

Students' Self-Perceived Multiple Intelligences and their Parents' Education

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Abstract This study aimed at to investigate the relationship between parent's education and students' self perceived multiple intelligences. All Students of 1st years in district Bannu constituted population of the study. Using multistage random sampling 379 male and 335 female all together 714 students were selected as a sample of the study. A significant correlation was found between Students' self-perceived verbal/linguistic, logical/mathematical, musical intelligence and their parents' education, and nonsignificant correlation was found between students' self-perceived bodily/kinesthetic, interpersonal, intrapersonal, naturalistic intelligence and their parents' education. There was a negative correlation between students' self-perceived bodily/kinesthetic intelligence and their parents' education. On the basis of the findings it was recommended that children may be provided various opportunities so they may develop properly their multiple intelligences. Government may make such policies regarding education where education of every citizen is guaranteed.

Keywords: parents, education, intelligence, IQ, linguistic, logical, visual/spatial, musical, interposal, intrapersonal, natural, bodily/kinesthetic.

1. Introduction

The most important contribution of education towards child advancement is to facilitate him where his abilities can better flourish and reach his pick of competencies. We assess every one in the context that he meets that limited criteria of achievement. A great attention must be given to help children to become aware of their potentials and develop them without paying less attention to their ranking. There are thousands of ways to get success and there are many abilities that would help an individual to be triumphant (Gardner, 1993). Perceived intelligence plays a great role in one's life, especially in students' academic achievement. Gardner discovered the following eight types of intelligence and said that there may be a possibility of more intelligences:

Logical-Mathematical Intelligence: Consists of the ability to detect patterns, reason deductively and think logically. This intelligence is most often associated with scientific and mathematical thinking.

Linguistic Intelligence: 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.

Spatial Intelligence: 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.

Musical Intelligence: Encompasses the capability to recognize and compose musical pitches, tones, and rhythms. (Auditory functions are required for a person to develop this intelligence in relation to pitch and tone, but it is not needed for the knowledge of rhythm.)

Bodily-Kinesthetic Intelligence: The ability to use one's mental abilities to coordinate one's own bodily movements. This intelligence challenges the popular belief that mental and physical activity is unrelated.

Interpersonal intelligence: The ability to understand and discern the feelings and intentions of others.

Intrapersonal intelligence: The ability to understand one's own feelings and motivations,

Natural intelligence: The ability to recognize and classify plants, animals, and minerals including a mastery of taxonomies.

The topic of intelligence is of considerable interest to academics and lay people alike (Mackintosh, 1998). Over the past decade, there have been a number of studies concerned with self-estimates of intelligence. This area of research is seen as important because it has been demonstrated that beliefs about intelligence have systematic motivational and behavioral consequences (Dweck, 2000). Furthermore, it has been suggested that self-estimated intelligence can have self-fulfilling effects in relation to examination performance (Chamorro-Premuzic, Furnham, & Moutafi, 2004). Numerous research studies have been conducted in order to explore the relationship of academic achievement with different variables. No specific study was found regarding the relationship of self-perceived multiple intelligences and parents' education in Pakistan. Being a very important area that needs to be explored it was felt intensely to conduct a research study on this topic.

Parents who have succeeded in the academic arena have achieved an important personal goal. Success tends to reinforce positive behaviors, as shown by B.F. Skinner's (1971) work in behaviorism. Confidence is a product of environmental influences, and mastery of certain cognitive skills engenders more self confidence. Parents who did not find as much success and positive reinforcement in their own schooling would naturally withdraw from further academic challenges. On the other hand, parents who have achieved higher education would most likely have fostered tenacity and skills in their children to navigate pathways to success by praising and rewarding their child's budding abilities.

Sánchez, Reyes, and Singh (2006) identified negative domains within the family such as low parental school involvement, socioeconomic status, and educational level to explain Latino youths' educational failure. Behnke, Piercy and Diversi (2004) found a connection between Latino youth's educational and occupational expectations and their parents' education. Garg et al. (2002) reported that "educational self-schema," referring to the student's perception of self and school, along with parental expectations, resulted in 76% of the predicted variance in educational aspirations of adolescents. A study on the effects of parental involvement as a form of social capital found a greater likelihood of the youth enrolling in both a 2-year and 4-year college (Perna & Titus, 2005). The data used for the analyses in Lippman, Guzman, Dombrowski Keith, Kinukawa, Schwalb, and Tice's (2008) report originated from the 2003 National Household Surveys Program (NHES) Parent and Family Involvement in Education Survey (PFI). They found 88% of students whose parents had earned at least a bachelor's degree had parents who expected them to finish college compared to 44% of students whose parents had graduated from high school or who had less than a high school diploma (Lippman et al., 2008).

When an adolescent rehearses mental images of success or failure scenarios, they become the construct of self-efficacy (Bandura, 1994). "These visualizations can serve to motivate one to take action to pursue a given goal" (Vick & Packer, 2008, p. 476). Self-efficacy was identified as a possible mediating factor of instrumentality in future goal possibilities such as "becoming a college student" (Vick & Packer, 2008). Kao and Tienda (1998) concluded that eighth grader aspirations to attend college derive primarily from parent's education and family background. Other researchers found substantial support for positive relationship between mothers' and fathers' supportive educational behaviors, educational level, language spoken in the home, and adolescents' aspirations (Plunkett & Bamaca-Gomez, 2003).

Chiu and Khoo (2005) reported 15-year-old students' test scores correlated significantly with mothers' mean years of schooling. In a study among black and white men born from 1907-1946, Kuo and Hauser (1995) found that at least half the variance in educational attainment was attributed to family background, including parental schooling. Other researchers noted only about 40% of the variance within families can be explained by standard domains of socioeconomic standing (Teachman & Paasch, 1998). "Most of the relationship is due to differences in parental education" (Teachman & Paasch, 1998, p. 712). Past studies have demonstrated that first-generation college students (students who do not have a parent who attended college) often encounter major hurdles in the college process. In comparison to students whose parent(s) attended college, first-generation students experience greater challenges to college access, college involvement, institutional connectedness, academic and social integration, and degree completion.

As such, first-generation students may be especially susceptible to personal doubts regarding their academic and motivational ability.

College-educated parents are typically more aware of the long-term benefits of acquiring a college degree, and thus they share this information with their children. The higher the degree the parents have obtained, the greater the support the student will have from their parents to complete a similar academic goal.

2. Statement of the Problem

The problem under study was to find out the relationship between students' self-perceived multiple intelligences and their parents' education

3. Objectives of the study

1. To investigate the relationship between students' self-perceived multiple intelligences and their parents' education.

4. Research question

1. Is there any relationship between students self-perceived multiple intelligences and their parents' education

5. Research Methodology

Review of relevant literature revealed that numerous studies have been conducted in order to explore the relationship of academic achievement with different variables. No specific study was found regarding the relationship between students' self-perceived multiple intelligences and their parents' education. Therefore it was felt intensely to conduct study on this topic. The following research methodology was adopted.

5.1 Population & Sample

Students enrolled in 1st year, in all government degree colleges, session 2010, in district Bannu constituted population of the study.

There were ten government degree colleges in district Bannu. Four male and three female degree colleges were randomly selected. Using simple random sampling techniques 379 male and 335 female all together 714 students were selected as a sample of the study.

5.2 Instrumentation

Some psychologists have developed different scales for the measurement of multiple intelligences. Multiple intelligence inventory based on Howard Gardner multiple intelligences theory, developed by Armstrong (1994) was used to measure students perceived multiple intelligences. This inventory contains 40 items five statement for measuring each intelligence.

This inventory was translated in Urdu with the help of English and Urdu expert in order to make it easier and understandable to the students.

For the reliability and validity and to remove language ambiguity the multiple intelligence inventory was personally distributed among 50 subjects as a pilot run. The subjects were part of the population but were not included in the selected sample of the study. Data was analyzed through SPSS-16. The reliability of forty items at Cronbach's alpha obtained was .784 which is quite reasonable.

5.3 Data Analysis

The collected data was entered in SPSS-16 and was analyzed using appropriate statistical tests. The central tendency and variability of the multiple intelligences of the sampled students was measured using Mean and SD respectively. Pearson co efficient correlation was used to find out the relationship between parents' education and students self-perceived multiple intelligences.

6. Findings of the Study

1. The coefficient of correlation between students' self-perceived verbal/linguistic intelligence and their parents' education is .14 with a P vale .00 which means that there is a significant correlation between students' self-perceived verbal/linguistic intelligence and their parents' education.
2. The coefficient of correlation between students' self-perceived logical/mathematical intelligence and their parents' education is .13 with a P vale .00 which means that there is a significant correlation between students' self-perceived logical/mathematic intelligence. and their parents' education.
3. The coefficient of correlation between students' self-perceived visual/spatial intelligence and parents' education is .10 with a P vale .00 which means that there is a significant correlation between students' self-perceived visual/spatial intelligence and their parents' education.
4. The coefficient of correlation between students' self-perceived musical intelligence and parents' education is .11 with a P vale .00 which means that there is a significant correlation between students' self-perceived musical intelligence and their parents' education.
5. The coefficient of correlation between students' self-perceived bodily/kinesthetic intelligence and their parents' education is -.00 with a P value .90 which means that there is a negative correlation between students' self-perceived bodily/kinesthetic intelligence and their parents' education.
6. The coefficient of correlation between students' self-perceived interpersonal intelligence and their parents' education is .59 with a P value .11 which means that there is a nonsignificant correlation between students' self-perceived interpersonal intelligence and their parents' education.
7. The coefficient of correlation between students' self-perceived intrapersonal intelligence and their parents' education is .06 with a P value .08 which means that there is a nonsignificant correlation between students' self-perceived intrapersonal intelligence and their parents' education.
8. The coefficient of correlation between students' self-perceived naturalistic intelligence and their parents' education is .00 with a P value .90 which means that there is a nonsignificant correlation between students' self-perceived naturalistic intelligence and their parents' education.(See table 1)

Table 1. *Correlation between students' self-perceived multiple intelligences and their parents' education*

S.NO	Variables	r	p
1	Parents' education	.14	.00
	Verbal/linguistic intelligence		
2	Parent' education	.13	.00
	Logical/mathematical intelligence		
3	Parent' education	.10	.00
	Visual/spatial intelligence		
4	Parent' education	.11	.00
	Musical intelligence		
5	Parent' education	-.00	.90
	Bodily/kinesthetic intelligence		
6	Parent' education	.59	.11
	Interpersonal intelligence		
7	Parents' education	.06	.08
	Intrapersonal intelligence		
8	Parents' education	.00	.90
	Naturalistic intelligence		

7. Conclusions

1. There is a significant correlation between students' self-perceived verbal/linguistic, logical/mathematical, musical intelligence and their parents' education.
2. There is a nonsignificant correlation between students' self-perceived interpersonal, intrapersonal, naturalistic intelligence and their parents' education.
3. There is a negative correlation between students' self-perceived bodily/kinesthetic intelligence and their parents' education

8. Recommendations

1. Parents should make efforts to provide encouraging environment for the enhancement of different intelligences of their children, rather than to impose their own wishes or decision on them. Children can lead towards self actualization if parents care for their individual potentialities.
2. Government should make such a policies where education for all the people is guaranteed. So educated parents may be produced.

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