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REGIONAL DIFFERENTIALS IN STUDENTS' PREFERENCES REGARDING THEORY OF MULTIPLE INTELLIGENCES AT ELEMENTARY LEVEL

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ABSTRACT

The purpose of the study was to investigate the students' multiple intelligences according to their preferences and how students' multiple intelligences differ in terms of their region in which they live, at Elementary level. All the students studying in 7th class of age group 12+ in Government Middle and Secondary Schools of Khyber Pakhtunkhwa (Pakistan) constituted the population of the study. Total Eighty Government Middle and Secondary schools (20 from each district) from urban and rural regions were selected randomly to choose the students as the sample for the study. A total sample of 2000 respondents, in the age group of 12+ years studying in 7th class, was drawn out of the population using stratified random sampling technique. A tool "Multiple Intelligences Scale for Elementary Level", having eight sub scales, was used to examine students' preferences in different components of Multiple Intelligences. The results of the investigation revealed that majority of the respondents had average levels of intelligence for all the eight components of multiple intelligence, however the students' multiple intelligences showed variety according to their interests. When results were examined in terms of their locality i.e. urban and rural, significant differences were observed in the mean scores of Urban and Rural students for Bodily-kinaesthetic (-4.8) and Naturalistic (-8) intelligences. It was found that in case of Bodily-kinaesthetic and Naturalistic intelligences rural students took slight lead due to environmental factors.

Key Words: *Multiple intelligences, preferences, urban, rural, linguistic, interpersonal, intrapersonal*

INTRODUCTION

Education is the principal instrument in awakening the child's professional training and helping him to adjust normally in the society. It is the investment made by the nation in its children for harvesting future crop in the form of a responsible and productive adult of the society.

In teaching learning process perception of the thing, to be learnt, plays a vital role. So the educational institutions must divert attention towards concept building and recognizing the dominant Multiple Intelligence of the students before planning the learning or educational activities. We know that perception is the process by which organisms interpret and organize sensation to produce a meaningful experience of the world.

It is agreed upon that every individual has specific and varied abilities and it is essential to guide individuals in the right direction at right time in a right way. Generally, people in Pakistani follow their father's footsteps or they abide by what parents or friends expect from them or simply fell victim

to their aspirations without knowing their peculiar talents and the result is frustration and stress on the part of the students. However, a very significant reason could be the lack of precise and reliable instrument to identify the talent of the students (Hashmi, 2000).

According to Webster's Dictionary, "intelligence is a capacity to perceive and comprehend meaning, information, news". Nowadays a new, more complex and extensive concept of intelligence has been developed, and the definition can be simply expressed as: Intelligence is the ability to solve complex problems in changing circumstances.

Intelligence as a concept is very old and different philosophers, psychologists and educationists have defined it in the most varied ways over the centuries. According to Munn (1966); "Intelligence is an ability to carry on abstract thinking."

Bronowski (1977) defined intelligence as: "something which could be measured. There are three concepts related to intelligence referred by Freeman (1988): i) The ability to deal with abstract symbols, concepts and relationships, ii) The learning or ability to profit from experience, and iii) The ability to adapt to new situations or problem solving in the proudest sense.

According to Gardner (1983) intelligence is: a) The ability to create an effective product or offer a service that is valued in a culture, b) A set of skills that make it possible for a person to solve problems in life, c)The potential for finding or creating solutions for problems, which involves gathering new knowledge.

While intelligence was initially perceived as a unitary concept, Dr Howard Gardner proposed the theory of multiple intelligences and challenged the old beliefs about what it means to be smart. Gardner (1999) define intelligence as; "bio-psychological potential to process information that can be activated in a cultural setting to solve problems or create products that are of value in a culture". Intelligence is a dynamic, ever growing reality that can be expanded in one's life through eight intelligences:

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REVIEW OF RELATED LITERATURE

The MI (Multiple Intelligences) theory is based on the belief that we all possess at least eight unique intelligences. Although we each have all eight, no two individuals have them in the same exact amounts.

According to Howard Gardner (1983): a) All human beings possess all intelligences in varying amounts, b) Each person has a different intellectual composition, c) We can improve education by addressing the multiple intelligences of our students, d) These intelligences are located in different areas of the brain and can either work independently or together.

Multiple intelligences

According to Gardner (1999) intelligence is the ability to solve problems, or to create products that are valued within one or more cultural settings. Gardner (1993) noted the traditional IQ tests unfairly

measured only logic and language and disregarded other intelligences of the brain. He also added that all humans have these intelligences, but people differ in the strengths and combinations of them. Furthermore, he believed that all of the intelligences could be enhanced through training and practice (Babak, 2008).

Musical intelligence is the ability to perceive, transform, and discriminate between musical forms and includes sensitivity to rhythm, pitch and timber. Those who have a high level of musical-rhythmic intelligence display greater sensitivity to sounds, rhythms, tones, and music. It encompasses the capability to recognize and compose musical pitches, tones, and rhythms.

Bodily-kinaesthetic intelligence is the ability to solve problems or form products using all or part of one's body. People in this category often prefer activities which utilize movement. They are generally adept at physical activities such as sports or dance. It is also the ability to use one's mental abilities to coordinate one's own bodily movements.

Logical-mathematical intelligence is the ability to use numbers effectively, manage long chains of reasoning and involves an awareness of logical and numerical patterns. It is also defined as the ability for abstract deductive and inductive reasoning, inference and scientific thinking. It consists of the ability to detect patterns, reason deductively and think logically. This intelligence is most often associated with scientific and mathematical thinking.

Spatial intelligence is the ability to form a mental model of the visual-spatial world, and to be able to manoeuvre the model. It also includes sensitivity to colours, lines, patterns, spaces and forms, and the relationships between them. It gives one the ability to manipulate and create mental images in order to solve problems. This intelligence is not limited to visual domains--Gardner notes that spatial intelligence is also formed in blind children.

Linguistic intelligence is the capacity to use words effectively both orally and in writing. It comprises sensitivity to the sounds, meanings and functions of language. In this category, people have high verbal memory and have an ability to manipulate syntax and structure. It involves having a mastery of language. This intelligence includes the ability to effectively manipulate language to express oneself rhetorically or poetically. It also allows one to use language as a means to remember information.

Interpersonal intelligence is the area which is concerned with interaction with others. It is the ability to understand the feelings, motivations and moods of other people, and respond appropriately to them. People in this category are characterized by their ability to communicate effectively and empathize easily with others.

Intrapersonal intelligence is the ability to understand oneself, to assess one's strengths, weaknesses and emotional states, and act effectively using this knowledge. In this category people are highly aware of their abilities and are capable of understanding their own goals and motivations.

Naturalist intelligence designates the human ability to discriminate among living things such as plants and animals, as well as sensitivity to other features of the natural world such as clouds and rock configurations.

RESEARCH METHODOLOGY

Study was delimited to the Dr Howard Gardner's theory of Multiple Intelligences and included the boys and girls of Elementary level (class VII) from selected districts of Khyber Pakhtunkhwa. Out of 24 districts of Khyber Pakhtunkhwa, only four districts i.e. Kohat, Peshawar, Karak and Hangu were selected for administering the Scale.

All the students studying in 7th class of age group 12+ in Government Middle and Secondary Schools of Khyber Pakhtunkhwa constituted the population of the study. Category-wise sample was drawn out of the above-mentioned population using stratified random sampling technique:

a) Total Eighty Government Middle and Secondary schools (20 from each district) were selected randomly to choose the students as the sample for the study.
b) Half of the schools selected for the study were from urban areas while the rest of the schools were from the rural areas.

So a sample of two thousand students was taken randomly. A Multiple intelligence Scale having eight sub-scales was constructed using Dr Howard Gardner's theory of Multiple Intelligences for this study.

RESULTS AND DISCUSSION

Region wise Distribution of the Respondents for Performance on "Multiple Intelligences Scale for Elementary Level"

The students were distributed according to their region or locality i.e. rural and urban and significant differences were observed regarding their perception about various components of multiple intelligences.

From Table 1 it is clear that both Urban and Rural students showed their preferences well in all the components of Multiple Intelligences, however in some components significant difference was observed. The significance of difference between mean scores of Urban and Rural students was tested by the 'z' test. Table 16 shows that there are significant differences in the mean scores of Urban and Rural students for Bodily-kinaesthetic (-4.8) and Naturalistic (-8) intelligences as both of these computed Z values are greater than table value of Z i.e. 1.96.

From the preferences shown by the students on the M I Scale, it was clear that in case of Bodily-kinaesthetic and Naturalistic intelligences rural students took slight lead due to environmental factors. According to theory of multiple Intelligences environment play an important role in the development of particular intelligence. It is our observation also that rural students are not only strong physically but have a deep relationship with flora and fauna present in the nature.

CONCLUSIONS

From the preferences shown by the students on the M I Scale it is clear that:

1. For all the components of multiple intelligences, maximum number of respondents was falling in 'average' category of performance, followed by 'above average' and 'below average' categories. Average performers have particular intelligence up to an average extent, and they might be 'above average' performers in other type of intelligence.

2. The study reveals that the mean performance of rural students was better than that of urban students in case of Bodily-kinaesthetic and Naturalistic intelligences.

RECOMMENDATIONS

Following recommendations are suggested in the light of the results of the study:

A. The same M I Scale for Elementary level may be administered to many samples of age 12+ students of Pakistan in order to compare the results from two different cultural back grounds.
B. In the light of the results of the study it is suggested that greater attention towards the Multiple intelligence of 'above average' scorers is required so that their unusual talent is not wasted and they may be guided and directed to opt the field of studies and professions according to their natural abilities.
C. Adolescence is a very crucial stage for identification and encouragement of particular intelligence as it is starting stage of career development. It is suggested that Parents and teachers should collaborate for identification and motivation strategies for maximum utilization of adolescent's talent which can be identified utilizing Multiple Intelligences Scales.
D. It is recommended that schools should organize workshops, fairs and campaigns etc. to make the parents aware about multiple intelligences as even educated parents do not have knowledge about this concept and they still believe in IQ and give importance to mark sheets for judgment of their child's performance.

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