Methodological Consideration

Suicide in young adults and adolescence is a worldwide problem of the twenty first century but it is particular concern in highly industrialized nations like United States (Conner et al., 2001) at the same time in different developing country like India which is under the transition of development. From a report of the National Mental Health Association (1997) suicide is the second leading cause of death among the college students. From a recent Indian scenario we came to know that in the last three decade 1975 – 2005, suicide rate has been increased by 43%. More strikingly the majority of suicides (37.8%) in India are by those below the age of thirty years. These alarming statistics have stimulated great concern in the public at large and have led social scientists to warn of an impending rise in the number of suicidal attempt among young adults.

From a closer scrutiny of the different previous research studies in this field it is noted that much of research literature appears to be focused on suicide per se however, professional are increasingly paying attention to the antecedent behaviour according to Bush and Pargament (1995), suicidal behaviour is often preceded by thoughts, threats, unsuccessful attempts of suicide. Similarly Cole, Protinsky and Cron (1992) have also noted that suicide is the completed process of a continuum that begging with suicidal ideation, followed an attempt of suicide and finally completed suicide. So, suicidal ideation is a preoccupation with intrusive thoughts of ending one’s own life while suicide is the completed act of taking one’s life (National Mental Health Association, 2002). Because of this progression from thought to action, it was thought
more justified to select the present work on "suicidal ideation" rather than 'suicide' — become earlier identification and intervention is more desirable in this context.

The present study examined the phenomenological relationship of personality, emotional intelligence, level of depression and gender with suicidal ideation among college students in Kolkata. For the present study above stated variables were chosen due to following reasons. The rational for selecting 'personality' (different dimensions like psychoticism, neuroticism and extraversion etc.) as one of the variable can be justified by the fact that certain personality traits increase individual's vulnerability to suicidal behaviour. Further more, both from our theoretical and practical experiences it is quite clear that personality plays a major role in determining the appraisal of a stimulus and the consequent behavioural regulations against it. So from that stand point the analysis of one's personality profile and an attempt to find out its relationship with suicidal ideation seems to be very much justified. Unfortunately the relationship between suicidal ideation and personality traits has limited research attention (Berg et.al., 2003).

Another pertinent question which may be raised in context to the present study is that why the non clinical population has been employed while the concept of 'suicide' is inherently intermingled with the feeling of sadness that is 'depression'. In order to answer this query it can be said that various previous studies to date have been done on clinical population gives us a good insight over the issues related to depression and suicidal behaviours but yet very little is known to us about the suicidal behaviours and depression of normal population particularly on adolescents and young adults in Indian context. Thus, Infact we know very little about the association of their mental processes in this context to non clinical population. And from our everyday life experiences we are aware about the fact that due to some reason all of us experience unpleasant emotion like depression anxiety and so on. So from this stand point also non clinical population was selected instead of the clinical one.

Many modern approaches have focused on hopelessness associate with depression as a core element of suicide, resulting from continuous frustration where as a consequent suicide remains the only way out. Considering this, in the present study depression was hypothesized as a predictive factor for the development of suicidal ideation.
Most of the prominent psychological theories of suicide suggest that people engage in suicidal behaviours due to inability to tolerate or modulate the experience of negative affect (Lynch et al., 2004). It is therefore very logical to think that those who are specially adopt at perceiving, integrating, understanding and managing their emotions would be at reduced risk for suicide behaviour or even in response to stressful life events. Accordingly the present study was designed to investigate the exact relation between suicidal ideation and emotional intelligence (EI) – a multidimensional construct that place a major role in perceiving, integrating, understanding and managing one’s own emotion.

The present study was conducted at the different colleges affiliated to University of Calcutta, Kolkata, India; with the objectives to study the nature and extent of suicidal ideation, their personality traits, emotional intelligence and prevalence of depression among under graduate college students. Total 400 undergraduate students were selected from 10 different colleges representing all regions of the Kolkata city using criteria based sampling method and assessed cross sectionally. In the aforesaid variables gender difference and possibility to consider as predictor variable for suicidal ideation was also explored in the sample.

**Socio-demographic Characteristics**

The mean age of college going students was 18.84 ± 0.94 with age range 18 – 23 years which is a normal range of age in this population as seen in the various previous studies in the same population (Dhar and Basu, 2006; Sil and Basu, 2007; Dogra, Basu, and Das, 2008; Thakur and Basu, 2006; Dogra and Basu, 2011; Hazra and Dasgupta, 2011). Majority of the participants were Hindus (94%) and the rest were Muslims and Christians and others which may be a reflection of the localities where the concern colleges were situated. Its also indicate the general religious background of the country where Hindus are major and it could be also due to the rate of education in deferent religious communities. Ghanawat et. al. (2011) studied in 150 UG & PG students at Ranchi, India and found around 71% students were Hindus. Majority (91.5%) of the students in the present study were unmarried, this is obvious for this study group, because marriage generally happens after completion education. Majority of the students belong to the urban area (76%) these are obvious for this study group because sample were taken from Kolkata city based colleges. This is...
contradictory finding with Ghanawat et. al. (2011) which reported majority (66%) were from rural and rest from urban areas. In the present study more students (48%) were having above Rs. 10,000 per month family income followed by 5000 – 10000 (28.5%) and below 5000 (23.5%) it is obvious finding, families with higher income can afford higher education of their children but result indicated that families with middle income also strive to provide higher education for their children. Majority of the students (52%) were from arts stream followed by science (43%) and commerce (5%).

**Psychological Profile**

With regards to different psychological aspects of the study group, out of 400 participants 47 (11.8%) scored 31 or more in ASIQ that means they were having pathological level of suicidal ideation during past one month. Where as Nath et. al. (2011) surveyed 1,817 undergraduate college students in Ahmedabad and found lifetime suicide ideation was 11.7%. So the findings obtain in Nath et. al (2011) has confirmed the present trend. In the present study sample mean score in ASIQ was 13.69 ±22.18; where as in a study done by Dogra, Basu, and Das (2008) on the student population and using the same tool ASIQ mean score was 18.94 ±20.30. In case of depression assessed by Beck Depression Inventory – II (BDI-II) the mean score was 12.84 ±8.77 which is consistent finding with the earlier study in student population (Beck, Steer, and Brown, 1996). The mean score in EQ it was 194.74 ±39.31, this finding is consistent with a study in Eritrea where emotional intelligence among college students was reported 186.16 ± 27.53 using the same tool (Nirmala, 2010). With regards to personality traits mean psychoticism score 7.42±1.71 mean neuroticism score was 5.23±1.81 and mean extraversion score was 4.65±1.68.

**Suicidal Ideation across Socio-demographic Profiles**

Advanced aged students were having more suicidal ideation than lower, in general, the suicide rate increases with age. Marital status emerged as statistically significant in the both group of students, all the students having pathological level of suicidal ideation were unmarried. This finding is consistent with a study which reported; people having single marital status (not-married, divorced, widowed & separated) are more prone to suicidal ideation as compared to married one (Khohkar, 2007) Majority
Discussion

of the students having pathological level of suicidal ideation were from families with less than Rs 10000 monthly income. It could be because students with advance age have more exposed to socioeconomic, familial and individual crisis. Majority of the students having pathological level of suicidal ideation were from families with less than Rs 10000 monthly income. Socioeconomic factors have well known association with suicidal ideation (Qin, Agerbo, and Mortensen, 2003). So, economic factor could be a reason in this study group.

Personality Traits and Suicidal Ideation

The present study had an objective of examining the relationship of different personality trait and suicidal ideation in a group of college students. And later on attention has also been paid to understand whether their personality trait can be considered as a potential predictor of suicidal ideation in the said population. From a look into table no 6 it is evident that the two (neuroticism and psychoticism) of the three broader dimensions of personality have been found to be significantly correlated with suicidal ideation. Earlier studies have been consistently indicated that neuroticism is positively related to suicidal thinking (Kerby, 2003; Lolas, Gomez, and Suarez, 1991; Velting, 1999). Though the trait psychoticism is characterized by toughmindedness, empirical findings have demonstrated that psychoticism has considerable degree of association with suicidal behaviour (Singh and Joshi, 2008; Kerby, 2003). Interestingly extraversion dimension did not yield significant association with the suicidal ideation in the present study, although the trend of correlation is in expected direction. Unlike other two dimensions of personality i.e. neuroticism and psychoticism, in case of extraversion, a trend of negative relationship (although statically not significant) with suicidal ideation supports an empirical finding of extraversion (Kerby, 2003; Lolas, Gomez, and Suarez, 1991). As the extraverts are generally sociable, friendly, optimist, carefree, out going and at the same time likes to love and be merry. So from that stand point it is very much likely that persons with such mental make up will not be suffering from such morbidity like 'suicidal ideation'. As they are optimistic in nature and have positive energy so they have a trend to solve the day to day problems in a more realistic and positive manner in stead of withdrawal of self through suicide. On the other hand the typical high neuroticism and psychoticism score as being an anxious, worrying, moody, and
frequently depressed, being solitary and not caring for people etc. are likely to be associated with suicidal ideation. When they face any stress they have a general tendency to flight instead of fighting with the stressors.

**Depression and Suicidal Ideation**

In the present study also depression was found more in students having pathological level of suicidal ideation in comparison to those who have non pathological level of suicidal ideation. Again a positive correlation ($r = .531$) significant at the $< 0.01$ level was found between depression and suicidal ideation. It indicates that a student with more depression having more suicidal ideation which is an obvious finding. This is consistent with the findings of a study by Singh and Joshi (2008) where suicidal ideation correlates positively with depression ($r = .37$, $p < .001$). The significant and positive correlation between these measures suggests that subjects scoring high on depression tend to have lack of ability to overcome suicidal wishes and may have plan and wishes to commit suicide. It is one of the general finding about linkage between depression and suicidal ideation. Therefore depression may be regarded as potent risk factor for suicidal ideation or suicide itself. Similar observations have been reported by a number of earlier workers (Brent et al. 1988; Cole, 1989; Yen et al. 2003; Hatcher-Kay, et al, 2003). Beck et al (1975) found that suicidal ideation is often present in persons suffering from major depression, extreme states of demoralization and overwhelming hopelessness. Another recent study also reported moderate relation between stress and the outcomes of hopelessness, depression, and suicidal ideation (Ciarrochi, Deane, Anderson, 2002).

**Emotional Intelligence and Suicidal Ideation**

Emotional intelligence was found more in students having non pathological level of suicidal ideation in comparison to those who have pathological level of suicidal ideation. Again a significant negative correlation ($r = -.234$) at the $< 0.01$ level was found between emotional intelligence and suicidal ideation. It indicates that students with less emotional intelligence having more suicidal ideation. This finding is consistent with the finding of a study which reveals that low emotional intelligence is associated with depression, loneliness, low self esteem, suicidal feelings, aggressive behaviour, poor impulsive control etc (Ciarrochi, Deane, and Anderson, 2002).
earlier study also indicated that, students with less in emotional intelligence (EI) having more suicidal ideation (Hazra and Dasgupta, 2011). In contrast, people with high EI. Emotional intelligence has been linked with subjective well being such as greater satisfaction with life and increased happiness (Rogers, et. al., 2006).

So from the above result (table no.6) it is clearly seen that there is a statistically significant (0.01 level) negative correlation between suicidal ideation and emotional intelligence. It means that people with higher emotional intelligence have less suicidal ideation. Such people are tended to adopt better with stress, responding with less suicidal ideation. Again the question arises what is the potential mechanism underlying this inverse relationship between suicidal ideation and emotional intelligence. From the studies of Goleman (1995) it is evident that the people with higher emotional intelligence have the skills for recognizing and regulating their own emotion as well as others. Such behavioural characteristics generally lead the people to closer friendship and greater social support which should be of psychological benefits in times of stress and crisis. So, social support can act as a protective factor for stress and suicide. The most prominent practical implication of the present finding is that for suicide intervention programme, training for the development of emotional intelligence can be incorporated.

Hopelessness, despair, negative views about oneself – these are the some of the hallmarks of the depression. Given such reactions, it is not surprising that many persons suffering from this disorder seek a drastic solution – suicide or taking of their own lives. From epidemiological findings it is noted that about two third of all depressed clients contemplate suicide, and 10-15 percent commit suicide (Sadock and Sadock, 2009).

Gender Difference in Suicidal Ideation

A look into the table no. 4 it is clearly evident that male and female subjects do not differ significantly in terms suicidal ideation, although the mean suicidal ideation score was slightly greater for female in comparison to male. This finding is consistent with the finding of earlier studies (Sil and Basu, 2007; Dogra, Basu and Das, 2008) on the same population using the same tool. Aiba et. al., (2011) studied 1080 randomly selected adults and found no sex difference in suicide ideations.
Similarly no gender difference could be found in terms of other variables like emotional intelligence this finding is consistent with a study by Nirmala (2010) and personality dimensions i.e. psychoticism. From a closer scrutiny of different epidemiological studies on suicide it have been noted repeatedly that completed suicide occur about five times more often in boys than in girls, although the rate of suicidal attempts is al lest three times higher among girls than boys (Sadock and Sadock, 2009). But the scenario is totally different in case of suicidal ideation. Suicidal ideation is not a static phenomenon. It can wax and wane with time. The decision to engage in suicidal behaviour may be made impulsively without much forethought or the decision may be the culmination of prolonged rumination. So considering all these it is rather difficult to arrive any consensus decision on the role of gender in the development of suicidal ideation.

Another interesting feature of the present study is that the mean scores of depression was higher among the males in comparison to its female counter part and the difference was statistically significant at 0.5 level. This finding is consistent with the finding by Culbertson (1997) where higher rate of depression has been reported in men in developing counties. Theories pointed out that for the gender differences in depression point to higher stress sensitivity in women as primary mechanisms (Dalla et.al., 2005; Cyranowski et.al., 2000). In contrary almost universal observation, independent of country or culture, is the two fold greater prevalent of major depressive disorder in women than in men (Nolen-Hoeksema, 1990; Weissman et al., 1996). The reasons for the difference are hypothesized to involve hormonal differences (Nolen-Hoeksema, 1990, 1995), differing nature of psychosocial stressor amongst woman (Nolen-Hoeksema, 1990). One of the positive reason for such opposite trend in present finding might be due to the fact that almost all the previous studies discuss so far have been done on typical clinical population where as the present study has been conducted on the non clinical population. In addition to this difference in the nature of sample characteristics, other possible reason for the development of conscious awareness about the feeling of depression is also very much dependent on the individual subjective evaluation of environmental stressors as well as the specific coping strategies utilized by the individual. Another significant point to be mentioned is, in spite of lesser amount of depression in comparison to males, the mean suicidal ideation score amongst the female students were higher and
with a high level of inconsistencies in their ultimate reporting. It has been confirmed by the higher SD in the female group in case ASIQ score. This lack of motivation to express freely one’s own inner feeling might be a reflection of typical gender issue specifically in context to the Indian culture.

The results of multiple stepwise regression analysis revealed that combination of depression, emotional intelligence, neurotic personality traits and psychotic personality traits account significant degree (31%) of variance in the suicidal ideation among college students. So understanding, predicting and preventing suicidal behaviour is one of the most challenging task in society in general and psychology in particular. During the recent years, it has become a priority, because several psychological autopsy studies of suicide victims have sown that the majority were suffering from depressive disorder with frequent morbidity of various other mental disorders (Rihmez, 2007). Further more the above scenario is uniformly applicable for both genders.

**Prediction of Suicidal Ideation**

Another major objective of the present study was to determine whether emotional intelligence, personality traits and level of depression can be considered as predictor variable for the development of suicidal ideation among college students. Consistent with this hypothesis, results of step wise multiple regression analysis (table no 7) revealed that the combination of depression, emotional intelligence, neurotic and psychotic personality traits account significant degree (31%) of variance in the suicidal ideation among college students.

Depression alone explained a greater degree (28%) of variability of suicidal ideation which is consistent with the studies findings of Singh and Joshi, 2008; Arria et. al., 2009) where depression has been assessed as most potent predictor of suicidal ideation in the college students. Emotional intelligence could predict only small (2%) degree variance in the suicidal ideation. Neurotic personality and psychotic personality (<1%) were another non significant predictor of suicidal ideation in the present study.

Several aspects of these findings warrant additional comment. The specificity of the observed predictive effect of the depression for suicidal ideation is an important
strength of the study. This has been supported by other recent studies (Wu, Hoven, Lin et al., 2004), done on both clinical and general community population. Never the less, considering the well known linkage of the suicidal ideation with depression, surprisingly few studies have focused on the inter relationships of their two issues. In the present study depression being most potent predictor of suicidal ideation. It is highly significant at .001 level. It clearly indicates that depression is a very strong predictor of suicidal ideation in this sample.

Identifying emotional intelligence as a predictive factor in the present study represents a unique and important contribution to research on suicidal behavior. Report on such predictive factor might move efforts forward by specifying what factors might keep students from engaging in suicidal behavior, thus identifying potential targets for interventions and prevention efforts. So the present study extends knowledge about what psychological factor protect against risk for suicidal behavior and provides a new direction in this developing research area.