



## COMPARISON OF BODILY KINESTHETIC INTELLIGENCE, SPATIAL-VISUAL INTELLIGENCE AND INTERPERSONAL INTELLIGENCE AMONG GENDER DIFFERENCE

**Ms. Janki Dhapola**, Research Scholar,

Department of Education, Guru Ghasidas University, Bilaspur (C.G.), India

**Dr. Seema Awasthi Pant**, Assistant Professor (Guest Faculty),

Govt. Degree College Patlot, Kumaun University, Nainital (U.K.), India

**Dr. Mahesh Singh Dhapola**, Assistant Professor,

Department of Physical Education, Guru Ghasidas University, Bilaspur (C.G.) India

**Dr. Gaurav Pant**, Assistant Professor,

Department of Physical Education, B.V.D.U., Pune, M.H., India.

### Abstract

Traditionally if the context of education is analyzed, it then seems that the carrier of education is the child, which was long back realized by naturalists and pragmatists like Dewey. The most crucial problem of education is, how to cater to the individual differences. Each classroom consists of students having wide range of differences with regard to various abilities, back ground characteristics, intelligence, learning styles, personality traits etc. To compare the Bodily Kinesthetic intelligence, Spatial-Visual intelligence, Interpersonal intelligence among gender difference. For pursuing the study simple two group research design was adopted and was considered quite appropriate for the study. The choice of research method is determined by the theory of the topic under study, objectives of the study, resources of the investigator etc. The nature of study is such that it requires descriptive analysis of learning styles in its relevant context, survey method of research has been suitable used. Survey provides a basis for theory construction or generalization in addition to it is implications for educational planning and reform. For comparison of Bodily Kinesthetic Intelligence, Spatial-Visual Intelligence and Interpersonal Intelligence t-test

has been used as statistical technique. Results and Conclusion: In this study the analysis shows that the hypothesis was accepted and there was no significance difference found among the gender difference in case of bodily kinesthetic intelligence, visual-spatial intelligence and interpersonal intelligence.

**Keywords:** Intelligence, Learning Style, Bodily Kinaesthetic Intelligence, Spatial-Visual Intelligence and Interpersonal Intelligence.

### Introduction

Traditionally if the context of education is analyzed, it then seems that the carrier of education is the child, which was long back realized by naturalists and pragmatists like Dewey. Mass communication processes, hardware and software and educational technologies have made efforts to make the individualized learning more effective. It is the time now when the learner has to be equipped with that kind of knowledge and skill which will soothe their adjustment in school and larger society in coming time.

The goal of, education can no longer be the transmission of the longer chunk of knowledge as such but to equip the student with the intellectual tools and resources which would



enable him to involve in the process of gaining the existing knowledge and creating knowledge new. A phrase that emerges and represents a stage in the evolution of knowledge about teaching is instructional technology which emphasize upon systematic way of diverging, carrying out and involving human and non human resources just to cater to the learning needs of an individual or individuals. Educational innovations like computers, super computers, video, teaching machines, and satellite based T.V. programme, and Programmed instructions approaches are basically invented with the idea of meeting individual learner's challenges. The most crucial problem of education is, how to cater to the individual differences. Each classroom consists of students having wide range of differences with regard to various abilities, back ground characteristics, intelligence, learning styles, personality traits etc. Intelligences that appeared repeatedly in Gardner's research were added to a provisional list, whilst intelligences only appearing once or twice were discarded. Gardner claimed that, "as a species, human beings have evolved over the millennia to carry out at least these seven forms of thinking" on his provisional list (Gardner & Hatch, 1989). In addition to the learning styles identified by Reissman, other aspects of behavior that might also be classified as learning styles are the mode of response and the thinking pattern (Nations, 1967). Response mode in this sense refers to the manner in which an individual prefers to work, alone or in a group. Thinking pattern refers to the tendency of some individuals to gather details first and organize them later, as compared with the tendency of others to look for the overall picture first and to obtain supporting information afterward. Reissman's (1966) position with regard to learning styles is that they are

developed early in life as a result of a combination of predisposition and environmental experience, and are not later subject to fundamental change. Consequently, teachers should help each individual student discover the learning style that is most effective for him and use this information in formulating learning plans. Thus, for example, the child who likes to learn by actively doing, but dislikes reading, might begin to take more of an interest in r reading activities if they were combined with role-playing activities.

### **Methodology**

This Methodology is a process, which reveals all those methods and tools used by the researcher during the course of his research. The role of methodology is to carry out the research work in a scientific and valid manner. Adaptation of suitable methodology can raise the efficiency and dignity of research work. The success of any research mainly depends on the research tools, techniques and the use of proper methods in the research. Universe in the present study involves the High School Male and Female students of 18 C.B.S.E. schools situated in Haldwani city of Nainital District. A list of ten schools was selected by Stratified convenient sampling. In the second step, sample of 100 students was taken. For pursuing the study simple two group research design was adopted and was considered quite appropriate for the study, with non-experimental survey methods. The selection of tools for a particular study depends upon various considerations such as – objectives of the study, the amount of time at the disposal of researcher, availability of suitable test, personal competence of the investigator, technique of scoring and interpretation etc.

The following tools have been used to measure variables in the study.



- Multiple Intelligence Rating Scale by Mark R. Kaser.(25 items)
- VAK Learning Style Self Assessment Questionnaire by Victoria Chislett (30 items)

For comparison of Bodily Kinesthetic Intelligence, Spatial-Visual Intelligence and Interpersonal Intelligence t-test has been used as statistical technique.

### Findings

**Analysis** The purpose of analysis is to reduce data to intelligible and interpretable form so that the relations of research problems can be studied and tested. The analysis of research data, however, does not in and of itself provides the answers to research questions. Interpretation takes the results of analysis, makes inferences pertinent to the research relations studied, and drawn conclusions about these relations. The researcher who interprets research results searches them for their meaning and implications. This chapter deals with the tabulation, analysis and interpretation of the data with reference to the objectives of the study.

TABLE- 1  
SIGNIFICANCE OF MEAN DIFFERENCE AMONG MALE AND FEMALE STUDENTS IN RELATION TO BODILY-KINESTHETIC INTELLIGENCE

Group	N	Mean	S.D.	CR value	Sig. of CR value
Male	50	16.06	2.57	0.038	Insigni-ficant
Female	50	16.04	2.66		

CRcal. (0.038) < CR stand.(1.96) at 0.05 level.

The above table-1 indicates the value of Bodily-kinesthetic intelligence scores of Male and Female students. The mean of Bodily-kinesthetic intelligence scores of male and female students are 16.06 and 16.04 and S.D. is 2.57 and 2.66 respectively.

To find out the significance of this difference 't'-test was used. The CRcal. of male and female students is 0.038. This calculated value of t is less than the CR stand.1.96. There is no effect of gender difference on bodily – kinesthetic intelligence because both are good enough to use their body parts to solve problems or to express their views like dancers, doctors, mechanic, craft person etc. There is no categorization in these fields regarding gender difference.

TABLE- 2  
SIGNIFICANCE OF MEAN DIFFERENCE AMONG MALE AND FEMALE STUDENTS IN RELATION TO SPATIAL- VISUAL INTELLIGENCE

Group	N	Mean	S.D.	CR value	Sig. of CR value
Male	50	13.82	2.28	0.911	Insigni-ficant
Female	50	14.24	2.32		

CRcal. (0.911) < CR stand. (1.96) at 0.05 level.

The above table-4.7 indicates the value of Spatial- visual intelligence scores of Male and Female students. The mean of Spatial intelligence scores of male and female students are 13.82 and 14.24 and S.D. is 2.28 and 2.32 respectively. To find out the significance of this difference 't'-test was used. The CRcal. of male and female students is 0.911. This calculated value of t is less than the CR stand. 1.96. In today's world both males and females are equally involved in fields where spatial skill is necessary like graphic artists, architects and map makes. Both are highly spatially intelligent. There is no difference in their work quality with regard to gender difference.

TABLE- 3  
SIGNIFICANCE OF MEAN DIFFERENCE AMONG MALE AND FEMALE STUDENTS IN RELATION TO INTERPERSONAL INTELLIGENCE

Group	N	Mean	S.D.	CR value	Sig. of CR value
Male	50	15.90	2.65	0.757	Insigni-ficant
Female	50	15.40	2.82		

CRcal. (0.757) < CR stand. (1.96) at 0.05 level.



The above table-3 indicates the value of Interpersonal intelligence scores of Male and Female students. The mean of Interpersonal intelligence scores of male and female students are 15.90 and 15.40 and S.D. is 2.65 and 2.82 respectively. To find out the significance of this difference 't'-test was used. The CRcal. of male and female students is 0.757. This calculated value of t is less than the CR stand. 1.96. In today's context both males and females are working. They have to interact with different type of people and work with them so to make the professional as well as personal relation healthy. They are developing their interpersonal intelligence so they can become social, easily understand intentions of other people, can make good number of friends. So there is no influence of gender difference on interpersonal intelligence.

### Conclusion

There is no significant effect of gender difference on interpersonal intelligence. There are a lot of benefits of using the multiple intelligence approach and understanding the learning styles of students. The teacher should adopt the suitable teaching style in classroom and student will learn better when using preferences in which they are successful. This study will help in understanding individual differences with regard to intelligence and learning styles. Teacher will provide opportunities for authentic learning based on their students needs, interests and talents. Teachers can construct activities that include multiple intelligence. Students will learn better when using preferences in which they are successful and they will be better learners when they can expand their preferences. They can learn effectively by using various learning styles like by doing, acting, sensing, feeling and through direct experiences. Parents and Community

involvement in the school may increase activities involving learning. Bring members of the community into the learning process. This happens as students demonstrate their works successfully.

### References:

- Diaz-Lefebvre, R. & Finnegan, P. (1997). Coloring outside the lines: Applying the theory of multiple intelligences to the community college setting. *Community College Journal*. October/November. 28-31.
- Diaz-Lefebvre, R. & Finnegan, P. (1997). Coloring outside the lines: Applying the theory of multiple intelligences to the community college setting. *Community College Journal*. October/November. 28-31.
- Diaz-Lefebvre, R. (2002, October). Multiple intelligences theory, creativity, and learning for understanding: Some pieces to the puzzle of learning. Paper presented at the 10th annual Innovations for Learning Enhancement Conference at Ashland Community College, Ashland, KY.
- Gardner, H. (1999). *Intelligence reframed: Multiple Intelligences in the 21st century*. New York: Basic Books.
- Honey, P & Mumford, A. (1982). *The Manual of Learning Styles*. Maidenhead, UK, Peter Honey Publications
- Honey, P & Mumford, A. (1983). *Using Your Learning Styles*. Maidenhead, UK, Peter Honey Publications
- Jackson, C. J., Hobman, E., Jimmieson, N., and Martin, R. (2008). Comparing Different Approach and Avoidance Models of Learning and Personality in the Prediction of Work, University and Leadership Outcomes. *British Journal of Psychology*, 1-30. Preprint. DOI: 10.1348/000712608X322900
- Jackson, C. J. (2009). Using the hybrid model of learning in personality to predict performance in the workplace. 8th IOP Conference, Conference Proceedings, Manly, Sydney, Australia, 25-28 June 2009 pp 75-79.
- Leite, Walter L.; Svinicki, Marilla; and Shi, Yuying: Attempted Validation of the Scores of the VARK: Learning Styles Inventory With Multitrait-Multimethod Confirmatory Factor Analysis Models, pg. 2. SAGE Publications, 2009.
- Pashler, H.; McDaniel, M.; Rohrer, D.; Bjork, R. (2009). "Learning styles: Concepts and evidence". *Psychological Science in the Public Interest* 9: 105- 119.
- Spoon J.C., & Schell, J.W. (1998). Aligning student learning styles with instructor teaching styles. *Journal of Industrial Teacher Education*, 35, 41-56.