

## Psychosocial factors affecting behavioural problems in children

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### ABSTRACT

**Background:** Psychosocial factors in early developmental stage influence the health and well-being of the growing individuals, and may also effect the later development of mental difficulties in youngster's health. The impact of psychosocial factors on young children's behavioural difficulties is unclear. The main objective of the present study was to examine the role of intelligence, family status, gender, birth order, class & age on behavioural problems in children. **Methods:** 292 children with the age range of 8-11 years from Chhattisgarh were selected on the basis of purposive sampling as participants of the study. The cross-sectional research design was used in the study. The intelligence was measured by Raven's coloured progressive matrices, and demographic checklist was used. Behavioural problems of the children were measured by behavioural checklist developed by Anuradha & Parimu(2005). Data was analysed by using multiple regression analysis. **Results:** Results indicated that independent factors explained 20.5% of total variance ( $R^2= 0.205$ ;  $F(6,12.258)=44.607$ ;  $p<0.01$ ). Intelligence, family status, and birth order of the participants were found to be significantly related with behavioural problems. No significant difference was found in terms of gender and behavioural problem. **Conclusions:** High intelligent have shown less behavioural problems. First born children have shown more behavioural problems. Children living in joint family system have shown less behavioural problem. No Significant difference was found in girls and boys with respect to behavioural problem. Study will be helpful for health care professional in the management of behavioural problem in the school.

**Keywords:** Demographic, Behavioural Problems, Intelligence

Intelligence of the individuals is influenced by the developmental trajectories across the lifespan which is also affecting the socioeconomic, psychological, and health outcomes<sup>1</sup> of the society. The differences in intelligence have been shown to be highly stable from early adolescence to late adulthood but are more variable in infancy and childhood, with some children showing substantial gains in intelligence and others considerable losses between infancy and adolescence.<sup>3-5</sup> These variations in the development of intelligence are likely to be associated with children's family, socioeconomic status etc.<sup>6-8</sup> Children who are less intelligent may possess correlative behavioural problems as the result of feeling misunderstood, developing at such an accelerated rate compared to their peers that they feel

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bored, having their intellectual development exceed their social development or even not realizing they are gifted. Various researches indicate the prevalence of behaviour problems in primary children is associated with low-income families. Several risk factors are associated with these behaviours, children from low socioeconomic status backgrounds were found to have a higher incidence of behaviour problems as compared to the general population. Behaviour problems were associated with multiple risk factors found in these children's lives related to child, parent, and socioeconomic characteristics. Various studies have been carried out showing children with lower middle income family may suffer from various behavioral problems and/or low self-esteem. This may cause students to withdraw from social interaction. Some students may turn to drugs or alcohol for relief from feelings of low self-worth. Studies have shown that 35% of students with learning disorders, were drop outs of High School.<sup>9-10</sup> Teenagers with dyslexia are more likely to think about and attempt suicide than other young people of their age".<sup>11</sup> Very few studies were found on exact psychosocial factors for the problem of maladaptive behaviour in children in India. Hence, the present research was designed to assess the role of psychosocial factor for maladaptive behaviour among primary school children. Therefore, in this study the attempt will be made to find out the impact of family status, birth order and gender on behavioural problems in the children. The proposed study will be helpful for health care professional in the management of behavioural problem in the school.

## METHODOLOGY

### *Participants*

In the present study, 292 children participated. Three independent samples of students from 3<sup>rd</sup>, 4<sup>th</sup>, and 5<sup>th</sup> classes were analysed. Total 172 (58.9%) boys and 120 (41.1%) girls were selected in the study. The sample comprised of 111 (38 %) 3<sup>rd</sup> class students (mean age = 8.58 SD =0.95, range from 7 to 10 years), and 95 (32.5%) 4<sup>th</sup> class students (mean age = 9.41, SD =.98, range from 7 to 12 years,) and the third sample included 86 (29.5%) 5<sup>th</sup> class students (mean age = 10.12, SD = 0.95, range from 8 to 11 years). In this study state schools were selected based on the principle of randomness.

The inclusion criterion of the participants in the study was children with an age range of 8-11 years. Selected children were those who can speak Hindi and enrolled in the government or privet primary schools of Chhattisgarh. The illiterate and those who were suffering from any chronic disease/disorder, i.e. tuberculosis, cancer was excluded from the study. The total sample of the present study was 292 students and was selected through the purposive sampling technique.

### *Design*

The cross-sectional research design was employed.

### *Tools*

- 1. Coloured Progressive Matrices:** Intelligence was measured by Raven's coloured progressive matrices. In the present test split half reliability was found 0.90. Colored Progressive matrices: is a suitable IQ test for the children in the age range of 6 years to 11 years.<sup>12,13</sup>
- 2. Behaviour Checklist:** To measures the behavioural problem of the children, child behaviour checklist was used (Anuradha & Parimu, 2005). Information related to their demographic (age, sex, birth order, family status, mother occupation, father occupation) variations were obtained by taking their bio-data record.

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### Procedure

First of all, the authorities of different school were requested to give permission for collecting data from the students. After getting permission, 30 students of each school from 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> class were selected for the present study. The student was administered Raven's coloured progressive matrices, behaviour checklist and demographic. Before administering the above measure printed instructions were made clear to them when they understood the instructions completely, the measures were administered to them and response sheets were collected.

A researcher was specifically trained for the administration of the intelligence test by means of a training course lasting 5 hours. The Raven's coloured progressive matrices can be administered in small groups or can be tested with an individual, in the present study it was tested individually in their classrooms and strictly adhered to conditions specified in the test's manual. The responses were coded in accordance to scoring pattern given in the manual.

Behavioral problems were rated by the class teacher on the basis of Behavioral problems checklist. In this checklist 30 items were included. Scores were obtained by (e.g., Yes = 1 & No = 0) and then summing all 30 items. High score reported high level of Behavioral problems.

### Ethical consideration

The study protocol was approved by the Institutional Ethics Committee, Pt. Ravishankar Shukla University, Raipur, India.

### Statistical Analysis

A multiple regression models were used to examine the effect of intelligence and demographic variable on behavioural problems. SPSS version 16.0 was used for data calculation.

## RESULTS

All 292 cases were included for data calculation. Variance inflation factors (VIFs) were examined to detect multi-collinearity.

**Table 1 (a). ANOVA Results of the Model - 1 (Multiple Regression Analysis)**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	267.643	6	44.607	12.258	0.000
Residual	1037.080	285	3.639		
<b>Total</b>	<b>1304.723</b>	<b>291</b>			

**Table 1(b). Direct effect of Psychosocial variable on Behavioural problems**

Predictors	Model - 1	
	$\beta$	VIF
Class	- 0.019	1.588
Age	0.050	1.466
Birth Order	- 0.136*	1.080
Sex	0.029	1.086
Family Status	- 0.152**	1.087
Intelligence	- 0.372**	1.080
R <sup>2</sup>	0.205	
Adjusted R <sup>2</sup>	0.188	
F(6,12.258)	44.607	
Sig.	*p< 0.05; **p< 0.01	

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**Table 2. Birth order and Behavioural problems**

Birth Order	Mean	N	Std. Deviation
1	12.8169	71	2.08608
2	12.6613	124	1.99954
3	12.3710	62	2.12891
4	12.3750	24	2.29957
5	10.0000	5	2.54951
6	10.8333	6	2.22860
Total	12.5308	292	2.11745

**Table 3. Family Status and Behavioural problems**

Family Status	Mean	N	Std. Deviation
Nuclear	12.9161	155	2.02566
Joint	12.0949	137	2.14162
Total	12.5308	292	2.11745

Table 1 (a) shows the ANOVA result of the models 'value with four predictors (family status, birth order, intelligence, age, sex, class) which were significant; ( $p < 0.01$ ). Regression weight for intelligence, family status sex, age, birth order and education of students, obtained from the multiple regression models is depicted in table1 (b). Table 1(b) indicates clearly that, VIF (Variance Inflation Factor) values ranged from 1.080 to 1.588, which was distant from the 4.0 criteria that may indicate multi-collinearity concern. In the model independent factors explained 20.5% of total variance ( $R^2 = .205$ ;  $F(6, 12.258) = 44.607$ ;  $p < 0.01$ ). Birth order of the participants (first birth=1, second birth=2 third birth= 3, fourth birth =4, fifth birth =5) was negatively associated with behavioural problems ( $-0.136$ ,  $p < 0.05$ ) that means first birth order students reported low level of behavioural problems (table2). Family status of the participants (joint =1 nuclear =2) was negatively associated with behavioural problems ( $-0.152$ ,  $P < 0.01$ ) this indicated that children living in joint family have more behavioural problems (table3) as compared to those who live in nuclear families. Intelligence of the students was found to be negatively related with behavioural problems ( $-0.372$ ,  $p < 0.01$ ), high intelligent students reported low level of behavioural problems.

## DISCUSSION

The purpose of the present study was to examine the effect of intelligence and demographic variables on the behavioural problem of children. Birth order and family status of the participants was negatively associated with behavioural problem (Table 1, b). That means first birth order students and joint family students reported higher level of behavioural problem than second, third, and fourth birth order. The reason behind that every child is born, they enter into a different family environment than the previous child. Other hand several study suggested that the family attention, parents do not have time to share care, parental cop-ratation and conversation with their children, drug addiction, and financial condition etc., of the family is important factor for behavioural problem. The family environment also affects the academic achievement, which is the product of maturational forces within the adolescent and the experiences provided by the environment.

Intelligence is negatively correlated with behavioural problem (Table 1, b). Current findings are in full agreement with the earlier reports on behavioural problems.<sup>14-17</sup> Maladaptive behaviours such as low tolerance to failure, attention difficulties, impulsivity, disorganization, inflexibility, lack of persistence, frequent absences have been observed in children with Learning Disability<sup>18</sup> Learning disabilities are often found with co-existing behaviour problems.<sup>19</sup> Learning disabilities are often found with co-morbid conditions. A

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study conducted in India by Hirsave and Shanti, on children with scholastic problems, revealed a number of behavioural problems.<sup>20</sup> Pagani, Tremblay, Vitaro, Boulerice and McDuff reported 30% of the students also experienced class retention which is often the cause for loss of self - esteem and the development of maladaptive or aggressive behaviour patterns.<sup>21</sup> These children are at a higher risk for severe emotional stress<sup>(22-23)</sup>.

The main reasons for the behavioural problems in children are the difficulty they face while dealing with their anxiety that often lead to frustration. Generally, children with behavioural problems are unable to verbalize their feeling as others do causing excessive anxiety condition. The maladaptive behaviours may also be a form of impulsivity and then there the disruptive disorders.

### CONCLUSION

High intelligent have shown less behavioural problems. First born children have shown more behavioural problems. Children living in joint family system have shown less behavioural problem. It is concluded that there is sufficient empirical and statistical evidence of the effect of intelligence and some demographic variable on the behavioural problems. The present research demonstrates the role of intelligence and demographic on behavioural problems in children's.

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### **Conflict of Interest**

The author declared no conflict of interest.

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