RESEARCH METHODOLOGY

This chapter of the present study describes about the research design, subjects, sampling and data collection procedures, instrumentation, and data analysis procedures to examine the relationship between spirituality and well-being of three major Indian religious groups - Hindu, Muslim and Christian.

There is a wide range of contemporary empirical research to study the relationship between religious orientations and various measures of health and well-being. The present work has been conducted to explore the relationship between spiritual attitudes, spiritual orientation and psychological well-being of the respondents belonging three different religious groups.

Hypotheses-

A hypothesis is a conjectural statement of the relation between two or more variables. This statement carries clear implications for testing the stated relations. Thus the hypothesis statement contains two or more variables that are measurable or potentially measurable and they specify how the variables are related.

Hypothesis is an important bridge between theory and empirical enquiry. It is a predictive statement capable of being tested by scientific methods, which relates an independent variable to some dependent variable or variables. (Singh, A.K. 2001).
The present research work has been designed to examine the relationship between spirituality and psychological well-being. To fulfill the purpose these hypotheses have been framed.

1. There would be positive correlation between spirituality and well-being of Hindu religious group.

2. There would be positive correlation between spirituality and well-being of Muslim religious group.

3. There would be positive correlation between spirituality and well-being of Christian religious group.

4. There would be positive correlation between spirituality and well-being.

5. Religion would not take place in spiritual orientation.

6. On the matter of spirituality all three religions would come on the same place.

**Sample-**

Sampling is taking any portion of a population or universe as representative (sample) of that population. Random sampling is that method of drawing a sample of a population, so that each member of the population has an equal chance of being selected.

The present research work has been designed to study the relationship between spirituality and well-being of three different religious groups. For this
purpose data were obtained from a sample of 600 people belonging three different religions. All the respondents were selected through purposive random sampling procedure. These respondents were taken from different areas of Kanpur city on availability basis. 200 subjects were fallen in each religious group.

The age range of the respondents was 30-50 years. It was assumed and a general fact that till the age of 30, an individual has set his/her carrier and being settled on marital status. After the age of 50 one has got stability in life and the offspring’s got settled in their own lives. So within this age range (30-50) most of the people spend some time in spiritual activities. Before 30 it is very rare to accept the importance to spirituality, and after 50 it is very common to enhancement in spiritual orientation. So that, this age range has been selected to gets appropriate findings in the present study.

It was the convenience sample of 600 subjects. The sample consisted of people who were at least graduate. Both male and female were randomly assigned as subject in the study. All the respondents were fallen from different socio-economic status.

Design-

Research design is the plan, structure and strategy of investigation conceived to obtain answers to research questions and to control variance. It is the overall scheme or program of the research. Research design enables the
researcher to answer research questions, validly, objectively, accurately and economically as possible.

The present study is a co relational field survey and seeks to explore the relationship between spirituality and well-being in different religious groups. The study aims to explore the spiritual attitude of people and its correlation with psychological well-being. Here 600 participants would randomly be selected and tested individually on questionnaires, for measuring spiritual attitude and psychological well-being.

There are three groups in the study, belonging three different religious paths. Raw scores would be treated in correlation to investigate the relationship between the independent and the dependent variable. To measure the significant difference between the pair of the groups on SAS and Ryff scale of Psychological Well-being, raw scores would be treated on t test.

Survey research is attempted to discover the relative incidence, distribution and interrelations of sociological and psychological variables. Survey research can be used on any set of objects that can be well defined. This type of research focuses on people, the vital facts of people and their beliefs, opinions, attitudes, motivations and behavior.

A coefficient of correlation is a single number that tells to what extent two things are related and to what extent variations in one, go with variations in other. (Guilford, 1965).
Thus correlation measures the concomitant variations between two variables, how far the variation of one variable is related to other variable in the same individual, object or situation. Correlation may be positive if the high and low magnitudes of one variable are associated with respectively the high and low magnitudes of the other. It is negative if the high magnitude of one is associated with the low magnitude of the other. The range of coefficient of correlation is +1.00 to ‘0’ and -1.00.

When the researcher wants to test the significance of difference between two Means, he uses the t test. The computation of t involves the computation of a ratio between the experimental variances (the obtained difference between two means) and the error variance (standard error of the mean difference).

**Degree of Freedom (df)**

The degree of freedom means freedom to vary. The degree of freedom is the number of observations that are independent of each other and that cannot be deduced from each other.

**Level of Significance**

The rejection or acceptance of the null hypothesis is based upon the level of significance, which is used as a criterion. The levels of significance are also known as alpha levels. In psychological, sociological and educational researches there are two levels of significance which are commonly used for testing the null hypothesis. One is 0.05 or 5% level and another is the 0.01 or 1% level of significance.
Instrumentations-

In the present research work two variables- spirituality and well-being would be measured independently by using Spirituality Attitude Scale (SAS), Ryff Scale of Psychological Well-being and Personal Data Sheet.

Spirituality Attitude Scale (SAS)

The SAS has been used to measure the attitude towards spirituality of the adults. The scale has been developed by Dr. Akbar Husain, Dr. M. Jahan, Dr. A.Nishat, Dr. R.N. Siddiqui and Dr. M. Akram, Aligarh Muslim University, India and published by Prasad Psychological Corporation, N. Delhi in 2011. It is a five point scale ranging from 5 (Strongly Agree) to 1 (Strongly Disagree), containing 31 items to assess spiritual attitude of the respondents.

The internal consistency was measured through Cronbach’s alpha is .83. To validate the scale construct validity was measured and that was found high, which exceeds the prescribed significance level.

Thus it is a reliable and valid instrument for measuring attitude towards spirituality. The items containing by the SAS are very consistent to measure the spirituality and language is also easy to understand.

Ryff Scale of Psychological Well-being

The respondents have been measured on this scale to know about their psychological well-being. The scale has been developed by Prof. Carol D. Ryff, University of Wisconsin, Madison in 1989. It is a six point scale ranging
from 6 (Strongly Agree) to 1 (Strongly Disagree). Scoring for the responses to negatively scored items (-) would be reversed in the final scoring procedure.

The Ryff inventory consists of either 84 items (long form) or 54 items (medium form). There is also a short form (18 items), but it is statistically unreliable. In the present research work the medium form (54 items) has been used. The scale consists of a series of statements reflecting the six areas of psychological well-being—autonomy, environmental mastery, personal growth, positive relations with others, purpose in life and self acceptance. All these dimensions have already been discussed in introduction section of the present study under the heading ‘well-being’.

The mid length version (54 items) is currently being used by Wisconsin Longitudinal Study. The psychometric properties of the scale are:

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Internal Consistency (Coefficient Alpha)</th>
<th>Correlation Coefficient (with 20 item parent scale)</th>
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</thead>
<tbody>
<tr>
<td>Autonomy</td>
<td>.83</td>
<td>.97</td>
</tr>
<tr>
<td>Environmental Mastery</td>
<td>.86</td>
<td>.98</td>
</tr>
<tr>
<td>Personal Growth</td>
<td>.85</td>
<td>.97</td>
</tr>
<tr>
<td>Posi. Rela. With Others</td>
<td>.88</td>
<td>.98</td>
</tr>
<tr>
<td>Purpose in Life</td>
<td>.88</td>
<td>.98</td>
</tr>
<tr>
<td>Self Acceptance</td>
<td>.91</td>
<td>.99</td>
</tr>
</tbody>
</table>

The face, factorial and content validity of the scale found high.
The Ryff scale of Psychological Well-being has measured multidimensional structure of Psychological well-being. The items of the scale are easy to grasp exact meaning by the Indian Population.

**Personal Data Sheet**

The Personal Data Sheet has been prepared by the investigator to gather initial information about the subjects. The sheet contains the general information as: name, age, gender, qualification, occupation, religion, address, phone number etc.

These instruments have been used in the present study because the psychometric properties of both the scales found relevant.

**Reliability of the Test**

The reliability is the accuracy or precision of a measuring instrument. It refers the consistency in scores which reflects in the form of reproducibility. Reliability is the consistency of results of a test when it is repeated on the same individual or group on different time intervals, under identical testing situations. It is defined through error as the more error, the greater the unreliability, the less error, the greater the reliability.

Thus the reliability of the test is the self correlation of a test.
Validity of the Test

It is the second most important aspect of test efficiency. Validity is the capacity of a test through which a test measures the trait or fulfills the purpose so that it was prepared. It is the discriminatory power of the test to exclude the measurement of other variables or traits. It is the predictive value of a test for only the specific trait.

Thus the validity of the test is the correlation of the test with an external criterion.

Variables-

Variable is the attribute of an object or incident that is measurable. The measurement could be quantitative or qualitative also. Thus the variable is an event or condition which can have different values. It can be measured and varies quantitatively. It is an observable and measurable quality of an object or organism.

Independent Variable

An independent variable is a condition or object selected by the experimenter to see whether it will have an effect on dependent variable. Values of this variable have been manipulated by the experimenter.

In the present research work spirituality of the participants is the independent variable which has been measured through the Spirituality Attitude Scale.
**Dependent Variable**

A dependent variable is that, the experimenter predicts about on the basis of manipulation in independent variable. It might be the response of the subject or a change in behavior. The value of the dependent variable depends on the manipulation in the value of the independent variable.

In the present study psychological well-being of the subjects is the dependent variable that would be measured by the Ryff Scale of Psychological Well-being.

**Controlled Variable**

These variables are also independent variable. There are numerous variables which occur or arise in the physical or social environment of the subject under the experimental procedure. But these variables are not intended to be undertaken in the experiment. So, the experimenter tries to control on all such variables to get the appropriate findings.

The present research work contains some controlled variables, such as-

<table>
<thead>
<tr>
<th>Controlled variables</th>
<th>Methods of Controlling</th>
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<tbody>
<tr>
<td>Age</td>
<td>Constancy (30-50 years)</td>
</tr>
<tr>
<td>Gender</td>
<td>Randomization</td>
</tr>
<tr>
<td>Education</td>
<td>Elimination (Graduate)</td>
</tr>
<tr>
<td>SES</td>
<td>Randomization</td>
</tr>
<tr>
<td>Religion</td>
<td>Elimination (Hindu, Muslim, Christian)</td>
</tr>
</tbody>
</table>
Thus the major objective of the present study was to ascertain the relationship between spirituality and psychological well-being. To attain the goal, the above mentioned research methodology has been designed and implemented for desired results.
**EXPERIMENTAL DESIGN**

<table>
<thead>
<tr>
<th>Research Design</th>
<th>I.V.</th>
<th>D.V.</th>
<th>C.V.</th>
<th>Method of Control</th>
<th>Statistics to be used</th>
<th>To be Interpreted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correlational</td>
<td>Spirituality</td>
<td>Psychological Well-being</td>
<td>Age</td>
<td>Constancy (30 to 50 years)</td>
<td>Mean</td>
<td>To study the average of the scores</td>
</tr>
<tr>
<td>Field Survey</td>
<td></td>
<td></td>
<td>Gender</td>
<td>Randomization</td>
<td>SD</td>
<td>To study the deviation of scores from Mean</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Education</td>
<td>Elimination (Graduation)</td>
<td>Correlation</td>
<td>To study the relationship between Spirituality and Psychological Well-being</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>SES</td>
<td>Randomization</td>
<td>t</td>
<td>To study the significant difference among the groups on SAS &amp; Ryff Scale of Psy. WB</td>
</tr>
</tbody>
</table>