

Clinical facets of suicide contemplation among youths and their personality indicants

Dr.KamleshRani*, Ansal University, Gurgaon
Dr. SarikaBoora**, GD Goenka University, Gurgaon

Abstract

The present study was mainly aimed at the exploration of personality indicants and clinical facets of suicide ideation/contemplation among youths. For this 200 Senior Secondary School students randomly drawn from various schools of Gurgaon, participated in the study. Selected subjects were tested with Beck Scale for Suicide Ideation (Beck et al., 1988), NEO-FFI (Costa & McCrae, 1992) and PAI (Morey, 1999). Obtained data were analyzed by Descriptive Statistics, Pearson's Correlations, and Principal Component Factor Analysis. Correlations and Factor Analysis depicted structured overlap between suicide ideation and personality variables. Neuroticism, Extraversion, Anxiety (ANX), Anxiety Related Disorder (ARD), Depression (DEP) & Borderline Feature (BOR) have emerged as the most common correlates of suicide ideation among adolescents. Overall findings revealed that suicide ideation among adolescents tends to develop on the neurotic and psychotic spectrum disorders.

Key Words: -Suicide Ideation, personality, youths.

Authors: *Dr.KamleshRani, Assistant Professor, Ansal University, Gurgaon
**Dr. SarikaBoora, Assistant Professor, GD Goenka University, Gurgaon

Every year, almost one million people die from suicide; a "global" mortality rate of 16 per 100,000, or one death every 40 seconds (WHO, 2011). According to WHO (2012) suicide rates have increased by 60% worldwide in the last 45 years. Suicide worldwide was estimated to represent 1.8% of the total global burden of disease in 1998; in 2020 this figure is projected to be 2.4% in countries with market and former socialist economies. According to the most recent WHO (2012) report, the rates of suicide range from 0.7/100,000 in the Maldives to 63.3/100,000 in Belarus. India ranks 43rd in descending order of rates of suicide with a rate of 10.6/100,000 reported in 2009 (WHO, 2012).

The term 'suicide' has been derived from the Latin *sui* (of oneself) and *cide* or *cidium* (a killing). Suicidal behaviors include a spectrum of behaviour ranging from precursor behaviour such as suicide ideation, suicide plan and suicide attempt to completed suicide. Suicide ideation is defined as thinking of engaging in suicide-related behaviour and it varies in severity from passive thinking of death and that "life is not worth living" to having suicidal thoughts associated with intent or plan whereas suicide attempt is "self-inflicted behaviour" intended to result in death (Abel et al., 2011). Researchers report that adolescents are at greatest risk for suicide ideation and have found that early onset of suicide ideation links with a greater risk of suicide plan and attempt, and that the transition from ideation to plan and attempt occurs within the first year of onset (Bridge et al., 2006; Abel et al., 2012). Consequently, adolescent suicide has been realized as one of the major health problems recently and now it ranks among the top five causes of death among adolescents, along with unintentional injuries, violence, HIV/AIDs and other communicable diseases. Analyses of trends in adolescent suicide depict that rate is increasing across the world over the last quarter century (Patton et al., 2009) including India (Radha krishanan & Andrade 2012). Most people, including youth, who contemplate, attempt and/or die from suicide suffer from one or more psychopathologies (Groholt and Ekeberg, 2009). Mood disorders are the most common mental disorders found being associated with suicidal behaviors (Nguyen et al., 2013). Psychological autopsy studies have reported a wide range of mortality due to BPD ranging from 7% to 30% (Linehan et al., 2001). Suicide attempts in alcoholics are common and are also linked to behavioural inhibition, impulsivity and aggression with the use of violent methods for attempts (Phoung et al., 2013). 43% of the subjects with alcohol dependence have been found having life-time suicide attempts (Wojnar et al., 2009). Persons with other substances dependence also have the tendency towards more impulsive aggressive personality and having the history of suicidal thought and behaviours (Pompili et al., 2009). Conclusively, the presence of psychopathology is probably the single most important predictor of suicide. Approximately 90% of suicide cases meet the criteria for a psychiatric disorder, particularly major depression, substance use disorders, cluster B personality disorders and schizophrenia (Gvion & Apter, 2012). However, despite the fact that most suicide attempters do suffer from psychopathology, most persons with psychiatric disorders do not attempt suicide, hence it implies that other factors over and above psychopathology are involved in suicide. Personality traits commonly found as predisposing factors in suicidal behaviors (included attempts, completed, and ideation) in researches are hopelessness, neuroticism, extraversion, aggression, anger, impulsivity,

and perfectionism (Brezo& Tremblay 2006; Brezo et al., 2008; Giegling et al., 2009). Majority of the studies in this regard have attempted to identify psychometric personality correlates of suicide ideation by using personality questionnaires which suffer from various limitations such as faking, social desirability, response set etc. (Cattell, 1957; Cattell&Dreger, 1977).

Method

Participants:

200 (males and females) students of 11th and 12th grades with the age ranging from 15 to 18 years were selected from various Public Schools of Gurgaon. All the subjects were tested with Beck Scale for Suicide Ideation (Beck et al., 1988), NEO-FFI (Neo-FFI; Costa & McCrae, 1992) and Personality Assessment Inventory by Morey, 1999. On the basis of their scores on BSS, subjects were selected (N=200). The sample also did not include the students having the history of suicide attempts.

Materials:

1. Beck Scale for Suicide Ideation (BSS; Beck, Steer, and Ranieri, 1988) is a 21 item self-report instrument that clinicians use to detect and measure the severity of suicidal ideation in adults and adolescents. BSS measures a broad spectrum of attitudes and behaviours that clinicians routinely consider when assessing patient' suicide risk; it also reveals specific suicidal characteristics which require greater clinical scrutiny. The BSS scores are best considered as indicators of suicide risk rather than as predictors of eventual suicide in a given case. Out of 21 items, the first five BSS items serve as a screen for suicide ideation. If a respondent circles the zero statements in both Item 4 (indicating no suicide intention) and Item 5 (indicating avoidance of death if presented with a life threatening situation), then he or she is instructed to skip to the next 14 items which relate to specific information about the respondents plans and attitudes. Any respondent who has previously attempted suicide is requested to rate Item No.21. The severity of suicide ideation is calculated by summing the ratings for first 19 items (items 20 & 21 are not included in the score). The total BSS score can range from 0 to 38.

2. Neo-Five Factor Inventory (Neo-FFI Short Version): is based on five factor model of personality. Costa & McCrae (1992) developed Neo –FFI to index five personality dimensions – neuroticism, extraversion, openness, agreeableness, and conscientiousness. The original Neo-Personality Inventory (Neo-PI) consisted of 180 items, from which Costa & McCrae (1989) selected 12 items for each scale to develop a short version called Neo-Five Factor Inventory (Neo-FFI). The Neo-FFI has been used in the present study to index the five factors of personality. The five scales of Neo-FFI have been assessed for internal consistencies and test-retest reliabilities. The alpha coefficients for individual facet-scales ranged from .56 to .81. The full scale coefficient alphas ranged from .86 to .95. The test-retest reliabilities (with 3 months interval) of Neo-FFI scales obtained from college samples have been found to be .79, .79, .80, .75 and .83 for N, E, O, A, and C respectively. Hence, it is considered to be a reliable and valid measure of five factors of personality across the world.

3. Personality Assessment Inventory-Short Version PAI(Morey, 1999): PAI is a self administered objectively scorable inventory designed to provide information on critical clinical variables. PAI originally consists of 344 items compressing 22 non-overlapping full scales: 4 validity scales, 11 clinical scales, 5 treatment consideration scales, and 2 interpersonal scales. The validity scales are Inconsistency (INC), Infrequency (INF), Negative Impression (NIM), and Positive Impression (PIM). Clinical scales consists of Somatic Complaints (SOM), Anxiety (ANX), Anxiety Related Disorder(ARD), Depression (DEP), Mania (MAN), Paranoia (PAR), Schizophrenia(SCZ), Borderline Feature (BOR), Antisocial Feature ANT), Alcohol Problem (ALC), and Drug Problems. Treatment Consideration scales includes Aggression (AGG), Suicide Ideation (SUI), Stress (STR), Non-Support (NON), and Treatment Rejection (RXR). Interpersonal scales consist of Dominance (DOM), and warmth (WAR). In the present study short version of PAI was used that consists of 160 items, which give estimates of scores for 20 of 22 full scales. In the present study PAI was scored for only nine clinical scales. The variables of PAI have reported to be satisfactory across various clinical samples.

Results and Discussion

Descriptive Statistics Mean and SD were computed in terms of significance of mean differences in scores of PAI,BSS and Neo-FFI variables.

Table – 1 Mean Scores of female andmalestudents on NEO-FFI, PAI and BSS

S. NO.	Variables	Mean	SD
1	N	24.31	4.92
2	E	26.27	4.85
3	O	24.58	4.07
4	A	25.89	4.47
5	C	29.31	5.63
6	SOM	20.68	5.40
7	ANX	27.38	6.15
8	ARD	28.63	5.58
9	DEP	24.91	5.051
10	MAN	31.31	5.90
11	PAR	29.78	5.25
12	SCZ	27.48	5.48
13	BOR	29.86	5.64
14	ANT	24.48	5.89
15	SI	5.26	3.82

Intercorrelations

Pearson's correlation coefficients were obtained among/ between all the 15 variables (5 of Neo-FFI; 9 of PAI & 1 of BSS) in the data(Table 2). Degree of Freedom being 200(N-2) in adolescents data, correlation coefficients of .14 and .18 are significant at .05 and .01 probability levels respectively.

Table – 2 Correlations between variables of NEO-FFI, PAI and BSS

S.No.	Scales	BSS
1	Neuroticism(N)	.395 **
2	Extraversion(E)	-.131 *
3	Openness(O)	.040
4	Agreeableness(Agree)	-.101
5	Conscientiousness(C)	-.091
6	Somatic Complaints(SOM)	.092
7	Anxiety (ANX)	.214 **
8	Anxiety Related Disorders (ARD)	.191 **
9	Depression (DEP)	.477 **
10	Mania (MAN)	-.022
11	Paranoia (PAR)	.067
12	Schizophrenia (SCZ)	.127
13	Borderline Features (BOR)	.140 *
14	Antisocial Features (ANT)	.120
15	Suicide Ideation (SI)	1.000

In adolescents data Intercorrelations among five factors of personality (Neo-FFI) are in general low. Only 5 of 10 correlations are significant, maybe because of their association with super factors at higher order level. Only neuroticism of Neo-FFI has marked significant positive correlation with suicide ideation (.503 $p < .01$) and extraversion has marked significant negative correlation with suicide ideation (-.13 $p < .05$). Intercorrelations among nine factors of personality (PAI) are in general high. 29 of 36 correlations are significant. ANX,ARD,DEP and BOR of PAI has marked significant positive correlation with suicide ideation (.21 $p < .01$), (.19 $p < .01$), (.47 $p < .01$), and(.14 $p < .05$).

Factor Analysis

Principal Component Analysis was applied on the intercorrelations among 15 variables (5 of Neo-FFI, 9 of PAI and 1 of BSS); and 5 factors with Eigen values greater than 1.00 were extracted which together accounted for 62.81% of total variance. Extracted factor have been interpreted after Varimax rotation (Kaiser, 1958). Varimaxly rotated factor are reported in (Table-3) Commonalities (h^2) for 15 variables range from .440 to .736.

Table – 3 Rotated Factor Matrix(Females)

Variables/Factors	I	II	III	IV	V	h ²
N	.175	-.100	-.072	.747	-.030	.605
E	.052	-.189	.755	.004	.195	.646
O	.076	.026	.071	.051	.653	.440
A	-.036	.032	.110	-.107	.782	.638
C	-.170	-.010	.766	-.082	.249	.685
SOM	.168	.806	-.050	.008	.057	.683
ANX	.567	.531	-.058	.179	.072	.645
ARD	.655	.277	.040	.190	.026	.545
DEP	.231	.538	-.083	.547	.131	.666
MAN	.445	.225	.546	-.137	-.239	.624
PAR	.757	-.248	-.145	.002	.149	.678
SCZ	.745	.262	.080	.133	-.074	.653
BOR	.589	.436	.159	.062	-.051	.568
ANT	.127	.470	.538	-.010	-.289	.611
SI	.010	.157	-.013	.841	-.056	.736
% of Variance	25.287	13.487	9.037	8.268	6.737	

Factor-I mainly loads on six clinical scales viz. PAR, SCZ, ARD, BOR, ANX & MAN with respective loadings of .757, .745, .655, .589, .567 and .445 depicting positive association among them. Obtained structure is indicative of sensitiveness, unconventional, unusual beliefs, distress, worries, self-doubting, poor control over emotions, tension, and high energy levels. It has accounted for 25.287% of total variance. It provides sufficient evidence that suicide ideators tends to be high in paranoid ideation.

Factor-II mainly loads on six scales of personality viz. SOM, DEP, ANX, ANT, BOR & ARD with respective loadings of .806, .538, .531, .470, .436 and .277 depicting positive association among them. Obtained structure is indicative of bodily complaints, unhappiness, distress, worries, impulsive, risk taker, self doubting. It has accounted for 13.487% of total variance. It is very evident that suicide ideators are prone in somatic complaints, depression anxiety. Hence, it is named as Neurotic Spectrums of suicide ideators.

Factor-III mainly loads on four scales of personality viz. Conscientiousness(C), Extraversion(E), MAN & ANT with respective loadings of .766, .755, .546, & .538 depicting positive association among them. Obtained structure is indicative of competence, dutifulness, self discipline, warmth, excitement seeking, active, self-confident and risk taker. It has accounted for 9.037% of total variance. The results depicted that people high in Conscientiousness are careful in their conduct if they are unable to do any task they often feel frustrated and depressed and resulting into suicide ideation.

Factor-IV highly loads on the measure of Suicide Ideation with the loading of .841 followed by Neuroticism and Depression with respective loadings of .747 & .547. All the significant loadings are positive depicting the positive association among the markers and suggest it to be a factor of *Suicide Ideation*. It has accounted for 8.268% of total variance. Obtained structure describes a person with suicide ideation characterized by depressed mood, preoccupied with hypochondreasis, & impulses, emotional instability and negative affects such as fear, sadness, embarrassment, guilt and disgust.

Factor-V mainly loads on three scales of personality viz Agreeableness(A) openness(o), & ANT with respective loadings of .782, .653 & -.289. Obtained structure is indicative of trust, tender-mindedness, modesty, straightforwardness, intellectual curiosity, values and feelings. It has accounted for 6.737% of total variance. Hence it is named as Openness.

Conclusion

Suicidal thoughts and behavior during college present unique challenges to both researchers and clinicians. The transition between late adolescence and young adulthood is typically characterized by high levels of stress associated with adjusting to a new social environment and increased academic demands. Moreover, social support networks undergo radical changes during college. If replicated, these findings may point to promising new strategies for suicide prevention. Rather than focusing primarily on students who are depressed, campus suicide prevention initiatives could include programs aimed at enhancing student social support networks, increasing students' awareness about the possible signs of suicide ideation (including AUD), and educating parents about effective ways of supporting students who might be at risk for suicidal behavior. In the end, we can conclude that moderate level of suicide ideation can be found in everybody at some point of time in life. But certain risk factors such as depression, anxiety, hopelessness and aggression etc are associated with suicidal behavior and should be identified by teachers and parents which should be seriously taken in to consideration in the development and implementation of interventions to prevent suicide and even to rate out suicide ideation among adolescents. For that, psychotherapy, CBT, should be used in the management of suicide ideation and behaviors.

References:

- Abel W, James K, Bridgelal-Nagassar R, Holder-Nevins D, Eldemire H, Sewell C. The epidemiology of suicide in Jamaica 2002–2010: rates and patterns [unpublished data]. Kingston: University of the West Indies; 2011.
- Beck AT, Steer RA, Ranieri WF. Scale for Suicide Ideation: Psychometric properties of a self-report version. *Journal of Clinical Psychology*. 1988;44:499–505.
- Brezo J, Paris J, Tremblay R, Vitaro F, et al. (2006). Personality traits as correlates of suicide attempts and suicidal ideation in young adults. *Psychological Medicine* 36(2):191-202.
- Brezo J, Paris J, Hebert M, Vitaro F, et al. (2008). Broad and narrow personality traits as markers of one-time and repeated suicide attempts: A population-based study. *BMC Psychiatry* 8(15. Date of Publication: 6 Mar 2008).
- Bridge JA, Barbe RP, Birmaher B, Kolko DJ, Brent DA (2005). Emergent suicidality in a clinical psychotherapy trial for adolescent depression. *Am J Psychiatry* 162: 2173-2175

Clinical facets of suicide contemplation among youths and their personality indicants
Kamlesh Rani and SarikaBoora

- Bridge JA, Iyengar S, Salary CB, Barbe RP, Birmaher B, Pincus HA, Ren L, Brent DA,(2007). Clinical response and risk for reported suicidal ideation and suicideattempts in pediatric antidepressant treatment. A meta-analysis of randomized controlled trials. *JAMA*, 297:1683-1696
- Cattell, R. B. "A Universal Index for Factors." *Psy-chologia*, X (1957), 74-85.
- Cattell,R.B.(1977).Thegrammarofscienceandtheevolutionofpersonalitytheory.InR.B.Cattell& R. M. Dreger(Eds.),*Handbookofmodernpersonalitytheory*(pp.3–42).NewYork:Wiley/HalstedPress.
- Costa, P. T., & McCrae, R. R. (1992).Revised NEO Personality Inventory (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI) professional manual. Odessa, FL: Psychological Assessment Resources.
- Giegling I, Olgiati P, Hartmann AM, Calati R, Möller HJ, Rujescu D, Serretti A. Personality and attempted suicide. Analysis of anger, aggression and impulsivity. *J Psychiatr Res*. 2009c;43(16):1262–1271
- Groholt B, Ekeberg O. (2009). Prognosis after adolescent suicide attempt: mental health, psychiatric treatment, and suicide attempts in a nine-year follow-up study. *Suicide and Life-Threatening Behavior* 39(2):125-36
- Gvion Y, Apter A. Aggression, impulsivity and suicide behavior: a review of the literature. *Suicide Life Threat Behav*. 2011;15:93-112.
- Linehan, M.M. &Dimeff,L. (2001). Dialectical Behaviour Therapy in a nutshell. *The California Psychologist*, 34, 10-13.
- Patton GC, Coffey C, Sawyer M, Viner RM, Haller DM, Bose K, Mathers CD. Global patterns of mortality in young people: A systematic analysis of population health data. *Lancet*. 2009;374:881–892.
- Phuong, Tran Bich, Huong, Nguyen Thanh, Tien, Truong Quang, Chi, Hoang Khanh, &Dunne, Michael P. (2013) Factors associated with health risk behavior among school children in urban Vietnam. *Global Health Action*, 6(18876).
- Pompili M, Innamorati M, Lester D, Akiskal HS, et al. (2009). Substance abuse, temperament and suicide risk: evidence from a case-control study. *Journal of Addictive Diseases* 28:13-20
- Morey, L. C. (1991).*Personality Assessment Inventory:Professional manual*.Odessa, FL: Psychological Assessment Resources.
- Morey, L. C. (1999). Personality Assessment Inventory. InM. E. Mauish (Ed.),*The use of psychological testing fortreatment planning and outcomes assessment*(2nd ed.,pp. 1083–1121). Mahwah, NJ: Erlbaum.
- Nguyen T. V., Mccracken J., Ducharme S., Botteron K. N., Mahabir M., Johnson W., et al. (2013). Testosterone-related cortical maturation across childhood and adolescence.*Cereb. Cortex* 23 1424–1432
- Radhakrishnan R, Andrade C. Suicide: An Indian perspective. *Indian J Psychiatry* 2012;54:304-19
- Wojnar M, Ilgen MA, Czyz E, Strobbe S, Klimkiewicz A, Jakubczyk A, Brower KJ. Impulsive and non-impulsive suicide attempts in patients treated for alcohol dependence. *Journal of Affective Disorders*. 2009;115:131–139.
- World Health Organization.Figures and facts about suicide.Geneva: WHO; 2011.