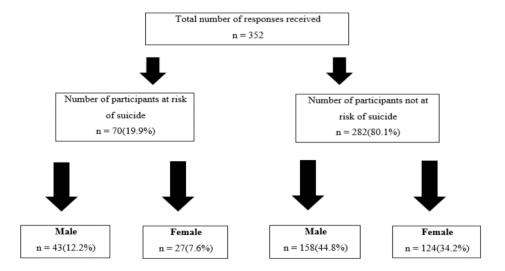


Fig No-1: Total number of responses

Table 1: (O2) Total number of responses

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Gender	Frequency	Percentage	Mean		
Male	201	57.1%	0.57		
Female	151	42.9%	0.42		

A survey on suicide ideation included 352 respondents, of whom 201 (57.1%) were men and 151 (42.9%) were women. (Table No: 1)

Table 2: (O3) Age-wise distribution of participants

Age (in			No risk of s (n=282)	uicide	P value	Regression factor	Mean	Standard deviation
years)	Male	Female	Male	Female				
18-20	29(41.4)	17(24.2)	107(37.9)	56(19.8)				
21-23	13(18.5)	8(11.4)	45(15.9)	66(23.4)	0.385	0.234	1.44	0.556
24-25	1(1.4)	2(2.8)	6(2.1)	2(0.7)				

Males in the age range of 18 to 20 out of 352 individuals who were at risk for suicide were 29 (41.4%), and females were 17 (24.2%). (Table No: 2)

Table 3: (O10-15) Participant's Satisfaction With Life

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	At risk of sui	cide	Not at risk of suicide		P value	Regression	Mean	Standard
Satisfaction with	(n= 70)		(n=282)			factor		deviation
life	Male	Female	Male	Female				
Dissatisfied	10(14.2%)	5(7.1%)	40(14.1%)	28(9.9%)				
Extremely	2(2.8%)	2(2.8%)	5(1.7%)	5(1.7%)				
dissatisfied								
Satisfied	1(1.4%)	-	3(1.0%)	-				
Slightly	21(30%)	15(21.4%)	90(31.9%)	73(25.8%)	0.579	0.176	3.14	0.754
dissatisfied								
Slightly satisfied	9(12.8%)	5(7.14%)	20(7.0%)	18(6.3%)				
Extremely	-	-	-	-				
satisfied								

Men and women from among the 352 participants in Satisfaction with Life participated. (Table No: 3)

Table 4: (17-20) Suicide behaviours of the participants

	Total number the risk factors	p- value	Mean	Standard deviation	
Suicide	Male	Female			
behavior					
At risk	43(12.2%)	27(7.6%)	0.386	1.80	0.4
No risk	158(44.8%)	124(35.2%)			

Out of 352 individuals, 43 (12.2%) men and 27 (7.6%) women were at risk of suicide; the remaining 158 (44.8%) men and 124 (35.2%) women were not at risk of suicide. (Table No:4)

Discussion:

Although women are more likely to attempt suicide, research consistently demonstrates that men are more likely to die by suicide. [20] For instance, a meta-analysis of 32 studies with more than 300,000 participants discovered that people with a history of mental health conditions, especially depression, were more likely to engage in suicidal behavior. [21] The majority of the individuals at risk of suicide are in the 18-20 age range. Men were found to have a considerably higher risk of suicide than women among those aged 15 to 24.[22] A systematic evaluation of 31 studies revealed that medical students were more likely than the general population to have suicidal thoughts.^[23] Since there are fewer economic prospects, social isolation, and higher rates of poverty in rural areas, residents there may experience more stress and psychological discomfort (CDC, 2020).^[24] The risk of suicide is thereby raised by these elements. Urban locations may have a lower suicide rate because there are more resources and services for mental health, as well as more diverse social and economic opportunities that help reduce stress and foster psychological well-being. [25] Females at risk of suicide are dissatisfied 5 (7.1%), slightly dissatisfied 15 (21.4%), extremely dissatisfied 2 (2.8%), satisfied 0, slightly satisfied 5 (7.14%), and extremely satisfied 0. Males at risk of suicide are dissatisfied 10 (14.2%), slightly dissatisfied 21 (30%), extremely dissatisfied 2 (2.8%), satisfied 1 (1.4%), slightly satisfied 9 (12.8%), and extremely satisfied 0.

Conclusion:

According The Suicide Behaviors to Questionnaire-Revised (SBQ-R), 19.9% of young people were at risk for suicide and had particular risk behaviors. Suicidal ideation has been linked to slightly lower life satisfaction and ongoing stress from medical issues in young people, and these characteristics are key contributors to the onset of suicidal thoughts. In conclusion, studies consistently show that men are more likely than women to engage in activities that are connected to suicide. Men who experience these things are more likely to commit suicide because they may feel hopeless and depressed. We distributed leaflets on mental health services to raise awareness about them and to prevent young people from having suicidal thoughts.

References:

- 1. Suicide. Who. int. Accessed July 12, 2023. https://www.who.int/news-room/fact-sheets/detail/suicide
- 2. Gunnell D, Appleby L, Arensman E, Hawton K, John A, Kapur N, Khan M, O'Connor RC, Pirkis J, COVID-19 Suicide Prevention Research Collaboration. Suicide risk and prevention during the COVID-19 pandemic. 2020 Jun; 7(6):468-471.
- 3. Klonsky ED, May AM, Glenn CR. The relationship between non-suicidal self-injury and attempted suicide: Converging evidence from four samples. *Journal of Abnormal Psychology*, 2013 Feb; 122(1):231-237.
- 4. Kolves K, Milner A, McKay K, De Leo D. Suicide in older adults: Differences between the young-old, middle-old, and oldest old. *International Psychogeriatrics*, 2020 Oct; 32(10):1179-1185.
- 5. Mann JJ, Arango VA, Avenevoli S, Brent DA, Champagne FA, Clayton P, Currier D, Dougherty DM, Haghighi F, Harkavy-Friedman J, et al. Candidate endophenotypes for genetic studies of suicidal behavior. *JAMA Psychiatry*. 2016 Feb; 73(2):115-126.
- 6. Joiner TE. Why people die by suicide. *Harvard University Press*; 2005.
- 7. Franklin JC, Ribeiro JD, Fox KR, et al. Risk factors for suicidal thoughts and behaviors: A meta-analysis of 50 years of research. *Psychol Bull*. 2017;143(2):187-232. doi:10.1037/bul0000084
- 8. Haas AP, Eliason M, Mays VM, et al. Suicide and suicide risk in lesbian, gay, bisexual, and transgender populations: review and recommendations. *J Homosex*. 2011;58(1):10-51. doi:10.1080/00918369.2011.534038
- 9. Hirsch JK, Ellis JB, Wong SS. Social support as a protective factor against loneliness and suicidal ideation among female but not male elderly veterans. *Suicide and Life-Threatening Behavior*, 2017 Feb; 47(1):78-84.

- 10.Centers for Disease Control and Prevention. Suicide and self-inflicted injury. [Internet]. Centers for Disease Control and Prevention; 2018 [cited 2021 Sep 22].
- 11.Dunn EC, Nishimi K, Powers A, Bradley B, Ismail AI. Childhood mistreatment and suicidal ideation among young adults in the United States: Results from a national survey. *Journal of Adolescent Health*. 2018 Dec; 63(6):741-748.
- 12. Kann L, McManus T, Harris WA, Shanklin SL, Flint KH, Hawkins J, et al. Youth risk behavior surveillance United States, 2015. *Morbidity and Mortality Weekly Report Surveillance Summaries*. 2016 Jun 10; 65(6):1-174.
- 13. Kuppuswamy B. Manual of socioeconomic status (urban). Manasayan; 1976.
- 14. Thorat S. Caste, religion, and socio-economic status: A critique of the Kuppuswamy scale. *Economic and Political Weekly*. 2011; 46(41):77-84.
- 15.Rao M, Singh A. Updating income ranges for Kuppuswamy's socio-economic status scale for the year 2011. *Indian Journal of Public Health*. 2011; 55(4):324-327.
- 16.Kumar N, Gupta N. Kuppuswamy's socioeconomic status scale: Updating income ranges for the year 2012.*Indian Journal of Public Health*. 2012; 56(1):103-104.
- 17. Gupta R, Garg R. Kuppuswamy's socioeconomic status scale: A revision. *Indian Pediatrics* 2016; 53(3):257-258.
- 18. Diener E, Emmons RA, Larsen RJ, Griffin S. The satisfaction with life scale. *Journal of Personality Assessment*. 1985; 49(1):71-75.
- 19.Osman A, Bagge CL, Gutierrez PM, Konick LC, Kopper BA, Barrios FX. The Suicidal Behaviours Questionnaire-Revised (SBQ-R): Validation with clinical and nonclinical samples. *Assessment*. 2001;8(4):443-454
- 20.Hedegaard H, Curtin SC, Warner M. Suicide mortality in the United States, 1999-2019. NCHS Data Brief. 2021; (398):1-8.
- 21.Franklin JC, Ribeiro JD, Fox KR, Bentley KH, Kleiman EM, Huang X, et al. Risk factors for suicidal thoughts and behaviors: A meta-analysis of 50 years of research. *Psychological Bulletin*, 2017; 143(2):187-232. doi:10.1037/bul0000084
- 22.Isometsä ET, Heikkinen ME, Marttunen MJ, Aro HM, Lönnqvist JK. Suicide and attempted suicide among Finnish adolescents: A review of psychological autopsy studies. *European Psychiatry*. 1997; 11(8):379-385. doi:10.1016/s0924-9338(97)88704-5
- 23.Rotenstein LS, Ramos MA, Torre M, Segal JB, Peluso MJ, Guille C, et al. Prevalence of

- depression, depressive symptoms, and suicidal ideation among medical students: A systematic review and meta-analysis. JAMA. 2016; 316(21):2214-2236. doi:10.1001/jama.2016.17324
- 24. Centres for Disease Control and Prevention (CDC). Suicide Prevention in Rural Areas. 2020. Accessed March 24, 2023.
- 25.Poremski D, Jaeger J, Brownson C. Rural-Urban Differences in Mental Health: A Systematic Review. *Journal of Rural Mental Health*, 2021; 45(2):69-83. doi:10.1037/rmh0000175.