CHAPTER III

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The present study has been planned to study role of health, negative affect, depression and stress in suicidal ideation among married professionals. The present chapter deals with methodology and it is divided in following sections:

(I) Sample

(II) Measuring Tests

(III) Administration and Scoring of Tests

(IV) Statistical Analyses

SAMPLE

The present investigation is conducted on the sample of married professionals by using non-experimental, correlation design. The sample consisted of 300 regularly employed married professionals (150 male and 150 female) drawn from different organisations using simple random sampling method. The age range of the sample was from 25 to 40 years (Mean Age 32.5). The length of marriage was more than two years. The job experience of individuals in the profession was on regular basis for at least five years. Only those professionals are included who gave their consent for the study. The sample excludes those professionals who are suffering from any critical psychiatric illness.

MEASURES

The following tests were used in the study

- Symptom Check List-90 (SCL-90) (Derogatis, Lipman, & Covi, 1973)
- General Health Questionnaire- 30 (GHQ-30) (Goldberg & Williams, 1988)
• Positive and Negative Affect Schedule Expanded Form (PANAS-X) (Watson & Clark, 1994)

• Beck Depression Inventory-II (BDI-II) (Beck, Steer, & Brown, 1996)

• Daily Stress Inventory (DSI) (Brantley & Jones, 1989)

• Adult Suicidal Ideation Questionnaire (ASIQ) (Reynolds, 1991)

The details are as under:-

• **Symptom Check List-90 (SCL-90) (Derogatis, Lipman, & Covi, 1973):** Symptom Check List 90 self report tools to measure the mental health of the participants. SCL-90 measure the nine dimension of the mental health, which includes- Somatisation, Obsessive Compulsive, Interpersonal Sensitivity, Depression, Anxiety, Hostility, Phobic Anxiety, Paranoid Ideation, and Psychoticism. SCL-90 has good psychometric properties. Good internal consistency coefficients have been reported for the SCL-90 subscales. For example, coefficient $\alpha$ in a study with 209 symptomatic volunteers ranged from 0.77 to 0.90 (Derogatis, Rickels, & Rock, 1976). Stability coefficients (test-retest reliability) for the SCL-90 have generally been adequate across a range of patient groups and test-retest intervals with a 10-week interval between tests had correlation coefficients ranging from 0.68 to 0.80 (Derogatis, 2000). Some of studies have reported good convergent validity for the SCL-90 (Derogatis et al., 1976; Dinning & Evans, 1977). In these studies, the nine SCL-90 dimensions were established to associate with similar measures from other tests. Derogatis et al. (1976) verified that nine major symptom dimensions of the SCL-90 correlated significantly in a convergent fashion with like score constructs on the Minnesota Multiphasic Personality Inventory (MMPI).

• **General Health Questionnaire-30 (GHQ-30) (Goldberg & Williams, 1988):** We have used the 30-item version of the General Health Questionnaire, which consists of
15 negative questions concerning symptoms of psychological distress (e.g., ‘Have you recently felt that life is entirely hopeless?’) and 15 positive questions about normal routine functioning (e.g., ‘Have you recently been managing to keep yourself busy and occupied?’). GHQ-30 measures the four dimension of general distress which includes- anxiety, somatisation, social dysfunction and depression. A four-point Likert-type scoring system is used for each items, ranging from 0 (=less than usual) to 3 (=much more than usual). The minimum obtainable score is 0 and the maximum obtainable score is 90, with higher scores reflecting more declined mental health. The wording of the items means that they can all be scored in the same direction. The GHQ-30, reflecting Cronbach’s alpha coefficient of 0.93. Construct validity was also supported by the GHQ-30 which demonstrated its robustness in separating groups with known mental health problems. Construct validity was also demonstrated in a logical four factor solution, which accounted for 50.0% of the variance in the study group (Dale, et al., 2012). The GHQ-30 has shown to be most stable and to have the highest validity (Goldberg & Williams, 1998).

• **Positive and Negative Affect Schedule Expanded Form (PANAS-X) (Watson & Clark, 1994):** The PANAS-X is a 60-item adjective checklist on which respondents rate a scale from 1 (very slightly/not at all) to 5 (extremely), with two higher order scales (Positive and Negative Affect). For the purposes of the present study we have used only Negative affect scale items which include 23 items. In prior research on university, community, and clinical samples, internal consistencies for the positive and negative affect scales ranges from .83 to .90 and from .79 to .91 for the two scales, respectively. Strong divergent validity has been demonstrated along with strong convergent validity between self and peer ratings and between scores on the
PANAS-X and other measures that assess multiple levels of affect (e.g. Profile of Mood States (POMS), (Watson & Clark, 1994).

- **Beck Depression Inventory-II (BDI-II) (Beck et al., 1996):** The BDI-II is a self-report instrument developed by Beck, Steer, and Brown (1996) to measure the severity of depressive symptoms in adults. It assesses symptoms of depression as defined by the American Psychiatric Association’s Diagnostic and Statistical Manual of Mental Disorders-Fourth Edition. This inventory includes 21 items, most of which measure depressive symptoms on a four point rating scale from zero to three. The two items that are exceptions to this are items 16 and 18; the scale for these two items has response pattern of 0, 1a, 1b, 2a, 2b, 3a, & 3c. For this inventory, people are asked to report the feeling that is consistent with them over the past two weeks; the ratings for each item are summed to obtain a total score. Possible inventory scores range from 0 to 63. In terms of clinical explanation the total scores is accomplished through criterion-referenced procedures which is kept in mind to follow this interpretive ranges: 0-13 (minimal depression), 14-19 (mild depression), 20-28 (moderate depression), and 29-63 (severe depression) (Beck et al., 1996). The BDI-II has good reliability, revealed a coefficient alpha of .92 for the outpatient population (n = 500) in the sample referred in the manual and a coefficient alpha of .93 for the college students (n = 120) in the sample (Beck et al., 1996). The BDI-II reports good psychometric properties, and there is evidence that it is a valid measure of depression symptoms (Beck et al., 1996; Beck, Steer, & Garbin, 1988).

- **Daily Stress Inventory (DSI) (Brantley & Jones, 1989):** The DSI is a 58 item self-report measure that allows a person to indicate events that they have experienced in the past 24 hr. After indicating the events occurred, individuals rate the stressfulness of those events, on a Likert-type scale from 1 (“occurred but was not stressful”) to 7
“caused me to panic”). It measures the number and relative impact of common minor stressor frequently experienced in daily life. Low score of DSI indicate low stress while high score indicate high stress. The DSI yields three basic scores: event score, impact score, and I/E ratio. Its items are grouped into five content clusters; interpersonal problems, personal competency, cognitive stressors, environment hassles, and varied stressors. It is applicable with male and females who are 17 years of age or older. It requires $7^{th}$ grade level of reading ability for successful completion. Reliability coefficient for event and impact were .83 and .87 respectively. DSI has appropriate concurrent and discriminant validity as reported by Brantley, Waggoner, Jones, and Rappaporl, in 1987.

- **Adult Suicide Ideation Questionnaire (ASIQ) (Reynolds, 1991):** The ASIQ is a 25-item self-report measure of suicide ideation and behaviour in adults designed by Reynolds (1991b). Participants rate the occurrence of suicidal thoughts or behaviour during the past month, using a 7-point scale for each item (0 = Never had this thought; 1 = I had this thought before, but not in the last month; 2 = About once a month; 3 = Couple of times a month; 4 = About once a week; 5 = Couple of times a week; 6 = Almost every day). The ASIQ yields a total score, ranging from 0 to 150 with higher scores indicating greater suicide ideation. It exhibits good reliability and validity (Reynolds, 1991a; 1991b) and has high internal consistency reliabilities for the adult community sample, college student sample, and psychiatric sample with Cronbach’s alpha coefficients of .96, .96, and .97, respectively (Reynolds, 1991a; 1991b). It is strongly associated with the variable of hopelessness ($r = .53$) and depression ($r = .60$) in a sample of college students (Reynolds, 1991a).
ADMINISTRATION AND SCORING

The participants were contacted personally to their respective organisation through their informed consent and their willingness to participate in the study was sought. The testing sessions were conducted in room settings with adequate facilities for ventilation, light and proper sitting arrangements. All the tests were administered in individual settings. As the numbers of tests were six, the administration was done in two sessions. In first session, Symptom Checklist-90, General Health Questionnaire-30 (GHQ-30), Negative Affect Schedule and Beck Depression Inventory- II were administered. In second session the Daily Stress Inventory along with Adult Suicidal Ideation Questionnaire were administered. A gap of at least one hour was given in between the sessions. Efforts were made to get the maximum cooperation of the participants. They were told that their results would be kept confidential and if they want they would be informed about these performances when all the subjects get finished with the final test.

Scoring for all the tests was completed strictly following the procedure mentioned in their respective manual. **Symptom Check List-90** measures the mental health of the participants. Scoring of all the 90 statements was done with the help of scoring key. Score on each statements ranged from 0 to 4. Total score of the subject ranged from 0 to 360. Scoring key of the 90 items with their nine dimensions are as under-

**Somatisation (12 Items):** 1, 4, 12, 27, 40, 42, 48, 49, 52, 53, 56, and 58.

**Obsessive compulsive (10 Items):** 3, 9, 10, 28, 38, 45, 46, 51, 55, and 65.

**Interpersonal Sensitivity (9 Items):** 6, 21, 34, 36, 37, 41, 61, 69, and 73.

**Depression (13 Items):** 5, 14, 15, 20, 22, 26, 29, 30, 31, 32, 54, 71, and 79.
Anxiety (10 Items): 2, 17, 23, 33, 39, 57, 72, 78, 80, and 86.

Hostility (6 Items): 11, 24, 63, 67, 74, and 81.

Phobic anxiety (7 Items): 13, 25, 47, 50, 70, 75, and 82.

Paranoid ideation (6 Items): 8, 18, 43, 68, 76, and 83.


Additional items (7 Items): 19, 44, 59, 60, 64, 66, and 89.

The General Health Questionnaire was scored for General Health variable. Scoring of all the 30 statements was done with the help of scoring key ranging from 0 to 3. For positive statements scores are assigned from 3 to 0 and for negative statements scores are assigned from 0 to 3. Total scores of the subject ranged from 0 to 90 on this test. Scoring key of 30 items is as under:

Positive items are (15 Items): 1, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 17, 20, 26, and 27.

Negative items are (15 Items): 2, 3, 14, 15, 16, 18, 19, 21, 22, 23, 24, 25, 28, 29, and 30.

Four dimension of GHQ-30 are as under:

Anxiety (13 Items): 14, 15, 16, 18, 19, 21, 22, 23, 24, 25, 28, 29, and 30.

Somatisation (10 Items): 1, 4, 5, 7, 8, 11, 12, 13, 20, and 26.

Social Dysfunction (5 Items): 6, 9, 10, 17, and 27.

Depression (2 Items): 2 and 3.

Negative Affect Schedule Expanded Form for negative affect variable. The scoring for each statement ranged from 1 to 5. Total scores of the subject ranged from 23 to 115 on this scale. Scoring key of all the item along with their dimension is as under:

Fear (6 Items): Afraid, Shaky, Nervous, Jittery, Scared, and Frightened. Items are, 6, 7, 12, 16, 18, and 23.
Hostility (6 Items): Disgusted, Scornful, Irritable, Angry at others, Hostile, and Loathing. Items numbers are, 1, 2, 3, 9, 15, and 24.

Guilt (6 Items): Disgusted with Self, Guilty, Ashamed, Angry at self, Blameworthy, and Dissatisfied with Self. Items numbers are, 4, 11, 17, 19, 22, and 25.

Sadness (5 Items): Sad, Alone, Blue, Lonely, and Downhearted. Items numbers are, 5, 8, 10, 13, and 20.

Filler Items (2 items): Excited and Distressed. Items numbers are, 14 and 21.

Beck Depression Inventory measures the level of depression of the participants. Scores on each statement ranged from 0 to 3. The score for each of the 21 questions were added by counting the number to the right of each response. The highest possible total for the whole test would be sixty-three and the lowest possible score for the test would be zero.

Daily Stress Inventory was scored for stress variable. Scoring of all the 58 statements was done with the help of manual. Scores on each statement ranged from 1 to 5. Total scores of the subject ranged from 58 to 290 on this test. Scoring key of 58 items is as under-

Interpersonal Problems (12 Items): 1 to 12

Personal Competency (10 Items): 13 to 22

Cognitive Stressors (5 Items): 23 to 27

Environment Hassles (14 Items): 28 to 41

Varied Stressors (17 Items): 42 to 58

Adult Suicide Ideation Questionnaire was scored for suicidal ideation. Scoring of all the 25 statements was done with the help of scoring key. Scores on each statement ranged from 0 to 6. Total scores of the subject ranged from 0 to 150 on this test. ASIQ
give a single total score. Higher score indicates high level of suicidal ideation whereas lower score indicates low level of suicidal ideation.

**STATISTICAL ANALYSES**

To meet the objectives of the study, the data were subjected to various statistical analysis using SPSS package. To obtain the difference between the groups, t-test was applied. To examine the relationship between variables; Pearson Product moment method of correlation was used. To find out the predictors of suicidal ideation among married professionals, multiple regression analysis was applied. To find out the group difference between high and low suicidal ideation among married professionals, discriminant functional analysis was used.