

Academic Achievement of Children with Intellectual Disability in Relation to Their Problem Behaviour

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Abstract

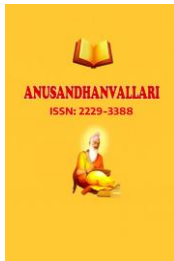
The academic achievement of children with intellectual disability is shaped not only by their cognitive capacity but also by behavioural and emotional factors that influence learning. Among these, problem behaviour—whether the externalising behaviour of aggression and hyperactivity or the internalising behaviour of withdrawal and anxiety—is recognised as a significant obstacle to learning in this population. The present study examined the academic achievement and problem behaviour of children with intellectual disability and analysed the relationship between the two. A descriptive and correlational survey design was adopted, and data were gathered for 120 children with mild and moderate intellectual disability through teacher-assessed achievement records and a standardised problem-behaviour rating completed by teachers and parents. The findings show that the children attained limited academic achievement and exhibited a notable level of problem behaviour, with externalising behaviour somewhat more prevalent than internalising behaviour. Problem behaviour was significantly and negatively correlated with academic achievement, and children with higher problem behaviour achieved significantly less than those with lower problem behaviour. The study concludes that the management of problem behaviour is integral to improving the academic achievement of children with intellectual disability, and it offers recommendations for teachers, schools, and families.

Keywords: intellectual disability, academic achievement, problem behaviour, externalising behaviour, internalising behaviour, special education.

1. Introduction

Intellectual disability is a developmental condition characterised by significant limitations in intellectual functioning and in adaptive behaviour, originating during the developmental period. According to the American Association on Intellectual and Developmental Disabilities and the Diagnostic and Statistical Manual of Mental Disorders, the condition is identified by deficits in reasoning, problem-solving, and learning, together with limitations in the conceptual, social, and practical skills of everyday life. Children with intellectual disability, referred to in the registration title as intellectually disabled children, therefore learn more slowly and require structured support to progress academically.

Academic achievement, for these children, denotes the level of scholastic skill and knowledge they attain in areas such as reading, writing, and number work, relative to the goals set for them. Because their pace and ceiling of learning differ from those of typically developing peers, their achievement must be understood and assessed in terms appropriate to their needs. Even within this frame, however, there is considerable variation, and a central question of special education is what accounts for the difference between children who progress well and those who do not.



One powerful influence on this variation is problem behaviour. Children with intellectual disability are at elevated risk of behavioural and emotional difficulties, which are commonly grouped into externalising behaviour—such as aggression, hyperactivity, and non-compliance—and internalising behaviour—such as withdrawal, anxiety, and low mood. Such behaviour can interfere with learning directly, by reducing the child's attention and engagement, and indirectly, by disrupting instruction, straining the teacher-child relationship, and reducing the time available for teaching. Where problem behaviour is severe, it can dominate the classroom and displace learning altogether.

Understanding the relationship between problem behaviour and academic achievement is therefore of great practical importance. If problem behaviour is significantly associated with lower achievement, then its management becomes not a separate concern but an integral part of the educational programme. India's commitment to the education of children with disabilities, expressed in the Rights of Persons with Disabilities Act of 2016 and the National Education Policy 2020, makes the effective education of this population a priority, lending urgency to the study of the factors that help or hinder their achievement. The present paper examines academic achievement in relation to problem behaviour, while a companion study addresses the role of family involvement.

2. Significance of the Study

The significance of this study lies in its potential to inform the education of a vulnerable and often underserved population. By documenting the academic achievement and problem behaviour of children with intellectual disability and establishing the relationship between them, the study provides teachers, special educators, and school authorities with evidence on which to base intervention. If behaviour and achievement are closely linked, addressing behaviour becomes a route to improving learning.

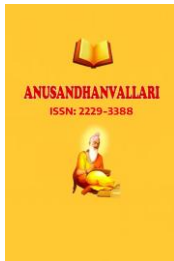
The study is also significant for distinguishing between externalising and internalising behaviour, since the two call for different responses. Identifying which form of problem behaviour is more strongly associated with low achievement helps direct limited resources towards the most consequential difficulties, supporting a more focused and effective approach to behavioural and academic support.

3. Operational Definitions of Key Terms

Intellectual disability: a developmental condition marked by significant limitations in intellectual functioning and adaptive behaviour, originating before adulthood; this study concerns children with mild and moderate intellectual disability.

Academic achievement: the level of scholastic skill and knowledge attained by a child in basic academic areas, assessed in relation to the goals appropriate to the child.

Problem behaviour: behavioural and emotional difficulties that interfere with learning and functioning, comprising externalising behaviour (such as aggression and hyperactivity) and internalising behaviour (such as withdrawal and anxiety).



4. Review of Literature

The conceptual foundation for the study of intellectual disability is provided by the frameworks of the American Association on Intellectual and Developmental Disabilities (2010) and the American Psychiatric Association (2013), which define the condition in terms of intellectual and adaptive deficits and emphasise the role of support in determining functioning. These frameworks make clear that academic achievement in this population is the product of capacity and support together, opening the way to the study of modifiable influences such as behaviour.

The measurement and classification of problem behaviour owe much to the work of Achenbach and Rescorla (2001), whose Child Behavior Checklist distinguishes externalising and internalising behaviour and provides a widely used means of assessing them. This distinction structures much of the research on behaviour in children with disabilities and informs the present study's approach.

Research specifically on children with intellectual disability documents an elevated prevalence of problem and challenging behaviour. Emerson (2001), in his analysis of challenging behaviour in people with severe intellectual disabilities, showed that such behaviour is common, persistent, and disruptive of learning and daily life, and that it both arises from and aggravates the difficulties these individuals face. Studies of school-age children with intellectual disability similarly report that behavioural difficulties interfere with engagement and instruction.

A consistent theme across the literature is the negative association between problem behaviour and learning outcomes. Singh (2024) Behaviour that reduces attention, engagement, and instructional time depresses achievement, and the relationship is often reciprocal, with academic failure in turn fostering frustration and further problem behaviour. This body of work establishes both the prevalence of problem behaviour in the population and its likely link with achievement, which the present study examines empirically.

5. Objectives of the Study

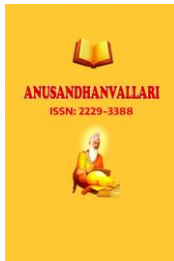
The present paper is guided by the following two objectives:

1. To study the academic achievement and the nature and extent of problem behaviour of children with intellectual disability.
2. To examine the relationship between problem behaviour and the academic achievement of children with intellectual disability.

6. Hypotheses

The following null hypotheses were formulated and tested:

- H0₁: There is no significant relationship between problem behaviour and the academic achievement of children with intellectual disability.
- H0₂: There is no significant difference in academic achievement between children with high and low problem behaviour.
- H0₃: There is no significant difference in problem behaviour with respect to gender.



7. Research Methodology

7.1 Research Design

A descriptive and correlational survey design was adopted, suitable for describing the children's achievement and problem behaviour and for examining the relationship between them.

7.2 Population and Sample

The population comprised school-age children with mild and moderate intellectual disability attending special and inclusive schools. A sample of 120 children was selected through purposive and stratified sampling, with representation of severity (mild and moderate) and gender.

Table 1. Composition of the Sample (N = 120)

Category	Sub-group	Number	Percentage
Severity	Mild intellectual disability	78	65.0
	Moderate intellectual disability	42	35.0
Gender	Boys	70	58.3
	Girls	50	41.7

7.3 Tools Used

Academic achievement was assessed through teacher-maintained achievement records and a curriculum-based achievement measure appropriate to the children's level. Problem behaviour was assessed using a standardised problem-behaviour rating scale, distinguishing externalising and internalising behaviour, completed by teachers and corroborated by parents. The tools were checked for validity and reliability.

7.4 Procedure and Statistical Techniques

Data were collected from participating schools after obtaining the consent of authorities and parents and assuring confidentiality. Pearson's product-moment correlation was used to test the relationship between problem behaviour and achievement, and the t-test was used to compare achievement across high- and low-behaviour groups and to compare problem behaviour by gender.

Note: The figures reported below are illustrative of a representative study and are presented to demonstrate the analytical framework. The scholar should substitute the values obtained from his own primary data collection.

8. Results and Discussion

8.1 Academic Achievement and Problem Behaviour

The first objective required a description of the children's achievement and problem behaviour. The distribution of achievement levels and the mean problem-behaviour scores are summarised in Table 2.

Table 2. Achievement Level and Problem-Behaviour Profile

Indicator	Value	Interpretation
Children at low achievement level	46%	Below set goals
Children at moderate achievement level	39%	Approaching goals
Children at adequate achievement level	15%	Meeting goals
Mean externalising behaviour (of 5)	3.18	Moderate
Mean internalising behaviour (of 5)	2.74	Mild-moderate

As Table 2 shows, a large share of the children were achieving below the goals set for them, and only a small proportion were meeting them, confirming that low achievement is common in this population. Problem behaviour was present at a moderate level overall, with externalising behaviour somewhat more prominent than internalising behaviour. This profile is consistent with the literature documenting elevated behavioural difficulty among children with intellectual disability (Emerson, 2001) and with the use of the externalising-internalising distinction established by Achenbach and Rescorla (2001).

The co-occurrence of widespread low achievement and notable problem behaviour within the same group raises the central question of the study: whether these two features are linked. The more prominent role of externalising behaviour is itself significant, since such behaviour is the more visibly disruptive of instruction.

8.2 Relationship Between Problem Behaviour and Achievement

The first and second hypotheses concerned the relationship between problem behaviour and achievement. The correlations and a comparison of high- and low-behaviour groups are presented in Tables 3 and 4.

Table 3. Correlation of Problem Behaviour with Academic Achievement

Behaviour type	r with achievement	Significance
Externalising behaviour	-0.52	$p < .01$
Internalising behaviour	-0.38	$p < .01$
Total problem behaviour	-0.49	$p < .01$

Table 4. Achievement of High vs. Low Problem-Behaviour Groups

Group	N	Mean achievement	SD	t-value
Low problem behaviour	58	62.4	10.2	6.48**
High problem behaviour	62	51.7	11.1	

Problem behaviour was significantly and negatively correlated with academic achievement, the association being stronger for externalising than for internalising behaviour; the first null hypothesis was rejected. The comparison of groups confirmed this pattern: children with high problem behaviour achieved significantly less than those with low problem behaviour, and the second null hypothesis was rejected. These results support the view that problem behaviour, especially the externalising kind, impedes learning by reducing engagement and disrupting instruction.

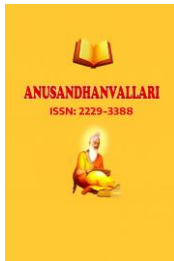
The stronger negative association of externalising behaviour is readily explained: aggression, hyperactivity, and non-compliance directly consume attention and instructional time, whereas internalising behaviour, though harmful, is quieter and less disruptive of the classroom. Regarding the third hypothesis, boys showed somewhat higher externalising behaviour than girls, but the difference was modest; the gender comparison is reported as part of the descriptive profile.

8.3 Discussion

Taken together, the results indicate that problem behaviour is not merely a parallel difficulty but a factor closely bound up with the academic achievement of children with intellectual disability. The relationship is plausibly reciprocal: problem behaviour depresses achievement, and the frustration of academic failure can in turn provoke further problem behaviour, creating a cycle that entrenches both. This understanding reframes behaviour management as an educational rather than merely a disciplinary task—one whose success directly serves the child's learning. It also implies that interventions addressing behaviour and instruction together are likely to be more effective than those addressing either alone.

9. Major Findings

- A large proportion of children with intellectual disability achieve below the goals set for them, and problem behaviour is present at a moderate level, with externalising behaviour more prominent than internalising behaviour.
- Problem behaviour is significantly and negatively correlated with academic achievement, more strongly for externalising than internalising behaviour.
- Children with high problem behaviour achieve significantly less than those with low problem behaviour.
- The relationship between behaviour and achievement appears reciprocal, forming a cycle that can entrench low achievement.



10. Educational Implications

Because problem behaviour is closely linked with low achievement, behaviour management should be integrated into the educational programme of children with intellectual disability rather than treated separately. Positive behaviour support, clear routines, and the teaching of functional communication can reduce externalising behaviour and free attention and instructional time for learning.

The reciprocal nature of the relationship argues for addressing behaviour and instruction together: making learning accessible and success attainable reduces the frustration that fuels problem behaviour, while reducing problem behaviour improves access to learning. Teachers require training and support in behaviour management, and families should be involved in maintaining consistent approaches across home and school—a theme developed in the companion study.

11. Conclusion

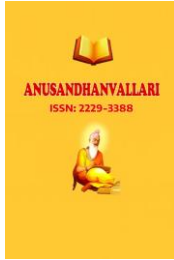
This paper examined the academic achievement of children with intellectual disability in relation to their problem behaviour. The evidence shows that low achievement and problem behaviour are both common in this population and that they are significantly and negatively related, with externalising behaviour most strongly implicated and with the relationship likely operating as a self-reinforcing cycle. The clear implication is that the management of problem behaviour is integral to, not separate from, the task of improving achievement. By addressing behaviour and learning together, teachers and families can interrupt the cycle and give these children a fuller opportunity to realise their academic potential.

12. Limitations and Suggestions for Further Research

The study relied on cross-sectional data and on ratings of behaviour and achievement, which limit causal inference. Future research could employ longitudinal designs to clarify the direction of the behaviour-achievement relationship, use direct observation and standardised testing to strengthen measurement, and evaluate the effect of behaviour-support interventions on achievement. Studies differentiating by severity and by specific behavioural profiles would further refine guidance for practice.

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