Chapter - 5

Summary, Conclusion, Suggestions & Educational Implications
SUMMARY, CONCLUSIONS, SUGGESTIONS AND EDUCATIONAL IMPLICATIONS

The empirical study of intuition is quite recent in the field of education and psychology as intuition has been seen from different perspectives e.g. Vaughan’s types of intuition (1979) and Goldberg’s intuition in terms of functions (1989).

To the present researcher however, the doubt arises in the mind whether intuition is a form of higher mental ability or is it a complete separate phenomena. Because if we consider intuition in terms of “insight” or functioning at the subconscious level then it might mean that some background knowledge or some background thinking is at the base. Then in this case intuition should be related to higher mental ability. If we take intuition as something which defies cognitive processes and take it as a separate faculty e.g. (in case of mystic awareness or the knowledge of a Sufi). In order to solve this controversy the present research is a humble attempt to understand the phenomena of intuition as Einstein said “intuition is what is important.”
OBJECTIVES OF THE STUDY

The objectives of the present study are given below:-

1. To study the relationship between intuition and higher mental ability.
2. To study the relationship between intuition and creative problem solving.
3. To study the relationship between higher mental ability and creative problem solving.
4. To search the factors involved in intuition, higher mental ability and creative problem solving.

HYPOTHESIS

To every problem, there may be more than one solution. A researcher’s effort is also directed towards a solution of the selected academic problem. Most of the time it is possible to make intelligent guesses about the solution of the problem. Such an intelligent guess of a tentative solution is known as “hypothesis”. As for that matter, the investigator formulated the following hypotheses.

In order to study the objectives the following hypothesis were formulated in the form of null-hypothesis.
1. There is no relationship between intuition and higher mental ability.

2. There is no relationship between intuition and creative problem solving.

3. There is no relationship between higher mental ability and creative problem solving.

For the objectives from one to three we employed product moment correlation. In order to test the first, second and third hypothesis product moment correlation was found between the three variables.

In order to study the fourth objective we used rotated varimax technique of factor analysis.

**Findings Based on Inter Correlation**

In order to study the three objectives namely

(i) Relationship between intuition and higher mental ability.

(ii) Relationship between intuition and creative problem solving.

(iii) Relationship between higher mental ability and creative problem solving. The productive moment correlation coefficient yielded the following results.
Only the important and significant results have been discussed in the following summary.

1. Intuition is not significantly related to higher mental ability and creative problem solving in total sample (N = 200), total boys, total girls. But in the case of PCB (boys and girls) it is significantly but negatively correlated with evaluation. In the case of PCM (boys and girls) intuition is negatively but significantly correlated with application- a dimension of higher mental ability. Intuition is significantly and positively correlated with wrong and original and is negatively correlated to right responses in the group of social sciences and arts students.

2. Application- a dimension of higher mental ability is positively and significantly correlated with analysis in the group of total science. Application is positively and significantly correlated with analysis in total boys total girls and PCB (boys and girls). Application is also positively and significantly correlated with synthesis in total boys.

3. Analysis is positively and significantly correlated with synthesis in the group of total science (N=200), total
boys, and PCM (boys and girls). Analysis is also significantly but negatively correlated with right responses in total science (N=200) and in the group of PCB (boys & girls). Analysis is also significantly and positively correlated with original responses in the group of PCB (boys and girls).

4. Synthesis is significantly but negatively correlated with wrong in creative problem solving task in the group of science, total boys and PCB (boys and girls). Synthesis is significantly and positively correlated with original responses in the group of PCB (boys and girls).

5. Evaluation has a positive and significant correlation with wrong in the group of girls and is negatively but significantly correlated with original responses also in the group of girls but is negatively correlated with wrong in the group of PCB (boys and girls). Evaluation is also positively and significantly correlated with right in the group of PCM (boys and girls).

6. Wrong responses – a dimension of creative problem solving task has a significant but negative correlation with right and original in the group of total science.
and total boys. Wrong responses are also negatively correlated with original in the group of total girls and PCB (boys and girls).

7. Right responses has a significant but negative correlation with original responses in all the groups.

8. Original responses has a significant but negative correlation with wrong and right responses of creative problem solving task in the group of science, total boys, girls, PCB (boys and girls). It is also negatively correlated with right in the group of social sciences and PCM (boys and girls).

**FINDINGS BASED ON FACTOR ANALYSIS**

In order to study the fourth objective namely the factors involved in intuition, higher mental ability and creative problem solving varimax technique of factor analysis has been used. The major findings obtained are summarized as follows.

Considering all the results five factors have emerged-

1. If we look closely at the results, we find that the IV factor Rational Vs A- rational is common in all the three groups.
2. Summarizing the results further we find high and low cognitive ability as the II factor which is also common in all the three groups.

3. In total sample of girls the first factor can be termed as insight.

4. The third factor in girls can be termed as ability to synthesise or organizing ability.

5. In total science group the first factor has been termed as divergent thinking (vs convergent thinking). The same factor has emerged in total boys group as factor III convergent thinking (vs divergent thinking).

**Educational Implications**

1. Intuition and “mental ability” under study are completely separate from each other. Pure intuition defies all logic whereas mental ability is based on reasoning. Intuition and creative problem solving ability have a meeting point in insight learning and problem solving. Here there is some background of logic, reasoning and experiences, but the solution is found all of a sudden and in a ‘moment’. In insight past experiences have a role to play as they are in the
background and the subject captures the right responses all of a sudden based on the totality or wholeness of the situation. Intuition also comes in a particular moment and has the characteristics of suddenness. It may or may not be based on past experiences. In its purest form it defies all logic in which the past experiences are embedded. When intuition has some background of past experiences we call it insight.

2. Application, analysis and synthesis are not separate dimensions of higher mental ability. This shows that a person who has application ability also has ability to analyse and synthesize. Evaluation however seems to be a separate factor of higher mental ability. Probably the capability for evaluation needs more training than it’s being an inherent capability.

3. The study also confirms Guilford’s idea about creativity which involves divergent thinking. Emphasis upon ‘right’ responses in teaching discourages originality of children.
Delimitations/suggestions for further researches

Though the present investigation has been carried out with due care and thought regarding various aspects of a research work, it may continue to have some shortcomings which have been realized during the conduction of the research. Being conscious of the shortcomings some suggestions are being made here for further investigations in this area.

1. Vaughan (1979) separates the extensive range of human intuitive experiences into four discrete levels of awareness. Physical, emotional, mental and spiritual. The test used by Goldberg has items mostly covering mental and emotional aspects involved in intuition. Therefore, another test on intuition which includes other dimensions of intuition has to be developed.

2. The test of higher mental ability was meant only for science students in the present study. It could not be applied on social sciences and arts students. Therefore, a test of higher mental ability which can be given to both science and social science group should be used in further researches.
3. None of the subjects except one, in the present sample scored “strongly intuitive” on the test of intuition. The test of intuition was scored in four categories i.e. strongly intuitive, more intuitive, erratic and low intuitive. Another study is needed to discover high scoring subjects on intuition. Only then we can reach at some definite conclusion.