The conduction of the present study was planned and executed in accordance with the specific objectives drawn thorough available literature and pertinent conceptual models. The main variables included in the study were psychological distress, work-family interference, work-family facilitation, job and family involvement, social support and mental health. In broad terms, the target population was married working women with sufficient job tenure and having at least one child. The proceeding sections of this chapter describe the methodology adopted in carrying out the present study.

Sample

A sample is a set of objects, occurrences, or individuals selected from a parent population for the purpose of research. Sample for the present study comprised 290 married working women drawn from various organizations across three Northern states, Haryana, Panjab, and Himachal Pradesh. The sampling of participants was accomplished through purposive sampling from seven townships including Yamuna Nagar, Ambala, Patiala, Jalandhar, Poanta Sahib, Shimla, and Nahan. The job titles included teachers, doctors, social workers, nurses, counsellors, chemists, bank employees, and post masters.

The sample drawn so may be regarded fairly well representative of the target population. The inclusion criteria for the participants were having been married, having at least one child, and working in the same organization since last three years. Purposive sampling technique is a type of non probability sampling where the researcher consciously selects particular elements or subjects for addition in a study so as to make sure that the elements will have certain characteristics pertinent to the study. It normally targets a particular group of
people. This was done to ensure that the respondents would have a perceptible experience of work-family interaction. The selected participants were in the age range of 23-50 years with a mean of 33.67 and SD of 7.34. Socio-economic status of the participants ranged between lower middle class to upper middle class.

**Measuring Instruments**

A brief description of measuring instruments used to collect data for the study is as under:

1. **Work Distress Scale (WDS):**

   The work distress scale was developed by Rani (2011) by adapting it from two standardized instruments namely Maslach Burnout Inventory (Maslach, Jackson, & Leiter, 1996), and Occupational Stress Index (Srivastava & Singh, 1981). The Maslach burnout inventory assesses three components of burnout syndrome: emotional exhaustion, depersonalization, and reduced personal accomplishment. Emotional exhaustion assesses feelings of being emotionally overextended and exhausted by one’s work, depersonalization measures an unfeeling and impersonal response toward recipients of one’s service or care, and accomplishment assesses feelings of competence and successful achievement in one’s work with people. As reported by the authors, the internal consistency reliability coefficients for the three subscales range between .71 and .90. The occupational stress index (Srivastava & Singh, 1981) assesses the perceived stress of the employees arising from twelve dimensions of their job life i.e. role overload, role conflict, unreasonable group and political pressures, responsibility, powerlessness, under participation, poor peer relations at work, intrinsic impoverishment, low status, strenuous working conditions, and unpredictability. The coefficient alpha and split half reliability of the occupational stress index in the standardization sample were found to be .95 and .90 respectively.
The WDS consists of 18 items based on three subscales of Maslach burnout and inventory the four scales of occupational stress index that are strenuous working conditions, role conflict, intrinsic impoverishment, and role overload. The WDS measures the comprehensive work distress and provides one composite score for it. The items have a five-point response pattern, ranging from strongly agree to strongly disagree, wherein the respondent has to show his/her agreement or disagreement about the specific situation presented to him in the statement. The coefficient alpha reliability for the work-distress scale was found to be .76.

2. Family Distress Scale (FDS):

Family Distress Scale is comprised of 18 items six each tapping, marital dissatisfaction, family maladjustment, and family role overload. The three family distress scales were adapted from Synder’s (1997) Marital Satisfaction Index-Revised (MSI-R), Spanier’s (1976) Dyadic Adjustment Scale (DAS), and Reilly’s (1982) Role Overload Scale. Marital Satisfaction Index-Revised (MSI-R) assesses the individual’s current experience in the marital relationship or marital quality. The MSI-R taps 10 specific aspects of the marital life but only six were drawn for the family distress scale, these are family distress, dissatisfaction with children, aggression, sexual dissatisfaction, communication problem, and time-together. Snyder (1997) has reported the internal consistency reliabilities for the subscales of MSI-R ranging between .80 and .85.

Spanier’s Dyadic Adjustment Scale (DAS) is a measure for assessing the quality of marriage and the scale can tap four empirically verified components which can be used as subscales. These components are Dyadic Consensus, Dyadic Satisfaction, Dyadic Cohesion, and Affectional Expression. Spanier (1976) reported a very high coefficient alpha for the scale that equals to .96. Reilly’s (1982) Role Overload Scale assess the degree to which persons are overtaxed cognitively as a result of being under time pressure and having too
many commitments and responsibilities. Cronbach’s alpha for the scale was .88 (Reilly, 1982). The present Family Distress Scale (FDS) was modeled by adapting relevant items from the three scales to provide a wholistic assessment of family distress as a unified construct. The 18 adapted items are responded on a five point scale ranging from strongly disagree to strongly agree. The coefficient alpha reliability for the adapted scale was found to be .73 which is quite acceptable (Rani, 2011).

3. **Work-Family Interface Scale (WFIS):**

   Work-family interface is conceptualized and operationalized as having two kinds with two directions each, hence four scales two each for work-family interference and work-family facilitation. In order to measure all the four dimensions, work-to-family and family-to-work interference and work-to-family and family-to-work facilitation were measured through a composite of Work-Family Interface Scale (Kinnunen, Feldt, Geurts, & Pulkkinen, 2006) and Work-Family Spillover Scale (Grzywacz & Marks, 2000). Each of these scales comprises 14 items, 28 items in total. Each item asked the respondent to indicate how often he or she experienced a specific situation on a five-point scale – very often, often, sometimes, rarely, and never. Each dimension of work-family interface is measured by seven items.

   The work-family interface scale (Kinnunen et al., 2006) takes into account both the positive and negative spillover between work and family in both directions. Grzywacz and Marks’ (2000) scale for work-family spillover scale was developed for MIDUS (National Survey of Midlife Development in the United States) to access work-family interface. The joint factor analysis of both the scales indicated that a four factor model, including negative work-to-family and family-to-work spillover and positive work-to-family and family-to-work spillover, was supported. Both the scales of each kind of spillover were highly related with each other, but the negative spillover scales correlated at lower
degree with those of positive spillover. These findings supported the scale for its construct, increment and discriminant validity. The alpha coefficients for the four scales ranged between .69 and .84.

4. **Job Involvement Sale (JIS):**

Job involvement was measured by means of Kanungo’s Job Involvement Scale (Kanungo, 1982). This questionnaire is an improvisation of the previously widely used job involvement measure of Lodahl and Kejner (1965). The scale as developed by Kanungo attempts to measure the job involvement construct, defined purely as psychological identification with one’s work and is seen by him as a unidimensional scale. The scale comprises 10 items answered on a five-point Likert scale with responses ranging from “Strongly disagree” (1) to “Strongly agree” (5). The author of the instrument reports the questionnaire to have reasonably high levels of internal consistency, test-retest reliability and construct validity. The Cronbach Alpha reliabilities in different studies have been estimated to be between 0.83 and 0.87 (Kanungo, 1982; Blau, 1985). Test-retest coefficients for varying time intervals were found to be 0.85, 0.82, and 0.74, respectively for varying time intervals. The measure is reported to be fairly valid; the Principal Axis Factor Analysis carried out on the scale indicated clearly a one-factor solution (Blau, 1985). In studies done by Boshoff and Hoole (1998) it was found that the Job Involvement Inventory designed by Kanungo was portable to the self assessment situation with high construct validity and high internal reliability. Similar results were found by Hoole and Boshoff (1998) in a later study.

5. **Family Involvement Scale (FIS):**

The family involvement was assessed by using the Family Involvement Scale modeled after Kanungo’s (1982) Job Involvement Scale. Items from the job involvement scale were modified to yield an entirely separate measure of family involvement. Items were worded to represent family situations. The scale
is comprised of 10-items and is responded on a five point scale ranging from “Strongly disagree” (1) to “Strongly agree” (5). The resultant scale was tested for its psychometric properties and found to have satisfactory estimates for reliability and validity. The Cronbach alpha of the scale was found to be 0.81 (N=290), which indicates a reasonably high level of internal consistency. Construct validity of the FIS was assessed through factor analysis. All the ten items loaded in the range of .41 to .73 on a varimaxly rotated factor solution with a Kaiser-Meyer-Olkin (KMO) estimate of 0.82.

6. **Perceived Social Support Questionnaire (PSSQ):**

The Perceived Social Support Questionnaire adapted by the researcher measures perceived support that captures an individual’s beliefs about the availability of support. The PSSQ was adapted from three different scales, viz. Perceived Social Support from friends and family (Procidano & Heller, 1983), Social Provision Scale (Cutrona & Russell, 1987), and Berlin Social Support Scale (Schwarzer & Schulz, 2000). The perceived social support questionnaire includes 43 items categorized under four types of social support that is Emotional support, Instrumental support, Appraisal support and Informational support. The questionnaire measures the extent to which an individual believes that her needs for support and information are being met by family members.

Talking about the scales form which the PSSQ was derived, the Perceived Social Support from friends and family measures perceived support from family and friends. The scale has a 3-point Likert-type scale response pattern ranging from *Yes* to *No*. Adequate psychometric properties have been found with the perceived social support from friends and family in several studies (Procidano & Heller, 1983). The Social Provision Scale (Cutrona & Russell, 1987) examines the degree to which respondent’s social relationships provide various dimensions of social support. The scale assesses the following aspects of social support: Attachment, Social Integration, Reassurance of Worth, Reliable Alliance,
Guidance, and Opportunity for Nurturance. Half of the items describe the presence of a type of support and the others describe the absence of a type of support. The Berlin Social Support Scales (Schwarzer & Schulz, 2000) has 6 subscales (perceived, actually provided and received support, need for support, support seeking, and protective buffering) measure both cognitive and behavioral aspects of social support.

The 43 item Perceived Social Support Questionnaire was prepared to fulfill the requirements of the present study. The PSSQ requires responses on a five-point scale (from strongly disagree to strongly agree) and provides a single composite scale as well as four separate scores to represent emotional, instrumental, appraisal and informational support. The internal consistency reliability of the four scales was found to range between .79 and .84.

7. General Health Questionnaire-60 (GHQ-60):

Developed in the 1970s by Goldberg (1978) the General Health Questionnaire is a tool to quantify the mental health problems indicating risk of developing psychiatric disorders. This instrument targets two areas – the inability to carry out normal functions and the appearance of distress – to assess well-being in a person. It was designed for the screening of non-psychiatric disorders. The GHQ is self-administered and comes in four versions: the GHQ-60 for detailed assessment; the GHQ-30 scaled down for quick screening; the GHQ-28 with four scales -somatic symptoms, anxiety and insomnia, social dysfunction, severe depression, used for research purposes; and the GHQ-12 useful for survey work. The GHQ-60 consists of 60 items and takes 10-12 minutes to complete. Results are most accurate when the instrument is administered as part of a medical consultation. The GHQ is developed from a pool of 140 items that are believed to cover all aspects of adjustments and felt distress. These concepts include: depression and unhappiness, anxiety and felt psychological disturbance, social impairment, and hypochondriasis. It is a measure of the common mental
health problems in the domains of depression, anxiety, somatic symptoms and social withdrawal. Cronbach alpha coefficient for the GHQ is in the range of 0.82 to 0.86. The instrument is considered as reliable and has been translated into 38 different languages. When correlated with the global quality of life scale, the GHQ showed negative correlation. This demonstrates the inverse relationship with an increase in distress leading to a decrease in quality of life.

**Procedure**

The selected participants were contacted individually, their consent for participation and prior appointment for psychological testing were sought. As per pre-decided schedule they were approached for data collection at their respective workplace. Testing was conducted in two sessions/sittings with a time gap of about 15-20 minutes. Work-Family Interface Scale, Work and Family Distress Scales, and Social Support Questionnaire were administered in first session. The remaining tests, namely Job and Family Involvement Scales and General Health Questionnaire were administered in second session. They also received a demographic information form, which contained some essential personal information, family details, and job related information. A testing congenial atmosphere was ensured through rapport with the participants. They were detailed the about purpose and importance of the study and that they are participating a scientific investigation. Their participation as well as their scores on various psychological tests would be kept strictly confidential. They were also informed that their performance on the tests would have no bearing on their work and family life. However, they were told that they may know about their status on various variables, if they desire so.

Each of the participants was given detailed instructions about how to perform on the tests. Instructions were read audibly while they were reading the same just to ensure that everything gets clear to them. The tests were administered well in accordance with the procedure described in respective
manuals or as detailed by the test authors. Although there was no time limit for any of the instruments, they were encouraged to finish the test as early as possible without ruminating on the items and their responses. They were requested to attempt all the items of a test. Testing procedure and other conditions were uniform all through; participants were enthusiastic and very cooperative. In the case of adapted versions of the questionnaires a tryout pilot study was conducted on 112 participants to assess the suitability and psychometric properties of the scales. The pilot tryout was also aimed at finding serious flaws in the test content and to ascertain adequacy of response choices. In most part the results of pilot study were very encouraging.

**Scoring**

The scoring of the tests was accomplished through specially designed stencil/transparency keys. The scoring keys were designed as per the procedure detailed in respective test manuals or as prescribed by the test author/s. The Job Distress Scale was responded on five response alternatives viz. strongly disagree, disagree, neutral, agree, and strongly agree. A score of 1 was assigned to strongly disagree and a score of 5 strongly agree where items indicated presence of job distress. It was reversed in the case of negatively worded items. A single overall job distress score was obtained by adding the score of all 18 items. The same way was scored the Family Distress Scale for overall family distress. The scores on both the scales are likely to range from 18 to 90. The Work-Family Interface Scale (WFIS) was scored for two dimensions with two directional components each. The WFIS is responded on five-point scale with responses alternatives; very often, often, sometimes, rarely, and never. The scale was scored separately for Work interference with family (WIF), family interference with work (FIW), work facilitation to family (WFF) and family facilitation to work (FFW), each containing 7 items. Scoring was accomplished by assigning a score of 5 to 1 to above response alternatives. Scoring was reversed in the case of negatively
worded items. Finally, individual item scores were added to obtain respective scale scores. This way WFIS provided four scores, viz. WIF, FIW, WFF, and FFW.

The Perceived Social Support Questionnaire (PSQ) was scored for four separate scales: emotional, instrumental, appraisal and informational support. It being a five-point Likert type scale- strongly disagree to strongly agree, scored by assigning 1 to 5 scores to positively worded items and 5 to 1. Separate scale scores were obtained by adding individual item scores of each scale. General Health Questionnaire (GHQ) was scored for five mental health dimensions, somatic complaints, sleep disturbance, social dysfunction, anxiety, and depression. GHQ items were rated on 4-point severity scale- “not at all” to “much more than usual.” Therefore, each individual item was scored by awarding a score of 1 to 4. All the items were scored in a way that higher score denoted mental health problem or mental ill health. Then scores were obtained separately for all the five categories. Job and Family Involvement Scales were responded on 5-point scale- “strongly disagree” to “strongly agree.” Therefore these were scored assigning scores 1 to 5 in the case of positive statements and 5 to 1 in the case of negative statements. Job Involvement and Family Involvement scores were accomplished by adding scores on 10 items in each scale. This way, scoring of all the seven scales provided scores for 17 variables/constructs.

**Statistical Analyses**

The obtained data were tabulated in rectangular 17×290 data matrix. It was loaded on SPSS 12.1 for further analyses. The data were processed for descriptive statistics, Pearsonian correlations, and hierarchical moderated regression. Further, to test a hypothesized model of Work-Family Interface data were subjected to Structural Equation Modeling (SEM) through AMOS Version 4.0. The SEM provided various tests of goodness-of-fit index apart from standardized and non-standardized parameter estimates and multiple R.