



Suicidal Ideation and Cognitive Distortions among Undergraduate Students

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ABSTRACT

Suicide is a public health problem and one of the leading causes of death (World Health Organisation [WHO], 2021). Cognitive distortions act as risk factors for causing and promoting suicidal thoughts in every individual. Some more insights in this area are crucial to know to make more effective conclusions to prevent it from happening in the general population, especially among youth. It is important to know and increase knowledge about the causes of suicide and the genesis of suicidal thoughts among undergraduate students. The current study looked into the connection between suicidal thoughts and cognitive distortions in undergraduate students. The study sample comprised 120 students from the various colleges of Hisar. The tools used in current study were the Suicidal Ideation scale developed by Sisodia and Bhatnagar (2011) and Cognitive Distortions Scale developed by Briere (2000). The outcome demonstrated that there is a significant positive correlation between suicidal ideation and cognitive distortions. Cognitive distortions have the potential to develop suicidal tendencies among students. The significance of cognitive distortions in understanding suicidal ideation is highlighted by the findings, which may have consequences for treatment and prevention strategies

Keywords: *Suicide, Suicidal Ideation, Cognitive Distortions, Undergraduate Students*

Introduction

Suicide among college students is a worldwide public health concern. Undergraduate students are particularly vulnerable population when it comes to mental health issues and suicide. According to the WHO (2021) 77% of global suicides happened in developing nations such as India in 2021. In 2021, the suicide death rate in India was 12.0 per lakh population, the highest among South-East Asian countries (National Crime Records Bureau [NCRB], 2021). Garlow et al. (2008) concluded that university and undergraduate students are a vulnerable population and become the victim of suicide. Some findings indicate that suicide is the second most frequent reason for death among individuals of 15-29 years worldwide (Arensman et al., 2016). Moreover, undergraduate students between the ages of 18 and 22 are most likely to die by suicide (Hedman-Robertson, 2018). Consequently, a growing number of studies have been conducted to investigate the frequency and reasons behind youth suicide in addition to creating suicide prevention initiatives for colleges (Farabaugh et al., 2012). Suicide encompasses several routes and methods, from the beginning of ideation to the actual conduct of suicide, making it a complex procedure and continuous behavior (Mann et al., 2005; Yuodelis-Flores & Ries, 2019). According to the cognitive theory of suicide suicidal ideas are based on cognition. Suicidal people frequently have dysfunctional perspectives of themselves, the future, and the world. The "negative triad" refers to this negative pattern (Alford & Beck, 1997).

Suicidal thoughts, sometimes referred to as suicidal ideation, are intentions of taking your own life (Bureau et al., 2012). Suicidal ideation plays an important role in the suicide process; It is the process that precedes suicide attempts and suicides (Harris & Barraclough, 1997). Thus, suicidal ideation is important to identify and prevent suicidal behavior (Palmer, 2004). According to Beck's cognitive theory, hopelessness for suicide is the main psychological variable that leads to the suicidal processes that characterize suicidal ideation (Weishaar & Beck, 1992). Among college students, psychological distress or depression (Garlow et al., 2008),

low societal support, substance abuse (Arria et al., 2009) and cognitive distortions are the highest risk factors for suicide behavior (Whiteman et al., 2019; Fazakas-DeHoog et al., 2017).

Many theories have been proposed to understand the causes of death by suicide. Joiner (2005) said that in interpersonal psychological theory when a person has a high baseline risk, their feelings of efficacy (also known as "perceived burdensomeness") and connectedness (also known as "thwarted belonging") serve as contributing causes that increase the likelihood of committing suicide. According to Van Orden et al. (2010) cognitive distortions are associated with negative beliefs of oneself and others, such as burdensomeness and thwarted belongingness.

Cognitive distortions are a group of irrational thinking patterns that negatively affect people's capacity to see the world in an optimistic way (Gross, 2015). According to Hedmen-Robertson (2018), Aaron T. Beck divided cognitive distortions into six main groups such as, arbitrary inference, dichotomous thinking, magnification or minimization, overgeneralization, personalization, and selective abstraction. According to Beck (1991) the term "cognitive distortions" refers to faulty reasoning that is thought to be a major contributing factor to the development of some mental illnesses. It may put college students in danger of suicidal ideation. College students have long been concerned about their mental health and the risk of suicide (McLaughlin & Gunnell, 2020; Miletic et al., 2015).

Review of Literature

According to Fazakas-DeHoog et al. (2017), if a person struggles to solve difficulties and avoids confronting them, this may cause him to experience hopelessness and negative thoughts, which may increase the likelihood, he will have suicidal thoughts. Furthermore, According to Wolfe et al. (2014), victimisation and cognitive distortion are positively correlated with suicide ideation. Rudd (1989) investigated the prevalence of suicidal ideation among college students and discovered that over 43% of participants had experienced some level of suicidal thinking. Kumar et al. (2020) demonstrates a study on college going students, the results found a strong positive association between sadness, cognitive distortion, and suicidal thoughts. The cross-sectional study conducted by Sarfaraz et al. (2019) sought to investigate the connection between Obsessive Compulsive Disorder patients' quality of life, suicidal thoughts, and cognitive distortions. Results showed a strong positive correlation between Obsessive Compulsive Disorder, suicidal thoughts, and cognitive distortion. Xiong et al. (2020) researched to investigate the connection between suicidal thoughts and cognitive distortion among students; they found positive relations between cognitive distortion and suicidal ideation. The association between various kinds of trauma and suicidal ideation was investigated by Whiteman et al. (2019). The results of this study provide credence to the regular evaluation of cognitive distortions and suicidal ideation in survivors of interpersonal trauma.

Objective

To study the relationship between Suicidal Ideation and Cognitive Distortion among Undergraduate students.

Hypothesis

Cognitive distortions and Suicidal Ideation will be positively correlated among Undergraduate students.

Methodology

Sample: The present study was carried out to examine suicidal ideation, and cognitive distortions among Undergraduate students. The sample consisted of 120 undergraduate students. Out of these students, 60 were males and 60 were females. The sample was collected from various colleges of Hisar and their selection was done according to the research criteria.

Tools

Socio-Demographic Profile: As per the need of the study, all the necessary and relevant information such as gender, year of class, age, etc. was collected from the respondents.

Suicidal Ideation Scale (SIS): This scale was developed by Sisodia and Bhatnagar (2011) to measure suicidal ideation. It is a self-report questionnaire comprising 25 statements in which 21 items are positive and 4 items are negative. Every item has a five-point rating. The scale's consistency value was 0.81 and the test-retest reliability was 0.78. After the scale was verified using external norms, a coefficient of 0.74 was obtained.

Cognitive Distortions Scale (CDS): This scale was developed by Briere (2000). It is a 40-items questionnaire that assesses cognition distortions. Each item is graded on a five point scale. The scale is made up of five sub-scales: self-criticism, self-blame, helplessness, hopelessness, and preoccupation with danger. The alpha reliability coefficient for the CDS scale is 0.89 for Pre-occupation with Danger =0.97, for Hopelessness = 0.93, for Self-Criticism = 0.92, for Self-Blame, and Helplessness = 0.94. In both general and clinical groups, the scale's convergent and discriminant validity (0.60-0.75) are sufficient.

Procedure

After getting permission from the authorities from the colleges of Hisar, the appropriate samples were selected as per study conditions. Before administering, the questionnaire rapport was established. The detailed information was explained for each questionnaire. After that, the consent form and questionnaire were given to the participants. All responses were analyzed as per the manuals and the scoring was done.

Statistical Analysis

The statistical analysis was made with the help of descriptive statistics (Mean, S. D.) and Pearson-r correlation was used to analyses the relationship between the variables.

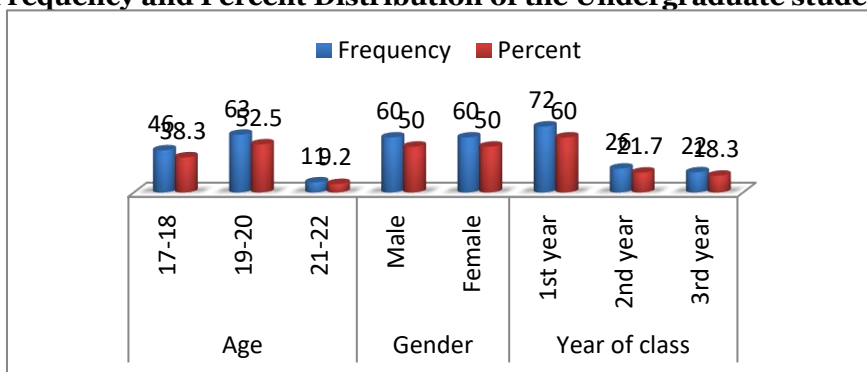
Result

The current study was conducted on a sample of 120 Undergraduate students from various colleges of Hisar to examine the relationship between Suicidal Ideation and Cognitive Distortions. Out of the total 120 participants, 60 (50%) were male and 60 (50%) were female within the age range of 18 years to 23 years (See Table 1).

Table 1: Frequency and Percent Distribution of the Undergraduate students (N= 120)

Variables		Frequency	Percent
Age	17-18	46	38.3
	19-20	63	52.5
	21-22	11	9.2
Gender	Male	60	50
	Female	60	50
Year of class	1 st year	72	60
	2 nd year	26	21.7
	3 rd year	22	18.3

Figure 1: Frequency and Percent Distribution of the Undergraduate students (N= 120)



Data enfold in Table 1 reveal that out of 120 Undergraduate students, 46 (38.3%) participants were in the age range of 17 to 18 years, 63 (52.5%) participants were in the age range of 19 to 20 years and 11 (9.2%) participants were in the age range of 21 to 22 years.

Table 1 shows that out of the total sample, 72 (60%) were from 1st year, 26 (21.7%) were from 2nd year and 22 (18.3%) were from 3rd year.

Table 2: Descriptive statistics of the Undergraduate students (N = 120)

Variables	Mean	SD
Suicidal Ideation	58.88	16.930
Self-Criticism	15.94	5.433
Self-Blame	19.48	6.252
Helplessness	19.67	6.469
Hopelessness	17.74	6.677
Pre-Occupation with Danger	19.03	5.568
Cognitive Distortions Total	91.87	24.074

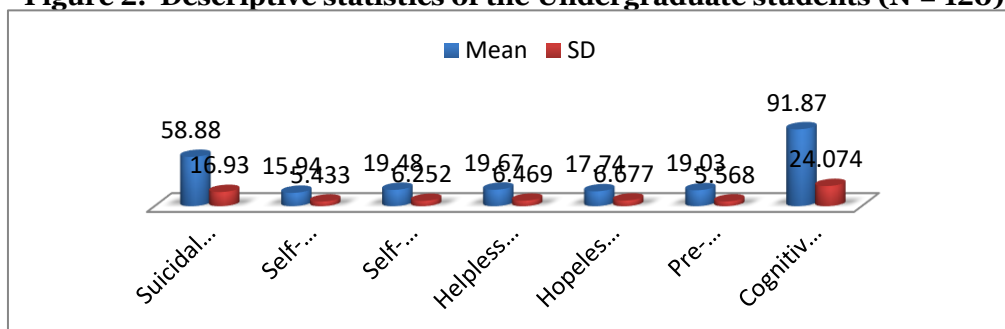
Figure 2: Descriptive statistics of the Undergraduate students (N = 120)

Table 2 shows the Mean and *SD* of the total number of undergraduate students of both genders on the dimensions of Cognitive Distortions and Suicidal Ideation. The mean of Suicidal Ideation is 58.88 with *SD* 16.930, the mean of Self-Criticism is 15.94 with *SD* 5.433, the mean of Self-Blame is 19.48 with *SD* 6.252, the mean of Helplessness is 19.67 with *SD* 6.469, the mean of hopelessness is 17.74 with *SD* 6.677, the mean of pre-occupation with danger is 19.03 with *SD* 5.568 and the mean of cognitive distortions total is 91.87 with *SD* 24.074.

Table 3: Correlation between Cognitive Distortions and Suicidal Ideation.

Variables	Self-Criticism	Self-Blame	Helplessness	Hopelessness	Pre-Occupation with Danger	Cognitive Distortions (Total)
Suicidal Ideation	.575**	.373**	.371**	.385**	.346**	.513**
Self-Criticism	1	.604**	.473**	.446**	.581**	.768**
Self-Blame		1	.412**	.399**	.575**	.750**
Helplessness			1	.705**	.593**	.815**
Hopelessness				1	.558**	.800**
Pre-Occupation with Danger					1	.826**

* Correlation is significant at < 0.05 level (2-tailed)

** Correlation is significant at < 0.01 level (2-tailed)

Table 3 shows the correlation to assess the relationship among Suicidal Ideation and Cognitive Distortions. There is significant positive correlation of Suicidal Ideation with Self-criticism ($r=0.575$, $p<0.01$), self-blame ($r=0.373$, $p<0.01$), helplessness ($r=0.371$, $p<0.01$), hopelessness ($r=0.385$, $p<0.01$), pre-occupation with danger ($r=0.346$, $p<0.01$) and cognitive distortion total ($r=0.513$, $p<0.01$) respectively.

The current results show a strong positive correlation between self-criticism and Self-blame ($r=0.604$, $p<0.01$). Additionally, the results also show a strong positive correlation between self-criticism and helplessness ($r=0.473$, $p<0.01$). Similarly, the results show a strong positive association between self-criticism and hopelessness ($r=0.446$, $p<0.01$). In addition, a positive correlation between self-criticism and pre-occupation with danger ($r=0.581$, $p<0.01$) is observed. Furthermore, the findings of other aspects establish a significant positive correlation between self-criticism and cognitive distortions total ($r=0.768$, $p<0.01$).

The present findings depict a significant positive correlation between Self-Blame and helplessness ($r=0.412$, $p<0.01$). The findings also reveal the existence of a positive correlation between self-blame and hopelessness ($r=0.399$, $p<0.01$). Similarly, the results of the study also establish a significant positive correlation between self-blame and pre-occupation with danger ($r=0.575$, $p<0.01$). Moreover, the other aspect findings establish a significant positive correlation between self-blame and cognitive distortions total ($r=0.750$, $p<0.01$).

The present findings indicate a positive correlation between helplessness and hopelessness ($r=0.705$, $p<0.01$). The findings also reveal the existence of a positive correlation between helplessness and pre-occupation with danger ($r=0.593$, $p<0.01$). Similarly, the findings also establish a positive correlation between helplessness and cognitive distortions total ($r=0.815$, $p<0.01$).

The present findings show a positive correlation between hopelessness and hopelessness and pre-occupation with danger ($r=0.558$, $p<0.01$). Similarly, the findings also establish a significant positive correlation between hopelessness and cognitive distortions total ($r=0.800$, $p<0.01$). The findings also reveal the existence of a positive correlation between pre-occupation with danger and cognitive distortions total ($r=0.826$, $p<0.01$).

Discussion

The present study sought to examine the relationship between suicidal ideation and cognitive distortions among undergraduate students. The study's hypothesis, which stated that cognitive distortions and suicidal ideation are positively connected among undergraduate students, has been accepted. The result showed that

suicidal ideation is significantly and positively correlated with cognitive distortion (0.513). The result also indicates that self-criticism (0.575) has a more positive correlation with suicidal ideation than the other dimensions of cognitive distortion. The pre-occupation with danger (0.346) has a lower significant correlation with suicidal ideation than the other dimensions of cognitive distortion.

A study conducted by Kumar et al. (2020) indicates that suicidal ideation is significantly positively correlated with cognitive distortion. Similarly, the finding is well supported by Langhinrichsen-Rohling et al. (2017). They also found the same result in their study, conducted to determine the relationship between maladaptive schemas and suicidal ideation concluding that college students with higher levels of maladaptive schemas are more likely to have suicidal ideation and more prone to suicide.

The result is also supported by Whiteman et al. (2019) these results validate the regular evaluation of suicidal thoughts and cognitive distortions in individuals who have experienced interpersonal trauma. Furthermore, to lessen the emergence of suicide thoughts in trauma survivors, these findings encourage the adoption of therapies that address cognitive distortions. The result is also consistent with the previous study done by Joiner et al. (2005). The results obtained aligned with the conclusions of earlier research by Jager-Hyman et al. (2014), Wolff et al. (2014), Yazici-celebi et al. (2024), Xiong et al. (2020), and Shakil et al. (2022), which suggested a significant positive relationship between cognitive distortion and suicidal ideation.

According to the current study's findings, unfavorable assessments of oneself, other people, and the future are the outcome of cognitive distortions and are linked to an increased risk of suicidal thoughts. Because students are unable to control their thoughts and emotions, they are at risk for irrational thinking, and hence they don't think they can change their circumstances, which can lead to negative thoughts about themselves, others, and the future. This correlation highlights the importance of understanding the cognitive processes underlying suicidal thoughts and behaviors, particularly within the context of academic stressors and challenges. To more conclusively determine how gradually, cognitive distortions interplay to influence the emergence of suicidal ideas and attempts, more research is needed to understand the relationship between cognitive distortions, as well as the specific role that each plays in the development of suicide attempts. The prevalence of cognitive distortions, such as overgeneralization, catastrophizing, and black-and-white thinking, among graduate students is concerning, as these distorted thinking patterns can exacerbate feelings of hopelessness and despair. The presence of such cognitive distortions may amplify the severity of suicidal ideation, making individuals more vulnerable to engaging in self-harming behaviors.

According to cognitive behavior therapy, maladaptive schemas have a significant impact on cognitive distortion, which is defined as a maladaptive thought pattern that causes people to see reality incorrectly. A schema is a system or mental framework for organising and interpreting unprocessed information (Goldstein, 2015; Matthews, 2013). The cognitive theory suggests that addressing these distorted cognitions through cognitive-behavioral interventions can help reduce suicidal ideation and prevent self-harming behaviors. According to the cognitive theory of suicidal ideation Wenzel and Beck (2008), individuals who experience suicidal ideation often engage in maladaptive thinking patterns characterized by cognitive distortions. These distortions include negative self-perception, hopelessness about the future, and an inability to envision alternative solutions to problems. The cognitive theory suggests that addressing these distorted cognitions through cognitive-behavioral interventions can help reduce suicidal ideation and prevent self-harming behaviors. The schemas are closely related to an individual's emotions and behaviors (Wadsworth, 1996). However, the connection between cognitive distortions in the emergence of suicidal ideation has a strong theoretical base. It is conclusively determined how cognitive distortions combine over time to influence the emergence of suicidal ideation and attempts. A therapeutic model should be designed and developed to provide professional help to the victims of suicidal ideation and thoughts.

Conclusion

In conclusion, by identifying and addressing these maladaptive thinking patterns, mental health professionals and academic institutions can play a vital role in preventing and reducing the risk of suicidal behaviors among graduate students. The increasing rate of psychological illness, as well as mental health issues, is not only the burden of individuals but the burden of the society and country also. Psychological illness reduces creativity and hampers the overall productivity of the nation. Therefore, suicidal thoughts and cognitive distortion among Undergraduate students should be assessed and recorded. Moving forward, concerted efforts are needed to prioritize mental health initiatives and support services within academia to foster a culture of well-being and resilience among graduate students. The mental wellness program must be conducted and organized to help them in crisis.

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