CHAPTER-3

RESEARCH METHODOLOGY

Investigations in the area of sports and sports psychology have focused upon the psychological variables that contributed to the sports especially; aggression, well-being and emotional intelligence are the most common variables that are recently investigated in the context of sports. Some prior researches indicated that sports had an impact on the aggression, sportsmen were found to be more aggressive as compared non-sportsmen (Reynes & Lorant, 2002) and prior study also depicted that men and women were not found to differ on the basis of aggression (Kurt, 2013) whereas, Pelegrín, Serpa & Rosado (2013) stated that men were and more aggressive than the women so there was a controversy in the prior researches. In the same way Da Silva, Rosado, Da Silva & Serpa (2014) and Coastarelli & Stamou (2009) found that sportsmen have high level of emotional intelligence and life satisfaction as compared to non-Practitioners. Rukmini & Patil (2012) found that males had high self awareness, integrity, emotional stability, empathy, self development, commitment than the females. Findings also stated that aggression and emotional intelligence significantly and negatively correlated (Masoumeh, Mansor, Yaccob, Talib & Sara, 2014; Garcia-Sancho, Salguero & Kumar, 2011). Studies on well being stated that no significant difference of gender was seen on the well-being (Kaur & Pal, 2014) and the emotional intelligence and psychological-wellbeing were positively correlated with each other (Chukwuemeka & Ugwu, 2015). The above researches stated that there was not even a single study was conducted on the Judokas related to aggression, well-being and emotional intelligence. So the present study focuses on studying the relationship between aggression, emotional intelligence and well being among the judo players. To fulfill the objectives of the study the following design was used.

3.1 DESIGN

The purpose of this research is to study the relationship between Aggression, Emotional intelligence and Well-being among Judo Players.
Therefore, keeping in view the nature of study a 3 factor 2 group design (Factorial design) was used (factors are- Aggression, Emotional intelligence and Well-being and groups are-male and female Judoka’s).

**Table 3.1**

*Description of factorial design*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Aggression</th>
<th>Emotional intelligence</th>
<th>Well-being</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For present study a purposive survey method was adopted. Survey method deals with the collection of relevant data through the use of appropriate tools.

### 3.2 SAMPLE

The sample was be selected by using purposive sampling method. In the present study a sample of total 200 Judokas (players who have won position at Haryana Senior State Judo Championship and M.D.U. Rohtak, K.U. Kurukshetra, C.D.L.U., Sirsa Universities) were being selected.

**Table 3.2**

*Distribution of Respondents*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Gender</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td></td>
</tr>
<tr>
<td>Sources of Sample</td>
<td>M. D. U., Rohtak</td>
<td>n= 25</td>
<td>n= 25</td>
</tr>
<tr>
<td></td>
<td>K.U. Kurukshetra</td>
<td>n= 25</td>
<td>n= 25</td>
</tr>
<tr>
<td></td>
<td>C. D. L. U., Sirsa</td>
<td>n= 25</td>
<td>n= 25</td>
</tr>
<tr>
<td></td>
<td>Haryana State</td>
<td>n= 25</td>
<td>n= 25</td>
</tr>
</tbody>
</table>
3.3 TOOLS

The descriptions of tools were as follows:

**Aggression Scale:** - Aggression scale was developed by Km. Roma Pal in 1986. It is consisted of 30 questions and all the questions are self-reported. Each question has five alternate answer choices graded on five point rating scale which started from least likely (zero score, negative dimension) to most likely (five score, positive dimension). All the questions are basically related to daily routine life situations. The test is basically suitable for both the Hindi and English knowing respondents.

**Instructions & Scoring:** “This is a very simple test it contains some questions related to the routine life situations along with multiple choice answers. Read each question carefully and choose the most appropriate answer according to you from the given alternatives there is no right or wrong answer but you have to choose only one response for each question. There is no time limit to complete the test but try to do it as fast as possible. Your responses will be kept confidential. Please do carefully so that no any question will remain unresponded”. This test usually has no time limit but approximately it takes 15-30 minutes. Total 30 questions five alternative choice (multiple choices) based. Graded five marks on the positive dimension and zero for the negative dimension. The minimum and maximum possible scores for the test are 0 to 150, respectively. It is a widely used test. It is applicable to various age ranges. The reliability correlation coefficient of the scale was found to be .82 and the test-retest reliability coefficient of the scale was .78, which indicates that the test is highly reliable. The validity coefficient of the test was calculated by two methods, content validity was found to be good according to the expert’s opinions judgments. The validity of the scale was also checked by correlation coefficient of the test with Chauhan and Tiwari’s Frustration Scale (only with dimension aggression) and it was found to be .74 which clearly indicated that the test was valid for measuring aggression.

**Sports Emotional intelligence test (SEIT):** The SEIT is developed by Agashe and Helode, 2002. The Sports Emotional intelligence test is comprised of total 15 items. SEIT is available in Hindi, Marathi and English language. The respondents have simply to put tick on the five possible suggested response options. The test can be
administered in both single as well as group setting but the group size should not be exceed the n=30 at a time (for avoiding the crowd). The respondents should be properly motivated so their anxiety level would be low. The language of the investigator should be clear and simple. It is ensured that each respondent has a pencil to give their responses, if respondents have not then need to supply.

**Instructions:** “This test includes some interesting items that simply related to sports situations and there are five alternate answers for each situation and you have to choose one response by putting tick on that, please be careful that you will have to give only one response for each situation, no answer is right but it’s simply your opinion about that particular situation. There is no time limit for completing this test but usually it takes 10-15 minutes, so please try to be as fast as possible and don’t leave any item to be unresponded”.

**Scoring:** Scoring of the test is simple there are a total 15 sports situations and five possible alternates i.e., (a) (b) (c) (d) and (e), for the best alternative assigned 20 marks and for better alternative assigned 15 marks, for good alternative assigned 10 marks, for poor alternatives assigned 5 marks and for the poorest alternative assigned zero marks. The minimum and maximum possible scores for the test are 0 and 300 respectively. Higher the score is an indicative of higher the level of sports emotional intelligence. The row scores are converted into the standard scores on the basis of available norms and the norms indicated that there is an insignificant difference among male and female sportsmen so the norms for both male and female are compiled into a single norms i.e. the percentile scores. Cronbach alpha reliability coefficient of test is 0.74 which indicates that test is found to have a high level of reliability. Construct validity of the test by Agashe, Helode and Thakur (2008) attempted to calculate the relationship of SEIT with Eysenck’s N scale of PEN inventory. The product moment correlation indicated a correlation coefficient of .041, which indicted an insignificant relationship and shows that the capacity of managing emotions as an element of emotionality is unrelated. So it is clear that SEIT is relatively free from the neuroticism. So it indicates that test is a valid tool for assessing the emotional intelligence of sportsmen.
**PGI General Well being Measure:** PGI General Well being Measure was developed by Dr. Santosh K. Verma and Ms. Amita Verma in (1989). It consists of 20 items which are suitable for Indian condition. It can be self administered or verbally answered. Items are simple and related to daily routine life and the nature of items does not cause any embarrassment to the respondents in presence of the others. These items of the test were tested through ‘Think aloud method’ for their suitability. This scale is available both in Hindi and English language.

**Instructions & Scoring:** “There are some items and you have to read those items carefully and give your response that how you feel these days (on the basis of last one month) simply by putting tick on the item if it is applicable to you. There is no right or wrong answer. There is no time limit for completing this that test but try to do it as fast as possible. Usually it takes 5 to 10 minutes. Your responses will be kept confidential. Please do it carefully so that not even a single item would remains un responded”. Scoring pattern is so simple that the score of 1 is given for ‘yes’ response and score 0 for ‘no’ response. The minimum and maximum possible scores for the test were 0 and 20 respectively. The higher score indicates the better well-being.

Reliability of the test was calculated by using K. R. 20 formula and the reliability coefficient was found to be .98 (Verma, Dube & Gupta, 1983). The test-retest reliability of the test was being calculated by Moudgil et al. (1986), and it was reported to be .91 for English version and .86 for Hindi version. Validity of it was calculated by computing the correlation of the present test with a number of other test in various researchers, the range of correlation was found to be ranging from .11 to .75. So the test was found to valid tool well-being of Indian subjects.

3.4 **PROCEDURE:**

The purpose of the present research is to investigate the relationship between aggression, Emotional intelligence and Well-being among Judokas. For this purpose a purposive sample of total 200 Judoka (100 males and 100 females) from four different institutes or championships were selected, who voluntarily agree to participate in the study were being selected and a set of three questionnaires/tests i.e. the Aggression Scale, Sports Emotional intelligence test and PGI General Well- being questionnaire were being administered on the sample. Then the respondents were being instructed
one by one, for each three tests separately. Then the participants were being asked to complete the questionnaire, after completion the questionnaires were being checked whether all items were responded or any one left, after assuring that all items were responded the tests/questionnaires were being collected and the respondents were being heartily thanked for their participation.

3.5 STATISTICAL TECHNIQUES USED

The obtained responses were scored and analyzed by using SPSS 20th version.

The obtained data was statistically analyzed and results interpreted in the next chapter.