

Predictive Efficiency of Parental Attitude for Intelligence of Secondary School Students

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Abstract

In the present study an attempt has been made to find out the predictive efficiency of parental attitude (separately for mother and father) for intelligence of secondary school students (further separately for boys and girls). In order to ensure wider applicability of findings, the total sample of 1000 students (both boys and girls) of IX class was drawn randomly from government as well as privately managed recognized secondary schools from 4 districts i.e. Amritsar, Ludhiana, Bathinda and Jalandhar, which prepared the students for eighth class annual examination conducted by Punjab School Education Board. Once the students sample was finalized data regarding parental attitude was collected from the parents, separately from mother and father of both the boys and girls. Results of the study revealed that certain scales of parental attitude (separately for mother and father) predict intelligence significantly. The present study is a novel attempt in studying the predictive efficiency of various scales of parental attitude (separately for mother and father) on intelligence.

Keywords: Family; Parents; Students; Education; School.

Abbreviations: PARI - Parental Attitude Research Instrument.

Introduction

Liberalization, globalization and privatization have brought in their wake intense competition. Education plays an important role in enabling a person to face a real life situation with adequate knowledge. All round betterment will enable us to be prepared and equipped in this fast life to undertake a work efficiently and effectively, leading towards accomplishment of the objective with remarkable ease. By rejuvenating themselves at physical, mental and spiritual levels, simultaneously, people can enrich their individual lives and also bring about lasting change in their attitudes, whether at the workplace or in the family set up. No sphere of life, whether it is education or social or physical science, literature or art, has remained uninfluenced by intelligence. One of the major factors influencing cognitive abilities is parental behaviour. In fact, parental influence on the child's personality remains throughout life, the most pervasive of all influences. The growing child has to be provided opportunities for realization of

his potentialities with love and affection, combining the parenting qualities like love, a better care and encouraging attitude of parents to the child are supportive factor to intelligence of the child's achievements. Yarrow *et al.* (1975) and Hess and Holloway (1984) investigated that verbal interaction between child and mother are directly related to intellectual development of children. It is commonly accepted that attitude of mothers towards their children has a very positive impact on the overall functioning of young mind. Studies conducted by Hill and Eaton (1977) and Widlak and Purrucci (1988) revealed that where parents are authoritarian and enmesh the child in rigid rules and regulations, low level of intelligence results. On the other side children with high IQ have parents who are involved with them, are affectively and verbally responsive and avoid restrictions and punishments. Alpay *et al.* (2007) examined parental attitude and critical thinking ability in adolescents. Multi regression estimates showed that critical thinking ability was significantly and positively related to liberal attitude of mothers. The

higher the education level of fathers, the better developed will be the critical thinking ability of the adolescents. In the present study an attempt is made to find out how parental attitude influences the level of intelligence. The findings may help the parents to modify their attitudes for developing intellectual competencies and academic achievement of their children because heredity factors cannot be changed but the environment can be manipulated and modified.

Objective of the Study

Predicting the impact of parental attitude (separately for mother and father) on the intelligence of secondary school students.

Hypotheses of the Study

1. Parental Attitude (separately for mother and father) will not be significant predictor of Intelligence among secondary school students.
2. Parental Attitude (separately for mother and father) will not be significant predictor of Intelligence among secondary school boys.
3. Parental Attitude (separately for mother and father) will not be significant predictor of Intelligence among secondary school girls.

Materials and method

Sample of the study

(a) The student Sample

Table 1. Values of R^2 , F and regression equation of parental attitude (mother form) and intelligence of secondary school students. (N = 1000)

Scales of Parental Attitude (mother form)	DF	R^2	F	Regression equation
Strictness (A8) + Suppression of aggression (A12) + Inconsiderateness of the husband (A17) + Intrusiveness (A20).	3,995	0.1269	28.90**	$Y = 47.773 + 0.865(A8) - 1.140(A12) + 0.769(A17) + 0.877(A20)$
** Significant at 0.01 level of significance				

Multi-staged stratified randomization technique of sampling was used in the present study. As it was not possible to cover the entire school population of the state of Punjab, the sample was drawn from 4 districts i.e. Amritsar, Ludhiana, Bathinda and Jalandhar. Further, four or five schools were selected randomly from each district. In order to ensure wider applicability of findings, the total sample of 1000 students (both boys and girls) of IX class was drawn randomly from government as well as privately managed recognized secondary schools which prepared the students for eighth class annual examination conducted by Punjab School Education Board.

The Parents Sample

Once the students sample was finalized, their parents were approached for taking opinions on varying scales of parental attitude. In the present study 1000 ninth class students (500 boys and 500 girls) are taken. Data regarding parental attitude was collected from the parents, separately from mother and father of both the boys and girls

Tools Used

- (1) Group test of General Mental Ability by Tandon (1971)
- (2) Parental Attitude Research Instrument (PARI for mother and father) by Saxena (1979).

Step-backward Regression Equation:

By taking all the 23 scales of parental attitude (mother form) and 20 scales of parental attitude (father form), researcher had reduced the scales, which had non-significant contribution towards intelligence. Only those scales of parental attitude (separately for mother and father) and further again separately for boys and girls were retained which had significant contribution towards intelligence. This was done by applying step-down regression equation. The researcher moved step by step till it reached the final table, where the significant contribution of the various scales of parental attitude (separately for mother and father) was there towards intelligence of secondary school students (separately for boys and girls).

Table 2. Values of R², F and regression equation of parental attitude (father form) and intelligence of secondary school students. (N = 1000)

Scales of Parental Attitude (father form)	DF	R ²	F	Regression equation
Suppression of a aggression (B9)+ Deification of parent (B10) + Strictness (B13)+ Inconsiderateness of wife (B16)	3,995	.0473	12.34*	Y = 67.2362 – 0.537 (B9) + 0.567 (B10) – 0.789 (B13) – 0.471 (B16)
** Significant at 0.01 level of significance.				

Results and Discussion

Results of the study reveals that combined value of R² for some scales of mother’s attitude namely strictness, suppression of aggression, inconsiderateness of the husband and intrusiveness is 0.1269, which explains that these scales contribute 12.69% in predicting the intelligence of secondary school students. F-value is 28.90 (Table 1), which is significant at 0.01 levels of significance. It shows that above mentioned scales of mother’s attitude contribute significantly in predicting intelligence of secondary school students.

Table 3. Values of R², F and regression equation of parental attitude (mother form) and intelligence of secondary school boys. (N = 500)

Scales of Parental Attitude (mother form)	DF	R ²	F	Regression equation
Encouraging verbalization (A1) + Strictness (A8) + Suppression of aggression (A12) + Avoidance of communication (A16) + Intrusiveness(A20) + Acceleration of development (A22) + Dependency of the mother (A23)	4,494	0.1871	16.17**	Y= 36.547 + 0.606 (A1) + 1.471 (A8) - 1.438 (A12) - 1.037 (A16) + 0.239 (A20) + 1.013 (A22) - 0.749 (A23)
** significant at 0.01 level of significance				

It is observed in the present study that combined R² for suppression of aggression, deification of parent, strictness and inconsiderateness of wife is 0.0473 (Table 2). This

Table 4. Values of R², F and regression equation of parental attitude (father form) and intelligence of secondary school boys. (N = 500)

Scales of Parental Attitude (father form)	DF	R ²	F	Regression equation
Encouraging verbalization (B1) + Ascend of husband (B15) + Inconsiderateness of wife (B16)	3,495	0.0737	13.16**	Y = 65.426 + 0.482 (B1) – 0.701 (B15) – 0.975 (B16)
** Significant at 0.01 level of significance.				

shows that above mentioned scales of father’s attitude predicts 4.73% intelligence of secondary school students which is statistically significant for value of F being 12.34, which is significant at 0.01 levels of significance. It means above mentioned scales of father’s attitude predicts intelligence of secondary school students significantly. Thus the hypothesis (1) which states that, “Parental Attitude (separately for mother and father) will not be significant predictor of Intelligence among secondary school students” is partially accepted.

It is clear from the table 3 that value of R² is 0.1870, which shows that the contribution of certain scales of mother’s attitude namely encouraging verbalization, strictness, suppression of aggression, avoidance of communication, intrusiveness, acceleration of development and dependency of the mother is 18.7% in predicting intelligence of secondary school boys. F-ratio is 16.17, which is larger than the corresponding tabular F-value. Thus, the conjoint contribution of the above mentioned scales of mother’s attitude in predicting intelligence is statistically significant.

Table 4 presents that for secondary school boys the value of R² for encouraging verbalization, ascend of husband and inconsiderateness of wife is 0.0737. It shows that 7.37% of intelligence of secondary school boys is predicted by these scales of parental attitude (father form). Computed F-

value 13.16 is larger than the corresponding tabular F-value. It means the joint contribution of the above said scales of father's attitude to the intelligence of secondary school boys is statistically significant. Thus the hypothesis (2) which states that "Parental Attitude (separately for mother and father) will not be significant predictor of Intelligence among secondary school boys" is partially accepted.

Table 5. Values of R^2 , F and regression equation of parental attitude (mother form) and intelligence of secondary school girls. (N = 500)

Scales of Parental Attitude (mother form)	DF	R^2	F	Regression equation
Breaking the will (A4) + Equalitarianism (A14) + Inconsiderateness of the husband (A17) + Suppression of sexuality (A18) + Intrusiveness (A20)	3,495	0.2268	28.98**	Y = 51.005 - 0.964 (A4) + 0.813 (A14) + 1.584 (A17) + 1.846 (A18) + 0.808 (A20)
** Significant at 0.01 level of significance.				

As per the results of table 5, value of R^2 for breaking the will, equalitarianism inconsiderateness of the husband, suppression of sexuality and intrusiveness is 0.2268. It means 22.68% of intelligence is predicted by above mentioned scales of mother's attitude for the girls of secondary school. Table 4 also shows that the combined F-ratio of breaking the will, equalitarianism, inconsiderateness of the husband, suppression of sexuality and intrusiveness is 28.98, which is significant at 0.01 level of significance. This concludes that prediction of intelligence by above mentioned scales of mother's attitude is statistically significant.

Present study observes that for secondary school girls the value of R^2 of deification of parent, strictness and forcing independency is 0.0393. It means the prediction of intelligence of secondary school girls by these scales of father's attitude is 3.93%. F-ratio for the same scales is 6.77 (Table 6), which is significant at 0.01 level of significance. It

shows that deification of parent, strictness and forcing independency predicts intelligence of secondary school girls significantly. Thus the hypothesis (3) which states that, "Parental Attitude (separately for mother and father) will not be significant predictor of Intelligence among secondary school girls" is partially accepted. It is true that intelligence prospers in an atmosphere of freedom; parental attitude is a prominent catalyst in creating such an environment. Parents expect their children to achieve high levels of success but in their high expectations they tend to become restless and critical leading to stumping of self-confidence of the child which further compounds failure and decreased intelligence level. Consequently, a patient and supportive parental attitude both mother and father becomes the pre-requisite for nurturing intelligence among the boys and girls of secondary school.

Conclusion

- Certain scales of parental attitude (mother form) i.e. strictness, suppression of aggression, inconsiderateness of the husband, suppression of sexuality and intrusiveness, predicts intelligence significantly for secondary school students. Whereas some scales of parental attitude (father form) namely suppression of aggression, deification of parent, strictness, and inconsiderateness of wife predicts intelligence of secondary school students significantly.
- Certain scales of parental attitude (mother form) i.e. encouraging verbalization, strictness, suppression of aggression, avoidance of communication, intrusiveness, acceleration of development, dependency of the mother predicts intelligence of secondary school boys significantly. Whereas following scales of parental attitude (father form) i.e. encouraging verbalization ascend of husband, inconsiderateness of wife conjointly predicts intelligence of secondary school boys significantly.

For secondary school girls certain scales of parental attitude (mother form) i.e. breaking the

will, equalitarianism, inconsiderateness of the husband, suppression of sexuality and intrusiveness along with deification of parent, strictness, forcing independency in combination predicts intelligence significantly. On the other side some dimensions of parental attitude (father form) i.e. deification of parent, strictness and forcing independency conjointly predicts intelligence significantly.

Implications of the study

Parents are the primary educators of children. Parental attitude towards the children is an important educational foundation on which children's formal school learning is built. In the present study it was found that both mothers and fathers remained contributors to the intellectual development of their children. Father is seen as bridge by which the child reaches the outside world. While mother symbolizes an emotional support, interpersonal sensitivity and gives help. It was found that the amount of warmth and friendliness, praise and recognition and degree to which the child – parent relationship is positive and cordial will influence their intellectual development.

The finding is indicative of the fact that cognitive, emotional and social support should be made available to the child within the home. Parental guidance, provisions for the child's intellectual needs, affective reward, dependence, independence, indulgence, verbal responsivity, avoidance of restriction and punishment, willingness to devote time to the child etc. are factors which are instrumental in child's intellectual development. Intellectual abilities of the children can be developed and substantially influenced by the way they are encouraged by their parents. Parents should realize the fact that lack of help and support and autocratic atmosphere of the family would lead towards under-achievement in children.

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