



A STUDY ON INTELLECTUAL ABILITIES OF RURAL ADOLESCENTS OF MYSORE DISTRICT

Dr. Lakshmi N.

Department of studies and Research in Education, Karnataka State Open University, Mysore.

ABSTRACT:

Individuals from different social segments of the society are exposed to varied environmental stimuli. One still finds extensive as well as intensive variations in degree of exposure to the variety of environmental stimuli which are conducive to proper cognitive functioning of an individual. The present study was taken up to study the intellectual abilities of rural adolescents of 16+ to 20+ years by using the Raven's Standard Progressive Matrices (RSPM) and also to see the relationship of selected personal social variables with the intellectual abilities. Sample consisted of 267 SS (174 boys & 93 girls) selected from junior colleges located in rural areas. Results revealed that majority of the boys and girls (92 & 88%) fell in to the category of below average on intellectual measure and the mean scores obtained were found to be low. Correlation analysis showed that socio economic status, mother's education, weight and stature were found to have positive and significant relationship with the intellectual abilities of rural adolescents.

1. INTRODUCTION:

From a developmental perspective, previous research explored the relationship between judgments of intelligence and measured intelligence at various ages based on a longitudinal dataset [12]. Perceivers judged photographs of target individuals at various ages and those intelligence judgments were correlated with targets' IQ scores obtained at each age level. Perceivers were better-than-chance at detecting measured intelligence levels from target photographs in childhood, early adolescence, and middle adulthood, though most of these relationships fell to nonsignificance when target attractiveness was controlled. However, the findings suggest that judgments of an individual's intelligence remain somewhat stable, and potentially accurately predict measured intelligence throughout childhood and adulthood.

Intelligence is comprehensively defined as the aggregate of global capacity of an individual to act purposefully, to think rationally and to deal effectively with the environment. Factors affecting intelligence are genetic, socio-economic, environmental, nutritional and psychological. Any of these factors in any combination may affect intellectual development. The relative contributions of genetic factors is 80% as against environmental factors being 20% (Probusch & Ragenam, 1984). Significant research has been done to study the various factors that affect the intellectual abilities of children. Still the lacuna exists and the need to study the various other personal social factors that affect the intellectual abilities stand as a priority. Especially regarding the intellectual abilities of rural boys and girls, we find only a handful of studies and very little documented literature. Keeping in view the above said limitations, the present study was taken up with the following objectives:

2. OBJECTIVES OF THE STUDY:

- a. To study the intellectual abilities of rural adolescents.
- b. To see the relationship of intellectual abilities with selected personal social variables.

3. DESIGN OF THE STUDY:

3.1. Sample:

The study was carried out in the rural areas of Andhra Pradesh. The junior colleges located in the rural areas were selected for the purpose of the study. The sample comprised of 267 SS out of which 174 were boys and 93 were girls covering the age group of 19 and 20 years.

3.2. Tools:

- a. General information schedule was used for collecting respondent's and family's background information and socio-economic status for the purpose of study.
- b. For measuring the intellectual abilities of rural children, Raven's Standard Progressive Matrices (RSPM, 1992) was used.

3.3. Statistical Techniques used:

The mean, standard deviation and coefficient of correlation were the Statistical Techniques used in this study

4. RESULTS AND DISCUSSION:

It was noticed that among boys and girls, majority of them (92%) were found to be below average on the intellectual measure. Among 16+ age group, boys were found to be more in average category than girls. Overall, very few (8%) were found to be above average. The low scores may be due to the reason that the sample was selected from rural government junior colleges where organisational climate and stimulating environment was poor.

Table 1 shows that among 16+ age group, boys scored higher than the girls, whereas the 17+ girls scored better than the boys on intellectual ability. While the mean scores of boys and girls were found to be same in 18+ age group. Since girls were not taken for 19+ & 20+ age groups, boys of 20+ age group scored better than the 19+ age group. On the whole, the mean score obtained by the respondents was found to be low ranging between 34 to 35 for a maximum of 60 score. This shows that rural adolescents lagged behind on tasks relating to intellectual performance.

Table - 1
Mean Scores on Intellectual Ability by Age and Gender

Sl. No.	Age in Years	Gender	Number	Mean	SD
1	16+	Boys	44	36.86	1.81
		Girls	43	34.32	1.98
2	17+	Boys	47	31.32	1.95
		Girls	24	32.79	2.66
3	18+	Boys	35	34.63	2.01
		Girls	26	34.42	2.36
4	19+	Boys	26	36.69	2.48
		Girls	-	-	-
5	20+	Boys	22	39.54	2.12
		Girls	-	-	-

Table 2 indicates correlational analysis which showed that age of the child has no significant relationship with intellectual abilities. Class was found to be positively and highly significant while the ordinal position was negatively related to intellectual ability indicating that as the ordinal position increases, there is a decline in the intellectual abilities. Father's education and Mother's occupation were found not to be significant where as mother's education was positively and significantly related with the intellectual ability. This supports the finding that if the mother is educated, children's intellectual capacity also increases. (Mehta, 1995).

TABLE - 2
Correlation of Intellectual Abilities with Selected Personal
Social Variables (N = 267)

Sl. No.	Variables	Intellectual Ability
1.	Age	0.0795
2.	Class	0.2893
3.	Ordinal Position	-0.0898
4.	Father's Education	0.1103
5.	Father's Occupation	-0.0024
6.	Mother's Education	0.1503*
7.	Mother's Occupation	0.0746
8.	Family Size	0.1275
9.	Land	-0.0746
10.	Socio-Economic Status	0.2271**
11.	Weight	0.1543*
12.	Stature	0.1932 ^{''}

* Significant at 0.05% level ($r = >0.130$)

** Significant at 0.01 level ($r = >0.172$).

On the other hand, SS socio-economic status, weight and stature were found to have a positive and significant relation with intellectual ability. This finding is coinciding with Lahiri, et. al (1994), W.H.O.-ICMR study (1991) and Vijayalakshmi (1995) who found that children coming from better socio-economic status and well nourished families perform better in school and they are more intelligent than those who come from impoverished and non-stimulating family environments. Deprived children score significantly less on intelligence than the non-deprived children (Mohan & Verma, 1990).

Family environment has a direct impact on the intellectual development of the child. It could be well possible that a child who has been deprived of a substantial portion of the variety of stimuli which he is maturationally capable of responding to, is likely to be deficient in the equipment required for cognitive learning. Thus the social factors have the significant effect on intelligence and the lack of learning experiences in the low socio-economic families manifest themselves in the development of poor intellectual skills accompanied with failure experiences which are detrimental to further reinforcement for mastery of cognitive tasks.

5. CONCLUSION:

The study shows that a mixed trend was observed among the scores obtained by the rural boys and girls. The mean scores indicated that boys and girls scored low when compared to the standards and majority of them fell under intellectually impaired category. The present study is an eye opener to various influencing factors responsible for intellectual development of rural children. A child to have normal intelligence, must be born in healthy social, educational and nutritional environment. As such, all these are pre-requisites for better intellectual development.

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