Chapter – III

Methodology

There is no doubt in the fact that Sports Education of Physical Education can be effective only if it takes help from Psychology at every step. The behavior of every player or sportsman has to be observed in order to give him proper coaching in games and sports. Besides this, the behavior of every player or athlete has to be analyzed. Hence, Sports Education has to employ methods of Psychology for the purpose of observation and analysis of behavior.

Following are main methods of Psychology for this purpose:

1) Introspection
2) Observation
3) Experimental Method
4) Clinical Method
5) Developmental Method
6) Rating Scale and Questionnaire
7) Testing Method.

The details of methods mentioned above are given below:

3.01. INTROSPECTION METHOD

Introspection means observing one’s own behavior through self analysis. No one else can observe the behavior of a person better than that person himself or herself.

There are always undergoing many activities in the mind of a person. If something is required to be known about the nature and personality of that
person, it is necessary to know the inner mental activities of that person. These inner mental activities can be best known by the method of Introspection by that person himself.

**Limitations of Introspection**

There are certain limitations in the method of Introspection, such as:

1) It is very difficult to observe a mental activity within a short period of time. If one starts observing the mental activity, it disappears or changes its pattern. For example, if a person gets angry for some reason and starts to observe and analyze the nature of his anger, the actual anger disappears or is lessened. Similarly if a player begins to observe and analyze the nature of his activities in the game, his sports activities will undergo a great change and will not be observed properly. The remedy for it is that memory should be utilized for the purpose of analyzing a particular mental activity, which took place a little earlier. But sound delicate mental activities cannot be recalled through the use of memory. Hence the method of introspection can be used under some limitations.

2) Mental activities are constantly undergoing changes. Hence it is very difficult to observe and analysis one’s mental activities through the method of Introspection.

3) The method of Introspection cannot make any use of Introspection.

4) Introspection can be used only up to conscious level. It has no approach to subconscious mind, which are as important as conscious mind.
5) Introspection can be reliable only if the person concerned is very honest and reveals even his faults and weakness. This cannot be expected of every person.

6) A person hesitates to reveal some of his mental activities, which are not according to the social norms. For example, if his thinking about sex matter is not acceptable to society he will not reveal it to others.

7) Introspection method is not recognized as a scientific method by some scientists, because it cannot be tested by experimental.

8) Introspection is purely a personal method. Its findings cannot be verified.

Merits of Introspection

Following are the merits of Introspection method:-

1) Introspection method is a very easy method. It requires no laboratory and no apparatus.

2) Introspection method can be of great use to the person who inspects and analysis his mental activities. He can try to remove his mental shortcomings and personal defects by coming to know of them through Introspection. He can modify his mental feelings by sublimating them. He can thus move towards socialization of his mental activities.

3) It is the oldest method of Psychology. The study of the behavior of a person is incomplete without the use of this method.

4) This method is very useful for the teacher in General Education and for the coach in Sports Education. The teacher or the coach can some to know of his personal shortcoming by the method of introspection and try to remove them.
5) It is true that small children cannot make use of Introspection but grown-up children, students, players and sportsmen can make use of this method and improve their performances by removing their defects and shortcoming.

6) In conclusion, we can say that Introspection method with all its limitations is very useful in the self study and self-analysis of the mental activities of a person. It can help him to improve his thinking and performance.

**3.02. OBSERVATION METHOD**

Psychology collects much of its material for study through observation method. It is very useful for the study of behavior of a person it is used in Sports Education or Physical Education for the study of the behavior of a player or athlete. We cannot see the inner mental behavior of a person with our eyes. But we can easily see these external activities. By observing his external activities we can come to know his internal mental behavior. Thus we can say, Observation is judging the inner mental behavior of a person through observing his external activities, gestures and ways of talking.

**Help from Introspection:** In fact, we can take much help from Introspection while making use of observation. When we observe the external activities and physical movements of a person we draw upon Introspection and recall how such external activities and physical movement have resulted from certain particular mental behavior mental situations in our own case. In this way, Observation and Retrospection combined together form the best basis for judging the mental behavior of a person. The combination of Observation and
Retrospection can be very useful in judging the mental behavior of a player or athlete in Sports Education or Physical Education.

**Merits of Observation Method**

Following are the merits of Observation Method:-

1) The behavior of a person is influenced by his mental thought and feelings. Hence Psychology reaches the realms of the mental behavior of a person through observing his external activities. Thus observation of external activities of a person shows the way judging his inner mental behavior.

2) Every one cannot make use of Introspection. Children, mentally retarded persons and insane persons cannot indulge in Retrospection. They cannot tell us anything, by which their behavior can be judged. Hence we have to make use of Observation while assessing the behavior of such persons. Thus we can say that observation can helps us in assessing the behavior of all persons.

3) It is a very simple method. It needs no laboratory or particular apparatus.

4) Observation method is quite inexpensive, besides being simple. Hence there is no financial hurdle in the way of its use.

5) Psychology makes permanent generalizations after observing certain true facts. These generalizations are based on truth because observation reveals only the truth. In this way, observation has made Psychology Science, which is always based on truth.

**Limitations of Observation**

Observation has the following limitations:-
1) It is the natural tendency of very person to judge the behavior of others through personal standards and personal ideals. This natural tendency is a great obstruction in the way of observation. Observation cannot be free from the element of subjectivity. The best Observation is that which is based on objectivity, but it can never be totally objective.

2) No external activities are fixed for mental feeling sometimes and external activity expresses diverse mental feeling. For example, tears come out as a result of sadness in the mind, but they also came out as results of cheerfulness in the mind, hence sometimes external activities can be deceptive while describing the inner feelings of the mind. Thus Observation can be deceptive when the judgment of inner state of mind is made by observing the external activities of person.

3) Difference in the way of living and customs put a great hindrance in the way of correct observation unless the observer is fully conversant with the ways of living customs of the object of observation; he cannot make a correct judgment of behavior by observing his external activities.

4) It is not necessary that the external activities of a person may be the mirror of inner state of mind. With the advance of civilization, man is becoming more and more hypocritical. He tries to conceal his inner state of mind by performing deceptive external activities. Thus we cannot judge from the external activities of a person whether he is happy or sad at heart.

5) The observer should be perfect in Psychology in order to make correct observation, but very few observers are so qualified. Hence observation suffers very much for shortage of good and qualified observers.
**Over-all Estimate.** Observation is a good and widely used method of Psychology, but it has many limitations and defects. These limitations and defects can be removed if the observer tries to be as much objective in his observation as possible.

**Various Steps in Observation.** The following steps of observation help a lot in making observation successful:-

1) **Observing.** Its first step is to observe the activities of the object of observation. The observer should remain careful and cautious throughout the process of observation. A little carelessness on his part may result in faulty observation. Moreover, it is essential that the object of observation should not know that he is under observation; otherwise he will try to conceal his exact nature and true state of mind.

   The students should be observed secretly doing various activities in the school. Players and athletes should be observed secretly while playing game or undergoing athletic activities without knowing that they are being observed. If they come to know that they are being observed, their behavior will be artificial.

2) **Recording** After completing observation, the observer should write down the details of his observation. This is called recording. There should be minimum interval of time between observing and recording. If recording becomes late, many important points are forgotten and they are not recorded. But now-a-days Movie cameras are used while observing. Hence nothing can be forgotten or missed from the recording of observation. In fact, photographs taken in Movie Camera are themselves Recordings. But while using Movie camera, it is
essential that the object of observation should not be conscious of it, otherwise
his behavior will become artificial.

3) **Analysis and Interpretation.** After recording the observed facts, the observer
should put them under analysis. After that he should give a detailed
interpretation of them. The observer should follow the rule of objectivity while
doing analysis or giving interpretation.

4) **Suggestion and Guidance.** The observer should make use of Psychology in
the act of observing. After going through various steps of observation, be
should give suitable guidance to the players and athletes. All this should be
done to bring about desired changes in their behavior. They should be given
suggestions to improve their behavior as well as their performance.

Experimental method is used. Just as experiments are important in other
Sciences they are very important in Psychology also.

**Definition of Experimental Method.** Experimental method is that method in
while experiments are made to reach the universal results. Experimental means
act of observation performed in laboratory under scientific rules and
regulations.

In Psychology the method of observing mental behavior in laboratory
according to scientific rules is called experimental method.

In Experimental Method the situations can be brought under control. It
means that the performer of experiment can decrease or increase the number of
situations. He can also change the situations according to the need of the
experiment. These situations work as stimulus. The activity performed by the
subject under the influence of stimulus is called ‘Response’. The performer of experiment makes the experiment perfectly scientific by keeping the situations under control. Then he observes the subject of the experimental according to psychological scientific rule.

Advantages of Experimental Method. Experimental method is very popular in Modern times, because it is purely scientific method. Following are the advantages of experimental method:-

1) Experimental Method is a scientific method in the real sense. It plays a very important role in making Psychology a subject of science.

2) Being a scientific method it is most reliable method. Various rules of science are based upon experimental method.

3) Work is done according to perfect plan in this method. The performer of experiment controls various stimuli in accordance with his plan. In this way this method is based on Objectivity.

4) In this method it is possible to conduct successfully Intelligence Test, Personality Tests and Aptitude test in order to test the intelligence, personality and aptitude of a person.

5) This method exercises a great influence upon the mental activities of a person.

6) Experimental method has made it possible to have quantitative measurement of mental activities.

7) Experimental method is most useful for giving proper guidance to students and special instructions to players and athletes, because in it guidance and instruction are based on scientific and psychological facts verified by experiments.
Limitation of Experimental Method

In spite of many advantages, Experimental Method of Psychology has some limitations, which are as follows:-

1) Experimental method requires a good laboratory, having many instruments and items of apparatus. It is very difficult to have such a laboratory in our schools, which have very meagre funds at their disposal.

2) There is a great need of specialists for the successful use of this method. These specialists should be well-versed in Psychology and scientific ways of experimentation. But there is a great shortage of such specialists.

3) Sometimes it is very difficult to control and check situations as are acquired in conducting an experiment.

4) Sometimes the mental state of the subject puts a hurdle in the successful performance of the experiments. It is very difficult to perform an experiment upon a person who is under the influence of anger, fear an anxiety.

5) The scope of this method is limited, because all mental states and behaviors cannot be made the subjects of experiment.

6) Some mental states such as states of sadness, anger and fear cannot be created in laboratory in the exact form.

7) Great time is required in Experimental Method. The experiment can be created in laboratory in the exact form.

8) It is difficult for the performer of experiment to maintain objective viewpoint throughout the experiment. At many times his personal feelings, thoughts and sentiments interfere with the results of his experiment.

3.04. CLINICAL METHOD OF PSYCHOLOGY
Clinical Method of Psychology is used for treating mental defects, mental ailments and abnormal behaviors. This method can be used only by expert Psychiatrists. In this method effort is made to reach the bottom of mental anxieties, fears and maladjustments of a person. Effort is also made to know the unconscious causes of mental ailments through the use of Psycho-analysis, Case History and Interview.

In Clinical Method the Psychiatrist does not dealt with conscious mind at all. He deals only a little with sub-conscious mind with which a person is not familiar but which can be brought to the level of consciousness through memory. The Psychiatrist in this method mainly deals with unconscious mind with which a person is not familiar. The unconscious minds contain repressed desires and suppressed feelings of a person. The person concerned is not conscious of the mind, but it is the source of his abnormal behavior.

**Procedure of Clinical Method.** The clinical Method probes into the unconscious mind and makes analysis of abnormal behavior of the person. According to Dr. Freud the unconscious mind is the main part of mind and it has a great influence upon the behavior of a person. His researches have proved that unconscious mind is much stronger than the conscious mind and has a great influence upon it. The unconscious mind contains those unfulfilled desires and feelings which have been repressed by conscious mind for being anti-social and immoral. These repressed desires and feelings do not remain dormant but influence the mental and physical behavior of the person without his knowledge. Hence the abnormal behavior of a person can be explained by the study of his conscious mind and by a probe into his repressed desires and
feelings. This can be done by the methods of Clinical Psychology. This method contains Psychoanalysis, Case History and Interview.

General Education and Sports Education has to take the help of Clinical Method of Psychology in order to know the causes of abnormal behavior of students, players and athletes. The sportsmen taking part in national and international sports competitions can improve their performance by getting rid of their mental stresses, strain and fears with the help of expert Psychiatrists. In modern times mental ailments are considered more dangerous than physical ailments. Hence, a great importance is given to treatment of mental diseases through Psychoanalysis. Full efforts are made to keep players and athletes free from all sorts of mental ailments and strains by the use of Clinical Method of Psychology.

**Objective of the research study:**

1) To find out the genders wise difference of mental health.

2) To investigate the level of mental health among tribal and non-tribal school going players.

3) To find out the genders wise difference of aggression.

4) To investigate the level of aggression among tribal and non-tribal school going players.

5) To find out the genders wise difference of self concept.

6) To investigate the level of self concept among tribal and non-tribal school going players.

7) To investigate the relationship between mental health, aggression and self concept.
Hypothesis:

1) There will be significant difference of mental health between tribal and non-tribal school going players.

2) There will be significant difference of mental health between male and female school going players.

3) There will be significant difference of aggression between tribal and non-tribal school going players.

4) There will be significant difference of aggression between male and female school going players.

5) There will be significant difference of self concept between tribal and non-tribal school going players.

6) There will be significant difference of self concept between male and female school going players.

Sample:

The sample consist of 400 subjects from tribal and non-tribal school going players 100 male and 100 female, 200 from non-tribal school players and 100 male and 100 female (All subject players at list district level outdoor games)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Area</th>
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<tbody>
<tr>
<td>Male</td>
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The subjects selected in the sample were in the age group of 12 to 18 who are living in tribal and non-tribal background.
Tool:

Self Concept Inventory:

This inventory developed by Dr. Mukta Rani Rastogi. The reliability of the scale by split-half method following spearmen brown prophecy formula was found to be .87

Mental Health Inventory:

This inventory standardized and constructed by Dr. Jagdish and Dr. A K Srivastav. 56 items are in the questionnaire and each of the items has four responses. Total inventory mental health reliability coefficients was .73 and Construct validity of the inventory is determined by finding coefficient of correlation between scores on mental health inventory and general health questionnaire it was found to be .54.

Dr. G.C. Pati (1976) Aggression Scale:

This test is developed and standardized by Dr. G.C. Pati the test consisted of 16 Items. The subjects were required to respond to each item in terms of _seldom_ , _sometimes_ OR _frequently_. The reliability coefficient of the test was found 0.82 with Spearman Brown formula. The validity coefficient was found 0.71.

Procedures of data collection:

Personal data blank sheet (PDBS) was given to collect the necessary information by the players’ related self concept, mental health and aggression scale was administered on the players. Before that rapport was established with players. And was told that their responses were kept confidential.
Variable:

Independent Variable:

1) Area     i) Tribal     ii) Non-Tribal
2) Gender   i) Male       ii) Female

Dependent Variable:

1) Mental Health
2) Aggression
3) Self Concept

Research Design: 2 x 2 Factorial Designs was used.

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<thead>
<tr>
<th>A = Area</th>
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<tr>
<td>A1 = Tribal</td>
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<td>A2 = Non-Tribal</td>
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