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Intellectual Function and Behaviour Problem Among Dropouts of School Children

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Abstract:

Present study was undertaken to see the extent of intellectual function and behaviour problem among the dropout of school children. The study was conducted on 62 dropouts of school children and 64 school children. Dropout's children were taken from different area of Bihar and normal children were taken from different schools of Bihar. Children of both groups were contacted individually for gathering information. Two different tools were used in the study. For the measurement of intellectual function Malin's Intelligence Scale for Indian children (MISIC) Arthur J. Malin (1969) was used, whereas for the measurement of behaviour problem Problem Behaviour Survey Schedule (PBSS) scale was used. The results showed that school children were significantly higher on intellectual function than dropout of school children but they were significantly lower on the behaviour problem than their dropouts of school children counterparts.

Introduction

Dropout of school children

Children are a nation's strongest asset. Their well-being and the well-being of the nation are interdependent. India has the second-highest proportion of children worldwide. Both physical and mental health are always improving. Human health affect by human maladapted behaviour. Initial development is based on the different learning methods such as observational learning, operant conditioning, conditioning learning and trial and error learning etc. Environment plays an important role in shaping the behaviour of children. India is a developing country, and we must be aware that a substantial portion of the population struggles with issues like poverty, poor sanitation, poor housing, hunger, and a lack of education. Therefore, the general growth of the nation's society and populace will have a significant impact on how children in this country develop. The combined family's resources and environment ensured the child's physical, psychological, social, and cognitive growth. The largest population of India has to face the socio-economic issue because they do not have enough resources for providing a quality of life for their children. Therefore, they cannot provide education and nutrition etc. Due to poverty, some students dropout of school early because their parents did not have enough money to pay their fees and can not maintain their requirements of education. According to National Family Health Survey-3(NFHS-3, 2005-6) data revealed that 75% of the children were attending school from the age of 6 to 16 years, whereas14% of children never attended school and 11% children dropped out of school for many reasons. Dropping out of school is linked to a variety of issues throughout life, including unsafe sexual acts, adolescent pregnancies, mental illnesses, externalising behaviour, delinquency, and the usage of alcohol, cigarettes, marijuana, and other drugs (Jaafar et al. 2013). Several studies focus on many aspects of dropout of school children but not enough study has been seen on intellectual differences among dropouts of school children. Basically, this research focuses on intellectual functioning and behaviour problems of dropout of school children.

Intellectual function:

The concept of intelligence has a significant impact on our socio-cultural context, and there are many different conceptual and operational definitions that come from perspectives that emphasise cognitive and abstract elements as well as emotional and social skills. There are also perspectives that are focused on the processes that underlie intelligent performance, such as in the case of executive functions, which are cognitive processes that enable self-regulation (Miyake & Friedman, 2012). The psychometric viewpoint, which emphasises how closely the idea of intelligence has been related to learning, is another method that gives intelligence an important and predictive role in school achievement. Additionally, we have the traditional viewpoint of Cattell's (1943) crystallised intelligence, which refers to information gained through educational and cultural practices.

Early on in a child's development, their surroundings and socioeconomic status (SES) are crucial factors. However, adequate dietary intake and stimulating surroundings cannot be assured for families with low SES. Children from low-SES families frequently experience hunger, loneliness, and infrequent nursing, which may result in dietary deficiencies and intellectual decline. Low SES families are characterised primarily by poverty; yet, it is still unclear what link there is between family poverty and IQ. In addition to worsening family stress levels, poverty can also affect children's learning environments, which can manifest as hyperactivity, memory problems, and social maladjustment in school children. A child's ability to develop their intelligence is also negatively impacted by poverty in the home. Due to the bad environment (such as toxicity exposure, unhealthy diet, and unknown water source), children who reside in rural locations are more prone to contract illnesses. The toxins may harm human brain nerves and adversely affect brain development. However, the majority of low SES households were unable to offer advanced learning tools for their children or, at the very least, state-guaranteed basic necessities. In this study researchers investigate the level of intelligence among dropouts of school children.

Behaviour problem:

Environmental and biological variables both have an impact on children's behaviour problems. Individual differences exist in children's traits such as friendliness, attentiveness, and temperamental aspects of activities. Both in early childhood and in adolescence, behaviour problems including anxiety, conduct, hyperactivity, peer problems, and anti-social behaviour are known to be inherited from the parent's genes or acquired by the surrounding society. Childhood events and social and environmental exposures have a direct impact on the shape and function of the growing brain, which in turn affects a person's capacity to control their behaviour and emotions. Accordingly, the National Academies of Sciences, Engineering, and Medicine (National Academies of Sciences, Engineering, and Medicine, 2016) determined that the home environment had the most significant impact on a child's early development in a variety of functional areas. There is a social gradient for behaviour issues, just like there is for many other mental health-related issues. According to several studies (Be et al. 2012; Mazza et al. 2016; Piotrowska et al. 2015), a family's lack of social and economic resources has been identified as a social risk factor for the emergence and prevalence of such issues. Present research was basically undertaken to see the level of intellectual function and behaviour problems among dropouts of school children. On the basis of review of literature following hypotheses were formulated:

1. There would be a difference in the intellectual function among dropouts of school children.
2. There would be a dif n ference in the behaviour problem among dropouts of school children.

Methods:

Present study attempted to study the intellectual function and behaviour problem among the two different groups of children.

Participant:

In this study, a total 126 children were taken as participants out of which 62 were dropouts of school children selected from low socio-economic family and 64 were school children. The children of 11-15 years ages were taken purposely from Bihar. Likewise school children of similar age groups were also taken from schools in Bihar.

Measure:

Two different tools were used in this study for measuring intelligence and behaviour problems. First scale was Malin's Intelligence Scale for Indian children (MISIC) developed by Arthur J. Malin (1969). MISIC is the Indian adaptation of Wechsler's Intelligence scale used to assess the Intelligence quotient of the children. It was used to assess the cognitive abilities of children aged 6 to 15 years. It contains 11 subtests, The test-retest reliability of the battery was 0.91 and congruent validity was 0.63. On the other hand, the Problem Behaviour Survey Schedule (PBSS) is used for assessing behaviour problems in children**.** This schedule has 77 items and eleven dimensions, i.e. Violent-destructive behaviour (16 items), temper tantrum (4 items), misbehaviour with others (12 items), self injurious behaviour (7 items), repetitive behaviour (7 items) Odd behaviour (7 items), Hyperactivity (3 items), Rebellious behaviour (6 items), Antisocial behaviour (5 items), Fears (4 items) and any other behaviour (6 items). The internal consistency of the scale was determined using Cronbach's alpha. The Cronbach's alpha coefficient for the total scale was .94.

Data were collected from the children belonging to the two different groups. They were contacted individually at their respective address taken from the centres/schools and other resources. Prior to the administration of the tools, verbal consent of each child was taken from his/ her parents and the purpose of study was explained to them. Obtained data were arranged and organised in the light of purpose of the study and demand of hypotheses.

Results:

Table: 1 Mean and standard deviation of the scores on intelligence of the two groups of children (dropout of school children and school children) and t-value for the test of reliability of difference between the two groups.

Intellectual functioning Subtests	**Drop out of school children (N=62) Mean (SD)**	**School children (N=64) Mean (SD)**	**t-value**	**Sig**
Full Scale Intelligence Quotient	89.60 (5.53)	96.47 (3.90)	7.02	.000

From table1 it was obvious that the mean of the overall scores on Intelligence Quotient between the school children group was higher than the dropout of school children. The mean score for the school children group of the children was 96.47; whereas, for the dropout of the school children group it were 89.60. Similarly, the standard deviation value for the school children group of children was 3.90 and dropout of school children group it was 5.53. The difference in the mean scores for the two groups were satisfactory and it was found to be statistically significant (t = 7.02).

Table 2: Mean and standard deviation of the scores on behaviour problem with dimension wise of the two groups of children (dropout of school children and school children) and t-value for the test of reliability of difference between the two groups.

Behavioural Problems	Drop out of school children (N=62) Mean (SD)	School children (N=64) Mean (SD)	t-value	Sig
Violent and Destructive Behaviour	3.56 (1.57)	4.25 (1.86)	2.22	.02
Temper Tantrum	3.56 (1.43)	2.64 (1.20)	3.92	.000
Misbehaviour with Others	4.46 (1.30)	5.04 (1.47)	2.33	.02
Self Injurious behaviour	3.67 (1.63)	2.81 (1.70)	2.90	.004
Repetitive behaviour	4.40 (2.22)	3.56 (1.46)	2.51	.01
Odd behaviour	4.08 (1.81)	3.06 (1.67)	3.27	.001
Hyperactive	3.09 (1.65)	1.85 (.97)	5.13	.000
Rebellious behaviour	2.25 (1.39)	2.70 (1.51)	1.71	.08
Antisocial behaviour	2.11 (1.30)	3.51 (1.99)	4.65	.000
Fears	1.98 (1.49)	1.85 (1.45)	.473	.63
Others	3.17 (1.75)	1.90 (1.35)	4.56	.000
Behaviour Problems	36.38 (6.55)	33.21 (7.00)	2.62	.01

Above the Table 2 revealed that the mean of the overall scores on behaviour problems between the dropouts of school children was higher than the school children group. The mean score for the dropout of school children was 36.38; whereas, for the school children group it were 33.21. Similarly, the standard deviation value for dropout of school children group was 6.55 and school children group it was 7.00. The difference in the mean scores for the two groups were satisfactory and it was found to be statistically significant (t = 2.62). The dimension-wise difference also indicates similar results in two groups (dropout

of school children and school children) of children were found significantly different from each other on the nine dimensions of behaviour problem except in rebellious behaviour dimension and fear dimension.

Discussion:

On the basis of results given in the table no. 1 it appears that school children were more intelligent than dropouts of school children. It showed that from low-socio-economic status families frequently experience hunger, loneliness, and infrequent nursing, which may result in dietary deficiencies and intellectual decline. Low SES families are characterised primarily by poverty. A child's ability to develop their intelligence is also negatively impacted by poverty in the home. Due to the bad environment such as toxicity exposure, unhealthy diet, and unknown water source. The toxins may harm human brain nerves and adversely affect brain development. However, the majority of low SES households were unable to offer advanced learning tools for their children or, at the very least, state-guaranteed basic necessities.Thus the hypothesis presuming difference in the extent of intellectual function among the two different groups(dropout of school children and school children) of children was found confirmed. The results of table no. 2 indicating a different thing according to the findings: school children had less behaviour problems than their dropout of school children counterparts. It reveals that childhood events, parents' economical status, social and environmental exposures have a direct impact on the shape and function of the growing brain, which in turn affects a person's capacity to control their behaviour and emotions. Obtained results also got support by the findings of the study conducted by several studies Mazza et al. 2016 and Piotrowska et al. 2015,highlighted the family's lack of social and economic resources has been identified as a social risk factor for the emergence and prevalence of behaviour problems in children. Thus the hypothesis presuming difference in the extent of behaviour problem among the two different groups(dropout of school children and school children) of children was found confirmed.

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