

Type of Birth effects on behavioural problems among intellectual disable children. A Cohort study in Rajahmundry

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ABSTRACT

This study identifies the type of birth incidence and disabled children's behavioural problems (i.e., hyperactivity, Lethargy, Stereotypical, Irritability behaviours) during the 6-15 years age. The objectives of the study were to explore the Birth effects on behavioural problems among mild intellectually disabled children, to find out the significant difference between demographical variables on Behavioural problems among mild intellectually disabled children, to understand and minimizing behavioural problems among mild intellectually disabled children. Using the Cohort Study. The participants for the present study included children diagnosed with mild intellectual disability as per the diagnostic criteria of DSM-IV TR. These children attend special schools across north coastal districts of Andhra Pradesh. The age ranged from 6-15 years, boys included 272 and girls included 228. The total sample consisted of 500 mild intellectually disabled children. We examine whether Normal birth and differs from Pre-mature birth intellectual disable and whether it converges with or diverges from them over time. Present study identified behavioural problems associations between pre- mature birth and normal birth. Present study show that Pre-mature birth intellectual disable children exhibit more behaviour problems than normal birth type intellectual disables at age of 5 years onwards, and their trajectories from ages 3 to 12 do not converge. Rather, disabled children, particularly pre-mature show increasing Lethargy, stereotype behaviour problems, hyperactivity, over time.

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Introduction

Children with intellectual disabilities and recognized behavioral problems face lasting consequences, including reduced access to educational and leisure activities, increased risk of neglect and abuse, and strained relationships (Decker et al., 2002; Dickens, 2005). ; Matson et al., 2009; Murphy et al. 2005). As noted earlier, there is a large disparity between the mental health needs of children with disabilities and their subsequent treatment (United States Public Health Service, 2002). The present study summarizes that behavioral problems are common in children with mental retardation, and that in addition to subjective distress, the individual limits the possibility of participating in a number of normal activities. Developmental disability is any disability caused by growth and development problems (Lawyer and Liz, 2010). People with intellectual disabilities have historically been the least-visited group, and the terms used to refer to this group have changed significantly over the years (Thumbull et al., 2002). Intellectual disability "has been ubiquitous in the literature until recently and is now often used to refer to people with significantly reduced cognitive function.", "mental handicap", "learning disability" and "mental retardation". Although there is a wide variation in the rate of prevalence reported for a behavioral problem, it is clear that behavioral problems are exhibited by a significant minority of people with intellectual disabilities. Research generally indicates that 10 to 17% of people with intellectual disabilities are related to behavioral problems (Emerson et al., 2001a; Emerson & Bromley, 1995; Kidman and Qureshi, 1993; Lowe et al., 2005). Al., 2007) Behavioral problems have adverse effects on the lives of a significant minority of people with intellectual disabilities. Children with behavioral problems have problems at school, in social and family settings, as well as in adolescence. It is now well documented that premature infants have a significant risk of neurodevelopmental Disabled. Studies in this area have generally focused on the motor and cognitive squeezes of prematurity, with less attention to nature, behavior, and emotional disturbances. Recent data suggest that premature infants may also have abnormalities in behavior and social development, which may be a precursor to later learning disabilities and mental disorders that occur in childhood. There is a higher risk for behavioral and psychological problems. Our review focuses on issues from birth to preschool age in infants less than 34 weeks of gestation.

In the 1990s there were numerous studies of problems, behavioral and emotional functions in preterm infants. However, procedural errors in the study design prevented any conclusive conclusions regarding these functions. There are a wider range of errors of gestational age related

to clinical use, birth weights of subjects, smaller sample size, lack of psychometric sound assessment tools, lack of controls and failure to provide medical information than population-based models. And psychosocial risk factors. Research results can be considered inconsistent based on the fact that multiple respondents have reported on the behavior of children in different contexts. Studies on infant nature and behavior were obtained through maternal ratings. But the mother ratings of nature reflect the characteristics of the mother rather than the baby. 6 researchers reported a significant association between maternal mental health and behavior in children. Parental reports of behavioral problems and social competence are often different from those of teachers, who relatively attribute children's behavior to their peers' behavior similarly, there is often disagreement between maternal and clinical ratings.

Physician assessment may not reflect the general attitude of the child. Infant nature is a very relevant factor in development, because early difficulties can lead to subsequent behavioral abuse in preterm infants and affect the quality of their relationships with caregivers. Based on standard parent report measurements, it was found that preterm infants and children generally exhibit less flexibility, rhythm, activity, attention, and consistency than full-term infants.¹⁴⁻¹⁶ Premature infants were also found to have more severe mood swings, more difficult to relieve, and more passive. Socially less responsive.¹⁷ Infants, preterm infants were found to be more likely to be arrhythmic, less persistent and more susceptible to adaptability and negativity.¹⁸ Increased activity and intensity of certain tendencies, and lack of consistency.¹⁸ Literature in this field Premature infants are more likely to be parents first Indicates to be challenging. Changes in nature over time are influenced by biological and environmental factors. However, premature babies as a group are at higher risk of developing problems with nature. Infants and young children with significant medical problems are associated with differences in nature. Prematurity does not appear to be a risk factor for abnormalities in nature. Particularly sensitive to behavioral adjustment and emotional issues. The findings are very consistent when considering the prevalence of ADHD.

At age 5 to 6, parents and teachers reported that children were more active and playful than controls, Marlow et al ¹⁹ reported. In a study by Szatmari et al., A higher incidence of ADHD was found in parent reports at 5 years of age, but no significant difference was found in teacher reports. Other studies on the VLBW population have found a high frequency of being diagnosed by school age, hyperactivity or ADHD. ADHD is more common in premature babies, who exhibit

neurodevelopmental problems and low birth weight and gestational age. There appear to be some indications that men are at greater risk and that adverse social conditions exacerbate these behaviors. As long as adverse environmental conditions are not controlled, there is no risk of behavioral problems in premature infants. Low intellectual level in VLBW infants. When heavy babies are included, these problems are less likely to occur. Premature babies are at risk for poorly developed positive skills, which can change contribution of biological and social factors. Most studies suggest that behavioral problems are associated with adverse environmental conditions such as low socioeconomic status, maternal depression, and family stress. The effect of these adverse factors may be greater in VLBW than in normal birth weight infants. Home nurturing promotes the development of self-regulatory behaviors. Multiple regression analyzes suggest that interactions between nature, the environment and developmental quality, and the home environment predict attention problems in childhood. Nature and behavior are related to gestational age and have a weak association with cognition, periventricular leukemia, intraventricular hemorrhage and cerebral palsy.

As a group, premature infants and young children were consistently characterized as having more withdrawal, less adaptability, less persistence, and less infancy in their infancy than full-term infants. These symptoms are more common in infants with VLBW and those with medical problems. Premature babies also have global behavioral difficulties, especially in relation to the prevalence of ADHD, but they do not appear to be at risk of developing behavioral disorders. Problems with social ability and positive functioning are more common in these infants than their full-time peers. Again, these symptoms appear to be limited to infants weighing less than 1500 g at birth, those with neurological and intellectual problems, and infants who live in adverse environmental and social conditions.

Children with a birth weight of <750 g are at risk for attention problems. Recent reports indicate that behavioral problems and attention problems persist until school age in most premature babies born in the 1990s. As the survival rate in preterm infants is high, the cumulative number on the health care system for behavioral and psychological problems is likely to increase. It is therefore important to understand the relative contribution of underlying biological and social factors in the design of effective interventions. Further research is needed to determine whether lending to parents can change parental behavior and improve mother-infant attachment and infant quality.

At this point, it is important to inform the parents of ELBW infants about the potential for behavioral problems so that they are well prepared to deal with and receive appropriate treatment. To this end, health care professionals should focus on early diagnosis and treatment.

Methodology

An objective

The aim of the study was to explore the type of effects of birth on behavioral problems in children with mild intellectual disabilities.

Hypothesis: There will be significant differences in the behavioral problems of mildly intellectually disabled children depending on the type of birth.

Study design

The present study is a pre-trial design. The study involved an experimental group taking drama therapy as an intervention.

Participants

The participants of the present study included children with mild intellectual disability according to the diagnostic criteria of the DSM-IV TR. These children study in special schools in the northern coastal districts of Andhra Pradesh. The ages ranged between 6–15 years, with 272 in boys and 228 in girls. The total sample consisted of 500 mildly intellectually disabled children, of whom 40 participants were randomly assigned to a sports therapy intervention, during the intervention process, 5 participants' subsequent dropouts. Therefore, a total of 35 participants received the full play therapy intervention.

(a) Inclusion criteria

Children with behavioral problems include children with mild intellectual disabilities.

Children under the age of 15 are included.

(b) Exclusion Criteria

Normal children with behavioral problems are excluded.

Children with moderate, severe and profound intellectual disabilities are excluded

In studies.

Children with mild intellectual disabilities over 16 years of age are excluded.

3.5. Tools: Aberrant behavior checklist and demographic variables were used for the present study.

Aberrant behavior checklist

The Aberrant Behavior Checklist was developed by Aman, MG. Singh, N. N., Stewart, A. W., and Field C. J. (1985A). The Aberrant Behavior Checklist is a symptom checklist for assessing the effects of treatment and as a tool to assess behavior in mentally retarded individuals (child through adult). Administration: 10 to 15 minutes. The checklist has 58 items divided into five sub-categories: I. Irritability, agitation, crying (15 items); II. Lethargy, social withdrawal (16 items); III Stereotypic Behavior (7 items); IV, hyperactivity, non-compliance (16 items); and V, Inappropriate speech (item 4). The researcher used the Telugu translation of ABC. Kempf-Constantin N., Varisco-Gasart S., Lehotke R., Gali Carminati G., Raju MVR, Devi Pothini N., Saraswati Devi T, and Alamuri S. (2009) was developed by. The checklist can be answered by choosing one of four drugs. 0 indicates that there is no problem, 1 indicates that the behavior is a problem but minor in degree, 2 indicates that the problem is moderately severe, 3 indicates that the problem is severe. Confirmatory factor analysis showed that the root mean square error of approximation (RMSEA) was equal to 0.06, the comparative fit index (CFI) was equal to 0.77, and the Tucker Lewis index (TLI) was equal to 0.77, indicating that five the model with correlated factors was a good fit. Coefficient alpha ranged from 0.85 to 0.92 in five subcategories. Spearman's rank correlation coefficients ranged from 0.65 to 0.75 for inter-rater reliability tests, and correlations ranged from 0.58 to 0.76 for test-retest reliability. All reliability coefficients were statistically significant ($p < 0.01$). The factor validity and reliability of the Telugu version of ABC provided evidence of factor validity and reliability compared to the original English version and appears to be useful for assessing behavioral disorders in Indian children with intellectual disabilities.

Table-1. The significant difference between children with an intellectual disability based on their type of birth with respect to their Behavioural Problems

Type of Behavioral	Type of Birth	N	Mean	Std.	t-value	P-Value
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Problems				Dev.		
Behavioural Problems	Normal Birth	370	62.57	12.42	2.17*	0.03
	Premature Birth	130	66.28	12.31		

* Significant at 0.05 level

Table-1 found that children with intellectual disabilities and children with intellectual disabilities had an average birth score of 66.28, depending on their type of birth with respect to behavioral problems, while the average birth rate for children with intellectual disabilities was 62.57 and the SD values were 12.31 and 12.42, respectively. The resulting t-value is 2.17 and the P-value is 0.03, which is statistically significant at the 0.05 level. This suggests that there is a significant difference between children with intellectual disabilities based on their type of birth compared to children with intellectual disabilities and that babies born prematurely have more problems related to their behavioral problems.

Table-2 the significant difference between children with an intellectual disability based on their type of birth with respect to their Irritability

Type of Behavioral Problems	Type of Birth	N	Mean	Std. Dev.	t-value	P-Value
Irritability	Normal Birth	370	15.96	3.88	1.98*	0.05
	Premature Birth	130	17.20	4.10		

*Significant at 0.05 level

There was depicted results in Table-2 that the average score of children with intellectual disability with respect to their behavioral problem of irritability depending on the type of birth was 15.96. The average score for children with intellectual disability was 15.96 as compared to that for premature birth. Children with intellectual disabilities were born at 17.20 and SD values were 3.88 and 4.10, respectively. The derived t-value was 1.98 and the p-value was 0.05 which was statistically significant at the 0.05 level. This suggests that there is a significant difference in children with intellectual disabilities based on the type of birth they have and that children with

intellectual disabilities at premature birth have higher rates of irritability with respect to their behavioral problem than those born prematurely.

Table-3. The significant difference between problems of children with an intellectual disability based on their type of birth with respect to their Lethargy

Type of Behavioral Problems	Type of Birth	N	Mean	Std. Dev.	t-value	P-Value
Lethargy	Normal Birth	370	17.75	4.01	2.01*	0.05
	Premature Birth	130	18.65	4.32		

*Significant at 0.05 level

Table 3 found that children with intellectual disabilities were born with an average score of 17.75 on the behavioral problem of laziness, depending on the type of birth. The resulting T-value is 2.01 and the P-value is 0.05, which is statistically significant at the level of 0.05. This suggests that children with intellectual disabilities have significant differences depending on the type of birth they have and that babies born prematurely have more problems related to the behavioral problem of their Lethargy than those born in normal births.

Table-4 the significant difference between problems of children with an intellectual disability based on their type of birth with respect to their Stereotypy

Type of Behavioral Problems	Type of Birth	N	Mean	Std. Dev.	t-value	P-Value
Stereotypy	Premature Birth	370	6.85	2.42	2.58**	0.00
	Normal Birth	130	7.81	2.34		

**Significant at 0.01 level

The mean score of Table-4 children with intellectual disabilities, based on the type of birth they had and the behavioral problem of their stereotypy, was 6.85, while those born prematurely had a mean score of 7.81 and SD values for normal birth were 2.42 and 2.34, respectively. The resulting t-value is 2.58 and the p-value is 0.00, which is statistically significant at the 0.01 level.

This suggests that there is a significant difference between children with intellectual disabilities based on their birth and that children with intellectual disabilities at a normal birth are more likely to have behavioral problems related to their stereotypes than those born prematurely.

Table-5 the significant difference between problems of children with an intellectual disability based on their type of birth with respect to their Hyperactivity

Type of Behavioral Problems	Type of Birth	N	Mean	Std. Dev.	t-value	P-Value
Hyperactivity	Normal Birth	370	17.42	4.54	1.10 ^{NS}	0.21
	Premature Birth	130	17.77	4.23		

NS: Not Significant

The mean score for children with intellectual disabilities, depending on the type of birth they had, was 17.42, while the mean score for premature birth for children with intellectual disabilities was 17.77 for normal born children and the SD values were 4.54 and 4.23, respectively. The derived t-value is 1.10 and the p-value is 0.21, which is not statistically significant at any level. This suggests that there is no significant difference among children with intellectual disabilities based on the type of birth they were born with and that they have similar problems related to the behavioral problem of hyperactivity.

Table-6 the significant difference between problems of children with intellectual disability based on their type of birth with respect to their inappropriate speech

Type of Behavioral Problems	Type of Birth	N	Mean	Std. Dev.	t-value	P-Value
Inappropriate speech	Normal Birth	370	4.59	1.90	1.26 ^{NS}	0.18
	Premature Birth	130	4.85	1.96		

NS: Not Significant

Table 4.13 observed that the mean scores of children with intellectual disability based on their type of birth with respect to their Behavioural Problem of Inappropriate speech, the mean score of Premature birth of children with intellectual disability was 4.59, whereas it is for the Normal birth of children with intellectual disability was 4.85 and the SD values are 1.90 and 1.96 respectively. The derived t – value was 1.26 and the p -value was 0.18 which was statistically not significant at any level. This shows that there is no significant difference between children with intellectual disability based on their type of birth and they have similar problems with respect to their Behavioural Problem of Inappropriate speech.

Discussion

Premature children with intellectually disabled have more behavioural problems than the normal birth intellectually disabled children. Stereotype behavioural problems are more severe in premature birth children than other problems. Secondly, hyperactivity and inappropriate speech were non-significant among premature birth children and normal birth children. Irritability is the most common behavioural disturbance present in prematurely born children at a moderate level. Irritability is less in normally born children.

The significant difference observed between premature and normal birth children with intellectually disabled with respect to lethargy and stereotype problems. Premature children with intellectually disabled reported significantly more lethargy and stereotype problems than normal birth children. No significant difference is found between premature and normal birth children with intellectually disabled with respect to their irritability, hyperactivity and inappropriate speech problems. There is a significant difference between premature and normal birth children with intellectually disabled in their behavioural problems. Hence, the majority of premature children are found to have more behavioural problems than normal children except irritability and hyperactivity.

FINDINGS

Present study found that there was a significant difference between children with an intellectual disability based on their type of birth and Premature Birth of children have high problems with respect to their Behavioural Problems than that of Normal birth of children children with intellectual disability.

Resent study identified that there was a significant difference between children with an intellectual disability based on their type of birth and Pre-mature birth of children have high problems with respect to their Behavioural Problem of Lethargy than that of Normal Birth of children with intellectual disability.

Study results revealed that there was a significant difference between children with intellectual disability based on their type of birth and Pre-mature birth of children have high problems with respect to their Behavioural Problem of Irritability than that of Premature Birth of children with intellectual disability.

Study shows that there was a significant difference between children with an intellectual disability based on their type of birth and Pre-mature birth of children have high problems with respect to their Behavioural Problem of Lethargy than that of Normal Birth of children with intellectual disability.

Present study found that there was a significant difference between children with an intellectual disability based on their type of birth and Normal birth of children have high problems with respect to their Behavioural Problem of Stereotypy than that of Premature Birth of children with intellectual disability. Present study identified that there is no significant difference between children with intellectual disability based on their type of birth and they have similar problems with respect to their Behavioural Problem of Hyperactivity and Inappropriate speech.

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