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CHAPTER 3

METHODOLOGY

3.1 OVERVIEW

This study used Mixed Methods Sequential Explanatory approach (Ivankova, Creswell, & Stick, 2006) that allows for use of both the Quantitative method as well as the Qualitative method. This approach was adopted primarily for getting insight into employees’ experience. In this design, quantitative method takes precedence over the qualitative. The qualitative data is primarily collected after the statistical analysis of the quantitative phase is over and the results are integrated while discussing the findings. The aim of collecting the qualitative data is to explain the findings obtained from quantitative method. There is integration of both results while discussing and drawing inferences. This mixing of both methods is finding popularity amongst researchers in behavioural and social sciences as it leads to better understanding of the phenomenon under inferences (Tashakkori & Teddlie, 2003). A survey research design was used to explore and quantify the relationship between perceived social support, PsyCap and work family enrichment. This study used a self-report questionnaire for quantitative method and semi-structured interview for qualitative method.

After the discussion on the rationale for the research design used for the study, the chapter reports the hypotheses that were formulated based on the literature review. Variables that have been explained conceptually in the first chapter have been operationally defined. The characteristics of the sample included in the study has been described along with the personal data sheet and standardized tools used in the study. The procedure followed to conduct the study has been reported. The methods for quantitative and qualitative analyses have been also discussed.
3.2 HYPOTHESES

Drawing from theory and results of empirical studies hypotheses for the present study were formulated. As part of initial screening, gender difference was explored on the dependent variable, i.e. work-family enrichment, using the independent samples t-test; it revealed a significant difference between the male and female employees. Therefore, instead of pooling data together for analyses, it was decided to carry out further analyses independently for men and women. This is explained in detail later in the next chapter. In order to keep in line with this revelation, it was thought appropriate to reformulate hypotheses independently for the two groups as follows:

1. Perceived social support i.e. (a) availability of support and (b) satisfaction with support, is positively and significantly related to PsyCap for male employees.
2. Perceived social support i.e. (a) availability of support and (b) satisfaction with support, is positively and significantly related to PsyCap for female employees.
3. Perceived social support i.e. (a) availability of support and (b) satisfaction with support, is positively and significantly related to work-to-family enrichment for male employees.
4. Perceived social support i.e. (a) availability of support and (b) satisfaction with support, is positively and significantly related to work-to-family enrichment for female employees.
5. Perceived social support i.e. (a) availability of support and (b) satisfaction with support, is positively and significantly related to family to work enrichment for male employees.
6. Perceived social support i.e. (a) availability of support and (b) satisfaction with support, is positively and significantly related to family to work enrichment for female employees.

7. PsyCap is positively and significantly related to work-to-family enrichment for male employees.

8. PsyCap is positively and significantly related to work-to-family enrichment for female employees.

9. PsyCap is positively and significantly related to family to work enrichment for male employees.

10. PsyCap is positively and significantly related to family to work enrichment for female employees.

11. PsyCap mediates in the relationship between social support and work-family enrichment for male employees.

12. PsyCap mediates in the relationship between social support and work-family enrichment for female employees.

13. PsyCap mediates in the relationship between social support and family to work enrichment for male employees.

14. PsyCap mediates in the relationship between social support and family to work enrichment for female employees.

### 3.3 VARIABLES USED IN THE PRESENT STUDY

Since the study is a correlational study, the variables are classified as predictor variables and criterion variables. The variables which were controlled for the study have been mentioned, too.

#### 3.3.1 Predictor Variables

- Perceived support
- Psychological Capital (PsyCap)

#### 3.3.2 Criterion Variables

- Work-Family Enrichment
- Work-to-family Enrichment
- Family to Work Enrichment
3.3.3 Control Variables

Age, annual family income, educational qualification, work experience, marital status, occupational status of spouse, number of children (refer sec 3.5 for details)

3.4 OPERATIONAL DEFINITIONS

The following section presents operational definitions of the variables studied.

3.4.1 Perceived social support

It is defined as “existence or availability of people on whom we can rely, people who let us know that they care about, value, and love us” (Sarason, Levine, Basham & Sarason, 1983, p. 127). It was measured by the Social Support Questionnaire (SSQ) developed by Sarason et al (1983). High score denotes high social support.

3.4.2 PsyCap

PsyCap is defined as an individual’s positive psychological state of development that is characterized by self efficacy, optimism, hope and resiliency.

Self efficacy refers to taking on and putting in the necessary effort to succeed at challenging tasks.

Optimism denotes a positive attribution about succeeding now and in the future.

Hope means persevering toward goals and, when necessary, redirecting paths to goals to succeed.

Resilience means sustaining and bouncing back and even beyond to attain success when beset by problems and adversity.

PsyCap was measured by the Psychological Capital Questionnaire (PCQ) developed by Luthans and colleagues. High score on the scale indicates high PsyCap.
3.4.3 Work-family enrichment

It refers to the extent to which experiences in one role improve the quality of life in the other role. It was measured by work-family enrichment scale by Carlson et al. (2006). High score on the scale denotes high work-family enrichment.

3.5 SAMPLE

Quantitative

Non-probability convenience sampling was used to obtain a large sample. Participants consisted of 300 (Males = 150 and females = 150) full-time white-collar employees from various organizations in Non-IT sector who were willing to participate. Age of the participants ranged from 30 years to 50 years (\(M = 38.21\)). Participants had a working experience not less than two years (\(M =9.18\)). The family income was at the least 5 lakhs and all were minimum graduates for service sector and minimum of engineering diploma for manufacturing sector having a working spouse and a child.

Inclusion Criteria:

- Employees from the manufacturing and service sector
- Age: 30-50 years
- Family income: 5-15 lakhs per annum
- Qualification: Minimum graduation
- Minimum work experience of 2 years
- Marital status: Married
- Spouse must be working
- Amongst couples, one partner shall be the participant in the study
- No. of children: At least one child

Exclusion Criteria:

- Couples working in the same company / organization.
- IT sector employees
Table 3.1: Analysis of Demographic and Occupational Variables (n = 300)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>150</td>
<td>50%</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>150</td>
<td>50%</td>
</tr>
<tr>
<td>Age</td>
<td>30-40</td>
<td>165</td>
<td>55%</td>
</tr>
<tr>
<td></td>
<td>40-50</td>
<td>135</td>
<td>45%</td>
</tr>
<tr>
<td>Sector working in</td>
<td>Manufacturing</td>
<td>216</td>
<td>72%</td>
</tr>
<tr>
<td></td>
<td>Service</td>
<td>84</td>
<td>28%</td>
</tr>
<tr>
<td>Work Experience</td>
<td>2-5</td>
<td>60</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td>5-8</td>
<td>135</td>
<td>45%</td>
</tr>
<tr>
<td></td>
<td>8-11</td>
<td>63</td>
<td>21%</td>
</tr>
<tr>
<td></td>
<td>12 and above</td>
<td>42</td>
<td>14%</td>
</tr>
<tr>
<td>Number of children</td>
<td>Single</td>
<td>126</td>
<td>42%</td>
</tr>
<tr>
<td></td>
<td>Two</td>
<td>138</td>
<td>46%</td>
</tr>
<tr>
<td></td>
<td>Three and more</td>
<td>36</td>
<td>12%</td>
</tr>
<tr>
<td>Family Income</td>
<td>5 -10 lakhs</td>
<td>264</td>
<td>88%</td>
</tr>
<tr>
<td></td>
<td>10 Lakhs and above</td>
<td>36</td>
<td>12%</td>
</tr>
<tr>
<td>Educational Qualification</td>
<td>Diploma</td>
<td>177</td>
<td>59%</td>
</tr>
<tr>
<td></td>
<td>Graduates</td>
<td>102</td>
<td>34%</td>
</tr>
<tr>
<td></td>
<td>Postgraduate</td>
<td>21</td>
<td>7%</td>
</tr>
<tr>
<td>Nature of Family</td>
<td>Joint</td>
<td>42</td>
<td>14%</td>
</tr>
<tr>
<td></td>
<td>Nuclear</td>
<td>258</td>
<td>86%</td>
</tr>
</tbody>
</table>
Qualitative

Strauss and Corbin (1990) suggest that the participants in qualitative analyses should be as varied as possible so as to get richer contents for analysis. Therefore, semi-structured interviews of 15 employees (6 males and 9 females) from those who were high on work-family enrichment and 15 employees (7 males and 8 females) from those who were low on work-family enrichment were conducted. These 30 participants were drawn from the initial sample of respondents who were a part of the quantitative analyses. Those whose scores were above the third quartile on work-family enrichment were said to be high and those whose scores were below the first quartile were identified as low. Apart from including individuals low and high on work-family enrichment, the sample included individuals from different religious background as in the process of data collection individuals started speaking from religious/cultural perspective about work-family enrichment. This indicates that data collection is a concurrent and iterative process in qualitative analyses (Glaser and Strauss, 1967). The sample had individuals with one, two or three children. The sample had participants from the nuclear as well as the joint family setup. The sample size here was found to be 10% of the quantitative sample size. To protect the identity of the respondents, the participants were coded as Case1, Case 2 and so on till Case 30.

3.6 TOOLS

A Personal data sheet was devised for collection of demographic information consisting of name, age, tenure of work etc. from employees.

1) Social Support Questionnaire (SSQ)

It is a 27-item scale developed by Sarason, et al., (1983). Each item has two parts. The first part of each item assesses the number of available others the individual feels he or she can turn to in times of need in each of a variety of situations (number or perceived availability score) and includes such questions as: “Who can you really count on to be dependable when you need help?” “Whom do you feel really appreciates you as a person?” The second part of each item measures the individual’s degree of satisfaction (satisfaction score) with the perceived support available in that particular situation. Subjects indicate how satisfied they are on a 6-point likert scale from ‘very dissatisfied’ to ‘very satisfied’.
The test has a significant negative correlation with a depression scale (coefficients ranging from -0.22 to -0.43); the satisfaction score ($r = 0.57$) and the number score ($r = 0.34$) is also significantly correlated with an optimism scale providing strong evidence for criterion validity of SSQ (Sarason et al., 1983).

The number scores yield an inter-item correlation ranging from 0.35 to 0.71 (m=0.54). The Cronbach’s alpha for internal reliability was 0.97. The inter-item correlations for the satisfaction scores range from 0.21 to 0.74, and the coefficient alpha is 0.94. Test-retest correlations of 0.90 for overall number scores and satisfaction scores of 0.83 have been obtained (Sarason et al., 1983). In the present study, the Cronbach’s alpha coefficient was found to be 0.79 for the Availability scale and 0.88 for Satisfaction scale and 0.85 for entire scale.

Psychological Capital Questionnaire (PCQ)

PCQ is a 24-item Questionnaire containing six items for each of the four components (efficacy, hope, resilience, optimism). The measure of PsyCap (PCQ) is based on standardized measures for example; hope from Snyder et al., (1996); resilience from Wagnild & Young, (1993); (3) optimism from Scheier and Carver, (1985); and self efficacy from Parker, (1998). It has revealed strong construct validity as well as content and face validity (Luthans, et al., 2007). Confirmatory factor analytic comparisons have demonstrated that although the components have distinct properties, they have more in common (Luthans et al., 2007). The internal reliability was found to be $r = .92$. PCQ measures efficacy (e.g., “I feel confident presenting information to a group of colleagues.”), hope (e.g., “There are a lot of ways around any problem.”) resilience (e.g., “I can manage difficulties one way or another at work.”), optimism (e.g., “I always look on the bright side of things regarding my job.”). Higher the score higher is the PsyCap. In the present study, the alpha coefficient for PCQ was found to be 0.91 for the entire scale. For the domains, the alphas were .88, .92, .90 and .91, respectively for Hope, Efficacy, Resilience and Optimism respectively.

Work-Family Enrichment Scale

It is an 18-item multidimensional measure of work-family enrichment which has been developed and validated by Carlson et al. (2006). This scale is bi-directional and measures enrichment in both directions work-to-family and family-to-work. Along with
each direction, scale items also include the three dimensions namely development, affect, and capital or efficiency. The scale measures the resource, is application and the consequent positive result. For example, “My involvement in work helps me to gain knowledge and this helps me be a better family member.” There is a five-point rating scale used where 1 is strongly Disagree and 5 is strongly agree. The Cronbach’s alpha for the Work-Family Enrichment Scale has been reported as .92 for the nine work items, .86 for the nine family items, and .92 for the full scale (all 18 items).

In the present study, the alpha coefficient was found to be 0.82 for nine work items and 0.89 for 9 family items and 0.88 for the full scale (all 18 items)

3.7 PROCEDURE OF DATA COLLECTION

Quantitative

The study used a non-probability convenience sampling method. The organizations in the manufacturing and service sector were contacted via telephone, email and in person to seek permission for data collection. Data was collected from 14 organizations situated in Pune and Panvel. Twelve of these were manufacturing and 4 were from service sector. Seventy two percent of the sample was from manufacturing firms and 28% was from service sector. From the 150 female employees 70% (n = 105) belonged to manufacturing industry and 30% (n = 45) belonged to service sector. While from the 150 male employees 74% (n = 111) belonged to manufacturing industry and 26% (n = 39) belonged to service sector. A total of 505 forms were given of which 350 were returned. 50 forms had to be discarded as they were either incomplete, showed response bias, or did not meet the inclusion criteria. Thus, the response rate of 59% was recorded.

The data for the female sample and from male sample was collected to match them in number and thus there were equal number of men and women in the study. The personal data sheet along with the three standardized tools was administered to the employees. All the tests were in English language. The tests were administered individually as well as in group setting. It took about approximate 40 minutes to complete the questionnaires. Participation in the study was voluntary and they were told they could withdraw at any stage of survey; the organizations and the employees were assured of utmost confidentiality. An informed consent was taken. Debriefing was done and results were shared with those participants who desired so.
Qualitative

Data was collected through interviews which were conducted at the place of choice of the employee. The place was ensured to be quiet. Its familiarity to the employee helped in making him/her relaxed. On an average, the length of the interview was forty-five minutes. At the beginning rapport was established. The participant was directed towards sharing his/her experience of work-family interaction. As the interview progressed, the interviewer took a back seat and the participant spoke freely without many interjections from the interviewer. This gave him/her full freedom to express him or herself. If the participant came to a halt, the investigator allowed some time to pass and then paraphrased what was said to check if she had understood precisely what the participant meant and it provided the participant an opportunity to add more information. Paraphrasing was an important part of the interview in the present study, because it not only removed the self-serving bias but also gave the investigator insights into what should be highlighted in the discussion. The interview was directed at probing a set of research questions which were identified after the quantitative analysis was done. The participants were assured of complete confidentiality and were told that the data would be used for research purpose alone. Debriefing was done after the interview was over. The participation was voluntary and they were informed that they could stop the interview at any point of time. The data collection stopped at a point of theoretical saturation; that is when the investigator found that no new information or new relationship was being added by the interviewees.

3.8 DATA ANALYSES

Data collected using psychometric tools were subjected to quantitative analyses while the data from interviews were subjected to qualitative analyses using coding and framing of themes. These are described below.

3.8.1 Quantitative Analyses

As mentioned in the beginning, the study adopted the mixed methods sequential explanatory approach encompassing both quantitative and qualitative studies. The following quantitative analyses were run for the data collected through psychometric tools; SPSS Version 20 was used for this purpose:
The data was first checked for outliers and normality. The detailed description of the procedure is given in the next chapter.

Descriptive statistics like mean and standard deviation were computed.

Since the data comprised of both genders, at the onset the independent samples t-test was done to find if there is gender difference on the criterion variable of work-family enrichment. There was a significant gender difference found, so separate analysis was run for male and female employees.

Pearson product moment correlation was computed to study the relationship between the variables under study.

The investigator ensured that all assumptions of regression analysis are fulfilled, and then carried out multiple hierarchical regressions to investigate the mediating role of PsyCap in the relationship between social support and work-family enrichment.

3.8.2 Qualitative Analyses

As part of the mixed methods sequential explanatory approach used in the study, the quantitative analyses were supplemented with qualitative analyses. Every qualitative analysis is unique therefore the analytical approach each follows would vary (Miles and Huberman, 1994). Literature states that the measures of grounded theory are pre-mediated to develop a well-integrated set of concepts. It gives a comprehensive explanation of the social phenomenon under study. The theorist is concerned with conceptualization of data rather than raw data.

So, the important aspect is forming concepts for the events, incidents narrated by the participants. There are many ways to do so. In the present study, concepts were formed by comparing and contrasting the similarities and differences between narrated life events, identifying patterns and themes, noting down novel responses and following up with respondents (Miles & Huberman, 1994). As suggested by Strauss and Corbin (1998), the coding procedures of grounded theory were followed which resulted in identifying central themes (core categories) and its corresponding sub categories (domains). Conceptual categories were named with the help of theory and investigators’ understanding of the categories. The categories are explained in the next chapter. Also, the data analyzed through both the techniques are discussed and subsequently are merged to give an integrated view of work-family enrichment.
Figure 3.2: Visual model of Mixed Method Sequential Explanatory Approach Used in the Study

Figure 3.2 uses uppercase and lowercase letters to indicate the priority of the quantitative study over qualitative study. The synthesis stage has uppercase notations for both quantitative (QUAN) and qualitative (QUAL) results as both were given equal priority.
3.9 SUMMARY

The chapter discussed the methodology for the present study. Mixed Sequential Explanatory Design and its relevance are explained. The hypotheses for correlation and mediation are formulated based on review of literature and initial exploration of gender differences. The variables and their operational definitions are stated. The sampling procedure for both quantitative and qualitative data collection along with the sample characteristics is mentioned. The standardized tools with their psychometric properties followed by the procedure for quantitative and qualitative data analyses are explained. The results of the both approaches are explained at length in the next chapter.