



A study Meaning and Nature of Curiosity

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ORIGINAL ARTICLE



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ABSTRACT Meaning and Nature of Curiosity Although the term curiosity is very familiar but it is very difficult to define it precisely and explain its nature and characteristics accurately. Maw & Maw (1964) is really very correct when he says that 'Nowhere in the literature is there a precise statement as to the nature of curiosity Bindra (1959) has also remarked that attempts to discuss the nature of curiosity have taken recourse to

Abstract :-

Although the term curiosity is very familiar but it is very difficult to define it precisely and explain its nature and characteristics accurately. **Maw & Maw** (1964) is really very correct when he says that 'Nowhere in the literature is there a precise statement as to the nature of curiosity **Bindra** (1959) has also remarked that attempts to discuss the nature of curiosity have taken recourse to hypothetical constructs that provide "redundant" descriptions, not systematic explanation. However, **Fowler** (1965) has attempted to define curiosity in terms of behaviour "that has the sole function of altering the stimuli that imping on the organism. But he has also pointed out that this concept is unsatisfactory because altering the organisms' stimulus field seems characteristic of all behaviour. He has made it obvious that exploratory behaviour is the overt manifestation curiosity. I of Fowler has further referred to Berlyne who happens to be the chief theorist in the field of curiosity **Berlyne** (1963) incourse of explaining the concept of curiosity makes a distinction between exploratory and non-exploratory behaviours. According to him the non exploratory and non-exploratory behaviours are accompanied by biologically important effects on tissues other than the sense organs and the nervous system. Thus curiosity and the resulting exploratory behaviour may refer to a great variety of events that possess little in common other than "our failure to recognise a specific biological function that can be associated with them". Curiosity enough curiosity has been defined not in terms I conditions under which it takes place , rather in terms of the absence of certain conditions.

Berlyne has drawn a distinction between the two kinds of exploration, intrinsic and extrinsic. This distinction has helped in clarifying the concept of curiosity.

Key Words :-

Behaviour, curious adolescents and their certain factors, curiosity.

Those aspects of behaviour which have clearly definable consequences are classed as extrinsic, for example food seeking and goal reaching. The term intrinsic exploration refers to those behaviours which are unrelated to any goal attainment for reinforcement activity. Such types of behaviour occur “for their own sake”. He has also distinguished between epistemic curiosity than perceptual curiosity. Keeping in view the various researches in connection with curiosity, it has been very often found to be related to exploration”, “manipulation”, “activity”, “interest” and “attention”.

There are two theoretical positions motivational origin of curiosity or exploratory behaviour. Fowler (1965) has outlined these two positions. One view holds that mild and novel external forms of stimulation motivate the organism to explore them. Naturally, organism becomes curious about the novel stimuli therefore responds to them. The novel stimulus not direct but also activates behaviour. Montgomery (1953) presumed that novel stimulus would evoke “exploratory drive” in an organism. Harlow (1953) also referred to a manipulation drive” and visual exploration drive that would motivate the organism to manipulate or explore. Berlyne (1950) has preferred to speak of an exploratory drive”. He has considered curiosity as a “drive state induced by the experienced novelty or uncertainty. or more generally, by lack of sufficiently information in a given environmental situation.

The other view has been derived from the assumption that familiar and unchanging stimuli of the organism’s present environment motivate exploration or the response to change. Out of these two main views grew others considered both views as essential to a more complete understanding. Thus the views that have taken into consideration, the fact that both rises and falls in the level of curiosity depend on the state of the organism and the conditions of the external environment have been favoured. Various studies of curiosity have provided scripture evidence of curiosity especially in young children. The most important stud in this regard is by Maw and Maw (1964). These researchers have explored a large number of techniques for measuring curiosity. Consequently, other researchers have in a major way adopted then methods as well as definition of curiosity. According to Maw and Maw curiosity is manifested by an elementary school child when he:

- (i) reacts positively in new, strange, incongruous or mysterious elements in his environment by moving toward, or by manipulating them”
- (ii) exhibits a need or a desire to know more about himself and or his environment
- (iii) Scans his surroundings seeking new experience.
- (iv) persists in examining and exploring stimuli in order to know more about them. Penney and Mc Cann (1964). Mtnuchin (1968) and King (1968) have used these criteria with only slight modifications. A few other writers have presented their views o- what constitutes curiosity. Beswick (1965) has define curiosity entersms of “openness to unusual experience, the desire to understand novel experience and to incorporate it into one’s map of the world.

Livson (1967) has said: “curiosity is a tendency, or motive to acquire or transform information under circumstances that offer no immediate adaptive value for such activity”. Curiosity has been almost always defined as a personality trait or motive that has generality overtime, task and circumstances. Besides the general curiosity, specific curiosity has been also admitted, while considering anxiety, strong evidences have been found for long term general anxiety and anxiety states (specific to task or situation). The same may be true for curiosity, but there is lack of experimental evidence in this regard. The measures available for assessing curiosity usually assume general curiosity valid across many tasks and conditions.

Educational Implications of curiosity :-

It can be said that exploration or curiosity is conceived not as a merely desirable attribute, rather as a need for normal functioning of the organism. Over and above normal physiological needs, the exercise of the cognitive capacities through curiosity is necessary to healthy development. On the other hand, deprivation may lead to stunted psychological growth. The research findings have supported the view that curiosity is positively related to IQ and creativity and inversely related to anxiety. Co-relational studies reveal the extent of relationships but say nothing about cause and effect. But it can be suggested that the same conditions.

That favour curiosity would favor intellectual and creative performance. Arnstine (1966) indicated that a class-room allowing freedom to their students to explore the world around them and shows a tolerant view towards deviations from the norm tends to encourage curiosity and at the same time intellectual and creative performances. On the contrary, a classroom atmosphere where examinations are emphasized, rigid and conformist behaviour is required and too much emphasis is laid on high marks would be likely to promote anxiety. This type of pressure-creating situation proves detrimental to the arousal of curiosity. When the activity is goal-directed, curiosity is not elicited. Curiosity can be aroused only in free atmosphere in the school when no specific result has necessarily to be produced. For this reason, the maximum development of curiosity is likely to occur in the pre-school and elementary school years. During the early years, one gets the opportunity: to explore the world around him . In an atmosphere free from pressures for formal academic success and achievement in accordance with standardized tests and courses of study.

Of course, pre-school and elementary school provide the most opportune time for the arousal of curiosity. There is also a well established psychological view that the attitudes and values developed early in life have a profound effect on subsequent development. Curiosity developed early in life is likely to be maintained throughout life. This view is very familiar to the psychoanalysts. Piaget and Montessori in their theoretical positions also assume curiosity as a primary motivational force for the development of the child understanding about the world.

Research evidences have clearly indicated that an intermediate degree of stimulation was most likely to arouse curiosity. Arnstine (1966) has discussed this central concept in terms of satisfaction of expectation as is obvious from his remarks; “when a situation is either too familiar or too remote, curiosity is inhibited and attention wanes. We may feel discomfort, boredom, restlessness, or aversion, and the situation is made worse if we cannot escape it”.

From what has been discussed above, it is clear that the fundamental problem for educators is to determine the intermediate degree of curiosity in any given situation of that they may regulate or modify method, and materials to be presented to their students. This determination, however, is not so easy in practice. Generally, the term “appropriate” has been labeled for that intermediate degree.

This appropriate level cannot be known before hand, rather it has got to be discovered through a process similar to trial and error or institution.

Aim of the Study :-

The study of the curiosity of the adolescents students is significant in view of the fact that adolescents play vital role in shaping the national. Hence the curious potential of the adolescents has to be used properly in building of the nation and creation of the culture suiting to the problem the present investigation aimed at studying the relationship between curiosity of adolescents and as a psychological factor parent child relationship and types of schools as background variables.

In the light of the survey of the previous investigation of the following hypotheses are formulated and tested :

1. Curiosity would be positively related to the six dimensions of PCRQ (Both Father-Form and Mother-Form). More specifically this hypothesis may be started as follows:
 - a. Curiosity would be positively related would be positively related to parental love (Both Fatherly and Motherly Love);
 - b. Curiosity would be positively related would be positively related to parental dominance as a psychological factor (Both Fatherly and Motherly dominance);
 - c. Curiosity would be positively related to parental Rejection as a psychological factor (Both Fatherly and Motherly Rejection);
 - d. Curiosity would be positively related to parental protection as a psychological factor (Both Fatherly and Motherly protection);
 - e. Curiosity would be positively related to parental punishment as a psychological factor (Both Fatherly and Motherly punishment);
 - f. Curiosity would be positively related to parental discipline as a psychological factor (Both Fatherly and Motherly discipline);
2. Curiosity would be positively related to parental discipline as a psychological factor (Both Fatherly and Motherly discipline);
 - a) The high curious adolescents would score significantly higher on parental love as psychological factor than the low curious adolescents. (Both Fatherly and Motherly Love);
 - b) The high curious adolescents would score significantly higher on parental dominance as a psychological factor than the low curious adolescents. (Both Fatherly and Motherly dominance);
 - c) The high curious adolescents would score significantly higher on parental Rejection as psychological factor than the low curious adolescents. (Both Fatherly and Motherly Rejection)
 - d) The high curious adolescents would Score significantly higher on parental Protection as psychological factor than the low curious adolescents, (Both Fatherly and Motherly Protection);
 - e) The high curious adolescents would Score significantly higher on parental punishment as a Psychological factor than the low curious adolescents (Both Fatherly Punishment);

- f) The high curious adolescents curious would score significantly higher on parental discipline as a psychological factor than the low curious adolescents. (Both Fatherly discipline);
3. The types of schools (Tradition, Convent and Public Schools in the present study) would have differential effect on curiosity of adolescents.
- a. The convent school adolescents Would score significantly higher on curiosity than the traditional school adolescents;
 - b. The convent school adolescentsconvent would score significantly higher on curiosity than the public school adolescents;
 - c. The convent school convent adolescents would score significantly higher than the traditional school adolescents;

The urban adolescents would score significantly higher on curiosity than the rural adolescents.

Samples :-

The study was conducted traditional (Government School and Convent School) adolescents of District.

The total sample consisted of high school adolescents of the age group 12 to 16 years. But all they were not included in the final analysis. The final analysis was done on students only. whose complete records were available. The sample was fairly representative of the socio- economic range of town. The sampling method used on this study was closure to the incidental sampling because whomsoever was present in the class was included in the sample baring a few who expressed their inability to take the tests.

Tests Used :-

The following tests were used :

1. Curiosity Questionnaire -Developed by I.K. Roy.
2. Parent-child relations Questionnaire for Psychological factors -Developed by Ojha

After instructions to the subjects the curiosity & Parent child relation Questionnaire were administered on them. An attempt was also made to control such as extraneous variables which were supposed to influence the curiosity scores and the parent child relation scores of subjects. Then the scoring was completed and co- relational analysis was done to determine the relationship between curiosity and parent child relationship and significance of all co- relations was tested. To be doubly sure about this relationship group the extreme comparisons were also made taking high and low achievers. For this purpose 't' ratios were calculated and significance of difference was tested.

Conclusion/Results :-

Now the findings are given below :

The co-relation coefficients calculated were between curiosity and different dimensions of PCRQ and were all found significant beyond .01 level of confidence. Out of these six dimension, the four dimensions, viz. Dominance, protecting Rejecting ad punishing were found to be negatively related to curiosity, whereas the remaining two dimensions, viz. loving and Discipline have positive relationship with curiosity. Now the findings with regard to curiosity and different dimensions of PCRQ are given separately.

1. The co-relation coefficient between curiosity and parental love was highly significant in both F-F and M-F. Thus hypothesis, curiosity would be positively related to parental love was confirmed. The result also revealed that the mother was found to have more loving attitude than the father.
2. Curiosity was found to be positively related to parental discipline. The correlation coefficient revealed that the mother was found to have more loving attitude than the father. Curiosity found was to be positively related to parental discipline. The correlation coefficient between curiosity and parental discipline was significant beyond .01 level of confidence. Thus the hypothesis, curiosity would be positively related to parental discipline was confirmed.
3. Curiosity was found be negatively related to to parental dominance. The correlation coefficient between curiosity scores and parental dominance was significance beyond .01 level of confidence. The mother was found to be less dominating than the father. Thus the hypothesis, curiosity would be negatively related to parental dominance was confirmed.
4. Like parental dominance, parental rejection was negatively related to curiosity. It was also found in this study that the father was more rejecting than the mother. The relationship between curiosity and highly significant. The was parental rejection hypothesis, curiosity would be negatively related to rejection was confirmed.
5. Parental protection was also negatively related to curiosity. The correlation coefficient between curiosity and parental protection scores was significant beyond 01 level of confidence. Here also, it was found that the mother had more protecting disposition than the father. The hypothesis framed in this regard was confirmed.
6. The negative relationship was found between curiosity and parental punishment. The correlation coefficient between curiosity scores and parental punishment scores was significant beyond .01 level of confidence In both (Father-Form and Mother-Form). It was also found that the mother was less punishing than the father. Hypothesis framed in this regard was confirmed.

The significant difference was found between the high curious and the low curious adolescents with regard. the six dimensions of both M-Form and F-Form of PCRQ. The difference between the mean scores of the high and low curious adolescents with regard to all six dimensions of PERO was found to be significant beyond .01 level of confidence.

To be more specific, the results in this regard may be stated as follows :

The high curious adolescents scored significantly 1. higher on loving and discipline than the low curious adolescents. The parental love and discipline were found to be conducive to curiosity. The results also- revealed that the mother had more loving attitude was than the father whereas the father was more discipline reinforcing than the mother. The hypothesis framed in this regard was confirmed.

The high curious adolescents scored significantly lower on dominating rejecting protecting and low curious adolescents. The parental dominance, rejection, protection and punishment were not found to be conducive to curiosity in adolescents, rather they produced hindrance. The results also revealed that the mother more protecting whereas the father was more was dominating rejecting and punishing. The hypothesis framed in this regard was confirmed. The highly significant difference was found between curiosity and the types of schools (Traditional, Public and Convent Schools in the Present study).

More specifically, it can be stated as follows :

- The convent school adolescents scored significantly higher on curiosity than the traditional school adolescents.
- The convent school adolescents scored significantly higher curiosity than on the public school adolescents.
- The public school adolescents scored significantly higher on curiosity than the traditional school adolescents.
- The highly significant difference was found between curiosity and different background variables viz. the rural background and the urban background. The urban adolescents scored significantly higher on curiosity than the rural adolescents.

In brief, the main findings of this study were as Follows :-

1. Curiosity was found to be positively related to parental love and discipline dimensions of parent child relationship.

This finding was further confirmed with the use of extreme-group comparison technique. High curious group was significantly higher on parental love and discipline dimensions of parent child relationship as compared to the low curious group.

2. The impact of the types of school (i.e. convent school, public school and traditional school) was also studied and it was found that convent school students were significantly higher on curiosity as compared to public school students and traditional school students.
3. The Urban adolescents were found to be more curious than the rural adolescents.

Implications and Suggestions :-

Every research has limitations. This applies also in case of this research. This research will be helpful in child care of students. As curiosity is related to achievement, proper care of students will be helpful for the development of nation. The research has been conducted on small sample. Hence it is suggested, this research should be conducted on larger samples of other places of our country. This research has been conducted on male sample only hence it is also suggested that similar research should be conducted on female sample too.

References :-

1. Ainley, M. Hidi, S., & Berndorff, D. (2002). *Interest, learning, and the psychological processes that mediate their relationship. Journal of Educational Psychology, 94, 545-561.*
2. Arnstinc, D. (1966) *Curiosity, Teachers College Record,*
3. May. Ashbaugh, E.J. (1929) *Curiosity, School and Society.*
4. Averill, L.A. (1949), *the Psychology of the elementary school child, New York, Longmans Green.*
5. Barto, A. (2013), *Intrinsic motivation and reinforcement learning in G. Baldassarre and M. Mirolli, eitors, Intrinsically Motivated learning in Natural and Artificial Systems, pp, 17-47, Springer.*
6. Berlyne, D.E. (1950), *Novelty and Curiosity as determinants of exploratory Behavior. British Journal of Psychology.*

7. *Berlyne, D.E. (1957), Conflict and information – Theory variables as determinants of human perceptual curiosity. Journal of Experimental and Psychology.*
8. *Berlyne, D.E. (1958), The influence of complexity and novelty in visual figures on Orienting responses, Journal of Experimental Psychology.*
9. *Berlyne, D.E. (1960), Conflict arousal and curiosity. New York, Mc Graw – Hill.*
10. *Berlyne, D.E. (1963), Motivational problem raised by exploratory and epistemic behavior. In S. Koch (Ed) Psychology : A study of Science, Vol – 5, New York, Mc Graw Hill.*

