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METHOD

Study Design: It is a cross-sectional co-relational study.

Venue: Different undergraduate colleges affiliated to University of Calcutta, Kolkata, India.

Sample: Undergraduate students from different colleges in Kolkata, India.

Sampling Technique: Colleges were selected giving equal representation to all regions (east, west, north, south and central) of the city from a list of undergraduate colleges in Kolkata. Principals of those colleges were officially requested to permit their students to participate in the study. Undergraduate students from 10 colleges were approached to participate in the study where permission was granted. Students who had given their consent and fulfilling required inclusion and exclusion criteria were selected for the present study. Total 400 (equal in number of male and female) students were selected using criteria based sampling method and assessed cross-sectionally.

Sample Size: The total sample was 400.
Method and Materials

Inclusion criteria
- Both boys & girls who can comprehend the instructions
- Age above 18 years
- Students who had given their consent to participate in the study.
- The students from all streams (Arts, Science and Commerce) from undergraduate colleges.

Exclusion criteria
- The students who has any chronic physical illness.
- The students who has history of any chronic psychiatric illness.
- The students who have already attempted suicide.
- Students who have previous family history (in first degree relatives) of suicidal attempt or committing suicide.
- The students who have history of hospitalization for diagnosed mental illness / physical illness for last two years.

MATERIALS USED

Tools
- Socio-demographic and Clinical Data Sheet - developed by the researcher.
- Emotional Intelligence Test (EQ) - developed by Chadha N.K. and Singh D., 2001.
- Beck Depression Inventory - II (BDI-II): - developed by Beck, Steer, and Brown, 1996.
- Adult Suicidal Ideation Questionnaire (ASIQ) - developed by Reynolds W.M., 1987.
Description of tools

1. Socio-demographic and Clinical Data Sheet: It is a semi structured proforma specially developed by the researcher to collect socio demographic information of the participants: age, sex, religion, marital status, family income, residence and stream of the undergraduate course.

2. Eysenck Personality Questionnaire - R (EPQ-R):

Description: It was devised by the psychologists Hans Jürgen Eysenck and his wife Sybil B. G. Eysenck (Eysenck and Eysenck, 1975). In the present study 90 items revised version of the EPQ-R (1985) was used. The instrument measures three dimensions of a person’s personality: Extroversion (E), Neuroticism (N) or emotionality, and Psychoticism (P) or tough-mindedness. It also has a lie scale (L).

Scoring: The EPQ-R manual provides scoring keys based on that scores were computed. Sum of the specified items for three personality dimensions – psychoticism neuroticism and extroversion a raw score was calculated, which was further converted into sten (standard ten) score with the help of a given conversion table, based on the highest sten score personality dimensions were determined.

Reliability: The EPQ is a reliable research tool. The reliability based on sample of 257 subjects is .78 to .89. EPQ is not inferior to any other published personality test.

Validity: Results of several research studies support the EPQ-R as a valid measure of dimensions of a person’s personality.

3. Emotional Intelligence Test (EQ):

Description: The EQ test was developed by Chadha N.K. and Singh D. (2001). The test contains 15 situations measuring different emotional
responses and their blends. It can measure emotional competency, emotional sensitively and emotional maturity.

**Scoring:** Total raw score can be computed with help of scoring key. Raw score can be transferred in percentile score on the basis of table given in manual.

**Reliability:** This test has been standardized for Indian managers, businessmen, and bureaucrats. The retest reliability for the test was found to be 0.94. The split-half reliability in the case of odd-even items was 0.92 and that for the first half and the second half was 0.90. Both reliability coefficients are significantly higher which indicate that the present scale is highly consistent and reliable.

**Validity:** The empirical validity of the scale was calculated by administering the scale of Goleman D. (2001) and present scale to a sample of 60 subjects. The validity was found to be 0.89, which indicates that the present scale is valid.

4. **Beck Depression Inventory - II (BDI-II):**

**Description:** The Beck Depression Inventory (BDI) was developed by Aron T. Beck et al. (Beck et al., 1961). There are three versions of the BDI - the original BDI, first published in 1961 and later revised in 1978 as the BDI-1A, and the BDI-II, published in 1996. It is a 21-item test presented in multiple choice format which purports to measure presence and degree of depression in adolescents and adults with a focus on behavioural and cognitive dimensions of depression. The current version, the Beck Depression Inventory – II (BDI-II), has added more coverage of somatic symptoms to be compatible with DSM-IV and covers the most recent 2 weeks. Earlier versions focus on the past one week or even shorter intervals, which may be preferable for monitoring treatment response.
Scoring: BDI-II includes 21 self-report items, each of which has four statements describing increasing levels of severity; the total score ranges from 0 to 84. The scale can be completed in 5 to 10 minutes. The instrument's strength lies in measuring the depth of depression; it is not suitable for making a diagnosis. Beck admits that there is no arbitrary cut off score and the specific cut off depend on the characteristics of the patients used and the purpose for which the inventory is administered.

Reliability: Test-retest reliability has been studied in the case of 38 patients who were given the BDI-II on two occasions. It was discovered that the changes in BDI-II scores tended to parallel changes in the clinical reading of the depth of depression, indicating a consistent relationship between BDI-II scores and the patient's clinical state. The reliability figures above .90. Internal consistency studies demonstrated a correlation coefficient of .91 for the test items, and the BDI-II is positively correlated with the Hamilton Depression Rating Scale with a Pearson r of 0.71

Validity: Content validity would seem to be quite high since the BDI-II appears to evaluate well a wide variety of symptoms and attitudes associated with depression. One study addressing concurrent validity demonstrated a correlation of .77 between the inventory and psychiatric rating using university students as subjects. Beck reports similar studies in which coefficients of .65 and .67 were obtained in comparing results of the BDI-II with psychiatric ratings of patients (Beck, Steer, and Brown, 1996).

5. Adult Suicidal Ideation Questionnaire (ASIQ):

Description: ASIQ was developed by William M. Reynolds (Reynolds, 1987) for the purpose of screening for suicidal ideation in college students and adults. It can be administered on individual or group, can be completed in 10 minutes or less time. Norms are based on 2,000 adults, ages 18 years and older, including psychiatric outpatients, normal adults, and college students.
Method and Materials

Scoring: The ASIQ is a 25-item self-report; items are rated on a 7-point scale between 0 - 6. A total score can be calculated from all 25 items, 31 is the cut off score which gives an idea to identify individuals in need of further evaluation for suicide risk. Those who had 31 or more total score were having pathological level of suicidal ideation.

Reliability: Internal consistency and test-retest reliability coefficients range from .96 to .97 and .85 to .95, respectively, in various samples.

 Validity: Results of several research studies support the ASIQ as a valid measure of suicidal ideation.

Procedure

Students (sample) were selected using criteria based sampling method and assessed cross-sectionally using:

1. Socio-demographic and Clinical Data Sheet.
2. Eysenck Personality Questionnaire - R (EPQ-R)
3. Emotional Intelligence Test (EQ)
4. Beck Depression Inventory - II (BDI-II)
5. Adult Suicidal Ideation Questionnaire (ASIQ)

Before administration of questionnaire instructions were repeatedly presented before the students and if any doubt developed, it was made clear instantly. During administration of questionnaire a uniform order was followed. Data was analyzed using Statistical Package for Social Sciences (SPSS) for windows 16.0 Argyrous George (2005). Appropriate statistics were used to get the results and interpretation of the result was done.
STATISTICAL ANALYSIS

- Measures of central tendencies, dispersion and t-test were done.
- Co-efficient of correlation was computed among variables in order to understand the linear relationship among them.
- Regression analysis was done in order to assess the significance of different predictor variables.
- Graphical representation of significant findings was done.