

CORRELATIONAL STUDY OF CURIOSITY, INTELLIGENCE, PROBLEM SOLVING ABILITY AND SCHOLASTIC ACHIEVEMENT OF SCHOOL GOING CHILDREN WITH REGARD TO GENDER AND HABITAT

PROF. RASHMIKANT N. PARMAR

Dept of Psychology, Shri P.H.G. Municipal, Arts & Sci. College, Kalol, Gujarat

Abstract :

The main aim of the present study is to find out correlation of Curiosity, Intelligence, Problem solving ability and Scholastic achievement of school going children with regard to gender and habitat. 120 school going children of VIIth standard of various group were selected randomly. Curiosity Scale by Rajiv Kumar, General Intelligence Test by S. M. Mohsin, Problem Solving ability Test by L.N. Dudey were administered in small manageable group of students. Average results of last three years annual examination was considered as scholastic achievement. Data was analyzed by product moment correlation method. Results revealed that significant correlation was found between intelligence and scholastic achievement among urban male. Significant correlation was also found between intelligence and curiosity and intelligence and scholastic achievement among rural male school going children.

Introduction:

Children are the future of the nation. It is the duty of every country to provide educational opportunities to all its children. Therefore all efforts should be directed through the system of education for their academic enhancement and personality development. The importance of curiosity, intelligence, problem solving ability and personality traits can not be denied because all these factors are responsible for academic achievement. They discovered several cognitive and non cognitive factors, which contribute to academic achievement.

Academic achievement is the indicator of the candidates' level of acquired knowledge skill, which has been gained as a result of training or experience. High academic performance is not possible in the absence of intelligence but the presence of high intelligence is no guarantee of high academic performance.

Predicting academic achievement of the students is a major task before the educational psychologists and such the researchers in this field have focused their attention to explain the relationship of academic achievement to various psychological variables. Curiosity is the "mother of knowledge" it is an important human trait which contributes to problem solving development of personality and learning. Therefore the secondary education commission (1952 & 1953) and the education commission (1964 & 1966) in India have emphasized the need for stimulating children's curiosity. which is important but less touched area of research.

Curiosity refers to a tendency to wonder to inquire, to investigate and to seek information about anything novel or unknown. It is a desire to now or learns something new. In other worlds. it is a quest or an appetite for knowledge. The vast body of knowledge which man has acquired in the field of philosophy art and science has its origin in curiosity. Our laboratories and research institutions are the living monuments of the universal urge to know and to investigate.

Intelligence is the aggregate or global capacity to an individual to at purposefully with his environment. IQ scores are fairly good predictors of academic achievement the correlation between school grades and IQ scores is about 0.50. Intelligence test scores are related to a wide range of social outcomes including job performance income, social status and year of education completed.

In problem solving situation and individual is confronted by external conditions is which an obstacle must be overcome to reach the goal. Problem solving is characterized, by (1) goal orientation and continuity of action towards that goal and (2) change of activity after the goal attained. Special characteristics in contrast to routine activity are (3) intra individual variability because the individual makes diverse attempts at solution. (4) inter individual variability because even the first attempt of different individual are seldom the same. (5) time required, because problem solving taken longer than the same execution of a previously learned response pattern of complexity and (6) the assumption of mediating activities is plausible.

Maw and Maw (196-t) conducted a preliminary study on five classes of elementary school children and found positive moderate correlations between teacher· s judgment of curiosity and IQ and somewhat lower positive and less consistent correlations between peer judgment of curiosity and IQ.

Kakkar (1977) conducted his study on 122 eight class male students and found significant differences in intelligence between the means of high, Medium and low curiosity students. Statistically significant relationship between intelligence and curiosity was obtained. Thorndike's intelligence test (non-verbal form-A) "as used as a measure of intelligence.

Beall (1984) found no significant differences among high normal and science achievers in terms of science curiosity. This finding is not in tune with all the findings reported earlier.

Gakhar and A seem a (2004) revealed that rural adolescents had greater academic achievement than urban ones and interaction also existed between sex and area. While affecting academic achievement. In addition to it self-concept stress, and locality both affects the reasoning ability.

Day (1968) found a significant relationship between curiosity and creativity Maw and Magoon (1971) found highly curious children to be more creative. In an earlier study, Maw and Maw (1965) reported a similar finding. Brody and Brody (1976) finding that higher the child's IQ the more years of school she is likely to complet.

Torrace (1969) to related curiosity and creativity is gifted children. However, Towell (1972), using teacher and self- judgment and measures of curiously and the Torrece Creativity Tests, did not find the expected relationship with an average group of children (Maw and Maw, 1977).

Prakash (2000) I his study on 7th class children of Chandigarh found positive significant correlation between problem solving ability and achievement.

Objective:

To find out the relation between intelligence and curiosity, intelligence and problem solving ability, intelligence and scholastic achievement among various groups of school going children.

Hypothesis:

There will be no significant correlation between intelligence and curiosity, intelligence and problem solving ability, intelligence and scholastic achievement among various groups of school going children.

Sample:

The sample was consisted of 120 school going children. The sample was selected from urban and rural areas schools of Ahmedabad District. The total sample was categorized as under:

	Male	Female	Total
Urban	30	30	60
Rural	30	30	60
Total	60	60	120

Variables:

In present research gender and habitat were considered as independent variables and scores of curiosity, intelligence, problem solving ability and scholastic achievement were considered as dependent variables.

Tools:

Following tools were used for data collection:

1. Curiosity Scale by Rajiv kumar
2. General Intelligence Test by S.M. Mohsin
3. Problem Solving ability Test by L.N. Duedy.

Procedure:

After establishing the rapport with school going children all three tests were administered to the school going children in small manageable groups. After completion the data collection responses of each subject were scored as per Scoring key of each tools.

Statistical analysis:

To find out the relation between intelligence and curiosity, intelligence and problem solving ability, intelligence and scholastic achievement among various groups of school going children Product Moment Correlation technique was used.

Results .and discussion: Summary table of correlation between various variables of various groups of students.

Groups	Intelligence and Curiosity	Intelligence and Problem solving ability Scholastic	Intelligence and Scholastics achievement
Male Urban	0.10	0.16	0.45
Male Rural	0.37	0.14	0.40
Female Urban	0.11	0.20	0.18
Female Rural	0.02	0.25	0.27

**Significant at 0.01 level •Significant at 0.05 level

The correlation between intelligence and curiosity of male urban school going children is 0.10, which is not significant. It means intelligence and curiosity is not significantly correlated. The correlation between intelligence and problem solving ability of male urban school going children is 0.16, which is not significant. It means intelligence and curiosity is not significantly correlated. The correlation between intelligence and scholastic achievement of male urban is 0.45, which is significant at .05 level. It means intelligence and scholastic achievement is significantly correlated.

The correlation between intelligence and curiosity of male rural school going children is 0.37, which is significant at .05 level. It means intelligence and curiosity is significantly correlated. The correlation between intelligence and problem solving ability of male rural is 0.14, which is not significant. It means intelligence and problem solving ability is not significantly correlated. The correlation between intelligence and scholastic achievement of male rural is 0.40, which is significant at .05 level. It means intelligence and scholastic achievement is significantly correlated.

The correlation between intelligence and curiosity of female urban school going children is 0.11, which not is significant. It means intelligence and curiosity is not significantly correlated. The correlation between intelligence and problem solving ability of female urban is 0.20, which not is significant. It means intelligence and problem solving ability is not significantly correlated. The correlation between intelligence and scholastic achievement of female urban is 0.18, which not is significant. It means intelligence and scholastic achievement is not significantly correlated.

The correlation between intelligence and curiosity of female rural school going children is 0.02, which not is significant. It means intelligence and curiosity is not significantly correlated. The correlation between intelligence and problem solving ability of female urban is 0.25, which not is significant. It means intelligence and problem solving ability is not significantly correlated. The correlation between intelligence and scholastic achievement of female rural is 0.27, which not is significant. It means intelligence and scholastic achievement is not significantly correlated.

Conclusions:

1. Intelligence and curiosity is not significantly correlated among male urban school going children.
2. Intelligence and problem solving ability is not significantly correlated among male urban school going children.
3. Intelligence and Scholastics achievement among male urban school going children.
4. Intelligence and curiosity is significantly correlated among male rural school going children.
5. Intelligence and problem solving ability is not significantly correlated among male rural school going children.
6. Intelligence and Scholastics achievement significantly correlated among male urban school going children.
7. Intelligence and curiosity is not significantly correlated among female urban school going children.
8. Intelligence and problem solving ability is not significantly correlated among female urban school going children.
9. Intelligence and Scholastics achievement is not significantly correlated among female urban school going children.
10. Intelligence and curiosity is not significantly correlated among female rural school going children.
11. Intelligence and problem solving ability is not significantly correlated among female rural school going children.
12. Intelligence and Scholastics achievement is not significantly correlated among female rural school going children.

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