Chapter IV
Methodology
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The aim of the present investigation was to study the cognitive and affective correlates of health among adults. The present chapter puts forth the description of the sample, tools used, procedure adopted, and the statistical analyses applied.

SAMPLE:

The sample for the present study comprised 150 male and 150 female adults in the age range of 30-45 years. These adults were working at gazetted posts, i.e., doctors, having urban background and working in government/private hospitals in Himachal Pradesh. Random sampling was done. Men and women having intact families (i.e., without loss of spouse) were considered in the present investigation. None of them indulged in risky lifestyle behaviors like smoking, drinking or drug addiction, and were not suffering from any major physical ailment.

TOOLS USED:

1. Cognitive Distortions Scale (CDS; Briere, 2000):

The cognitive distortions scale is a brief, 40-item test of dysfunctional cognitions. Each item is rated according to its frequency of occurrence over the past month, using a five-point rating scale ranging from 1 (never) to 5
(very often). There are five scales which comprise the scale, viz., self-criticism (SC), self-blame (SB), helplessness (HLP), hopelessness (HOP), and pre-occupation with danger (PWD). The alpha reliability coefficients range from 0.89 to 0.97 for all the subscales. The scale has adequate convergent and discriminant validity (0.60-0.75) in general as well as clinical populations.

2. Cognitive Emotion Regulation Questionnaire (CERQ; Garnefski, Kraaij and Spinhoven 2002):

It is a 36-item self-administered questionnaire consisting of nine conceptually distinct subscales with each referring to what someone thinks after the experience of threatening or stressful life events. The nine subscales are self-blame, acceptance, rumination, positive refocusing, refocusing on planning, positive reappraisal, putting into perspective, catastrophizing, and other-blame. The rating is done on a five-point scale with responses ranging from 1 (almost never) to 5 (almost always). All the scales have adequate internal consistencies ranging from 0.68 to 0.86 (Garnefski, Kraaij et al., 2002), and Cronbach alpha reliabilities for the subscales range from 0.76 - 0.86.

3. PANAS- X (Waston and Clark, 1994):

To assess specific emotional states, Watson and Clark (1999) created a 60-item version named PANAS-X that measures 11 specific affect states, viz., fear, sadness, guilt, hostility, shyness, fatigue, surprise, joviality, self-assurance, attentiveness and serenity. The subjects have to rate each
emotional state on a scale of 1 (not at all) to 5 (extremely) that they experience. It is simple to administer. The scale is rated on a five-point rating scale from 1 (not at all) to 5 (extremely). The alpha reliability ranges from 0.83 to 0.90 for positive affect, and from 0.85 to 0.90 for negative affect. The convergent validity ranges from 0.89 to 0.95 (Watson et al., 1988). The scale also has adequate discriminant validity.

4. **Positive expressivity scale and negative expressivity scale** (Barchad, 2001):

   Emotional expressivity is the tendency to express one’s emotional reactions in observable behavior. The scale consists of two sub-scales, viz., positive expressivity scale and negative expressivity scale with 10 items in each subscale. Positive expressivity scale measures expression of affection, laughter and happiness. Negative expressivity measures expression of anger, sadness, fear and sadness. Co-efficient alpha for positive expressivity and negative expressivity subscales have been reported by its authors to be 0.78 and 0.74 respectively. Both the scales have adequate consistency and discriminant validity.

5. **The Scale of Emotional Competencies** (Sharma and Bhardwaj, 1995):

   The scale for emotional competencies consists of 30 items to measure five emotional competencies where each competency is measured by six items selected for the same in the five domains viz., adequate depth of
feeling (ADF), adequate expression and control of emotions (AEC), ability to function with emotion (AFE), ability to cope with problem emotion (ACPE), and enhancement of positive emotions (EPE). All the items are rated on a five-point likert scale. z-scores for each competency is calculated separately, and the sum total of the z-scores across the five domains provides the score for emotional competence. The scale has a test-re-test reliability of 0.76, and validity for two subscales with 16 PF has been found to be 0.64 to 0.69.

6. Psychological Distress Manifestations Measure Scale (PDMMS; Masse et al., 1998):

The psychological distress manifestations measure scale is based on a list of physical, cognitive, behavioural, and emotional manifestations. Total score on the scale is constructed by summing up the raw scores on the frequency scale from 1 ‘never’ to 5 ‘almost always’. The scale’s internal consistency is high, with Cronbach alpha of 0.093.

7. General Health Rating Index (Ware, 1976):

General health rating index consists of 22 questions, subdivided into eight sub-areas of current health, prior health resilience or susceptibility to illness, health outlook, health worry, sickness orientation, rejection of sick role, and attitude about going to doctor. The responses are graded from 5 (definitely) to 1 (definitely false). The scale has adequate reliability and discriminant validity. Health rating index is computed on the basis of scale items.
PROCEDURE:

The aim of the present investigation was to study the cognitive (viz., cognitive coping and cognitive distortions) and affective (viz., emotional experience, emotional expression, emotional competence, and psychological distress) correlates of health. The sample consisted of 150 adult males and 150 adult females working as doctors in government/private hospitals of Himachal Pradesh. Participants’ consent was taken prior to the investigation. A rapport was established with the participants before beginning the investigation, and they were informed that the information provided by them would be kept confidential. The questionnaires assessing health, cognitive distortions, cognitive emotion regulation, emotional experience, emotional expression, and emotional competence were administered to the participants in two to three sittings. The scoring of each questionnaire was done as per the instructions given in their respective manuals.

STATISTICAL ANALYSES:

Means, standard deviations, skewness, and kurtosis were computed for all the above-mentioned variables. Product-moment correlations were computed, and multiple regression analyses were applied. T-test (for independent samples) was applied to compare male and female doctors on health and its cognitive/affective correlates.