Chapter III

METHODOLOGY

This chapter provides an overview of the method used for the research study. Under this part of the research method, subjects/tools, variables, design and statistical techniques used are described in view of testing the formulated hypothesis. The purpose of the study is to make a comparative Study on locus of control and interpersonal relationship in team and individual sports.

3.1 SELECTION OF SUBJECTS

To facilitate the study 60 players selected from the team-games and 60 players selected from individual sports from Tripura State. A total of hundred twenty male players were selected from 16-24 years of age as subjects. The players were selected randomly. The requirements for the collection of data through administration of questionnaires were explained to the subjects so as to avoid any ambiguity of the effort required on their part and prior to the administration of the questionnaire. All the subjects participated voluntarily and responded to the questionnaire without bias.

3.2 SELECTION OF VARIABLES

The research scholar reviewed the various scientific literatures pertaining to the selected psychological variables from books, journals, periodicals, magazines and research papers. Taking into consideration of feasibility criteria, availability of instruments and the relevance of the variables of the present study, the following variables are selected:
• **Dépendent Variables**

  1. Locus of control
  2. Interpersonal relationship

• **Independent Variables**

  1. Individual Sports (Judo and Gymnastics)
  2. Team Sports (football and Handball)

### 3.3 RESEARCH DESIGN

Independent randomize research design was used for this study, as the subjects were selected randomly from two independent variables team sports and individual sports. The responses obtained through standardize questionnaire to measure all the two group locus of control and interpersonal relationship were collected. The collected data was analyzed statistically to find out any differences between the groups in the dependent variables selected.

### 3.4 CRITERION MEASURES

The criterion measures chosen are:

1. Locus of Control (Rotter) was used to measure the locus of control of the subjects (Revised on 1982).
2. Interpersonal relationship was measured through questionnaire developed by Ahmed S & Swami Nathan V.S (1990).
3.5 RELIABILITY OF DATA

The reliability of data was considered by establishing the questionnaire reliability, tester’s competency and subject reliability.

3.6 QUESTIONNAIRE RELIABILITY

The questionnaires administered were used in assessing the selected psychological factors for years together by various psychologists. Apart from this, the authors developing the questionnaire found the reliability and validity of the tests and the key for scoring the responses. These were taken as correct and thus the reliability of the questionnaire found by the author accepting for the purposes of this study.

3.7 TESTERS COMPETENCY

The investigator himself read out the questionnaire to the subjects and obtained the responses personally within the time prescribed for the said purpose. Since the investigator was qualified enough to administer the questionnaire, the repeating measurement of individuals on the same test was done to test the tester’s competency.

3.8 TOOLS USED

3.8.1 ROTTERS INTERNAL-EXTERNAL LOCUS OF CONTROL SCALE

Rotter (1959) divided individuals in two personality classifications. Internal and external based on their perception of locus of control. Internals are personalities who believe that their rewards and punishments are controlled by what they do. Their own actions are the determining factor in their minds. External are the people who believe that forces outside
themselves are responsible for their rewards and punishments. Factors such as chance, luck and powerful people control their consequences, sometimes the outcomes are appropriate and the external’s feel often that they are not related to what they do. J.B.Rotter’s Internal External Locus of Control Scale is a measure of personal belief. It consists of 29 items. The force choice that is inclusive of 6 filler items, intended to make more ambiguous, for the purpose of the test.

**Instructions**

Rotter’s I-E Locus of Control questionnaire helps to identify how certain important events in our society affect different people. Each item consists of pair of alternatives, lettered A or B. The individual has to select one statement from each pair, which they strongly believe in or can relate to. This is a measure of personal belief. Obviously there is no right or wrong answers in this. Be sure to find an answer for every choice. Encircle the letter ‘A’ or ‘B’ as the case may be, as far as you are concerned, in the separate answer sheet provided. Yours answers will be kept confidential and will be used anonymously for research purposes only.

**Scoring**

The scoring for the scale is in the direction of Externals with the following scheme:

**External Key**

2a, 3a, 4b, 5b, 6a, 7a, 9a, 10a, 11b, 12b, 13b, 15b, 16a, 17a, 18a, 20a, 21b, 22b, 23a, 25a, 26a, 28b, 29b.

**Filler Items**

1,8,14,19,24,27
Reliability

The test – retest reliability of the scale was reported by Rotter (1966) to range from 0.49 to 0.83 depending on the time period and particular population, Hersch and Sebeibe (1967), over a time period of three, six and nine month intervals reported reliability coefficient of 0.75, 0.390 and 0.26 respectively. Clearly the size of the reliability co-efficient will be closely tied to the length and nature of the time period involved. These periods may provide subjects with experience that alter I-E beliefs. Locus of Control Scale (Rotter) was administered to assess the locus of control of the football, basketball and hockey players. This questionnaire consists of 29 alternate statements, which had to be responded by each of the subject. Out of the 29 statements, six statements (1, 8, 14, 19, 24, 27) are filler items and the remaining 23 were scoring items. Scoring key suggested by the author was used to score either point 1 or 0 based on the response of the subjects. If the score is high, the subject’s locus of control was internal and if the score is low, the locus of control was external.

3.8.2 SPORTS TEAM INTERPERSONAL RELATIONSHIP SCALE

Description of the Tool

The Sports Team Relationship scale was used to measure the interpersonal relationship of the subjects. The questionnaire consists of twenty five questions. The subject was expected to respond for a four point scale, replay ranging from All, Somewhat, Often or Very Much, scoring 4, 3, 2 or 1 respectively.
Scoring

The scoring of the following items such as 7, 9, 15, 20, 21, 23, 24 and 25 was done by reversing the response number as 4 becoming, 1, 3, becoming 2, 2 becoming 1 and 1 becoming 4. The response number is taken as the score for rest of the items. For the rating scale, scoring is done by adding the scores, indicated by the coaches, on the rating scale against the specified aspects and the average is taken.

3.9 COMPONENTS OF LOCUS OF CONTROL

1. Personality: - Locus of control is a theory in personality psychology referring to the extent to which individuals believe that they can control events that affect them. Understanding of the concept was developed by Julian B. Rotter in 1954, and has since become an aspect of personality studies. A person's "locus" (Latin for "place" or "location") is conceptualized as either internal (the person believes they can control their life) or external (meaning they believe that their decisions and life are controlled by environmental factors which they cannot influence).

2. Individuation: - Jung’s writings are replete with calls for individuals to recognize and take up personal responsibility:

The maturing personality must assimilate the parental complex and achieve authority, responsibility, and independence. You could treat yourself if you don’t succumb to the prejudice that you receive healing through others. In the last resort every individual alone has to win his battle, nobody else can do it for him. Every man is, in a certain sense,
unconsciously a worse man when he is in society than when acting alone; for he is carried by society and to that extent relieved of his individual responsibility. The bettering of a general ill begins with the individual, and then only when he makes himself and not others responsible.

3. Personality trait: - Locus of control (LOC) refers to a personality trait reflecting the generalized belief that either event in life is controlled by one’s own actions (an internal LOC) or by outside influences (an external LOC). Those with an internal LOC believe that they can exert control over life events and circumstances, including the associated reinforcements, that is, those outcomes which are perceived to reward one’s behaviours and attitudes. In contrast, those with an external LOC believe they have little control over life events and circumstances, and attribute reinforcements to powerful others or to luck.

4. Conceptual and methodological: - Conceptual and methodological ambiguities surrounding the concept of perceived behavioral control are clarified. It is shown that perceived control over performance of a behavior, though comprised of separable components that reflect beliefs about self-efficacy and about controllability, can nevertheless be considered a unitary latent variable in a hierarchical factor model. It is further argued that there is no necessary correspondence between self-efficacy and internal control factors, or between controllability and external control factors. Self-efficacy and controllability can reflect internal as well as external factors and the extent to which they reflect one or the other is an empirical question. Finally, a case is made that measures of perceived behavioral control need to incorporate self-efficacy as well as controllability items that are carefully selected to ensure high internal consistency.
3.10 COMPONENTS OF INTERPERSONAL RELATIONSHIP

1. **Field of study:** - The study of interpersonal relationships involves several branches of the social sciences, including such disciplines as sociology, psychology, anthropology, and work. Interpersonal skills are extremely vital when trying to develop a relationship with another person. The scientific study of relationships evolved during the 1990s and came to be referred to as 'relationship science',[^2] which distinguishes itself from anecdotal evidence or pseudo-experts by basing conclusions on data and objective analysis. Interpersonal ties are also a subject in mathematical sociology.

2. **Development:** - Interpersonal relationships are dynamic systems that change continuously during their existence. Like living organisms, relationships have a beginning, a lifespan, and an end. They tend to grow and improve gradually, as people get to know each other and become closer emotionally, or they gradually deteriorate as people drift apart, move on with their lives and form new relationships with others. One of the most influential models of relationship development was proposed by psychologist George Levinger.[^3] This model was formulated to describe heterosexual, adult romantic relationships, but it has been applied to other kinds of interpersonal relations as well.

3. **Flourishing relationships:** - Positive psychologists use the term "flourishing relationships" to describe interpersonal relationships that are not merely happy, but instead characterized by intimacy, growth, and resilience. Flourishing relationships also allow a dynamic balance between focus on the intimate relationships and focus on other social relationships.
4. Love: - The capacity for love gives depth to human relationships, brings people closer to each other physically and emotionally, and makes people think expansively about themselves and the world. In his triangular theory of love, psychologist Robert Sternberg theorizes that love is a mix of three components: some (1) passion, or physical attraction; (2) intimacy, or feelings of closeness; and (3) commitment, involving the decision to initiate and sustain a relationship. The presence of all three components characterizes consummate love, the most durable type of love. In addition, the presence of intimacy and passion in marital relationships predicts marital satisfaction. Also, commitment is the best predictor of relationship satisfaction, especially in long-term relationships. Positive consequences of being in love include increased self-esteem and self-efficacy.

3.11 STATISTICAL TECHNIQUE FOR ANALYSIS OF DATA

The data collected from the subjects was treated statistically. Analysis of variance was used to find out the differences in team and individual sports on the selected psychological variables. The Post hoc test (LSD) was used to find out the paired means significance difference. The level of significance was set at 0.05 levels.