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RESEARCH ARTICLE

A STUDY ON RURAL AND URBAN CHILDREN IN RESPECT OF INTELLIGENCE

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Abstract

The aim of the present study was to compare the level of intelligence of children in respect of rural and urban subjects. For calculating intelligence, the formula of $I.Q = M.A / C.A \times 100$ were adopted for the study. The researcher found that the mean significant difference existed in intelligence in the case of rural and urban areas. The intellectual level of study was taken of school children from the urban and rural areas of West Bengal, India. The sample consisted of total six hundred (N=600) of the subjects in respect of rural children (300) and urban children (300) hundred included which collected from the district of Howrah, Nadia, Kolkata & 24 parganas(s). Whereas, according to 10-years, 11-years and 12-years age group where each group two hundred subject were taken for the purpose of the present study. A systematic random sampling method was followed in the study. The appropriate tests were applied for the purpose of the study such as mean, standard deviation, and t-test. In the present study, the obtained t-value (4.399) were greater than the tabulated value (1.645) are significant at 0.05 level. Therefore, the rural and urban children were significant difference in mean scores in the subjects of intelligence. The t-test was significant at 0.05 levels. Within the same age group there were significantly existed mean scores in intelligence in respect of rural and urban children as well as other age group.

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Introduction:-

In every games and sports situation there is essential and functional variable which to be mention that is call "intelligence". The intellectual activities can be measured by the concept of intelligence quotient. An intelligent individual not only thinks intelligently but acts intelligently too and it is psycho-physical in nature. The level of complexity in intelligence goes on increasing with chronological as well as mental age (Kamlesh, 1983). It is a very general mental capability that involves the various mental processes, learn quickly and learn from experience (Legg and Hutter, 2007). An intelligence quotient coined by psychologist William Stern is a score derived from one of several standardized tests designed to assess intelligence. Mental age is a concept in relation to intelligence expressed as the age at which a child performing intellectually. The formula of intelligence quotient (I.Q) = $M.A / C.A \times 100$ was created as an indicator, (Rama, 1987). The majority of the school children, say about 60% are found in the intelligence quotient range 90-110 and were referred to as 'Normal' or 'Average'(Cratty,1973). Some philosophers and scientists believe that might demonstrate the partly genetic origin of group differences in intelligence. The majority of philosophers and social scientists take it for granted that all population differences in

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intelligence are due to environmental factors (Cofnas, 2019). According to a researcher in his paper that the mean intelligence quotients of 11-year old children living in rural areas have been compared with those of children in urban areas. All comparisons showed that the rural school children obtained lower scores than urban children and that the spread in intelligence among them was also smaller. Girls revealed higher scores than boys; their superiority increased with the fall in the concentration of population (Emmett, 2011). The investigator (Lehmann, 2014) opinion that as time with changes in our pattern of living, advances in the media of mass communication, and better rural schools, the experiences to which rural and urban children are may have become so similar today that there is no longer any appreciable difference in intelligence as measured by our present tests of mental ability. (Nanda et al., 1994) studied about 550 adolescents and found that rural students were significantly less intelligence than the urban students. (Tehran, 2001) conducted a comparative study of intelligence level of senior secondary stage and found that level of intelligence of the urban students were better than the rural students. A clinical observation suggests that children with myopia have a higher intelligence and it is most probably determined by genetic and environmental factors (Czepita et al., 2008).

Materials and Methodology:-

The present study was conducted of school children from the rural & urban areas of West Bengal, in India. The sample consisted of total number of children (N=600) which collected from the district of Howrah, Nadia, Kolkata & 24 pgs(s). In this sample, rural children were 300 and urban children were 300 in respect of the locality. A systematic random sampling method was followed in the study. Appropriate test were taken for the measurement of intelligence quotient (I.Q) (Rama, 1987). A suitable statistical method was adopted for the purpose of study as mean, standard deviation; comparison t-test. The test was conducted within the period of 2014. The t-test was significant at 0.05 levels.

Results and Discussion:-

The results and discussions were stated in the following manner in respect of locality with gender. The descriptive statistics of intelligence in respect of rural and urban subjects were stated in table 1.

Table-1:- Descriptive statistics of intelligence in respect of rural and urban subjects.

Age group	Location with gender	Mean	S. Deviation	No. of subjects (n)
10-years	Rural Boys	103.63	21.99	50*4=200
	Urban Boys	110.08	27.57	
	Rural Girls	91.07	17.43	
	Urban Girls	113.71	25.33	
11-years	Rural Boys	96.60	14.67	50*4=200
	Urban Boys	90.10	16.01	
	Rural Girls	92.81	10.99	
	Urban Girls	108.09	20.28	
12-years	Rural Boys	96.26	19.86	50*4=200
	Urban Boys	96.40	16.17	
	Rural Girls	97.29	15.44	
	Urban Girls	103.20	20.83	

Table-1 represents the descriptive statistics of the subjects of rural and urban with gender respectively. Table 1 shows that the Mean±SD of rural boys-103.63±21.99, urban boys-110.08±27.57, rural girls-91.07±17.43, urban girls-113.71±25.33 in respect of 10-years group and the Mean±SD are rural boys-96.60±14.67, urban boys 90.10±16.01, rural girls-92.81±10.99 and urban girls-108.09±20.28 in respect of 11-years group. Table 1 also revealed that the Mean±SD of rural boys-96.26±19.86, urban boys 96.40±16.17, rural girls-97.29±15.44 and urban girls-103.20±20.83 in respect of 12-years group.

Table-2:- Inter- group comparison (t-test) on intelligence according to locality.

Locality	Mean±SD	Mean Differ.	S.Error	t-ratio
Rural	96.28±17.42	7.32	1.664	4.399*
Urban	103.60±22.80			

$$t_{0.05}^{598} = 1.645 ; \quad * \text{ Significant at 0.05 level}$$

Table-2 revealed that the Mean \pm SD of rural are 96.28 \pm 17.42 and the urban are 103.60 \pm 22.80. Table-2 Shows the inter-group comparison (t-test) on intelligence according to rural and urban subjects. Table-2 represents that the t-value 4.399 were greater than the tabulated value ($t_{0.05}^{598} = 1.645$) which is significant at 0.05 level. From the table-2, it revealed that the urban and rural subjects were statistically significant difference in intelligence. Hence, the urban were better in intelligence than the rural respectively. The study finding were similar with the others researchers as like (Verma, 1997). According to data, in table-2, shows that urban subjects were better than the rural subjects which are similar with the opinion (Emmett, 2011), (Tehlan, 2001), (Nanda, 1994). However, although the superiority of urban children is statistically significant, the difference is so small as to have little practical importance. (Emmett, 2011).

Figure-1:- Graphical presentation of intelligence in respect of rural and urban subjects.

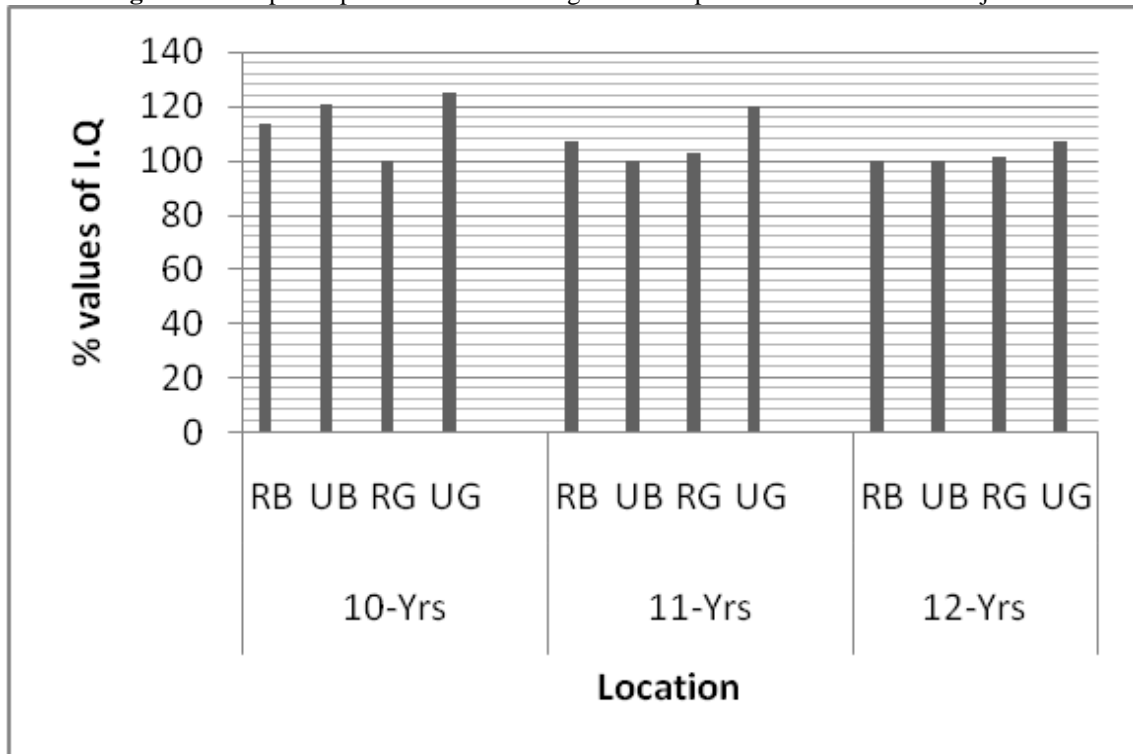


Figure-1 revealed intelligence of the subjects of three age group in respect of rural and urban subjects. According to age groups, there are mean scores of intelligence were significantly difference existed in intelligence. Within 10-year age group, urban girls are better intelligence than urban boys and rural boys are better in intelligence than the rural girls. Within 11-year age group, urban girls are better intelligence than urban boys and rural boys are better in intelligence than the rural girls and similarly, within 12-year age group, urban girls are better intelligence than urban boys and rural girls are slightly better in intelligence than the rural boys.

Findings of the study

The study found that there were significantly existed mean scores in intelligence in respect of locality and it is revealed that urban children were better in intelligence than rural children.

Within 10-year age group, urban girls are better intelligence than urban boys and rural boys are better in intelligence than the rural girls.

Within 11-year age group, urban girls are better intelligence than urban boys and rural boys are better in intelligence than the rural girls.

Similarly, within 12-year age group, urban girls are better intelligence than urban boys and rural girls are slightly better in intelligence than the rural boys.

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References:-

1. Cofnas, N. (2019). Research on group differences in intelligence defense of free inquiry. *Jn. of philosophical psychology*, 33(1):125-147
2. Czepita, D. et al. (2008). Are children with myopia more intelligent? A literature review. *Ann. Acad. Med. Stetin*, 54(1):13-16.
3. Cratty, B. J. (1973). *Intelligence in action*. Englewood Cliffs. N.J: Prentice Hall.
4. Emmett, W.G. (2011).The intelligence of urban and rural children. *A journal of demography*, 7(3): 207-221.
5. Kamlesh, M. L. (1983). *Psychology of Physical Education and Sports*. New Delhi: Metropolitan Book Co: 376 &387.
6. Lehmann, I. J. (2014).Rural-urban differences in intelligence. *The journal of educational research*, 53(2): 62-68.
7. Legg, S and Hutter, M. (2007). Universal intelligence: A definition of machine intelligence, 03 & 12.
8. Rama, T. (1987). *General Mental Ability Test (GMAT)*. APRC, Agra, India.
9. <https://www.ncbi.nlm.nih.gov/pubmed/19127804>: Link:11.12.2019
10. https://www.mafiadoc.com/chapter-ii-review-of-related-literature-shodhganga_5a21a0841723ddd18af226b7.html/: Link: 27.08.2020.