Chapter - 3

Methodology

3.1 Aim

The aim of the study is to determine the Occupational Self-efficacy level, Psychological well-being and Organizational Commitment and to study the relationship among these variables in teachers.

3.2 Objectives of the study

1. To assess the level of occupational Self-efficacy, psychological well-being and organizational commitment among the teachers.
2. To study the relationship between occupational Self-efficacy and Psychological well-being.
3. To study the relationship between organizational commitment and psychological well-being.
4. To study the relationship between occupational self-efficacy and organizational commitment.
5. To study the influence of demographic variables, experience, age, and sector and designation on occupational self-efficacy, organizational commitment and psychological well-being of teachers.
6. To suggest proper measures to improve psychological wellbeing, occupational self-efficacy and organizational commitment among teachers.

3.3 Hypotheses

1. Teachers (male and female) differ significantly in their occupational self-efficacy, psychological well-being and organizational commitment.
2. There will be significant relationship between occupational self-efficacy and psychological well-being of teachers.

3. There will be significant relationship between occupational self-efficacy and organizational commitment of teachers.

4. There will be significant relationship between psychological well-being and organizational commitment of teachers.

5. Demographic factors - experience, age and sector, influence significantly occupational self-efficacy, organizational commitment, and psychological well-being of teachers.

3.4 Design

The study involves a correlation experimental design. In general, a correlational study is a quantitative method of research in which there are two or more quantitative variables from the same group of subjects and one is trying to determine if is a relationship (or co-variation) between the two variables (a similarity between them, not a difference between their mean). Theoretically, any two quantitative variables can be correlated as long scores on the variables are from the same participants.

3.5 Sample

The population of interest was school teachers in and around Mysore city of India. A total sample of 600 is drawn from schools in and around Mysore city. The detail of the sample selected was as follows:
Gender | Sector | Male | Total |
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Inclusion criteria

1. Full time teachers working in private and government schools
2. Teachers in the age group of 20 to 60 years
3. Teachers working in lower primary schools to higher secondary schools

Exclusion criteria

1. Teachers working in residential schools
2. Teachers working in day care centers and nursery schools
3. Teachers working in special schools
3.6 Tools

1. **Demographic data sheet**: Developed by the researcher to collect demographic profile of the sample respondents.

2. **Occupational Self-efficacy questionnaire**: Developed by Pethe, Chaudhari and Dhar (2005) were employed. Occupational self-efficacy scale assesses the occupational effectiveness of the employees. The odd-even reliability of the scale determined by calculating reliability coefficient. The reliability coefficient of the scale is .98. The scale has indicated high validity, the coefficient being 0.99.

The scale has the following sub scales

   a) Confidence: it is dependence on one’s own abilities. Items 10, 11, 12, &13 measure this factor.

   b) Command: is sense of control over the situation. Items 4, 6 & 17 measure this factor.

   c) Adaptability: it is the ability to adjust, measured by items 2, 5 & 9.

   d) Personal effectiveness: it is the inclination towards continuous development, measured by items 1, 14, 18 & 19.

   e) Positive Attitude: it is the ability to evaluate optimistically. Items 3, 7, & 8 measure this factor.

**Scoring:**

All the statements are scored given a weight age to each of the response to the statement: Strongly Disagree -1, Disagree -2, Neutral -3, agree-4, strongly agree-5. The total scores in all the dimensions are calculated to get the total occupational self-efficacy score. The norms of the scale can be regarded as references points for
interpreting the occupational self-efficacy scores. Norms are developed based on the samples. Individuals with very high scores may be considered to have very high level of occupational self-efficacy (Pethe and others 2005)

3. **Psychological well-being scale questionnaire**: To measure Psychological well-being, Carol Ryff’s psychological well-being Scale (1989) - medium form was employed. Respondents rate statements on a scale of 1 to 6, with 1 indicating strong disagreement and 6 indicating strong agreement. Internal consistency values (coefficient Alfa) for each dimension varied between: 0.86 to 0.91 which indicated high reliability of the scale. Correlation coefficient with 20-item parent scale for each varies between 0.83 and 0.99 indicate higher level of validity for the scale for each varies between 0.83 and 0.99 indicate higher level of validity for the scale. The number of responses made by the subject on each question depends whether the question is positive or negative. If it is a positive question responses are rated from 1 to 6, where a score of 6 indicates strong agreement. If it a negative question scoring done is in reverse order which is from 6 to 1, where 6 indicated strong disagreement. For each category, a high score indicates that a respondent has a mastery of that area in her life. Conversely low score shows that the respondent struggles to feel comfortable with that particular concept. Validity: correlation with 20-item parent scale for each dimension varies from 0.83 to 0.99.

4. **Organizational commitment questionnaire**: Organizational Commitment scale by Dhar, Mishra and Srivatsava (2002). The scale measure organizational commitment of employees in Indian context. The scale consists of 8 items. The split-reliability of 0.60 was obtained on a sample of 500
executives. The index of reliability of this scale is as high as 0.77 which makes the scale scientific, accurate and acceptably valid. The factor analysis of the test shows the test measures two factors: a) concern for the organization and b) identification with the organization. Factor 1 is measured by the 4 items 1, 2, 3, 4, 5, & 7. Factor 2 is measured by the items 4, 6, & 8.

**Scoring:**

Each item should be awarded as 5, 4, 3, 2 or 1 by encircling them. Among the 8 items 1, 2, 3, 4, 5, & 7 are positive items and items 6 & 8, are negative items. For these two items the responses should be reversed as 1, 2, 3, 4 & 5. The sum of scores of all the items is the organizational commitment score and this score and this score will be interpreted according to the norms. Norms for the scale are available based on sample of subjects belonging to the range of 22 to 55 years. Score of 37 and above is considered as high organizational commitment and score 27 and below is considered as low organizational commitment (Dhar and others 2002).

**Operational definitions of the variables employed**

**Occupational self-efficacy** refers to belief in ones abilities and skills to perform and fulfill the requirement at the workplace. In the present study it will be measured through the total score obtained on the items in the questionnaire comprising of employees confidence, command, adaptability, personal effectiveness, positive attitude and individuality (Pethe & other 2005).

**Psychological well-being:** Psychological well-being has a complex structure that concerns with peoples’ optimized experience and performance and it is defined as a
state that appears from feelings of satisfaction with one’s physical health and one’s interpersonal relationship as a person and with one’s personal relationships with society and included six key dimensions scale of well-being which are (a) self acceptance based on the capacity to see and accept strengths and weaknesses; (b) personal growth which emerges from realizing talents and potential over time (c) having positive intimate and valued relations with significant others (d) autonomy (e) environmental mastery and (f) finding purpose in life by having goals and objectives that give life meaning and direction (Carol Riff’s psychological well-being Scale, RYFF, 1985).

In the present study it measured through total score obtained on the items in the questionnaire comprising of consist of a series of 84 statements reflecting the six areas of psychological wellbeing: autonomy, environmental mastery, personal growth, positive relations with others purpose in life and self-acceptance.

Organizational commitment

Organizational commitment refers to an employee’s concern for the organization and identification with the organization and involvement in the organization (Dhar and others 2002).

In the present study it will be measured through the total score obtained on the items in the questionnaire on the employees concern for the organization and identification for the organization.
3.7 Data Collection

The following procedure was followed to collect required data for the study.

**Stage 1:** Rapport was established with participants and the demographic data sheet was given to 800 participants. The data was collected randomly from the teachers who volunteered in every school. The data sheet was then collected back, based on the required sample, 600 participants were chosen for the final collection of data.

**Stage 2:** The three tools were administered on 600 chosen participants. While obtaining them back, first-hand information was collected from every participant about themselves and their experience in their school.

**Instruction for occupational self-efficacy scale**

Here is the list of statements about how you would behave at your workplace in certain situation. Five options are given- strongly disagree, disagree, neutral, agree and strongly agree. Please read each of them carefully and indicate your responses by marking in the appropriate column.

**Instruction for psychological well-being scale**

You will find below a set of items that relate to your feelings and attitudes and ways of thinking and acting in life. You are required to give your responses to each of them according to how you feel, think and act in your daily life.

Respond to each of them using a six-point format:

* Strongly disagree (1),
* Moderately disagree (2),
* Slightly disagree (3),
* Slightly agree (4),
* Moderately agree (5),
* Strongly agree (6).
Answer all the items. Your answers will be kept confidential.

Instruction for organizational commitment scale

Please indicate the extent of your agreement or disagreement with each statement below by circling a number from 5 to 1, where 5 - strongly agree, 4 - agree, 3 - neither agree nor disagree, 2 - disagree, 1 - strongly disagree.

3.8 Statistical analysis

To test the hypotheses formulated for the present study following inferential techniques were employed.

a. Independent samples’ t' test

The independent-samples t-test compares the means between two unrelated groups on the same continuous, dependent variable. For example, we could use an independent t-test to understand whether first year graduate salaries differed based on gender (dependent variable would be "first year graduate salaries" and independent variable would be "gender", which has two groups: "male" and "female"). Alternately, we could use an independent t-test to understand whether there is a difference in test anxiety based on educational level. When you choose to analyze our data using an independent t-test, part of the process involves checking to make sure that the data you want to analyze can actually be analysed using an independent t-test.

In the present study, independent t' test was used to find the difference between male and female teachers on Occupational Self-efficacy, Psychological Well Being and organizational commitment. Independent t' test was also used to find the difference in terms of experience, age and sector on
occupational self-efficacy, psychological well-being and organizational commitment.

b. The Pearson Product moment correlation

The Pearson product-moment correlation coefficient is a measure of the strength and direction of association that exists between two variables measured on at least an interval scale. For example, you could use a Pearson’s correlation to understand whether there is an association between exam performance and time spent revising; whether there is an association between depression and length of unemployment; and so forth. A Pearson’s correlation attempts to draw a line of best fit.

In the present study Pearson Product Moment correlation was used to find out the relationship between occupational self-efficacy and Psychological well-being, relationship between occupational self-efficacy and organizational commitment and relationship between psychological well-being and organizational commitment.

c. One way ANOVA

The one-way analysis of variance (ANOVA) is used to determine whether there are any significant differences between the means of two or more independent (unrelated) groups (although you tend to only see it used when there are a minimum of three, rather than two groups). For example, we could use a one-way ANOVA to understand whether exam performance differed based on test anxiety levels amongst students, dividing students into three independent groups (e.g., low, medium and high-stressed students). Also, it is important to realize that the one-way ANOVA is an omnibus test.
statistic and cannot tell you which specific groups were significantly different from each other; it only tells us that at least two groups were different. Since we may have three, four, five or more groups in our study design, determining which of these groups differ from each other is important.

In the present study One Way ANOVA is used to know the difference in mean scores of different age groups on various components of Psychological Well Being, occupational self-efficacy and organizational commitment. One Way ANOVA is also used to know the difference in mean scores of different years of experience on various components of psychological well-being, occupational self-efficacy and organizational commitment.

d. Scheffe’s Post hoc test along with descriptive statistics

In the design and analysis of experiments, post hoc analysis (from Latin post hoc, "after this") consists of looking at the data—after the experiment has concluded—for patterns that were not specified a priority. It is sometimes called by critics data dredging to evoke the sense that the more one looks the more likely something will be found. More subtly, each time a pattern in the data is considered, a statistical test is effectively performed. This greatly inflates the total number of statistical tests and necessitates the use of multiple testing procedures to compensate. However, this is difficult to do precisely and in fact most results of post hoc analyses are reported as they are with unadjusted p-values. These p-values must be interpreted in light of the fact that they are a small and selected subset of a potentially large group of p-values. Results of post hoc analyses should be explicitly labeled as such in reports and publications to avoid misleading readers.